THE VOLVO GROUP

# Annual and Sustainability Report 2017

## Driving Performance and Innovation

VOLVO

Volvo Group

# CONTENT



The Volvo Group's formal financial reports are presented on pages 82–187, 206–207 and 211–213 and have been audited by the company's auditors.

For information on which pages constitute the Volvo Group's Sustainability Reporting Index, please see Sustainability Reporting Index on page 82.

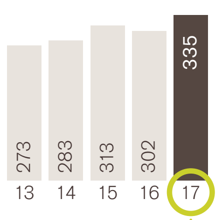
## STRONG BRANDS

The Volvo Group's brand portfolio consists of Volvo, Volvo Penta, UD, Terex Trucks, Renault Trucks, Prevost, Nova Bus and Mack. We partner in alliances and joint ventures with the SDLG, Eicher and Dongfeng brands. By offering products and services under different brands, the Group addresses many different customer and market segments in mature as well as growth markets.

## 2017 IN BRIEF

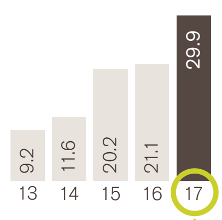
# Increased sales and continued profit improvement

- Strong demand for the Volvo Group's products and services in many of the world's markets. Net sales increased in all regions and amounted to SEK 335 billion.
- Increased sales volumes contributed to an increase in profitability. Adjusted operating income improved to SEK 29.9 M corresponding to an adjusted operating margin of 8.9% with a particularly strong development in Construction Equipment.
- Operating cash flow in the Industrial Operations increased to SEK 28.4 billion.
- Strong financial position with net financial assets of SEK 26.3 billion, corresponding to 26.9% of equity in the Industrial Operations, excluding provisions for post-employment benefits.
- New financial targets introduced.
- New trucks from Volvo Trucks and Mack Trucks contributed to the Group's biggest product renewal in North America in 20 years. Furthermore, all-new heavy-duty and medium-duty truck ranges were launched under the UD brand.



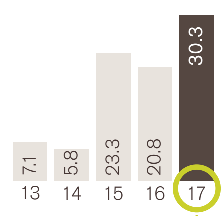

NET SALES, SEK BN

**335** SEK bn



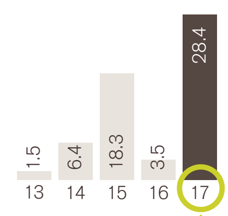

ADJUSTED OPERATING INCOME[1], SEK BN

**29.9** SEK bn




OPERATING INCOME, SEK BN

**30.3** SEK bn




OPERATING CASH FLOW, INDUSTRIAL OPERATIONS, SEK BN

**28.4** SEK bn

| KEY RATIOS | 2017 | 2016 |
|---|---|---|
| Net sales, SEK M | **334,748** | 301,914 |
| Adjusted operating income[1], SEK M | **29,928** | 21,094 |
| Adjusted operating margin, % | **8.9** | 7.0 |
| Operating income, SEK M | **30,327** | 20,826 |
| Operating margin, % | **9.1** | 6.9 |
| Income after financial items, SEK M | **28,254** | 19,230 |
| Income for the period, SEK M | **21,283** | 13,223 |
| Diluted earnings per share, SEK | **10.32** | 6.47 |
| Dividend per share, SEK | **4.25**[2] | 3.25 |
| Operating cash flow, Industrial Operations, SEK bn | **28.4** | 3.5 |

| KEY RATIOS | 2017 | 2016 |
|---|---|---|
| Return on shareholders' equity, % | **20.8** | 14.9 |
| Total number of employees | **99,488** | 94,914 |
| Share of women, % | **18** | 17 |
| Share of women, presidents and other senior executives, % | **25** | 24 |
| Employee Engagement Index, % | **75** | 72 |
| Energy consumption, MWh/SEK M | **6.4** | 7.1 |
| Total $CO_2$ emissions, tons/SEK M (GHG scope 1 & 2) | **1.2** | 1.4 |
| Share of direct material purchasing spend from suppliers having made a CSR self-assessment, % | **95** | 88 |

[1] For more information on adjusted operating income, please see Alternative Performance Measures on page 211.

[2] Proposed by the Board of Directors.

OVERVIEW

# This is the Volvo Group

The Volvo Group is one of the world's leading manufacturers of trucks, buses, construction equipment and marine and industrial engines. The Group also provides complete solutions for financing and service. With its headquarters in Gothenburg, Sweden, the Group employs almost 100,000 people, has production facilities in 18 countries and sells its products in more than 190 markets.

## WHAT WE DO

### ON THE ROAD

Our products help ensure that people have food on the table, can travel to their destination and have roads to drive on. Our products deliver goods to keep production plants running.

### AT THE SITE

Engines, machines and vehicles from the Volvo Group can be found at construction sites, in mines and in the middle of forests.

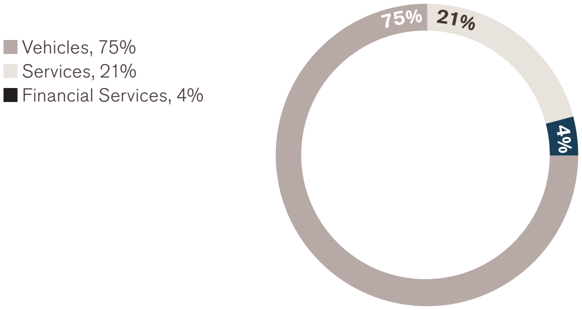
### IN THE CITY

Our products are part of daily life. They take people to work, distribute goods and collect rubbish. We develop the public transport solutions of tomorrow, with an increased focus on electrification.

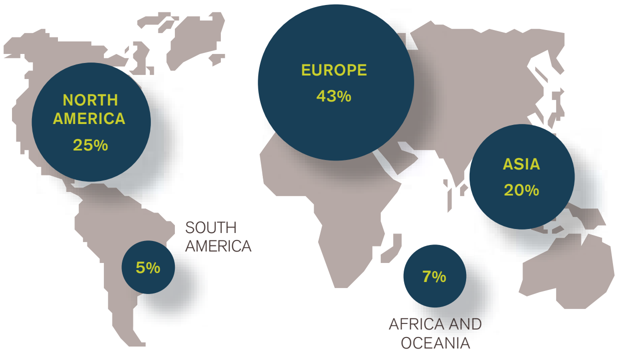
### AT SEA

Our products and services are there, regardless of whether someone is at work on a ship, on holiday in a pleasure boat or need urgent help from the sea rescue services.

### SHARE OF NET SALES




### SHARE OF NET SALES BY MARKET



TRUCKS

CONSTRUCTION EQUIPMENT

BUSES

ENGINES AND COMPLETE POWER SOLUTIONS FOR MARINE AND INDUSTRIAL APPLICATIONS

## OUR CUSTOMERS MAKE SOCIETIES FUNCTION

The Volvo Group's products and services contribute to much of what we all expect of a well-functioning society. Our trucks, buses, engines, construction equipment and financial services are involved in many of the functions that most of us rely on every day. The majority of the Volvo Group's customers are companies within the transportation or infrastructure industries. The reliability and productivity of the products are important and in many cases crucial to our customers' success and profitability.

## STRONG POSITIONS GLOBALLY

Thanks to competitive product programs, strong dealers with dense service networks and increasingly more complete offerings, including services such as financing, insurance, leasing, various service contracts, accessories and spare parts that support the core products, the Volvo Group has established leading positions on a global market. The Volvo Group is the world's second largest manufacturer of heavy-duty trucks, one of the world's largest manufacturers of construction equipment, buses and heavy-duty diesel engines as well as a leading supplier of marine and industrial engines. These positions provide for economies of scale in product development, production, purchasing and financial services.

## COMPETITIVE PRODUCTS

All of the Volvo Group's products have been developed to contribute to efficient transport and infrastructure solutions. Sales of new vehicles, machines and engines as well as used vehicles and machines, superstructures and special vehicles accounted for 75% of the Group's net sales in 2017. Sales of vehicles and machines build a population of products that drives spare parts sales and service revenue.

## FIRST CLASS SERVICES

In addition to vehicles and machines, the Volvo Group's offering includes various types of services such as insurance, rental services, spare parts, preventive maintenance, service agreements, assistance services and IT services. The range and flexibility of the offering means that the solutions can be customized for each customer. The service business contributes to balancing the fluctuations in the sales of new products and is an area of priority. Sales of services accounted for 21% of Group net sales in 2017. The Volvo Group also offers financing for customers and dealers. During 2017 Financial Services provided financing solutions for 25% of Group products in the markets where financing is offered.

CEO COMMENTS

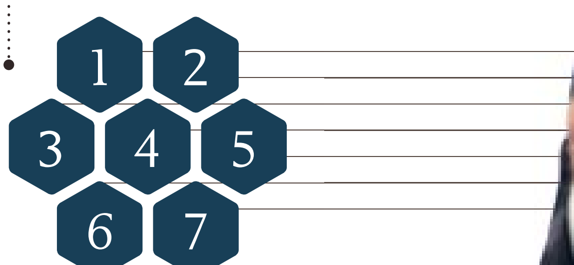
# Driving performance and innovation

2017 was a record year in terms of sales and profitability for the Volvo Group. We supported our truck customers who worked at high activity levels in many markets and successfully met the global surge in demand for construction equipment. For us, this resulted in increased sales, improved profitability, strong cash flow and a strengthened balance sheet. In fact, we achieved the highest sales and operating income in the Volvo Group's history.

STRATEGIC PRIORITIES

To be successful the key is to create value for our customers by impacting their bottom line profitability. By understanding our customers' priorities and challenges, we are able to provide products and services that grow customers' revenues and decrease customers' costs. This is the basis for our strategic direction.

**Read more on page 16 »**

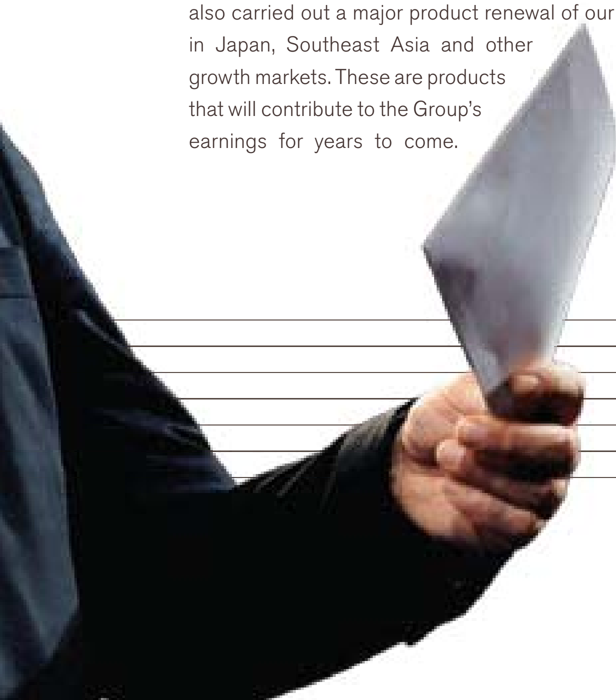


In addition we renewed and extended our truck ranges in North America, Japan and Southeast Asia and demonstrated innovations within electromobility, automation and connectivity. I am proud of the dedication and hard work done by my colleagues across the Group as well as at dealers, suppliers and other business partners.

For the full year, we grew our net sales by 11% to SEK 335 billion and improved our operating income to over SEK 30 billion. Trucks, Construction Equipment, Volvo Penta and Financial Services all recorded their highest operating income ever. We also improved our profitability with an operating margin of 9.1%. All business segments contributed, with the biggest step up in margin in Construction Equipment. Furthermore, we increased our financial strength, with the operating cash flow of SEK 28 billion leading to us having a net cash position of SEK 26 billion at year end. In line with the improved profitability and strengthened financial position, the Board proposes a dividend of SEK 4.25 per share. During 2017, the Board also introduced new financial targets: the operating margin for the Group shall exceed 10% measured over a business cycle and the industrial business shall have no net financial debt. This is further outlined on page 21.

**Profitability improvement in Trucks**

Most truck markets were on high levels or in upward trends during the year. In Europe, good freight demand, low fuel prices and low interest rates provided support to customer profitability and their demand for our trucks. Our performance in Europe was strong, with Volvo Trucks' market share on a historically high level and with Renault Trucks regaining market share. The North American market picked up with both Volvo and Mack taking advantage of the increased demand. In a move that is very important for the future, we launched new truck generations for Volvo and Mack in the Group's biggest product upgrade in North America in 20 years. We also carried out a major product renewal of our range of UD trucks in Japan, Southeast Asia and other growth markets. These are products that will contribute to the Group's earnings for years to come.



The Japanese market for heavy-duty trucks continued to be good, with UD Trucks regaining market share in the heavy-duty truck segment. The Brazilian truck market, in which Volvo holds a leading position, rebounded from low levels. For our truck operations, both the adjusted and reported operating margin improved to 9.4%, compared to an adjusted operating margin of 8.7% in 2016. The improved profitability was driven by increased sales and higher earnings in our joint ventures.

**Strong rebound for Construction Equipment**

Our performance program to strengthen the competitiveness of Construction Equipment combined with increased market demand yielded good results in 2017. Net sales rose by 31% to over SEK 66 billion and Construction Equipment substantially improved the profitability, with the operating margin increasing to 11.9% compared to 4.4% in 2016. This was thanks to a focus on core products, reduced break-even and tight control over costs as volumes returned in most markets across the globe. Furthermore, we successfully gained market shares in our stronghold segments – excavators, wheel loaders and articulated haulers. More than half a century after inventing the concept, Volvo Construction Equipment in 2017 celebrated the production of the 75,000th articulated hauler. This is a segment where we have more than a third of the world market. During the year we also launched a new flagship 50 ton class wheel loader, the L350H, and unveiled a concept machine, the EX2, which is a 100% electric compact excavator prototype that emits zero emissions. In January this year, we took another step in strengthening the customer offer with the announcement of the Volvo brand entering the rigid hauler market.

"We are targeting a consistent improvement in financial performance with all business areas contributing.

IMPROVING PERFORMANCE

**Buses spearheading the move to electrification**

Our bus business had a year of record sales as global demand remained high. Increased service sales and good traction in internal efficiency programs provided support to profitability. The operating margin of 3.6% was a slight improvement from 3.4% in 2016. Volvo Buses has been spearheading our investments in electromobility and today we have a complete range of buses and end-to-end systems for electrified public transport with turnkey solutions for electric bus routes, including charging infrastructure. During the year we announced an upgrade of the fully electric Volvo 7900 Electric with increased battery capacity and more charging options, which translate into an extended operating range of up to 200 km and more flexibility for operators. To date Volvo Buses has delivered over 3,800 electrified buses under the Volvo brand, bringing the advantages of energy efficiency, low emissions and reduced noise to cities and commuters around the world.

**Continued good profitability in Volvo Penta**

Volvo Penta continues to successfully grow profitably into new customer segments. Net sales increased by 12% and the operating margin amounted to 12.9% (12.8). We have a strong position in the marine engine market and is also successfully driving and developing the industrial engine business by continuously expanding the product offer to fit new market segments, such as agriculture. Thanks to the wide range of new products, Volvo Penta continues to gain business with new and existing customers.

**Good portfolio performance in Financial Services**

Our credit portfolio in Financial Services continued to perform well with low credit losses. Profitability improved and the underlying return on shareholders' equity was 14.3% (13.7). Financial services are key in our work to deepen the relationship with customers, and there is still an untapped potential for us to increase the sales of financing and insurance packages for Group products. During the year, we opened-up new markets with a new operation in South Africa and new alliances to reach customers also in South Korea, Indonesia and the Philippines.

**Investing in technology and innovation**

As mentioned, 2017 was a year when we launched a large number of new products and services, some of which you can read more about in this report. It was also a year when we demonstrated new technologies and innovations within automation, connectivity and electrification. We are committed to successfully make the transition into new technologies and business models and have a strong platform in terms of the Group's modular system, customer relations and not least the knowledge gained from our leading position in electrified buses.

The key here is to utilize our Group assets, work cross-functionally and innovate together with customers, suppliers as well as new partners to drive more efficient and sustainable transport and infrastructure solutions.

One example is the announcement in January 2018 that both Volvo Trucks and Renault Trucks will start selling electric medium-duty trucks for city distribution in Europe in 2019. The first of these trucks will be put into operation together with selected customers already this year. These trucks are based on the Group's modular technology already used for our electrified buses, which can be leveraged also by our other business areas.

**Sustainability is at the heart of the Volvo Group**

Our transport and infrastructure solutions drive prosperity here and now, regardless of where in the world our customers operate. As the population in the world continues to grow, the need for sustainable

"There are still a lot of opportunities in services – both by improving the basics and by climbing the services ladder.

GROWING SERVICES

transport will increase. For us, sustainability includes economic, environmental and social dimensions, and we have been working towards transport solutions that take these aspects into consideration for a long time. It is also manifested in the Volvo Group supporting UN Global Compact, which we signed as early as 2001. Global Compact is a call to companies to align strategies and operations with universal principles on human rights, labor, environment and anti-corruption, and take actions that advance societal goals.

We believe that efficient and accessible transport is a driver of sustainable development and a precondition for economic growth, alleviating poverty and combating climate change. The shift towards sustainable transport represents great opportunities for society, our industry and for us in the Volvo Group. We are embracing these opportunities by developing new technologies and new business models and by working closely together with our customers and other parties in the entire value chain.

**Strategy for improved performance**

There is no doubt that market developments worked in our favor in 2017, but the good profitability is also the result of our own efforts. Through our strategic priorities, we are targeting a consistent profitability improvement with all business areas contributing. Our strategy with brand and business area driven organizations combined with decentralized accountability is working well. I firmly believe that those closest to the customer should be empowered to make the decisions.

Also, our efforts to grow the service business are paying off and during the year it grew by 6%. We are putting increased focus on areas such as workshop performance, spare parts availability and higher service contract penetration. A solid service business makes our dealers and ourselves more resilient to downturns in the economy, but most importantly, a well performing service business keeps our customers happy!

“We are committed to successfully transition into new technologies and business models.

LEADING IN TECHNOLOGY

To be successful, engaged and passionate people will continue to be the most important asset in any company. The voice of my colleagues is captured in the Volvo Group Attitude Survey. For the second year running, the Employee Engagement Index increased and there were improvements in all areas. That tells me that we are well on our way, but there is still room for further improvement in areas such as speed and efficiency in decision making, internal collaboration, the time it takes to solve customer problems and to deliver an even better customer experience. I believe that the areas pointed out show that we see things the way they are and that we want to improve for real. They also show the passion my colleagues have for their work and for our company. The improved profitability is the result of hard work by many and I would like to extend my gratitude to all colleagues and business partners for their efforts and a job well done.

**Focus for 2018**

In 2018 we will continue our focus on continuous improvement to drive operational efficiency throughout the Group and the value chain as well as on managing the introduction and production ramp-ups of the new trucks in North America. It will also be a year when we continue to invest in new and innovative technologies to the benefit of our customers and society. We work with continuous improvement, to secure our customers' success and shareholder value in both the short and the long term. ■

Martin Lundstedt
*President and CEO*



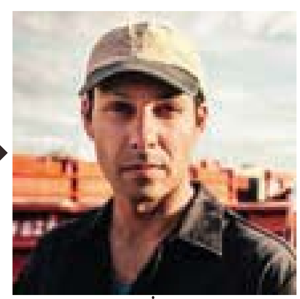
# Committed to staying ahead

A CLEAR STRATEGY FOR THE FUTURE

Our strategy guides what we need to do in order to secure competitiveness. After more than a decade of acquisitions to build the scale needed to be competitive in commercial vehicles, the Volvo Group is now in a phase focused on organic growth, improved efficiency, increased profitability and getting even closer to customers.

**1999–2011**
ACQUISITION-DRIVEN GROWTH
Scale, synergies and geographical expansion.

**2012–2015**
TRANSFORMATION TO CLOSE THE GAP
Product renewal, restructuring and cost efficiency.



**2016–**
IMPROVED PERFORMANCE
Customer focus, simplicity, speed, continuous improvements and organic growth.

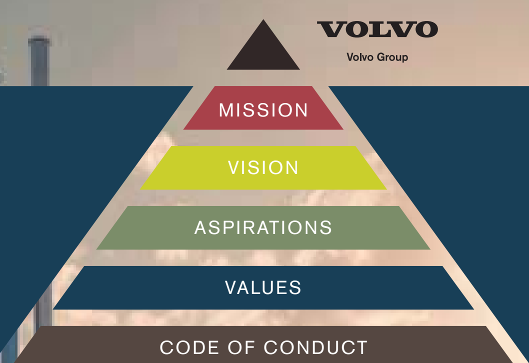
From the late 1990's to 2011 the Volvo Group's strategy was primarily targeted at growth, not least through acquisitions, while at the same time focusing the business on commercial vehicles. On the truck side, acquisitions include Renault Trucks, Mack Trucks and Nissan Diesel (now UD Trucks), the joint venture with Eicher Motors in India (VECV) and the strategic alliance with a 45% ownership in Dongfeng Commercial Vehicles (DFCV) in China. Examples from the Construction Equipment side include the acquisition of Samsung's excavator business, the 70% ownership in the Chinese wheel loader manufacturer Lingong (SDLG), road equipment from Ingersoll-Rand and the hauler business from Terex.

The acquisitions along with organic growth have enabled the Volvo Group to reach economies of scale in product development, production, purchasing and financial services. The streamlining to commercial vehicles has also involved the divestment of non-core operations such as Volvo Aero, Volvo Rents, real estate and the external IT business.

During 2012 to 2015 the Volvo Group underwent a transformation program aimed at reorganizing the company to take out overlaps, reduce structural costs and increase efficiency and profitability after the period of acquisition-driven growth. Among the activities in the program to reduce the Group's structural cost levels were substantial reductions of white-collar employees and consultants, a reduction in research and development expenses, optimization of the sales and service channel and the industrial footprint as well as a consolidation and optimization of the spare parts distribution worldwide.

Now the Group has entered the next phase with a focus on organic growth and improved performance. ■

**IN 2016 A NEW MISSION AND STRATEGY WAS LAUNCHED**




# STRATEGY

## MISSION

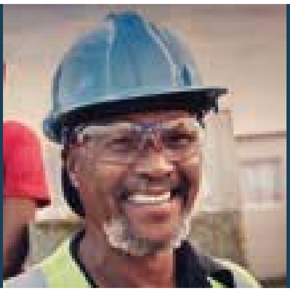
### Driving prosperity through transport solutions

The Volvo Group's mission statement expresses a broad ambition – to drive prosperity. Our customers provide modern logistics as the base for our economic welfare. Transport supports growth, provides access for people and goods and helps combat poverty. Modern transport solutions facilitate the increasing urbanization in a sustainable way. Transport is not an end in itself, but rather a means allowing people to access what they need, economically and socially.

## VISION

### Be the most desired and successful transport solution provider in the world

Our vision is to be the most desired and successful transport provider in the world. We are in a people business. Even though we operate in a business-to-business market, where people make the decisions. Trust and relations are as important as the total offer. We have competitive products and services and it is with these and our people that we build lasting relations with our customers. In the end, by bringing together the best of everything from the offer to the relationship, we will become the customers' preferred choice.



## VALUES

### Building a performance culture

The wanted culture is described by a set of five carefully chosen values. They serve as a guide to our day to day behavior and they drive our decisions at all levels of the organization. They express our shared beliefs across regions and entities and create the base for a high performing culture through employee engagement. We value:

#### CUSTOMER SUCCESS

We truly understand our customers' business. We listen to and talk with our customers about their needs, desires and challenges. We focus on transport solutions that make customers successful and create value for society. We deliver on our promises.

#### TRUST

We are transparent and have respect for the individual. We trust other teams to do their best and we respect the decisions made. We collaborate easily and create excellent results through teamwork and open dialogue. We are empowered and have the courage to act.

#### PASSION

We are proud of the work and business we do. We are engaged and committed to meet our goals. We see how diversity strengthens us and try to bring out the best in »

ASPIRATIONS

# Guiding us on our journey

Our vision describes where we want to be in the future. The aspirations are there to guide us on our journey. Working towards them ensures that we are on the right track.

### HAVE LEADING CUSTOMER SATISFACTION FOR ALL BRANDS IN THEIR SEGMENTS

The only true measure of success is customer satisfaction.

Read more about how we work with customer satisfaction on **page 28**.

### BE THE MOST ADMIRED EMPLOYER IN OUR INDUSTRY

By being the most admired employer we attract and retain the best people.

On **page 68** you can read more about the many ways in which the Volvo Group works to attract and retain talent and to create a culture of highly engaged employees.

### HAVE INDUSTRY LEADING PROFITABILITY

Through strong performance we are able to invest in products, services and people – and thereby own our own destiny.

In August, the Board of Directors of AB Volvo introduced new financial targets aimed at driving performance and managing cyclicality. More information is available on **page 21**.

» everyone. We admit mistakes, fix them and learn from them. We are proud of our achievements, have fun and celebrate our successes.

### CHANGE

We are curious about the world around us. We are innovative and find smart ways to create new solutions and business. We see change and transformation as a source of inspiration and energy. We are open-minded and share our knowledge.

### PERFORMANCE

We have a strong business instinct. We have the skills, knowledge and intuition to do the right thing. We expect a lot from ourselves and others, and walk the extra mile to do a great job. We see the big picture and know when to let go of an idea, a project or a plan.

CODE OF CONDUCT

# Business made right is good business

In 2017 the Volvo Group launched a new Code of Conduct, which clearly states the expectations for how we do business – not just in a few locations, but everywhere we operate.

- We respect one another
- We earn business fairly and lawfully
- We separate personal interests from business activities
- We safeguard company information and assets
- We communicate transparently and responsibly

Read the Code of Conduct on volvogroup.com and find more information on pages 74–75.

STRATEGY

# Driving innovation

**DEFINING THE FUTURE WHILE MASTERING TODAY**

**WHY** **WHAT** **HOW**

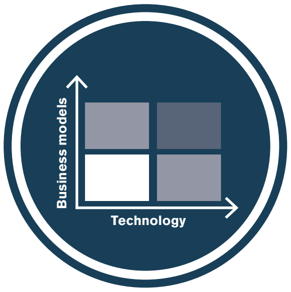
## Moving to the next level

We are living in exciting times, where technology we have available already today brings major opportunities for us and our customers. Social and environmental challenges, political instability and changed behaviors due to digital and technological transformation are however increasing the uncertainty around us. The Volvo Group is committed to take an active part in defining the transport solutions meeting future demands.

Continued successful development of combustion engines, transmissions and aerodynamics, to name a few, will be important also tomorrow. By focusing on common components between our brands and business areas as well as common product architecture and shared technology (CAST) we will free up capacity and resources for new technologies while mastering the existing.

Innovation does not come out of machines or computers. It comes out of people. Increased need for transports, climate challenges and to lift countries out of poverty set demands on technological innovations and on new ways of doing business.

FOCUS ON WELL-KNOWN AND NEW TECHNOLOGIES




DRIVING INNOVATION IN TECHNOLOGY AND BUSINESS MODELS

# WHY

## IMPROVING EFFICIENCY

### UTILIZATION

In general, today's trucks are used for a fraction of the day and only to part of their capacity. This is due to congestion, regulations for resting time, service and low fill rates. As demand for transportation is growing, the Volvo Group works to improve utilization rates and thereby delivering benefits to customers, society and the environment.

### CUSTOMER EFFICIENCY

By understanding our customers' priorities and challenges, the Volvo Group is able to provide products and services that grow customers' revenues and decrease customers' cost. On average about 30% of the total cost of a truck in use relates to fuel. The focus on improved fuel efficiency in our vehicles and machines is directly translated into increased profitability for our customers.

### ENVIRONMENTAL EFFICIENCY

Improved fuel efficiency is one way to lower emissions. Other ways are lower carbon alternatives and new business models that use resources more efficiently. Environmental concerns drive interest for and opportunities in electromobility, as well as for alternative and renewable fuels.

### ROAD SAFETY

Every year there are more than 1.2 million fatalities and 50 million people injured in traffic accidents globally. Safety is about reducing the risk of accidents and mitigating the consequences of any incidents that occur. It is therefore an integral part when developing our products.

Trucks, construction equipment, buses and industrial and marine engines make our societies function. When customers use products and services to build societies and facilitate trade, they contribute to prosperity.

Still, there are a lot of opportunities to improve efficiency in the logistical value chain by moving goods and people in a safer, more affordable and timely manner with less impact on the environment.

Facts show that there is great improvement potential in the transport industry related to the utilization of trucks, energy efficiency, as well as safety and congestion aspects. Today's trucks are not used to their full capacity due to congestion, resting time, service and low fill rates. A truck operating on diesel is one of the most energy-efficient ways of transporting goods on our roads. There is no doubt, however, that alternative fuels will play a more important part going forward, as a response to regulations as well as our customers' and their customers' demands. When it comes to safety aspects, it's a fact that people die in traffic and human error is by far the main reason. It is also a fact that people and goods spend too much time in congestion. Our daily life pattern and non-optimized infrastructure and logistics models result both in temporary congestions and at other times heavily unutilized road networks.

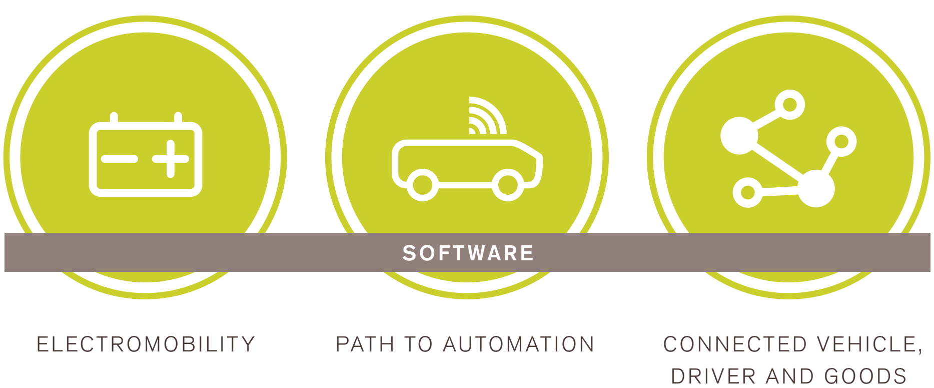
### DRIVER AND OPERATOR ENVIRONMENT

Improving the working conditions and overall experience for the driver or operator, results in more relaxed, safer and healthier driving. Over the years, the Volvo Group has developed a number of features to support the driver's comfort and driving experience and this work will continue.

## WHAT

### GROUP TECHNOLOGY PLATFORM

There are three main technology trends impacting our industry: connectivity, automation and electromobility. To a large extent, these technologies are enabled by software technology. The Volvo Group has an excellent platform for the future as evidenced by 700,000 connected Volvo Group vehicles, pilot projects in automated solutions for trucks and machines, as well as our electric and hybrid solutions. The increased focus on the development of software opens up for new opportunities. One example is meeting customers' demands and delivering productivity as a service instead of selling hardware.



# HOW

## MEETING THE CHALLENGES

It is a fast moving world. To keep up we need to adjust our ways of working. The Volvo Group is adapting to the new environment by a changed organizational structure, larger involvement of the end-customer, smaller and less complex development projects and closer partner collaboration. Our electromobility, automation and connectivity platforms will be the foundation on which to further improve customer success by leveraging on the new technologies.

There are, however, many challenges ahead. Some of them relate to affordability of batteries, safety and cyber security. Others relate to business model acceptance from customers, drivers, society and regulators.

The greatest contribution to society is when the three technologies converge. For the Volvo Group the work with these technologies is an investment in our customers' ability to contribute to prosperity even further.

ELECTROMOBILITY READ MORE ON PAGE 62 »

AUTOMATION READ MORE ON PAGE 64 »

CONNECTIVITY READ MORE ON PAGE 66 »

NEW STRUCTURES AND GOVERNANCE

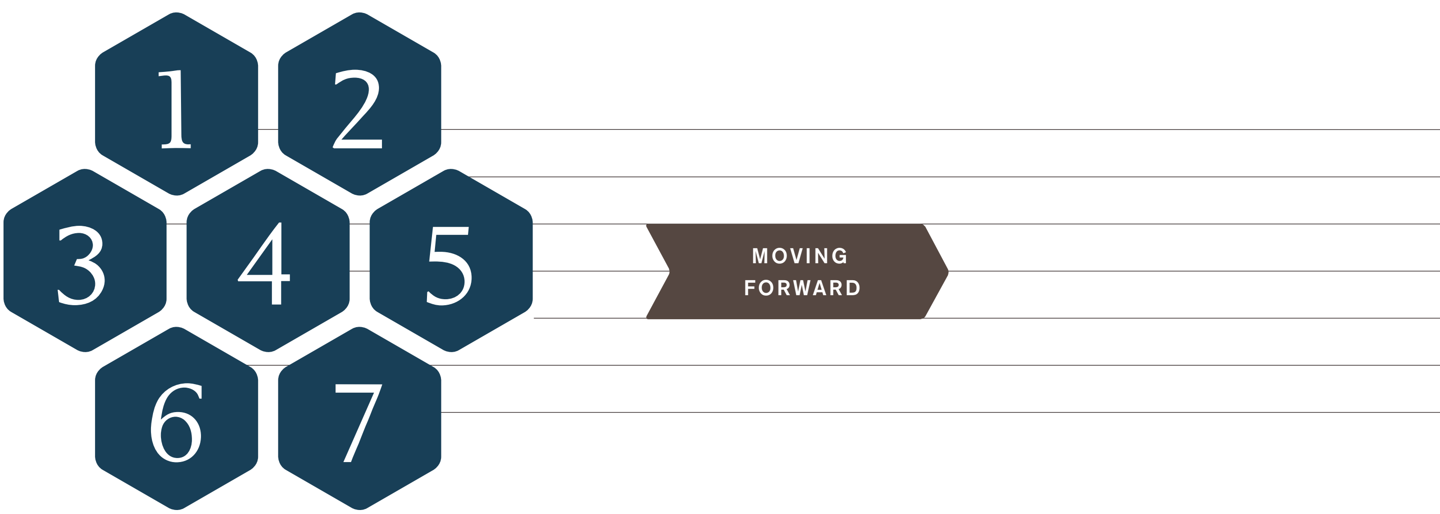
WAYS OF WORKING

NEW TECHNOLOGIES – ON OUR WAY

STRATEGIC PRIORITIES

# Creating value by supporting customer profitability

By understanding our customers' priorities and challenges, we are able to provide products and services that grow customers' revenues and decrease customers' costs. In other words – creating value for our customers by supporting their profitability. This is the foundation of our strategy.




In a large company, such as the Volvo Group, there are many paths to pursue to take on opportunities and challenges. Therefore, our seven strategic priorities consist of areas with large benefits for both our customers and us in the Volvo Group. They guide our decision making and result in actions, but should not be seen as detailed action plans fixed to a specific time frame.

During 2017, the work within each area was deepened. We have strengthened our brand portfolio with new products and further utilized our regional advantages through strong collaboration and by increasing the offer of tailor-made solutions to our customers.

Our work to drive continuous improvement in product development, production, sales and administration will together with an expanded brand responsibility set the right focus. By leveraging on Group assets for trucks and other business areas, we can generate additional profits through synergies and technology leadership.

To succeed in this work we need a strong, value-based culture that leads to engaged employees and subsequently improved business performance.

THE NEW MACK ANTHEM and the updated Mack Pinnacle and Mack Granite are together with the new Volvo VNL and Volvo VNR the biggest upgrade of the Group's North American product line-up in 20 years.

**Read more on page 22 »**

Reinforce Volvo as a global premium heavy-duty truck brand and regain position and market shares of Renault Trucks, Mack and UD as regional high-end truck brands.

1

2

Capture growth in Asia through having the joint ventures DFCV in China and VECV in India as well as the Group's value truck range in a separate value chain – and leveraging it in other emerging markets.

GROUP TRUCKS ASIA & JVS aims for profitable growth through strong brand images, competitive offers and a lean cost structure.

**Read more on page 32 »**

Create the most desirable heavy-duty product and service portfolio tailored to selected markets and segments.

Customers have different requirements and cost structures and therefore want different propositions depending on their location and the type of transport work they carry out. Creating customer value by improving our customers' profitability therefore means offering trucks adapted for each application.

3

In 2017 the Volvo Group introduced a large number of new products and services aimed at creating further value for our customers by strengthening their competitiveness in the market.

**Read more on page 42 »**

THE VOLVO VNL HAS BEEN REDESIGNED WITH SIGNIFICANT IMPROVEMENTS TO ERGONOMICS, AERODYNAMICS, FUEL EFFICIENCY AND PERFORMANCE.

Secure robust profitability through leading R&D, quality, purchasing and manufacturing operations using Volvo Production System, which is the Group concept for driving continuous improvement in product development, production, sales and administration.

By working with a system which is applied throughout the Volvo Group, it is possible to secure a sustainable way of working with continuous improvement. It can be applied to all functions and secures a Group-wide approach which facilitates cooperation and knowledge sharing.

**Read more on page 51 »**

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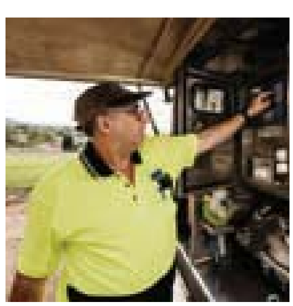
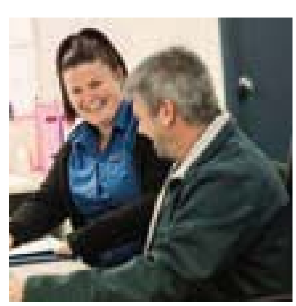
Have brand specific sales operations with a focus on retail excellence and a growing service business where decisions are made more quickly and closer to the customer. Each brand has an expanded mandate to develop its own business with an explicit responsibility for profitability.



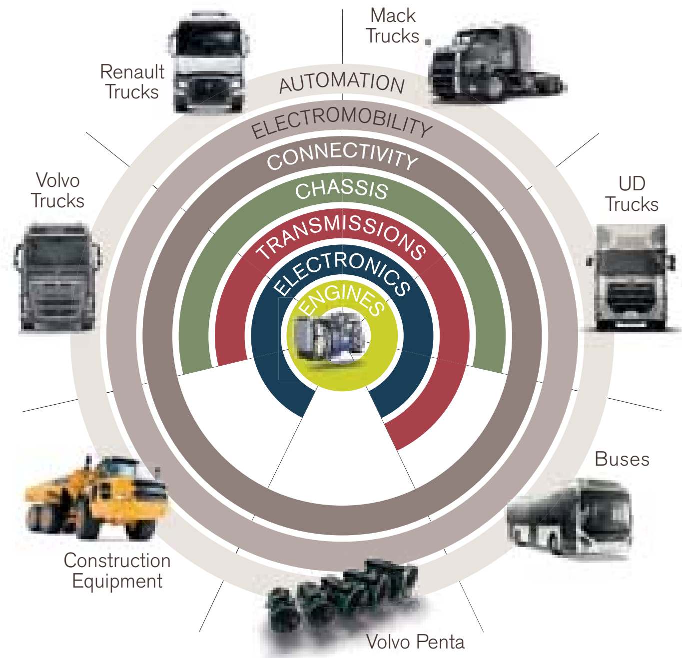


As an example, in Australia, the increased focus on services has boosted our truck brands' market shares, despite tough competition.

**Read more on page 56 »**

Leverage Group assets in the non-truck Business Areas, creating additional profits, synergies and technology leadership. Many of the Volvo Group's products are based on a common architecture and shared technology (CAST), a modularized concept with standardized interfaces. At the center of this strategy are the Group's engine platforms, which together with electronics, transmissions, and technology in connectivity, electromobility and automation are Group resources for the Business Areas to draw from.

Read more on page 38 »




6

7

Revitalize the Volvo Group culture with a focus on Customer Success, Trust, Passion, Change and Performance. We believe that a strong culture leads to engaged people. This in turn drives business performance.

Read more on page 68 »

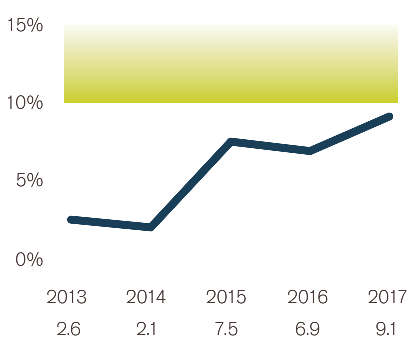
FINANCIAL TARGETS

# Measuring our performance

NEW TARGETS VALID FROM AUGUST 31, 2017

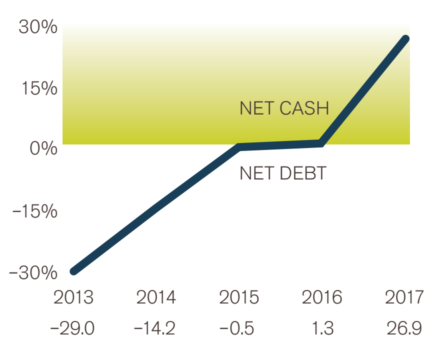
In its annual review, the Board of Directors' of AB Volvo decided to introduce new financial targets.

### OPERATING MARGIN FOR THE VOLVO GROUP, %



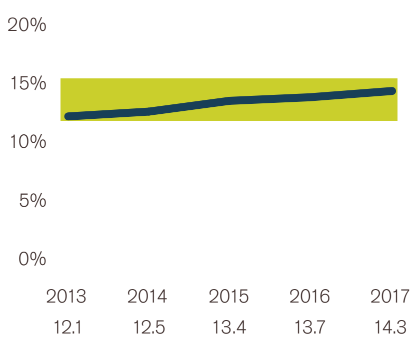

The Volvo Group's operating margin shall exceed 10% measured over a business cycle. In 2017, the operating margin amounted to 9.1%.

### FINANCIAL POSITION IN INDUSTRIAL OPERATIONS, % OF SHAREHOLDERS' EQUITY




The Industrial Operations shall under normal conditions have no net financial indebtedness excluding pension liabilities. At the end of 2017, the Industrial Operations had a net cash position of 26.9% of equity.

### RETURN ON EQUITY IN FINANCIAL SERVICES, %




Financial Services' target is a return on equity of 12–15% at an equity ratio above 8%. In 2017, return on equity amounted to 14.3%, excluding a revaluation effect from a US tax reform. Reported return, including the revaluation effect, was 22.6%.

## RATIONALE

The Volvo Group has in recent years gone through a substantial restructuring process in order to reduce structural costs and increase efficiency and is currently in a phase where focus is on organic growth and improved profitability through continuous improvement and innovation.

A clear and straightforward operating margin target supports the efforts to drive performance across the Group. The target also better aligns with the way the Group and its business areas today are challenged and measured internally. The Board therefore decided to introduce an operating margin target of above 10% over a business cycle.

A debt-free industrial balance sheet enables the Volvo Group to better manage cyclicality in a capital-intensive industry and to secure competitive cost of funds for the Financial Services' operation.

# The next-generation highway hero in North America

In September 2017, Mack Trucks introduced the Mack Anthem. The new truck was one important part of the Volvo Group's biggest product upgrade in North America in 20 years. The Mack Anthem is a re-engineered, redesigned and reimagined interpretation of what today's highway truck should be – aerodynamic, comfortable and connected, all with a distinctively bold Mack look.


"As one of the most significant new trucks in Mack's 117-year history, the Anthem combines our latest innovations with more than a century of truck-building know-how," says Dennis Slagle, president, Mack Trucks. "The incredible result is a truck that's been built for our customers' business and designed for drivers, all while delivering the power and presence that only a Mack truck can deliver."

The Mack Anthem gives drivers and businesses the tools they need to command the road. The truck features an all-new exterior design with optimized aerodynamics for improved fuel efficiency by up to 3%. New driving and sleeping environments were crafted with an emphasis on increasing driver comfort and productivity. Gauges on the instrument panel have been positioned higher for better driver visibility, the new steering wheel contains illuminated controls for cruise control, Bluetooth and the audio system and behind the steering wheel, Mack's Co-Pilot display has been updated with a new full-color screen for improved visibility and more intuitive navigation.

Mack Trucks also announced an update of its existing range in the vocational and regional haul segments, the Mack Granite and the Mack Pinnacle.

Mack also introduced Mack Connect, which will serve as the reference for Mack's growing connectivity and uptime service offers. With Mack Connect, current and future services will be structured under connected support, connected business and connected driving. When service is required, the closest dealer location is identified and service bay space and parts availability is confirmed, all while the truck is still on the road. Using predictive analytics and connective technologies, Mack Connect turns data produced by the truck, the driver and the service process into insights and actions, resulting in superior support and service to Mack customers.



# Creating value for our customers, our company and society

Responsible business and sustainable transport solutions are prerequisites for the Volvo Group's mission of driving prosperity, and thereby we contribute to the development of our society. By addressing responsible business behavior throughout our value chain, we mitigate risk and create long term value and trust.

We strive to assume economic, environmental and social responsibility for our operation, our products and our services in the areas where we have the potential to influence. This will enable us to strengthen our brands and relations with business partners and thus create new business opportunities that offer long-term growth and improved profitability.

As a global company, we have operations, suppliers, customers and other business partners all over the world. Volvo Group is buying goods and services from almost 48,000 suppliers, employing almost 100,000 employees and is selling products and services in more than 190 countries. With this footprint, we are committed to use our leverage to contribute to a more sustainable and prosperous world. Our customers contribute to the prosperity of society by transporting people and goods, constructing infrastructure and provide many of the services needed in daily life and thereby contribute to economic welfare.

**Contribute to a sustainable future**

Sustainable transport solutions advance development in the society. Volvo Group applies a life cycle approach to developing and delivering products and services responsibly and sustainably. Responsibil-

STRATEGIC DELIVERY OF GOALS

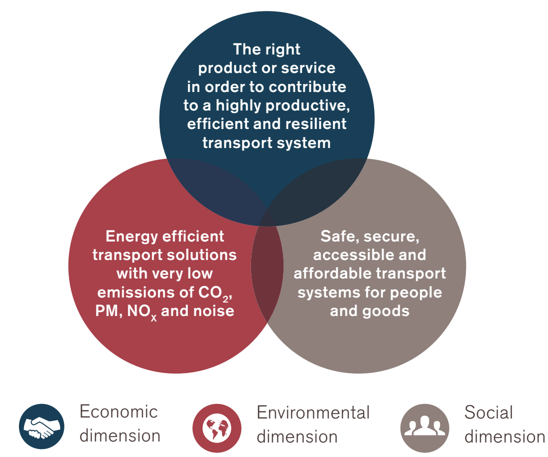

THE VOLVO GROUP CSR AND SUSTAINABILITY PLAN was developed in 2016 to ensure that we focus on areas supporting the Volvo Group's mission, vision, aspirations, values and strategic priorities. The plan helps us to contribute to the UN Sustainable Development Goals, do business with the intention of the UN Global Compact and create new business opportunities.

## UN GLOBAL COMPACT

In 2001, the Volvo Group signed the Global Compact, the United Nation's initiative on responsible business practices.

WE SUPPORT

## SUSTAINABLE TRANSPORT SOLUTIONS




ity and sustainability are vital components throughout the value chain – from product development to recycling.

We transform our business and society through products and services that advance sustainable economic, social and environmental development. By linking each of the three areas we build resilience and mitigate risk through embedding Corporate Social Responsibility (CSR) and sustainability into daily work. We clarify accountability by assigning responsibility to the Group CSR and Sustainability function to develop the strategic model for the work while responsibility of delivery lies within the business area, or entity closest to the objective. As a signatory of the United Nations (UN) Global Compact, partner in the World Wide Fund for Nature (WWF) Climate Savers program, and supporter of the UN Sustainable Development Goals, we consider global trends and challenges, international norms of responsible business behavior and stakeholder expectations when developing our work.

We address societal challenges related to our industry and contribute to a prosperous and resilient society, therefore Volvo Group has a societal engagement program based on the creating shared value principle. Read more about our societal engagement and contribution to the UN Sustainable Development Goals on page 79. ■

## UN SUSTAINABLE DEVELOPMENT GOALS – VOLVO GROUP'S FOCUS


GOOD HEALTH AND WELLBEING
Halve the number of deaths and injuries from road traffic accidents by 2020.

INDUSTRY, INNOVATION AND INFRASTRUCTURE
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

SUSTAINABLE CITIES AND COMMUNITIES
Make cities and human settlements inclusive, safe, resilient and sustainable.

CLIMATE ACTION
Take urgent action to combat climate change and its impacts.

Volvo Group focus on the goals most relevant to our business and where we can contribute the most, but not at the expense of the other goals.

The Volvo Group is generating long-term competitiveness by maximizing value creation in every part of our value chain through increased efficiency, quality and performance and by acting responsibly towards business partners, employees and the world around us.

## CUSTOMERS

The customer is at the center of everything we do and the customer's voice is present in every part of the value chain. By delivering customer value we will deliver value for ourselves.

## PRODUCT DEVELOPMENT

Fulfilling our customers' needs and improving their long-term profitability forms the basis of our product and service development.

## PURCHASING

Long-term cooperation with suppliers drives efficiency, quality and responsible behavior throughout the value chain.

## PRODUCTION AND LOGISTICS

Our well invested global industrial and logistics system efficiently meets the demands of our organization.

## RETAIL AND SERVICE

Our global network of dealers and service centers staffed by competent and service-oriented personnel are key factors for customer satisfaction and success.

## REUSE

Working with lean methodologies enable us to use less material and energy, incorporate more recycled materials, recover heat and reduce waste.

## INVESTMENTS

A significant portion of generated capital is normally transferred back into the operation. The capital is used for investments that will strengthen competitiveness and create long-term value for the Group and its stakeholders.

**The income for Volvo Group 2017 amounted to SEK 21,283 M.**

## SHAREHOLDERS

AB Volvo shareholders normally receive a certain portion of the retained earnings in the form of a dividend, after consideration has been given to the Group's need for capital for continued development according to its strategies. The Board of Directors has proposed a dividend of SEK 4.25 per share, corresponding to a total of SEK 8,636 M for 2017.

| VALUE BY STAKEHOLDER GROUP, SEK M | 2017 | 2016 |
|---|---|---|
| To suppliers – Purchases of goods and services | 227,367 | 205,910 |
| To employees – Salaries and remuneration[1] | 41,696 | 39,069 |
| To society – Social costs[1] | 9,033 | 8,228 |
| To society – Pension costs[1] | 3,864 | 3,884 |
| To society – Income taxes paid | 4,758 | 4,219 |
| To creditors – Interest paid | 1,602 | 1,584 |
| To the Volvo Group – Investments in tangible assets | 5,734 | 6,643 |
| To shareholders – Dividend | 8,636[2] | 6,603 |

[1] For further information, please see note 27 to the consolidated financial statements.

[2] According to the Board's proposal.

## CUSTOMERS (PAGE 28–31)

We see our customers as our partners and constantly work, together with our global dealer network, to understand their challenges and help them succeed in their business and turn productivity to prosperity.

- Through interviews with customers, our customer satisfaction surveys and materiality analysis, we can conclude that our customers most value productivity, uptime and fuel efficiency.
- The Volvo Group offers trucks adapted to a wide variety of segments – from city distribution to construction work, long haul and heavy transport.
- Almost 2,1 million trucks and 100,000 buses, which the Group manufactured in the past 10 years, serve on roads worldwide.
- Our construction machines operate at construction sites all over the world. We have delivered about 600,000 units of construction equipment in the last 10 years.

## PRODUCTION & LOGISTICS (PAGE 48–51)

Our industrial and logistics system is well invested with modern production equipment and adequate technical capacity.

- At the end of 2017 the Group had 87,104 (84,039) regular employees and 12,384 (10,875) temporary employees and consultants, of which 43,086 (40,798) regular employees and 6,222 (4,946) temporary employees and consultants were blue collar.
- The Volvo Group has wholly-owned factories in 18 countries.
- In 2017, the Volvo Group's wholly-owned truck operations delivered 202,402 (190,424) trucks. The Group also delivered 9,393 (9,553) buses, 64,127 (44,306) units of construction equipment, 19,565 (18,016) marine engines and 21,432 (19,251) industrial engines.
- All the Volvo Group's wholly-owned production facilities have third-party audited quality certificates and 98% have environmental certificates.

## PRODUCT DEVELOPMENT (PAGE 34–45)

In parallel with developing well-known technologies, we are focusing on strong trends such as automation, electromobility and connectivity.

- Product development is based on customers' needs, legislation, changes in society and new technologies.
- Investments in research and development amounted to SEK 16.1 (14.6) billion for 2017, corresponding to 4.8% (4.8) of Group net sales.
- Around 95% of the environmental impact from a truck occurs during the use phase. Therefore sustainable transport solutions is an integral area for our product development.
- We work together in partnership with other companies, universities and suppliers to find the best solutions for the future. Our close cooperation with our customers, ensure that the features we develop are useful, and spur new business models.

## RETAIL & SERVICE (PAGE 54–55)

Our global network of skilled service technicians maximizes uptime and reduces the risk of unplanned stops for our customers.

- The Volvo Group's products are sold and distributed to customers through wholly-owned and independent dealerships.
- 90% of our distribution centers are certified according ISO 14001.
- Our support services keep thousands of customers' fleets on the road, contributing to productivity and growth. Today, approximately 700,000 Volvo Group vehicles are connected via different telematics solutions.
- Through our Responsible Sales Process we have performed 113 assessments for sales to high risk countries.
- During 2017, our service business represented approximately 21% (22) of the Volvo Group's net sales.

## PURCHASING (PAGE 46–47)

Solid supplier and business partnerships are essential for our and our customer's success.

- We strive to have long-term relationships with suppliers of technologically advanced components.
- In 2017, the Group made purchases of goods and services totalling SEK 227.4 (205.9) billion.
- We have around 48,000 Tier 1 suppliers, of which about 6,000 supply automotive product components.
- During 2017, 95% (88) of the value bought from automotive product suppliers underwent CSR self-assessment, whereof 89% (83) passed.
- Around 92% of the Volvo Group spending on automotive products comes from suppliers certified in accordance with ISO 14001 or its equivalent.

## REUSE (PAGE 60–61)

Efficient use of resources, lower energy consumption and reduced emissions contribute to lower costs for the company, improved cost of ownership for the customer and less impact on the environment.

- Resource efficiency and recycling potential is designed into our products already in the product development phase.
- The Volvo Group has eight remanufacturing centers worldwide handling used components from our whole range of brands.
- 85% of a truck produced by Volvo Group is recyclable.
- Gearboxes produced through remanufacturing uses 80% less energy than producing a new component.
- In 2017, the total sale of remanufactured components amounted to more than SEK 9 billion.

CUSTOMERS

# We win when our customers win

Our customers' success is our success. By understanding the customers' business and needs, values and challenges, Volvo Group can provide solutions that make customers prosperous and create value for the society. Therefore customer focus is integrated in every part of the value chain.

**Understanding our customers' business**

We see our customers as our partners and constantly work, together with our global dealer network, to understand their challenges and help them succeed in their business and turn productivity to prosperity. To better understand our customers, we analyze the segments they operate in to find the best solutions, to meet their needs and to be flexible for market changes.

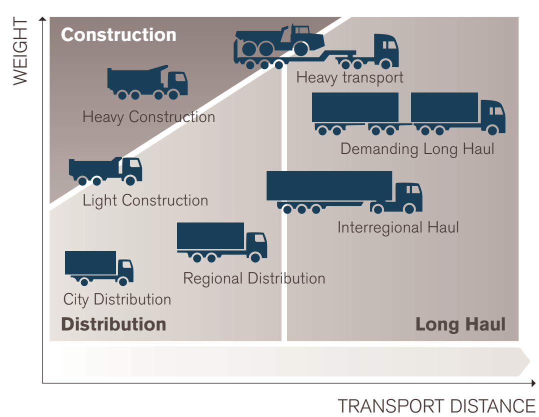
**Create value for our customers**

From interviews with customers, through our customer satisfaction surveys and materiality analysis, we can conclude that our customers value productivity, uptime and fuel efficiency the most.

- Future technologies provide great potential for increased productivity for our customers. During 2017 the Volvo Group presented a number of automated, electric and connected vehicles. Read more about our work within these areas on pages 34–45 and 62–67.
- Uptime is crucial for our customers. To secure uptime, new vehicles developed within the Volvo Group are equipped with connected devices to schedule services and prevent unplanned stops. Almost 700,000 vehicles are connected, which is the largest number of connected vehicles in our industry. Read about how our dealer, Volvo Commercial Vehicles Newcastle in Australia, supports SRH Milk Haulage on page 56–59. Learn more about how Volvo Group deliver uptime through our retail and service network on page 54.

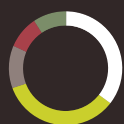
CONTINUED >>

TRUCK SEGMENTS



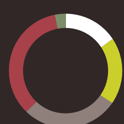

The Volvo Group offers trucks adapted to a wide variety of segments – from city distribution to construction work, long haul and heavy transport.

DISTRIBUTION, FRANCE

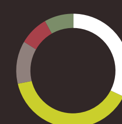


MINING, INDONESIA

CONSTRUCTION, USA



LONG-HAULAGE, EUROPE



Cost items: Fuel Driver Vehicle Repair & maintenance Administration

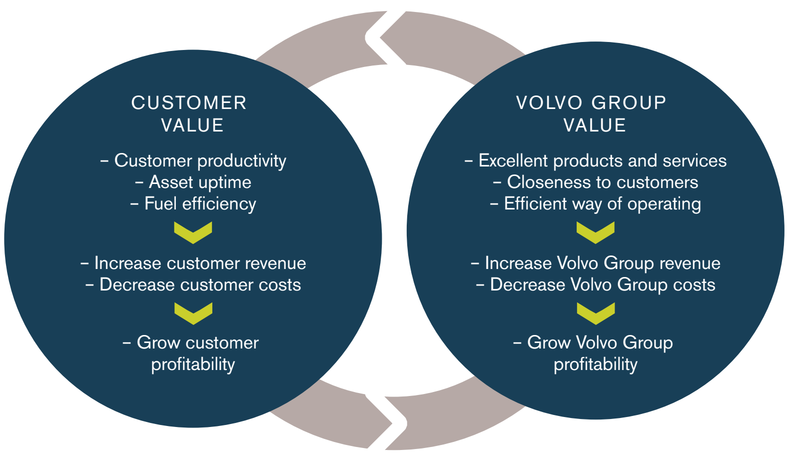
Customers have different cost structures and therefore want different propositions depending on their location and the type of transport work they carry out. Creating customer value by improving our customers' profitability therefore means offering trucks developed to for each application.

"

NEVER SAY NO – ADAPT AND OVERCOME

Scott Hughes, Brand Manager at VCV Newcastle, Australia talks about customer care and having the right attitude on page 59.

VALUE CO-CREATION




TO BE SUCCESSFUL the key is to create value for our customers by improving their bottom line profitability. By understanding our customers' priorities and challenges, we are able to provide products and services that grow customers' revenues and decrease customers' cost. Key areas to create value for our customers are offers that increase our customers' productivity, ensure that vehicles and machines are running as they should and increase fuel efficiency. By delivering customer value and doing so efficiently, we will also deliver value for ourselves and our owners.

- Fuel efficiency and adaption to alternative fuels are central in our product development. As one example, Volvo Trucks introduced a gas-powered truck and presented a long-haul concept truck with a hybrid driveline that can harnesses brake energy and further reduce energy use and fuel consumption. Read more about our improvements and strategy in this area on page 39.

**Customer satisfaction**

The only true measure of success is customer satisfaction. Our vision "to be the most desired and successful transport solution provider in the world" states the direction and links to our aspiration of having leading customer satisfaction for all brands in their segments.

Each brand organization within Volvo Group, track customer satisfaction and brand image perception through world-wide surveys. Performance is integrated in key performance indicators reporting in the brand organizations. Research and studies are done by leading market research companies and are carried out with decision makers among customers and non-customers. The data we get is an integral part of understanding our customers' needs and continuously improve.

**Follow-up on main brands in main markets**

Volvo Trucks' customer satisfaction survey results showed an overall improvement in Europe, the Middle East and Africa. Most notable improvements are in customer care and safety areas. Customer care index improved in comparison to previous score, as well as compared to the competition, making the brand gain more ground. In South America, the lead over competition continues in most areas being tracked. All tracked areas showed improvements, while

**6 focus areas**

WHAT CUSTOMERS WANT

Six focus areas for customers when purchasing a heavy-duty vehicle:

**What are the opportunities to increase revenue?**

PRODUCTIVITY is about the effective and efficient use of all resources. It is impacted by factors like transport rates, average speed and mileage, time spent on non-driving activities, driving time, load capacity and utilization.

**What is the cost of unplanned stops?**

UPTIME is the percentage of time that the truck is up and running – fully operational or ready to perform its intended functions.

**What cost savings arise from burning less fuel?**

FUEL EFFICIENCY is about covering maximum kilometers with minimum fuel.

**What are the costs and consequences of an accident?**

SAFETY is about being safe from suffering – or causing – injuries or loss.

**What is the cost of crime?**

SECURITY is about being protected from theft of vehicles, fuel, cargo or personal belongings.

**What is important for driver comfort and performance?**

DRIVER APPEAL is about providing a supreme working and living environment in order to attract the best drivers.

These six customer needs have been identified through surveys with Volvo Trucks customers.

# Supporting customers and the local society

THE COST OF TRAFFIC ACCIDENTS IN PERU IS MORE THAN USD 1 BN PER YEAR (APPROX. 2% OF GDP). MORE THAN 32,000 PEOPLE HAVE BEEN KILLED IN TRAFFIC ACCIDENTS IN THE LAST 10 YEARS.



indices for customer care, fuel efficiency and uptime improved the most. The improvement was most notable in Brazil. Volvo Trucks continues to be the leading brand in image and customer satisfaction areas in most of South America.

For Volvo Construction Equipment, customer satisfaction increases in Asia Pacific, the Americas are stable, whilst increasing in Europe, the Middle East and Africa. Customers agree that our machines offer good productivity with Volvo providing good uptime support. Customer loyalty to the Volvo brand is high in these markets. In China, where overall market conditions are improving for the entire industry, we see a very positive trend in customer satisfaction. In addition, the position of Volvo CE has improved relative to the competition. The overall perception of Volvo CE in terms of providing low fuel consumption and safety is very strong among both customers and non-customers. ■

In many markets there is a lack of, or fierce competition, for the best drivers and operators. In Peru, 100 women got the chance to join the Volvo Group's training program to become truck drivers in 'Iron Women', an initiative to increase safety and diversity in the Peruvian transport industry. The program includes practice, theory and training in simulators, which allows students to acquire the skills and knowledge necessary to drive trucks and obtain an AIIIB, a license that allows them to drive vehicles of more than 12 tons. They also received a training course called 'Transformar' – a program addressing driving attitudes to increase safety.

One of the first students was Ana Caballero, who used to work for a public transport company, but now sets out to be a truck driver with her own company: "I was excited to receive the invitation to Iron Woman and the program has already meant a lot to me. I really want to learn everything I can from Volvo Trucks," she says.

# Capture growth in Asia and emerging markets

Today, emerging markets make up the lion's share of the volume of medium-duty and heavy-duty trucks sold globally. Markets such as China, India, Southeast Asia, and Africa are the ones with the biggest growth potential. Group Trucks Asia & JVs was set up to seize this opportunity for profitable growth and strengthen the cooperation with our joint ventures.

To meet its unique market challenges, Group Trucks Asia & JVs has its own value chain with resources for purchasing, R&D, manufacturing and sales of heavy-, medium- and light-duty trucks sold under the UD Trucks brand. The business area also works closely with the Volvo Group's partners in Dongfeng Commercial Vehicles (DFCV) in China and VE Commercial Vehicles (VECV) in India.

DFCV and VECV delivered a total of 218,031 trucks in 2017, which can be compared with the Volvo Group's wholly-owned truck brands' deliveries of 202,402 trucks. Group Trucks Asia & JVs has a strong position in the heavy-duty segment in China through DFCV and its brand Dongfeng, which is number three in terms of market share, and in the light-duty and medium-duty segments in India through VECV and its brand Eicher, which is number three in terms of market share in the commercial vehicle market.

"Having our own value chain enables us to have a cost-efficient structure, which is necessary to be competitive in these markets. We will utilize the joint ventures' assets including strong brand images to strengthen our capabilities and share components between the JVs and our UD branded products. The Volvo Group also brings a lot into these partnerships to support the joint ventures' profitability and strengthen their growth, particularly how to develop retail and service excellence to differentiate ourselves in the industry. We have a good development in volumes and profitability and I am very positive about the future," says Håkan Karlsson, President of Group Trucks Asia and JVs.

**Expanded UD product offering**

The heavy-duty UD Quester was launched in 2013 and in 2017 it was joined by the medium-duty UD Croner and the light-duty UD Kuzer (more information on these trucks is available on pages 42-44). These UD branded trucks' main markets are in Southeast Asia with Thailand and Indonesia currently being the countries where the trucks have made the biggest impact. However, the truck offering is also starting to make inroads into other markets such as South Africa and the Middle East.

UD Quester is a complete range of trucks with configurations for long-haul, construction, distribution and mining applications. After a somewhat slow start, the truck range has started to gain momentum with increasing volumes. In Thailand, UD Quester had a market share of 5% in the heavy-duty segment in 2017, and in Indonesia the share was 12%. In Indonesia, we cooperate with Astra Group to drive sales and to provide service support to the installed fleet. Production of UD Croner was gradually ramped up during 2017, and UD Kuzer will be hitting the market in volumes in 2018.

**Strong position in China …**

DFCV, in which the Volvo Group is an owner since 2015, has a complete range that covers heavy- and medium-duty trucks for demanding operations in long haul, regional and local distribution and for tough construction, mining and off-road operations. The market share in heavy-duty trucks was 13% in 2017.

DFCV produces the Volvo Group's 14-speed manual gearbox technology under license and to further strengthen the product portfolio in connection with the introduction of the CN6 emissions regulations, DFCV will produce an 11-liter engine based on Volvo Group technology. As the Chinese market matures, a strong retail and service network that offers first-class service will become increasingly important and this is another area where DFCV can draw from the Volvo Group's competence.

In recent years demand in China has improved following a number of weak years after the previous peak in 2010. In 2017 the market was very strong, reaching over 1.1 million heavy-duty and medium-duty trucks. The increasing volumes and internal restructuring to lower the cost base resulted in DFCV's profitability improving significantly in 2017.

**… and in India**

In 2018 VECV celebrates its 10 year anniversary of becoming operational. It has been a decade of a very positive development. In India, VECV's brand Eicher had a market share of 32% in the light and medium-duty truck segments in 2017. Eicher is also slowly but steadily increasing its market share in heavy-duty trucks. However, there is more potential to grow in the heavy-duty segment where the market share was close to 5%.

In addition to trucks, VECV also produces the Volvo Group's medium-duty 5- and 8-liter engines on a global basis. Euro 6-compliant diesel base engines are supplied to the Volvo Group plant in Venissieux, France where they are adapted to the Euro 6 requirements. The same platform is adapted to Euro 3 and 4 engine technologies to meet VECV and other Group requirements for these types of engines in Asia.

After a weak demand in 2013 and 2014, the Indian market has been on a rebound in recent years, with some bumps to the growth along the way. However, all through the downturn VECV continued to be profitable. Along with retail excellence, profitable growth continues to be in focus for VECV, especially in heavy-duty trucks. ■

## Develop a joint eco system to stay ahead of our competitors

We utilize the strength of the Volvo Group and the JV's competence and technology to develop competitive products and processes.


**GROUP TRUCKS ASIA**

Number of employees 1,400. R&D and purchasing in Bangalore, India and production in Bangkok, Thailand. The main markets are Thailand and Indonesia. Some sales in South Africa and the Middle East. 2017 deliveries: 6,722 trucks.

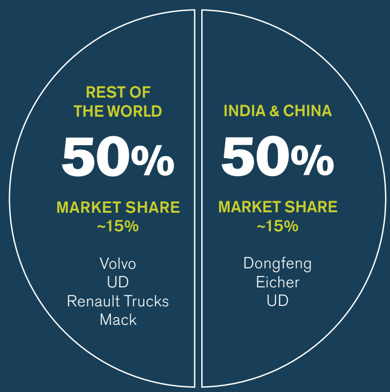
**VECV**

Established in 2007. Ownership 45.6% with Eicher Motors as the partner. 11,000 employees. Headquarter, R&D and production in Pithampur, India. The main market is India. Deliveries in 2017 totaled 47,376 trucks.

**DFCV**

Established in 2015. Ownership 45% with Dongfeng Motor Corporation as the partner. 24,000 employees. Headquartered in Shiyan with R&D and some administration located in Wuhan. Main market China, some exports. Deliveries in 2017 totaled 170,655 trucks.

## Strong global market position with our joint ventures




Markets outside China and India represent some 50% of the global truck market. In these markets the Volvo Group has a market share of around 15% with its wholly-owned truck brands. China and India represent the other half of the global market. In this fast-growing part of the world, Volvo Group's own truck brands have a very limited market share. Through the joint ventures with Dongfeng and Eicher, the Volvo Group has a strong total global presence and market position.

PRODUCT DEVELOPMENT

# Investing in the future

We are at the start of a paradigm shift in transport that will reshape the industry and the society we live in. We are looking at three strong trends: automated driving, electromobility and connectivity. Several of the current and well-known technologies will remain crucial during the transition period. Therefore we need to find the right balance in our product development investments between well-known and new technologies.

All our product development is based on the future needs of our customers. We will provide them with products and services that help them offer their customers the most efficient transport solutions. The working environment for drivers and operators should be pleasant and safe, and our products should fulfill or exceed all requirements on emission standards, safety standards, data protection and more.

New technology areas such as automation, electromobility and connectivity have huge potential to raise productivity and safety and to reduce the environmental impact, but it will take time before we can fully utilize these opportunities. Our engineers need to continue to innovate and develop the well-known technologies – to make engines and transmissions more fuel-efficient with lower emissions, to further reduce the weight of our vehicles, and make them more aerodynamic, and to ensure that our cabs are further adapted to the needs and demands of drivers and operators. Innovative ideas are equally important in well-known technologies as in new technologies. And we firmly believe there is still huge potential in well-known technologies. The Wave Piston, which received the 2017 Volvo Technology Award, is one good example (see page 37).

In parallel with developing well-known technologies, we have embarked on a journey toward increased automation, electromobility and connectivity. Each of these technology areas have the potential to impact the mobility of goods and people. And when they converge, they will radically transform transport. To ensure we remain on the frontline of these technology areas, we need to work in a different way. We need to work more in partnerships with other companies, universities and suppliers to find the best solutions for the future. And we need to continue working in close cooperation with our customers to ensure that the features we develop are useful for them, and that we can work together to develop the new business models needed.

VOLVO CE PRESENTED THE SECOND-GENERATION OF ITS CONCEPT AUTONOMOUS, BATTERY-ELECTRIC, LOAD CARRIER HX2 IN MARCH.

CREALab

# *At CREALab in Lyon, there are no normal rules*

At CREALab in Lyon Bertrand Félix got the chance to experiment with new ways of using augmented reality. In record time, he and his team developed a software prototype for hololenses: glasses that use augmented reality technology. The idea is that these glasses will be used by operators at the Volvo Group's plants to perform quality control with intuitive head-up display instructions. The prototype is now going to be tested at the GTO Powertrain Production plant in Lyon. The team continues to evaluate other possible applications for augmented reality


Anyone in the Volvo Group who is in need of new ideas can try out the creative areas, or innovation labs, that have been established in different parts of the Volvo Group. Here, teams and coworkers are able to work on problem solving, idea generation and development in an environment that stimulates creativity and inspiration. Some facilities also offer laboratories, as well as opportunities for prototyping and demonstrations.

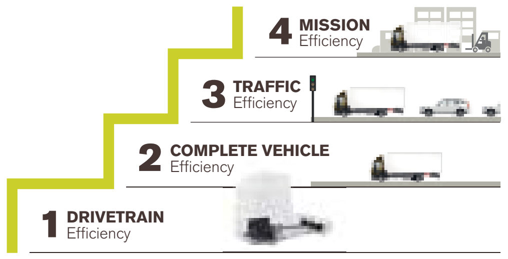
### Automation benefits customers and society

We believe that automation will redefine the commercial transport solutions that most of us rely on every day. Automation will create real-life benefits for both our customers and society in terms of productivity, safety, energy and fuel efficiency. But automation is nothing new. Automated gearboxes and cruise control, to name a few, are functions that are part of our commercial offer since several years, supporting drivers in their everyday work. With the exponential increase of microprocessor capacity, however, it is now possible to take automation much further. There are different levels of automation throughout the vehicle industry – from no automation to self-driving vehicles without the need of a driver or operator. Since the ideal level of automation is determined by its added value for customers and society, Volvo Group aims to introduce automation gradually over time. We believe there will be drivers and operators in our vehicles in most applications for the foreseeable future. During the year, we demonstrated fully automated concept vehicles for confined areas, for refuse collection, for hub-to-hub applications in semi-confined areas and a self-steering truck for the sugar cane harvest in South America (see page 65).

We believe that fully automated vehicles in commercial operations will initially appear in confined and semi-confined areas like mines, quarries, ports and dedicated lanes on some highways. For more complex environments, such as city traffic and mixed traffic at higher speeds, we believe it will take significantly longer time before this is possible.

Our concept vehicles show that we have come a long way in terms of technology development, but more research and development is still needed. To fully utilize all possible automated features of the future, we in the industry together with authorities also need to further develop and agree upon related areas, including standards and regulations, liabilities and cyber security.

#### TRANSPORT TECHNOLOGIES IN CONTEXT




#### NEXT STEP FOR AUTONOMOUS TRUCKS

We believe autonomous vehicles will initially be commercialized in confined areas, as shown by the underground tests performed by mining company Boliden. The next step could be semi-confined areas with somewhat more complex traffic situations. A new project to test this has started with Boliden, and the autonomous vehicle for this project was first shown at the Volvo Group Innovation Summit in Beijing.

**Read more about automation on page 64 »**

### Progressing electromobility

There are several reasons why electric vehicles are now emerging in the transport industry.

- An electric motor is highly energy-efficient.
- Battery capacity is increasing.
- Provided that the electricity has been produced from non-fossil sources, electric propulsion eliminates $CO_2$ emissions.
- There are no local emissions of nitrogen oxides and particulates, and the electric motor is quiet.

We believe that electrification will fundamentally change the way we look at city planning. Just imagine indoor bus stops at hospitals or shopping malls. Electric vehicles will also enable better use of the infrastructure, especially in cities. Today, roads and streets are mostly used during rush hours and daytime. The noise from diesel vehicles makes it impossible to distribute goods or do construction work at night, but electric vehicles are so quiet that the infrastructure could be used at night for some purposes.

More and more cities are investing in electric public transport systems as the city bus market moves away from pure diesel-powered vehicles. As far back as 2010, Volvo Buses took the decision to offer only complete, low-floor city buses as hybrids on the European market. Volvo Buses now offers the entire range of electrified city buses, including hybrids, electric hybrids and all-electric buses. Volvo Buses has sold more than 3,800 (2,300) Volvo branded electrified buses in 22 (20) countries since the start in 2010. During the year, Volvo

# Wave piston design reduces fuel consumption

THE WINNING TEAM BEHIND THE WAVE PISTON CONCEPT CONSISTS OF FOUR ENGINEERS AND INVENTORS FROM GROUP TRUCKS TECHNOLOGY: JOHN GIBBLE, FRANK LÖFSKOG, MICHAEL BALTHASAR AND JAN EISMARK.

Buses further strengthened its electric bus offering with a significantly extended range and more charging options (see page 61).

Volvo Group benefits greatly from being early in the development of electrified solutions for our buses. The technology developed for buses will also be used for areas such as city distribution, refuse trucks and construction equipment in the coming years. In 2019 both Volvo Trucks and Renault Trucks will start selling medium-duty electric trucks for city distribution in Europe. The first trucks will be delivered to selected customers already in 2018. During the year, good results were also obtained when Volvo Construction Equipment tested a hybrid wheel loader in California, USA, and the company presented a fully electric compact excavator concept (see page 38).

Next step will be electrification of trucks for regional and long haul operations. For many applications this will take longer time, not least because it will take time to secure the charging infrastructure customers need. Combustion engine technology will therefore be needed for many years to come.

We will not necessarily need to use diesel as a fuel – alternative and renewable fuels are also an option. During the year, a new and highly efficient gas-powered Volvo truck was introduced in Europe and we also presented a long-haul concept truck with a hybrid driveline that harnesses brake energy to further reduce energy use and fuel consumption.

In the long term, we believe that a dynamic supply of electricity from the road could power long-haul trucks and practical knowledge is therefore being obtained through participation in electric road systems concept studies in both Europe and North America.

Although the internal combustion engine has been in existence for 140 years – during which time it has undergone continuous development – it still offers room for improvement. A team of Volvo Group engineers developed a new piston crown that featured the addition of "waves" to improve the utilization of oxygen for which they received the 2017 Volvo Technology Award. The technology is unique within the automotive industry and is protected by several patents. Working in combination with other engine enhancements, the wave piston delivers improved fuel efficiency of up to 2.2% for the 11-liter engine and 2.5% for the 13-liter.

### Alternative fuels and drivelines

Volvo Group acknowledges that there is no single fuel that can meet all needs. Conventional diesel fuel, with increasing renewable or synthetic content, will likely remain the dominant fuel for most types of commercial transport for many years to come.

We have advanced our offering of alternative fuels for vehicles, such as methane and hydrogenated vegetable oils (HVO), and is testing DME in order to reduce the environmental impact and meet market demand. During the year, a new and highly efficient LNG-powered Volvo truck was introduced in Europe (see page 39).

In North America, Volvo Trucks and Mack Trucks were the first Original Equipment Manufacturers to approve the use of advanced hydrocarbon renewable diesel fuel (HVO) in all of their products. The biggest challenge posed by renewable diesel is not compatibility or emissions, but the lack of adequate supply. Volvo Trucks and Mack Trucks also offer trucks equipped with 9- and 12-liter natural gas engines, as does Nova Bus. These vehicles offer the benefit of a fuel that is domestically produced and reduces emissions.

### Increasing fuel efficiency

The Volvo Group performed a fuel consumption and NOX emission test between two typical European long haul tractors, one Volvo FH from 2016 and one Volvo F12 from 1991. Both trucks were simultaneously measured on an open road during normal traffic situations pulling similar semi-trailers loaded to 40 tons total weight. The test route where driven four times during the same day. The measurements, from preparation to final evaluation, was witnessed, reviewed and approved by an independent third-party, AVL MTC. The measurements showed that the new Volvo FH 2016 has reduced fuel consumption by 19% and $NO_x$ emissions by 98%.

### VOLVO CE UNVEILS 100% ELECTRIC COMPACT EXCAVATOR PROTOTYPE

At the Volvo Group Innovation Summit in London in May, Volvo CE demonstrated the EX2 – a fully electric compact excavator prototype that delivers zero emissions, ten times higher efficiency, ten times lower noise levels and reduced total cost of ownership. The EX2 is a research project and not commercially available.

### Connectivity presents new opportunities

When it comes to connectivity, or the digitization of vehicles, Volvo Group was the first in our business to offer telematics solutions back in 1994. Today, we have a broad customer offering of connected solutions for trucks, buses and construction equipment. With almost 700,000 connected vehicles, we have the largest number of connected vehicles in the industry.

Today's connected solutions help our customers lower their costs through fleet optimization and fuel savings, and to raise their productivity and profitability through improved uptime. And uptime, in the world of commercial transport, is what everyone is chasing. It means avoiding unplanned stops, which we can help our customers achieve by monitoring vehicles and predicting when they will need maintenance, assign a technician and schedule a visit to the service station at a time when the truck is not operational. During the year, Volvo Trucks and Mack Trucks in North America launched remote programming services making it possible to download different software for the truck wireless wherever the truck is (see page 66).

Connectivity has the potential to increase transport and resource efficiency through optimized traffic flows and higher utilization of existing infrastructure, as well as new business models for logistics.

### Common Architecture and Shared Technology

With 11 different brands in different product segments, we find synergies to reduce product and product development costs, while simultaneously securing brand-unique solutions. Volvo Group is now leveraging more than 15 years of work to create a modular system, and we have come a long way. We call the system CAST – Common Architecture and Shared Technology. The engines we develop are shared by all our product segments, electric systems and transmissions by most segments, and chassis components by all our truck brands, to name a few examples. Instead of reinventing the wheel with every new product, we use as much common technology as possible, to benefit both our customers and the Volvo Group. And the efficiency gains generated by our consistent work with commonality are not confined to product development. They can also be seen in our supplier structure, industrial system, sales and, not least, service system.

At the same time, it is important to ensure that each product in the modular system is adapted to what customers expect from each brand and product segment, as well as local demands and requirements. Therefore we have a global product development system with engineering resources in different parts of the world, close to

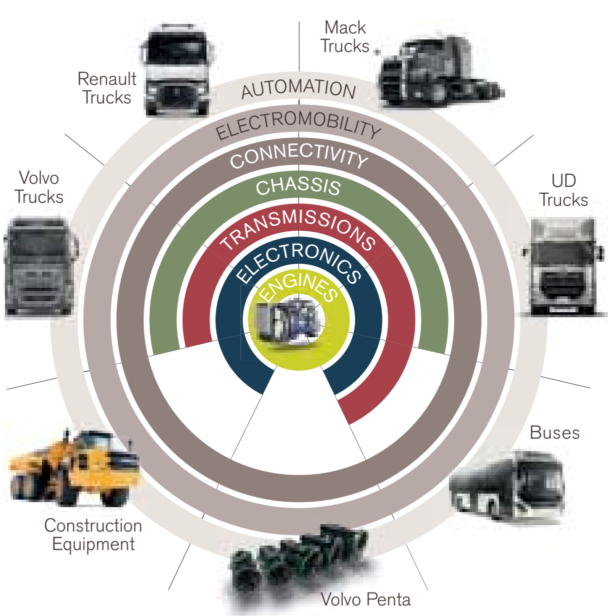
# LNG: Same performance as diesel – lower $CO_2$ emissions

*20–100%*

LOWER $CO_2$ EMISSIONS

customers, to ensure that every product delivers what customers expect. The new truck UD Quon, which was launched during 2017, is a good example of a truck with a high level of solutions and components shared with other Volvo Group trucks, combined with the characteristics that customers expect from a UD truck.

CONTINUED >>




Volvo Trucks has introduced trucks for heavy regional- and long-haul operations that run on liquefied natural gas (LNG) or biogas (LBG) using diesel engine technology. The new trucks have the same performance, drivability and low fuel consumption as Volvo's diesel-powered models, but with 20–100% lower $CO_2$ emissions compared with diesel, depending on the choice of fuel.

**Safety a prerequisite**

The Volvo Group's ambition is zero accidents involving our vehicles and equipment. Road traffic and worksite safety are global challenges for the Volvo Group. Safety is about reducing the risk of accidents and mitigating the impact of any incidents that do occur. Safety is therefore an integral part of product development.

The Volvo Group's in-house Accident Research Team has been investigating heavy truck accidents for almost 50 years. Combining accident data analysis with the Group's own research and test programs provides solid insights into the causes of accidents and injuries. This is important input for developing even safer products for our customers.

Volvo Group has pioneered a variety of driver assistance systems, including Driver Alert Support and Lane Changing Support, which enhance awareness and alert the driver before a situation turns critical. The Collision Warning with Emergency Brake system is another sophisticated system, and offers market-leading emergency braking capabilities. The fast development within the automation area will make it possible for us to offer even more sophisticated driver assistance systems the coming years. ■

# Metal 3D printing: The future for lighter and more compact engines

WEIGHT REDUCED BY

25%

A team of Volvo Group engineers in Lyon has succeeded in building and running an engine with some vital 3D-printed components. The estimation is that a 3D-printed engine could lead to a reduction of the number of components in the engine and weight by about 25%. This could lead to greater payloads and lower fuel consumption should it reach production.

# Emissions regulations for heavy-duty vehicles

In recent decades, regulators in Europe, the US and Japan have progressively implemented stricter emissions standards for new heavy-duty engines for trucks and buses. In spite of great progress, particularly related to lower levels of nitrogen oxide ($NO_X$) and particulate matters (PM), problems with air pollution and climate change remain. A common focus for regulators going forward is the actual engine performance in use instead of a generic engine model in a test cell.

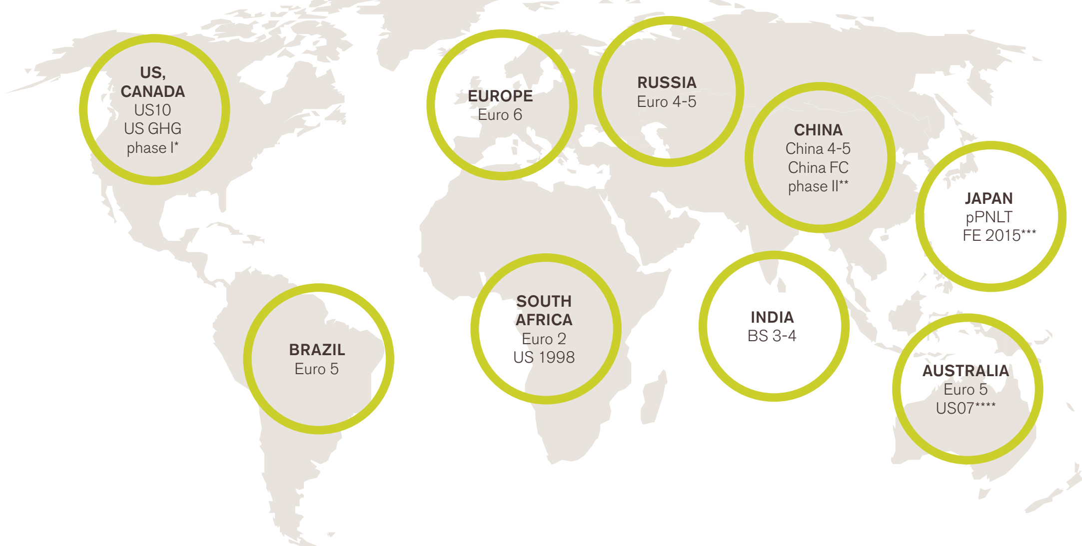
The Volvo Group supports this direction. The Euro 6 regulation implemented 2013 has clearly shown that testing with portable emissions measurement systems (PEMS) can be a very effective way to reduce real driving emissions during all conditions. The emissions regulation for passenger cars has now been updated in the same direction. We actively follow developments to ensure adherence by developing engines that meet all legal requirements.

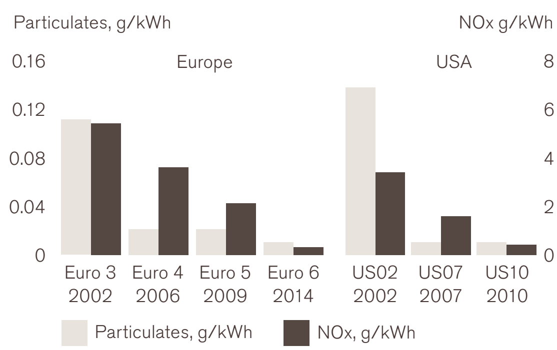
## EUROPE

In 2016 a new regulation, Stage V, was published for non-road engines in EU. The main changes compared to Stage IV relate to particulate matters. The new requirements, valid from 2018/2019 are set at a performance level currently expected to be achieved with particulate filters.

The emissions regulation for on-road vehicles was also updated with a Euro 6 step D entering into force 2018/2019. The main updates concern the in-service conformity testing with PEMS where the limits regarding payload and power have been changed to include low load duty cycles in a better way.

A regulation for certified declaration of carbon dioxide ($CO_2$) emissions and fuel consumption for heavy-duty trucks has been decided and will start in the beginning of 2019. The regulation has been developed by the EU Commission with broad support from the Volvo Group and the industry via the European Automobile Manufacturers' Association (ACEA). The certified declaration will be the most advanced in the world and is based on certified measurements of components and calculations of complete vehicle $CO_2$ emissions. The system will give customers a possibility to, on an equal and fair basis, compare $CO_2$ emissions of different product offerings and specifications. This will even further strengthen and support the market




THE EMISSIONS LEGISLATIONS varies for different regions. In some regions the implementation of stricter rules is hindered by insufficient availability of good fuel quality and low sulfur content. In many parts of the world, the emissions legislations are based on EU and US legislation. In 2010, US10 was implemented in North America and at the end of 2013 Euro 6 was introduced in the EU. With the implementation of US10, emissions levels for particulates and nitrogen oxides ($NO_X$) have decreased substantially. Euro 6 entails that emissions of nitrogen oxides and particulate matter are reduced by more than 95% compared to a truck from the early 1990s.

* US Greenhouse gas standard phase I.

** China Fuel consumption standard phase II.

*** Japan Fuel Efficiency targets 2015.

**** In addition to Euro 5 and US07, there is also NLT in Australia.

forces regarding $CO_2$ and fuel consumption. The declaration will be followed by a proposed reporting and monitoring regulation, allowing the EU Commission to follow the progress and implement further actions if needed. As a third step, a $CO_2$ regulation including standards or limits is being prepared by the EU Commission.

## USA

In the US, the EPA (Environmental Protection Agency) and NHTSA (National Highway Traffic Safety Administration) have decided the US Greenhouse Gas (GHG) regulation phase II final rule. It includes separate regulations for engines and vehicles, but also a new separate trailer regulation starting in 2018. One main difference from the current regulation is that the vehicle regulation includes the actual engine performance of the vehicle instead of a generic engine model. All limit values for engines and vehicles have been updated. The level of stringency will according to the EPA increase by up to 27% between year 2017 and 2027.

Regarding criteria pollutants, California Air Resources Board (CARB) has adopted optional low $NO_X$ certification standards for on-road heavy-duty engines. The emissions levels are reduced by up to 90% compared to the current federal $NO_X$ levels.

## LOCAL INITIATIVES

On top of these regulations there are other local initiatives where cities around the world set more stringent regulations to improve air quality in cities. One example is the commitment from Paris, Mexico City, Madrid and Athens made at the C40 Mayors Summit to remove diesel vehicles from their cities by 2025. C40 is a network of the world's megacities committed to addressing climate change. ■

LAUNCHED IN 2017

# Several important new products and services

In 2017 the Volvo Group introduced a large number of new products and services that strengthen the customer offer and the Group's competitiveness.

**FEBRUARY**

### UD CRONER

The UD Croner is a medium-duty truck designed and developed specifically for emerging economies in Asia, Africa, the Middle East and South America. It includes a number of features for improving both fuel and driver efficiency, as well as uptime and durability. The automatic transmission in particular – a rare feature in medium-duty trucks in many markets – is widely seen as a game-changer in the industry.

**MARCH**

### VOLVO PENTA STAGE V INDUSTRIAL ENGINE

In March, Volvo Penta launched its concept to meet European Stage V emissions legislation for the full off-road engine range between 5 and 16 liters.

### VOLVO L350H AND L260H

The new Volvo L260H and L350H wheel loaders are the latest addition to the Volvo CE H-Series range for heavy-duty applications. Compared with the previous models, the loaders have more horsepower and torque and a significant increase in payload. These improvements mean up to 10% better fuel efficiency. Add the revolutionary Volvo Co-Pilot with Load Assist, and the result is faster cycle times, increased on-site productivity, maximum operator comfort and simpler serviceability.

### VOLVO B8R

The Volvo B8R is Volvo Buses' latest chassis. In comparison with the Volvo B7R, the top-selling chassis that it replaces, it has higher power output with improved fuel consumption. Further leveraging the Group's common engine platform, its robust yet highly flexible structure, made from tried-and-tested components, is designed to form the foundation for both city and intercity buses, as well as long-distance coaches.

### UD QUON

The new UD Quon is a full upgrade of the brand's flagship heavy-duty model. It includes a number of unique features for improved drivability, fuel efficiency, safety, productivity and uptime, such as the ESCOT-VI automatic transmission, traffic eye brake and driver alert system. Its new, more powerful GH11 engine complies with the stringent Japanese pPNLT exhaust gas regulation, and exceeds the 2015 fuel economy standards for heavy vehicles in Japan by 5%.

### VOLVO VNR

On April 20, Volvo Trucks launched the new Volvo VNR regional haul truck in North America, marking the first step in the renewal of the Volvo range in the North American market. With its modern ergonomic interior workspace and more aerodynamic exterior, the new vehicle will significantly improve Volvo's position in the important regional haul market.

### VOLVO PENTA IMO TIER III ENGINE CONCEPT

In May, Volvo Penta revealed its concept to meet future marine emission standards, IMO Tier III. Volvo Penta's new engine and after-treatment concept is based on both the company's own experience along with expertise from the Volvo Group in selective catalytic reduction (SCR) technology, resulting in a system that is dedicated to low-emission, heavy-duty marine operations.

APRIL

MAY

# LAUNCHED IN 2017

**SELF-STEERING VOLVO TRUCK**
Volvo Trucks has developed a new self-steering truck that can become a significant productivity booster for Brazilian sugar-cane farmers. The truck, which is used to transport newly harvested sugar-cane, is steered with great precision through the fields in order to avoid damaging the young plants that will form the following year's crop.

**VOLVO VNL SERIES**
With the long-haul segment accounting for a large portion of Volvo Trucks' business in North America, the new Volvo VNL series is the brand's new flagship model in the region. The cab has been designed for improved aerodynamics and visibility, while the interior sets new standards in driver productivity and ergonomics. Other features include Volvo's I-Shift automated transmission, XE (eXceptional Efficiency) packages, Position Perfect steering and collision avoidance through Volvo Active Driver Assist.

**VOLVO PENTA D13 1000**
With 1,000 hp, Volvo Penta's D13-1000 is its most powerful marine leisure engine yet. Combined with an IPS pod drive that has been upgraded to handle this extra power, the D13-IPS1350 integrated package can offer the equivalent power of a 1,350 hp engine. It also means that the full benefits of Volvo Penta's IPS can be extended to larger yachts of up to 120 feet, allowing Volvo Penta to grow in the super yacht segment.

**UD KUZER**
The new Kuzer is a light-duty truck that has been developed specifically for growth markets. Strong economic growth and increased investment in infrastructure is fuelling demand for commercial vehicles, and with the Kuzer, we believe that we can fill a gap in the market. With 150 hp, the Kuzer offers the highest engine power in its class, and 25% extra torque compared to other trucks currently available in the same segment.

**JUNE** **JULY** **AUGUST**

## BIGGEST UPGRADE IN NORTH AMERICA IN 20 YEARS

In 2017 we moved ahead with a comprehensive renewal of the truck portfolio in North America. In the spring Volvo Trucks launched the new Volvo VNR regional haul and Volvo VNL long haul trucks. And in September Mack Trucks announced an update of its existing range of Mack Granite in the vocational segment and Mack Pinnacle in regional haul as well as a re-entry into the long haul segment with the new Mack Anthem sleeper cab. These product launches mark the biggest upgrade of our North American truck range in 20 years.

### NEW MACK ANTHEM AND UPDATED PINNACLE AND GRANITE

In North America an important step was taken in September with the announcement of Mack Trucks' expansion into the long-haul segment with the new Mack Anthem sleeper cab as well as an update of its vocational truck Mack Granite and its regional haul lineup Mack Pinnacle.

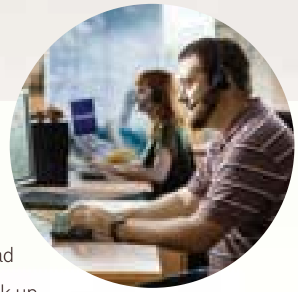
### VOLVO TRUCKS RUNNING ON GAS

With new Volvo FH LNG and Volvo FM LNG trucks, it is now possible to substantially reduce $CO_2$ emissions in heavy regional-haul and long-haul transport, without compromising on performance. Available with 420 hp and 460 hp, the Volvo FH LNG offers the same drivability and reliability as a standard Volvo FH, but because it is powered by liquefied natural gas, LNG, $CO_2$ emissions are 20% lower. It can also be powered by liquefied biogas, LBG, which would reduce $CO_2$ emissions by 100%. It was not long after the introduction when the new trucks received Italy's Sustainable Truck of the Year 2018 award.

### VOLVO 7900 ELECTRIC WITH GREATER RANGE AND FLEXIBILITY

In October, Volvo Buses launched a new generation of its all-electric bus, the Volvo 7900 Electric equipped with next generation battery technology, offering more charging options and significantly extending the operating range to up to 200 km.

**SEPTEMBER** **OCTOBER**

## AND NEW SERVICES

The Volvo Group has a broad range of services that back up the products. In 2017 a number of new services hit the market. Volvo CE launched ActiveCare Direct in North America, a telematics monitoring service supported through the company's dealer network. Mack Trucks introduced Mack Connect, a telematics solution that supports uptime. Using predictive analytics and connective technologies, Mack Connect turns data produced by the truck, the driver and the service process into insights and actions that help customers' operations perform at their best. Read more about Mack Connect on page 23. Mack Trucks and Volvo Trucks also announced over the air remote programming. For an insight into these new services, please turn to page 66.

PURCHASING

# Driving purchasing excellence with professional partners

In order to achieve synergies and customer value, the Volvo Group is aiming for an industry-leading position in purchasing, placing high demands on ourselves and our suppliers. Together we aspire to have a leading customer satisfaction for all brands in the Volvo Group.

We expect our suppliers to be on the highest professional level in all areas. The selection of suppliers is done in a Group-wide forum taking all aspects of quality, delivery, cost, features and technology into account. In 2017, we emphasized the importance of responsible purchasing by increasing the focus on sustainability and risk management in our way of working. We demand responsible and sustainable behavior from our suppliers during the complete product life cycle, from the early phases of project planning, through production and delivery to aftersales services.

"Sustainable purchasing in the supply chain is about driving performance from social, ethical and environmental aspects which at the end of the day will benefit our customers' results," says Andrea Fuder, Chief Purchasing Officer, Volvo Group.

**A new purchasing organization with sustainability at heart**

In 2017, the Volvo Group bought goods and services for SEK 227 billion. In the truck business alone, 2 billion parts were delivered to 40 plants around the world. To leverage the significant business impact in the supply chain, two new strategic functions were set up in truck purchasing: 'Uptime, Adaptation & Synergies', securing uptime targets and customer needs with faster and more efficient solutions, and 'Innovative Purchasing', driving and safeguarding new technologies, innovations and sustainability.

**Stretched supply chain in 2017**

Solid supplier base and business partnerships are essential for customer success in a volatile market, which we experienced during 2017. Full order books are the best evidence of our customers' trust in us, but they also put increased pressure on the supply chain to meet the high demand. Together with our suppliers we were able to stabilize the situation through constructive dialogue and cross-functional efforts. Flexibility, strong focus on improved forecasting tools, systems and closer collaboration are on the agenda to handle the demands in the commercial vehicle market.

CSR SUPPLIER SELF-ASSESSMENT

| % | 2017 | 2016 | 2015 | 2014 | 2013 |
|---|---|---|---|---|---|
| AP* suppliers CSR self-assessed | 95 | 88 | 87 | 80 | 72 |
| of which passed the assessment | 89 | 83 | 80 | 72 | 62 |
| AP* suppliers in high-risk countries | 9 | 9 | 9 | 12 | 15 |
| CSR self-assessed | 94 | 94 | 92 | 92 | 80 |
| of which passed the assessment | 89 | 87 | 79 | 75 | 63 |

* Automotive Product.

Numbers based on spend/value.

**Supplier assessment model**

Potential suppliers are required to undertake our Supplier Assessment Program, which evaluates their technical capabilities, as well as the quality standards in their products, services and operations. We also expect all our suppliers to fulfill the level of responsible behavior and environmental standards as set out in our Key Element Procedures (KEP) on CSR and Environment. Responsible behavior and environmental performance are measured through a Supplier Self-Assessment Questionnaire. Our target is to have all our suppliers, specifically those in high-risk countries or segments, evaluated

on their performance in accordance with our KEP in the areas of working conditions and human rights, business ethics, and environment. The outcome of these assessments is used in the suppliers' selection process as well as to act as input for our general CSR risk assessment model.

**Sustainable purchasing and focus on high risk countries**

During 2017, we also decided to implement an updated Sustainable Purchasing Program. It will consist of a range of tools designed to help us assess our potential sustainability risk-exposures and to increase the dialogue, transparency and trust with our suppliers. The aim is to focus our efforts on the areas where we believe that there are the highest risks of doing harm to people and the environment. Therefore, one of the tools aims at setting an increased focus on selected critical materials with potential adverse impacts on human rights and/or the environment, such as conflict minerals. We will also improve our Human Rights Due Diligence process for selected high-risk countries and segments where we strive to identify, prevent and mitigate any potential human rights violations.

In 2017 we initiated a pilot in selected High Risk Countries, focusing on service providers delivering on-site services to Volvo Group's facilities. Based on the outcome of the social audit pilot performed during the year, we have also decided to increase workplace assessments on our suppliers in High Risk Countries. The Human Rights Due Diligence and social audit program for our supply base is closely aligned with the Volvo Group Human Rights Due Diligence process for our own employees, which is further described on page 76.

A tool to be implemented is a Supplier Code of Conduct, replacing our current Environmental and Corporate Social Responsibility requirements as set out in KEP, in line with the new Volvo Group Code of Conduct rolled out in 2017 for all Group employees (see page 74). The aim is to outline the minimum sustainability requirements and ambitions for Volvo Group's suppliers. It is important that all expectations that we have on our employees are equally respected by our suppliers. To ensure internal understanding of the various aspects of the Supplier Code of Conduct, we have already started to develop a training program, e-learning and instructor-led tutoring, for all purchasing employees.

One example of how we work proactively to understand and build leverage and capacity in our supply chain, is when in august 2017, the Director of Sustainability in our purchasing organization as well as other representatives of the Volvo Group, visited the Marikana mining area in South Africa. They met the management teams of the primary producers of platinum and made a field trip to the mines. The purpose was to follow up on the progress regarding workforce conditions assessed on previous visits, as well to increase our knowledge of the political, economic and social context in South Africa.

Eva Bennis,
Sustainability Director
Volvo Group Purchasing.

**Many hands make sustainability work**

The Volvo Group's purchasing organization is committed to enable a prosperous and sustainable environment and in 2017 became a lead partner in "Drive Sustainability", a network facilitated by CSR Europe, consisting of the 10 largest automakers in the world. The partnership aims to drive sustainability throughout the automotive supply chain by promoting a common approach within the industry and by integrating sustainability in the overall procurement process. Together with the other members of the network, we have developed and established a training program for selected suppliers in the automotive industry that provides an understanding of what sustainability is, how to understand and live up to our requirements and how to overcome specific sustainability challenges. During 2017 we trained suppliers mainly in India and Italy. ■

PRODUCTION & LOGISTICS

# Continuous improvement

To secure robust profitability the Volvo Group has developed a mind-set of continuous improvement as well as tools, processes and production systems that contribute to cost efficiency.

Our industrial and logistics system is well invested with modern production equipment and adequate technical capacity. To meet customer expectations the Volvo Group focuses on quality, lead times and delivery precision while working to ensure health, safety and wellbeing for our employees. The Group has factories in 18 countries around the world. In addition to our production sites, our industrial operations worldwide include several product development centers, and a large number of parts distribution centers and logistics centers. Furthermore, there are assembly plants operated by independent companies at 10 locations around the world.

### Factories and assembly plants to meet demand

Our industrial system for trucks consists of capital-intensive component factories as well as labor-intensive assembly plants. The component factories supply the Group's needs on a global basis, whereas assembly plants in most cases are located close to end-markets to cater for different local needs and specifications and shorter delivery time.

All the Volvo Group's wholly-owned production facilities and distribution centers are third-party audited. We hold certificates as follows:

- ISO 9001 Quality management system: 100% of production facilities and 90% of distribution centers
- ISO 14001 Environmental management system: 98% of production facilities and 90% of distribution centers
- ISO 50001 Energy management system: Lehigh Valley, Hagerstown and New River Valley plants in the US
- OHSAS 18001 Occupational health and safety management system: 50% of our production facilities.

### From restructuring to continuous improvement

To enhance our manufacturing efficiency and strengthen competitiveness in Europe, we have restructured our European truck assembly. We have achieved the right balance and size and changes are now driven by continuous improvement and adaptation to external factors. Across all areas of production and logistics, continued standardization and process harmonization will contribute to improved productivity.

In Asia, the Volvo Group has its own industrial structure as well as established sales and distribution channels with UD Trucks, Volvo Trucks, Volvo CE and SDLG. In addition, the Group Trucks Asia & JVs business area is responsible for the Group's proprietary trucks UD Quester, UD Croner and UD Kuzer and for the joint ventures VE Commercial Vehicles (VECV) in India and Dongfeng Commercial Vehicles (DFCV) in China. Read more on page 32.

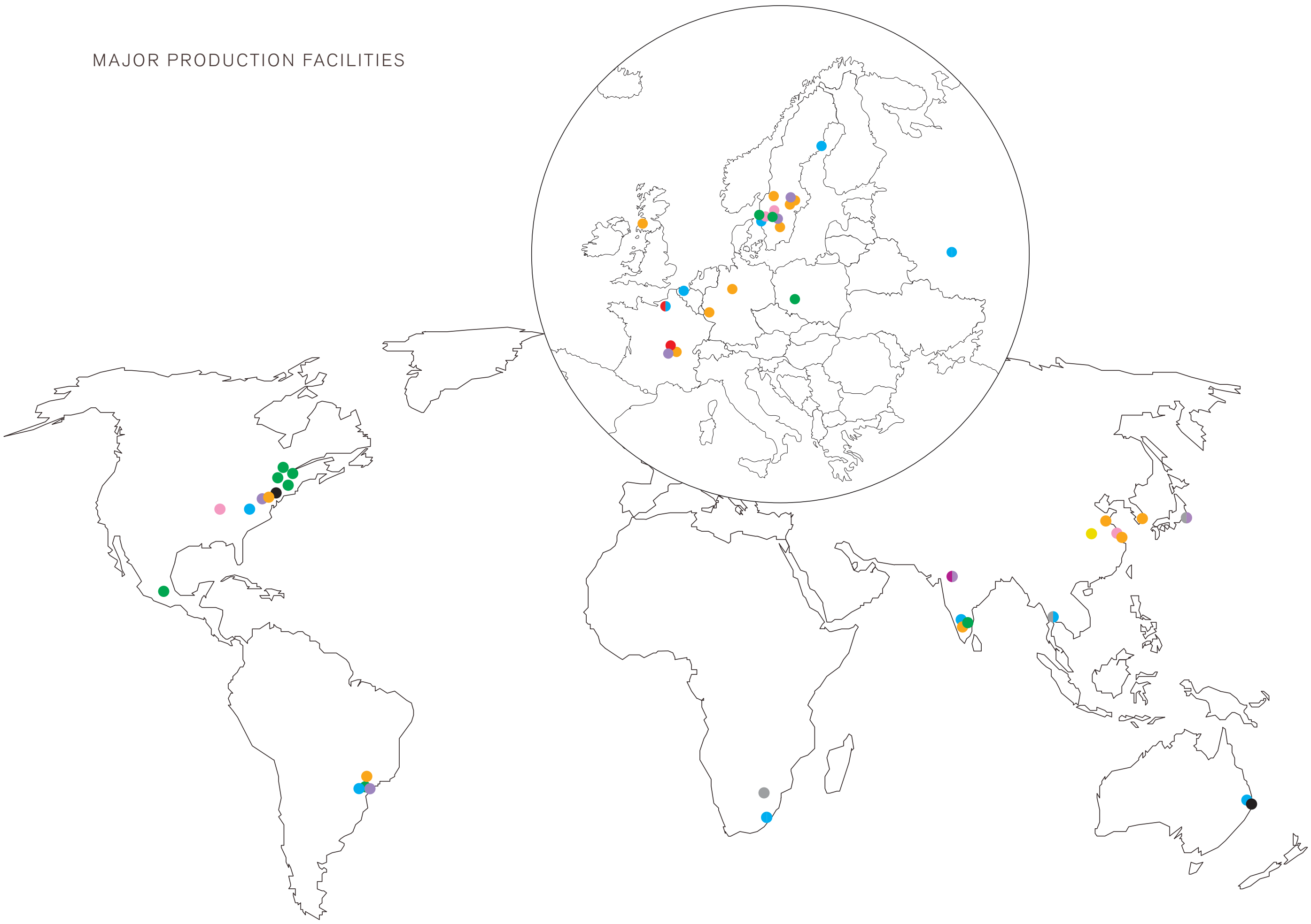
### Environmental performance

The Volvo Group's Environmental Policy is available at volvogroup.com. We have reported environmental data since 1991 and the latest quantitative data is presented in the graphs on page 50 and in the 11-year summary on page 211. Please see the GRI (G4) Index at volvogroup.com for further information related to chemical and harmful substances as well as for waste and water.

The following information is disclosed in accordance with the Swedish Annual Accounts Act. In 2017 the Volvo Group had 12 licensed facilities in Sweden and there were no major environmental incidents. The permits cover general conditions, such as allowed production volumes and environmental performance measures. All permits have specific site requirements related to impact on neighbors and the local environment. For some facilities the environmental permits need to be renewed in 2018 due to planned changes.

CONTINUED ON PAGE 50 »

MAJOR PRODUCTION FACILITIES



| | NORTH AMERICA | SOUTH AMERICA | EUROPE | ASIA | AFRICA AND OCEANIA |
|---|---|---|---|---|---|
| Volvo Trucks | New River Valley (US) | Curitiba (BR) | Blainville (FR), Göteborg, Umeå (Cabs) (SE), Gent (BE), Kaluga (RU) | Bangalore (IN), Bangkok (TH) | Brisbane (AU), Durban (ZA) |
| UD Trucks | | | | Ageo (JP), Bangkok (TH) | Pretoria (ZA) |
| Renault Trucks | | | Blainville, Bourg-en-Bresse (FR) | | |
| Mack Trucks | Lehigh Valley (US) | | | | Brisbane (AU) |
| Eicher* | | | | Pithampur* (IN) | |
| Dongfeng Trucks* | | | | Shiyan* (CN) | |
| Construction Equipment | Shippensburg (US) | Pederneiras (BR) | Arvika, Braås, Eskilstuna, Hallsberg (SE), Konz-Könen, Hameln (DE), Belley (FR), Motherwell (UK) | Changwon (KR), Shanghai, Linyi* (CN), Bangalore (IN) | |
| Buses | St Claire, St Eustache, St Francois du Lac (CA), Mexico City (MX), Plattsburgh (US) | Curitiba (BR) | Borås, Uddevalla (SE), Wroclaw (PL) | Bangalore (IN), | |
| Volvo Penta | Lexington (US) | | Göteborg, Vara (SE) | Shanghai (CN) | |
| Engines and transmissions | Hagerstown (US) | Curitiba (BR) | Köping, Skövde (SE), Vénissieux (FR) | Ageo (JP), Pithampur* (IN) | |

* Ownership ≥ 45%

### Measuring emissions

The Greenhouse Gas (GHG) Protocol is developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). It sets the global standard for how to measure, manage, and report greenhouse gas emissions. According to the GHG Protocol Corporate Standard a company's GHG emissions are classified into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions, not included in scope 2, that occur in the value chain of the reporting company.

### Carbon emissions from production

In 2017, the Volvo Group's total $CO_2$ emissions from production facilities, including scope 1 – direct emissions and scope 2 – indirect emissions, decreased from 408,000 tons to 399,000 tons i.e. 2%, which is more than the reduction in total energy used. This reduction is a result of our transition to low $CO_2$ energy sources. More than 40% of our total energy use came from low-carbon renewable sources, including hydropower electricity and biomass heating.

The Volvo Group has carbon-neutral facilities in Ghent, Belgium, as well as Vara, Tuve and Braås in Sweden. During 2017, we investigated the possibility to supply our facilities in Bengaluru (Bangalore) with solar power. Our intention is to supply these facilities with at least 70% of the electricity use with solar power starting in 2018.

### Energy efficiency in operations

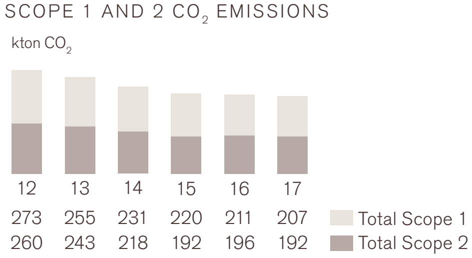
By reducing our energy use, we both lower emissions and reduce costs. The Group's 2017 total energy use amounted to 2,068 GWh, which is lower than 2,076 GWh used in 2016. Our energy efficiency index, which measures energy use per net sales, was 6.4 MWh/SEK M, which is 10% better than in 2016 (7.1 MWh/SEK M). The efforts made in energy-saving activities are clearly demonstrated in the decrease of energy use despite the high production volumes.

In the last five years, the energy efficiency index has improved by 25%. The goal is to implement energy-saving projects that together save 150 GWh per year by 2020. Since 2015, more than 600 energy-saving projects have been implemented resulting in a yearly saving of 102 GWh.

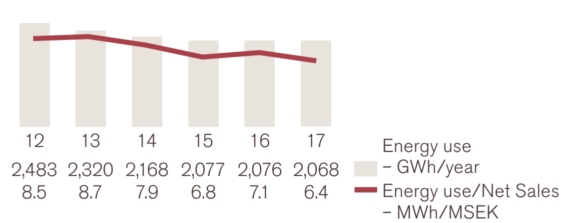
Between 2007 and 2017, the Volvo Group's energy use in its own production processes decreased by 15% in absolute terms. This means that the corresponding energy cost decreased by more than SEK 200 M comparing 2017 to 2007. The accumulated saving is significantly larger. Typical energy-saving activities cover heating and ventilation efficiency, lighting and energy use during non-production hours. We constantly improve our production processes. For example in 2017, we optimized humidity and temperature in the paintbooths in Blainville which led to a saving of 700 MWh/year.

| ENERGY SOURCES, GWh | 2017 | 2016 |
|---|---|---|
| Electricity | 981 | 953 |
| District heating | 170 | 188 |
| Natural gas | 539 | 556 |
| Diesel | 192 | 191 |
| Other | 187 | 188 |
| **Total** | **2,068** | **2,076** |

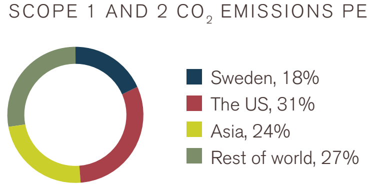
SCOPE 1 AND 2 $CO_2$ EMISSIONS



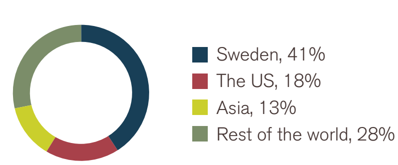

ENERGY USE




SCOPE 1 AND 2 $CO_2$ EMISSIONS PER REGION 2017




ENERGY USE BY MAIN REGIONS 2017



# Improved ergonomics in the truck plant

Another example of an energy-saving activity is the Hagerstown facility, where the lighting was updated to LED lamps which gave a saving of 4,100 MWh compared to 2016. Continuous work with improving energy consumption in the engine plant in Skövde has resulted in a total saving of 2,200 MWh compared to 2016.

**Reducing the carbon footprint**

Volvo Group also estimates the 15 factors in scope 3 of the GHG protocol standard. The use of our products represents more than 95% of the Volvo Group's total carbon footprint. Therefore we focus on reducing our products' emissions. In our commitment to the World Wide Fund for Nature (WWF) Climate Savers program, we have a target to reduce product lifetime emissions by 40 Mton $CO_2$ between 2015–2020, compared to 2013. For 2015–2017, the savings were 17 Mton $CO_2$.

As part of scope 3 reporting, we also focus on carbon emissions from freight transport involved in the supply of materials and deliveries to customers. The size of these emissions is similar to the $CO_2$ emissions from our production plants (scope 1 and 2). Therefore this is a prioritized area and our goal is to reduce $CO_2$ emissions from Volvo Group freight transport per produced unit by 20% by 2020.

Carbon emissions for the total volume transported in our manufacturing supply chain, were calculated to 410,000 tons for 2017 compared to 510,000 in 2013. This means that a reduction of 20% $CO_2$ per produced unit has been achieved. The challenge remains to keep and improve this level going forward. One important reason for the reduction in 2017 is the filling rate of the vehicles that has improved considerably. ■

## Volvo Production System – Better every day

The secret to improving is to be open to change and constantly re-evaluate ways of working. Continuous improvement has always been of importance within the Volvo Group, and it is also one of the strategic priorities. Over the years the progress and maturity level has constantly increased. Working with Volvo Production System (VPS) secures a systematic and sustainable approach for continuous improvement. This supports us to produce the best products on the market by focusing on improved customer satisfaction, shorter lead times and reduced waste. It is a constant journey for increasing customer value and reducing waste through everyone's engagement.

Each Volvo Group entity has the responsibility to identify the areas which continuous improvement should focus on to bring the highest added value. The principles of our continuous improvement system can be used in all work environments in order to improve the ways of working, such as sales, product development, administration and projects, manufacturing to name just a few.

At the same time we aim to stimulate a continuous improvement culture with all employees. Everybody has the ability and responsibility to improve their ways of working, work environment and team. Recognition of such type of behavior is part of our mindset.

**LESLIE DE SOUTER**
IMPROVES WORK

Through a number of small changes, Leslie de Souter at the Group Trucks Operations assembly plant in Ghent, Belgium has greatly improved her work station's ergonomics. As a result, she now experience a lot less back and muscle pain. One improvement simply involved elevating the work bench slightly, so that she could fit her trolley wheels underneath and minimize movement and lifting – which has made a huge difference. She is impressed by the speed and responsiveness to her suggestions. "I submitted my idea and our work leader said 'yeah, it's a very good idea, we're going to do it'. The next day it was fixed."



# 0% failures, 100% reliability

The Chalavan et Duc Group has been constantly renewing and expanding its fleet of Renault Trucks vehicles for almost 20 years. While the dealer's ability to pay attention to their needs and provide service have always been decisive factors in their choice of trucks, the new Renault Trucks T has improved their satisfaction even further.

**VIEWPOINT**

## Mr. Guinebert

*driver of a Renault Trucks T.*

"I've been at Chalavan for two years now and I work at night. I drive a Renault Trucks T truck on the Carros / Toulon route, which has many difficult climbs. Whatever the load, it handles these gradients without incident at 80-85 km/h. I never have to change down, unlike on other vehicles that seem unable to keep the speed up. All controls are within easy reach inside the cab, the seat is comfortable and easy to adjust. This lets me concentrate on the road in perfect safety. I particularly appreciate the line departure warning system, which triggers an audio signal if I deviate from my lane. The Renault Trucks T is also very maneuverable, docking is always easy and we are able to work without any fatigue, thanks also to the very flexible power steering. In fact, I drive it just like I drive my car!".

"The Renault Trucks T is Chalavan et Duc's most reliable, cost effective and efficient vehicle. Not to mention its safety! This means our drivers can fully concentrate on their mission and the road ahead. All of which results in keeping our customers satisfied!," says Christian Duc, Technical and Purchasing Manager for Chalavan et Duc.

## Chalavan et Duc

Forwarding and distribution of goods in France. Founded in 1955. 7 agencies in France. 1,100 staff members, including 1,000 drivers. 1,200 vehicle registration cards, including 700 motor vehicles. 35% Renault Trucks vehicles. 250,000 to 300,000 km covered per year and per vehicle.

### TELL US ABOUT YOUR BUSINESS

The company was founded in 1955 and today has a workforce of 1,100. In France, our biggest client is La Poste, which exclusively rents vehicles with drivers, an activity which accounts for 70% of our business. Other customers are in industrial freight, logistics, services and training. We cover all parts of the country and also provide regional and urban delivery services.

### HOW IS YOUR FLEET MADE UP?

We have a very diversified fleet to meet all of our customers' specific and increasingly demanding needs. We have been operating Renault Trucks vehicles for twenty years and they account for 35% of our fleet, which will continue to grow. We renew the T range tractor trucks every 5 years. The trucks have 2 lives. During the first 2 years, they travel about 25,000 to 30,000 km per month, and that falls to 5,000 or 6,000 km in the second part of the vehicle's life.

### WHAT IS THE RENAULT TRUCKS T'S MOST IMPORTANT FEATURES?

Unquestionably its reliability, low fuel consumption, comfort and safety! Reliability because it's currently the vehicle with the lowest failure rate. Fuel consumption because it's lower than those of equivalent trucks thanks to its automated manual gearbox. As for comfort and safety, these are two aspects I have learnt about from our drivers and company instructors. All these characteristics work together, allowing us to accomplish our missions on time. We must mention that La Presse, a subsidiary of La Poste, imposes strict time constraints. For example, on a run scheduled to take about 12 hours, we are only allowed a margin of 5 minutes. Furthermore, this customer's satisfaction rate must never be less than 98%. At the last meeting, it stood at 99.8%. the rate takes into account delays due to the driver or the vehicle. Thanks to the Renault Trucks T we achieved this performance, since we had a 0% breakdown rate during the period concerned.

### HOW GOOD IS YOUR RELATIONSHIP WITH YOUR RENAULT TRUCKS DEALER?

We use the highly responsive 24/7 service and the Clovis rental service, which offers a diverse range of vehicles that meet our needs. We also use their trainers to take care of new vehicle handovers. Repairs are carried out either at our in-house workshops or at Renault Trucks after-sales service centers all over France. The fast delivery of spare parts they offer allows us to considerably reduce vehicle downtime.

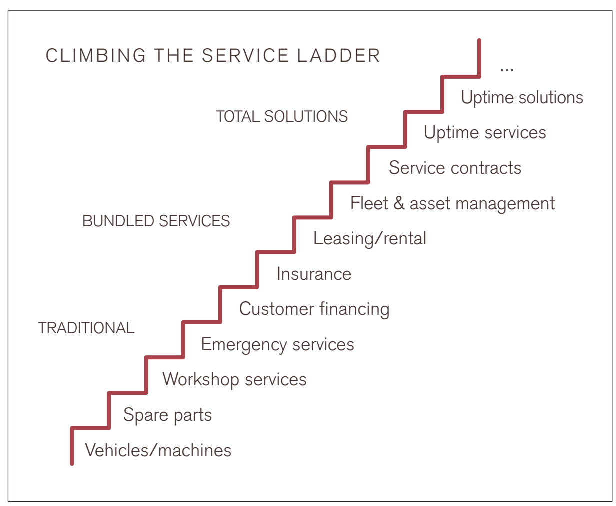
RETAIL & SERVICE

# Making customers succeed

Our retail and service personnel work close to the customers to understand and support the challenges they are facing. The global network of skilled service technicians maximizes uptime and reduces the risk of unplanned stops for our customers.

One of our strategic priorities is to establish brand-specific sales operations with a focus on retail excellence and a growing service business. The respective brand organizations within the Volvo Group support customers through efficient dealer workshops, service and maintenance agreements. With our service contracts and connected equipment, customers know when their vehicle or machine is due for service and what the cost will be for maintenance and repairs. Roadside assistance services are available whenever customers need support.

We work with continuous improvement through dealer development programs to ensure our customers get the best service.




### Supporting customers around the globe

During 2017, the spare parts and services in total represented approximately 21% of the Volvo Group's net sales, compared to 22% in 2016. As services are needed on a continuous basis while our products are in use, they help to balance out the fluctuations in our business cycle.

Clear and transparent information is important for customers to make an informed decision about our products and services. For example, customers can receive environmental product information for many of our products, based on lifecycle assessment. For more details, please see the GRI (G4) Index at volvogroup.com.

### Deliver uptime

In 2017 both Volvo Trucks and Renault Trucks introduced new remote services through Volvo Remote Programming and Mack Over the Air. Trucks equipped with these services no longer need to be rerouted to a service facility for certain updates.

Volvo Construction Equipment (CE) in North America launched an UpTime center where they provide ActiveCare Direct, a 24-7/365 active machine monitoring and monthly fleet reporting system. They also launched a 24-hour parts guarantee for the US. Read more on how Volvo Group increases uptime for customers through connected services on page 66–67.

### Responsible sales

Since 2014 we have a Responsible Sales process covering business ethics, social and environmental factors, developed primarily to secure customer financing. The project was initiated following the Swedish Government's introduction of requirements on the Swedish Export Credit Agency, EKN, to include human rights due diligence in their credit assessments of customers.

# Everyday heroes


**TAN KEE SENG**

TECHNICIAN, SINGAPORE

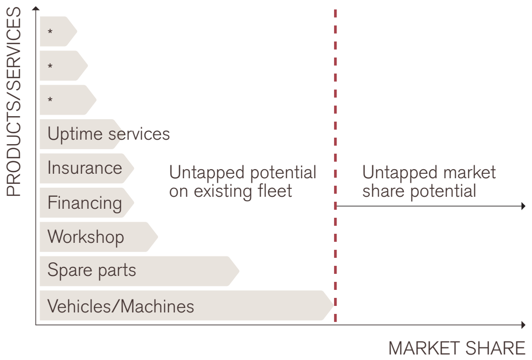
Singapore's multicultural identity is reflected in the Volvo CE dealership. There is staff with Burmese, Malaysian, Chinese, Indian and Singaporean origins. Technician Tan Kee Seng is Singaporean and one of the most experienced members of the team. He has been working as a machine technician since the 1980s and joined Volvo CE a couple of years ago. Today, his work includes repairs, organizing tasks in the workshop and communicating with customers. Our skilled staff keeps our customers operations running - they are our everyday heroes.

The Responsible Sales process is used for sales in high-risk segments and countries, as defined in our CSR Country Risk Atlas, for sales using governmental export credit agencies and other private insurance companies. The Atlas is tailor-made for the Volvo Group using risk indices from a global risk analytics company and based on a combination of business ethical, environmental and human rights factors. During 2017, the Group had about 24% of its sales in high risk countries, as defined by the Atlas.

Each Business Area is responsible for implementing the process in their respective organization. During 2017, Volvo CE has taken the lead to develop the process further, including a policy document for Responsible Sales. By the end of 2017, the geographical scope for Volvo CE was Europe, the Middle East, Africa and South America. Further, Volvo CE conducted workshops with management teams in Southeast Asia and South America to discuss and learn about potential risks in respective markets. For Volvo Trucks and Renault Trucks the geographical scope was Africa, the Middle East and South America. Volvo Buses continues with a global scope for new customers in high risk countries, but due to the nature of their business very few customers are currently assessed.

During the year, the number of assessments performed by Volvo Trucks and Renault Trucks was 54 (46) and by Volvo CE 59 (34). Risks were identified in 10% of the cases, mainly related to the areas of corruption, environment, occupational health and safety. Identified risks were investigated and in one case, EKN is placing requirements on Volvo CE to mitigate risks as a pre-condition for customer financing, with bi-annual progress reports to EKN. This is a joint pilot project between EKN and Volvo CE and lessons learned and results will be evaluated together. ■

GROWING SERVICES




Growing the sales of services is of priority for the Volvo Group. One way is to increase the market share and thereby grow the population of products to service and another is to increase the penetration of services in the installed fleet.

# The power of good service

Customer loyalty starts at the dealership. The Volvo Group's global retail network, and its dedicated staff, is key to customer satisfaction. Australia's SRH Milk Haulage and their Volvo Group dealer, VCV Newcastle, is a case for how strong customer service brings advantage both for the dealer and the customer.

Two hours north of Sydney, you find the rolling hills and dales of the Hunter Valley. Unlike most of this bone-dry continent, the Hunter receives enough rain to support a thriving dairy industry. Nestled amidst the valley's green fields is the town of Rutherford, the home of SRH Milk Haulage, a family business that's grown into one of Australia's largest and most successful milk transport companies.

"When my wife Regina and I started the company twenty years ago, we had one truck and someone else's trailer," says Managing Director Scott Harvey.

Now the company has a fleet of 36 tankers servicing Australia's east coast, from Victoria to Queensland, and another 15 on the other side of the country in Western Australia. All but two of their trucks are Volvo or Mack.

CONT. »

## There's no fail option

Scott Harvey and his wife Regina started SRH Milk Haulage 20 years ago with just one truck, now they have more than 50 tankers. Cows never stop producing milk, so SRH works 24/7, 365 days a year and they can't afford to miss a single delivery.

For Scott Harvey, keeping his trucks on the road 24/7 is an obsession and, when things go wrong, the stress levels can get extreme.

"Juggling trucks all over the country to make sure you don't miss a deadline gets complicated and VCV Newcastle take a lot of the stress out of it," says Scott Harvey.

"Through our service agreements we can plan everything upfront, but what matters to me is that they'll do whatever it takes, whenever necessary, to keep my trucks on the road. They understand what matters to us, they're practical and flexible, and they get it right first time. They've got the best product, best service and best parts package, but most importantly they've got the right attitude. That's what makes great customer service and it makes it easy for me to decide where to buy my next truck."

## On top of the game

Workshop manager Jamie Maher handles all aspects of the daily servicing that keeps the SRH fleet on the road.

"Things can change at any time in this industry, so we have to re-arrange things all the time. VCV Newcastle have got very good at adapting to us and making sure we get what we need when we need it. They're good people to deal with, they genuinely understand the urgency of a milk tanker that's sitting on the side of the road."

He has noticed a continuous improvement in VCV Newcastle's level of service over the years.

"They've really gone out of their way for us many times, I can't ask them for much more than that. Certainly when compared with some other manufacturers, they're right on top of the game."

CONT.»

"We've used Volvos for years, so when Mack started coming out with similar Volvo Group technology, we thought we'd give them a go. Some of my drivers like having a bonnet in front of them and the Mack Super-Liner is ideal for hauling road trains around Western Australia. We've got three Macks and more on the way."

For Scott Harvey, the key factor in this decision was that the Volvo and Mack trucks are built and serviced by Volvo Group Australia.

"For me, the service I get from the dealer is the decisive factor in any purchase. Any truck will do the job we do, but it's the support that counts. When things start to get complicated, you appreciate genuine customer service and VCV Newcastle does a brilliant job," he says.

As evidence of how seriously he takes this, Scott Harvey keeps a spare tractor sitting idle in the yard. If there is a breakdown, that truck goes to take over.

"We send that truck whether or not we think we'll get the breakdown fixed before it arrives. It's not worth the risk of leaving 20,000 liters of milk on the side of the road," he says.

This zero-tolerance approach led to SRH putting their entire fleet on service agreements. Under these, all 73 staff at Volvo Commercial Vehicles (VCV) in nearby Newcastle take responsibility for the predictive maintenance and scheduled servicing that keeps the SRH fleet on the road.

Outside the VCV dealership a gleaming Mack Super-Liner leaves you in no doubt what they sell here. Inside,

Brand Manager Scott Hughes explains that understanding his customers' business intimately and providing the best possible level of customer service is critical.

"We've spent the last few years really getting to know Scott Harvey's business and adapting the way we work to suit them, not the other way around. Scott knows that any of his people can call us and we'll solve their problem, whatever it is. For me, providing excellent customer service comes down to this: Never Say No – Adapt and Overcome," says Scott Hughes.

## Driving growth through service

"Good service always sells. In a growing market there are factors such as production capacity and supply chain efficiency that influence sales, but in a market where things are not going so well and where customers are taking more time to make decisions, service is a greater differentiator. We've built a solutions-focused culture in Australia today. Generally, when customers call us, we first say – 'Yes!' Then we work out the details," says Peter Voorhoeve, Managing Director Volvo Group Australia. His definition of good service is about being empathetic and asking what does the customer expect from me and how can I deliver it? It is about meeting or exceeding expectations and finding solutions.

"If a customer comes to us with a problem – we solve it. But that doesn't mean doing a repair and handing the customer a massive bill. Instead, we always ensure an open dialogue. By keeping the customer informed, we can avoid unpleasant surprises."



Scott Hughes at VCV Newcastle is convinced of planned preventive maintenance, and the better his team knows the customer's business, the more it enables his crew to plan their schedule. Despite that, emergencies can always arise.

"Our customers know that if one of their trucks is off the road, we won't stop until it's up and running. We do everything we can to maximize their uptime and that's why they keep coming back. More than half our sales are repeat business," he says.

VCV Newcastle's success can be seen in the activity level in the workshop. A few years ago, they were achieving 2,500 sold hours per month, now it's 5,000, largely due to repeat sales and service agreements.

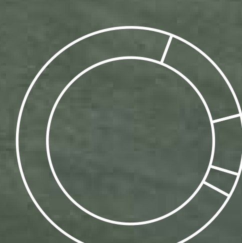
"When a customer buys a service agreement, what they're really buying is uptime. My entire team takes pride in keeping our customers' trucks on the road."

**18**

truck brands compete in the Australian market including Volvo Trucks, UD Trucks and Mack Trucks.

**27.2%**

was the combined market share for the Group's truck brands in Australia in 2017.



Volvo Trucks, 15.4%

Mack Trucks, 8.5%

UD Trucks, 3.3%

REUSE

# Better business with circularity

Efficient use of resources, lower energy consumption and reduced emissions contribute to lower costs for the company, improved cost of ownership for the customer and less impact on the environment for the society.

To repair, renovate, reuse and recycle components and parts reduces costs and promotes circularity. With higher demands from our customers and their customers on resource efficiency and lower environmental footprints, we see potential for this business. In order to take further advantage of the opportunities, our remanufacturing business is part of our product development. In 2017, total Volvo Group sales of remanufactured components amounted to over SEK 9 billion, compared with almost SEK 9 billion in 2016. In the last 8 years, sales from the Volvo Group remanufacturing business have increased by a yearly average of 10%. The first Volvo Group remanufacturing center opened in 1960 in Flen, Sweden. Other centers are located in France, Japan, Brazil, USA, China and India.

> “85% of a truck produced by Volvo Group is recyclable.

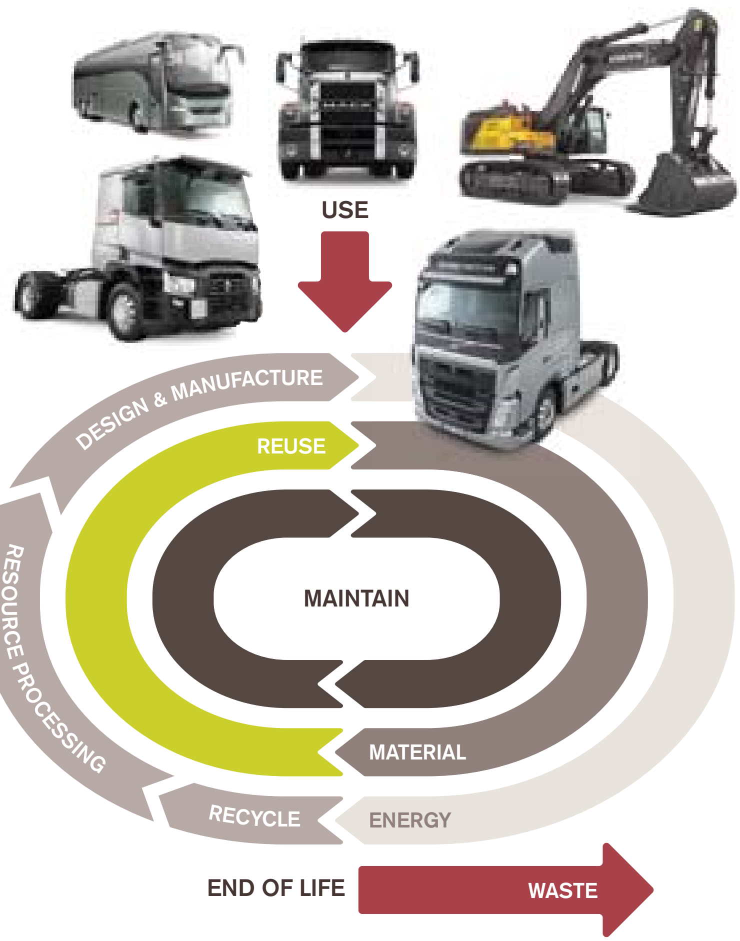
**Save costs for customers**

Remanufactured components are offered to Volvo Group customers worldwide. The exchange system works by customers receiving and installing a factory remanufactured component and returning the replaced component to the dealer. Through exchange, engines, gearboxes, exhaust filters and rear axle transmissions can be renovated to the same condition as new parts. Customers benefit from the same quality and a full warranty, delivered at a lower price.

In 2016 Volvo Penta expanded its offer of factory remanufactured exchange components for marine products with drives and components for the Inboard Performance System (IPS). With a guarantee of providing the same quality, reliability and performance as new genuine Volvo Penta parts, the Volvo Penta Exchange system enables customers to have components replaced faster and offers a cost effective alternative to repair and overhaul. Today, Volvo Penta offers more than 600 components in the Exchange system.

Volvo Trucks and Renault Trucks brands see a continued growth in the new, more basic versions of the brands' exchange Automated Manual Transmission (AMT) gearboxes. The new products offer a more sustainable and cost-effective solution for customers with ageing vehicles. The gearboxes are produced through remanufacturing, which uses 80% less energy and material than producing a new component. These basic gearboxes are delivered without several electronic features, which means they are less expensive to produce and have a lower retail price than original remanufactured gearboxes.

TAKING ADVANTAGE
OF OPPORTUNITIES




THE ABILITY TO REUSE, recycle, renovate and repair parts and components is considered already in product development. It supports a growing remanufacturing business, less waste and reduced environmental impact.

**Financial and environmental benefits**

A truck produced by the Volvo Group is largely recyclable, since almost 85% of its weight consists of metal – mostly iron, steel and aluminum. The additional materials are mainly plastic, rubber and material from electronics components.

The Volvo Group works consistently with lean methodologies to use less material as well as processes to integrate more recycled materials, reduce waste and energy, recover heat, and assess our water footprint. As well as extending the life-time of our products and reducing costs for our customers, remanufacturing ensures that potentially dangerous residuals inside worn components are dealt with correctly.

The Volvo Group has together with suppliers managed to extract palladium and platinum from the diesel particulate filters that were scrapped in the process. The environmental impact in terms of saved energy, landfill and mining were substantial, particularly as the remaining resources globally of palladium and platinum are limited.

**Promoting circularity**

In Sweden, lithium-ion batteries from Volvo Buses electrified buses in Gothenburg will get a second life in a building project, Positive Footprint Housing. Second life batteries will be used together with solar panels for local energy storage and production. The purpose is to study energy management and value over time. The energy storage in the building is being developed collaboratively between the energy sector, building sector and vehicle sector to demonstrate and research future energy solutions. Batteries for storing solar energy already exist on the market but the aim of this project is to prolong the lives of batteries built to recharge quickly at bus stops and to see if their lives may be extended by 10 to 15 years if used in buildings with less load. Considering the great potential of electrified vehicles and machines, reuse and extended life is positive both from a total cost of ownership perspective for the bus operator and from an environmental perspective. ■

# High speed towards electrification

There is no doubt electrification will play a big part in the transport industry of the future. Electric vehicles will significantly lower carbon emissions, noise and other emissions and over long term be the preferred choice for most applications.

There are challenges, but technological advances, especially in energy infrastructure, battery storage and battery charging, will gradually reduce costs and improve performance, making electric concepts more feasible, even for heavy vehicles. In a sense the Volvo Group is already in the future with its offering of hybrid buses, fully electric buses and complete transport solutions including charging infrastructure. Volvo Buses is spearheading the Group's development in this area and has already delivered more than 3,800 Volvo branded hybrid buses and fully electric buses.

"We have with our hybrid and electric buses shown that Volvo Group has the competence to be in a leading position also when it comes to electromobility. We will take these steps also with our trucks and construction equipment," says Lars Stenqvist, Volvo Group Chief Technology Officer.

**Volvo Buses taking the next step**

There is a general trend to improve air quality in city centers. This means a growing demand for transport capacity without increasing environmental stress. The need for safety zones, silent zones, zero emission areas and even indoor terminals has become a reality. Volvo Buses has a complete offer, including charging infrastructure and everything else a city needs to get started.

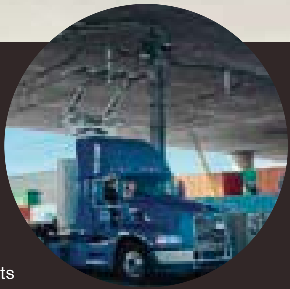
In October Volvo Buses launched a new version of its all-electric bus, the Volvo 7900 Electric. With significantly extended range and more charging options, the new Volvo 7900 Electric offers bus operators even greater flexibility. Battery capacity, in particular, has been significantly extended compared with before. The new Volvo 7900 Electric is available with a choice of 150, 200 and 250 kWh. This means that the bus can run far longer between charges, allowing it to be utilized more efficiently throughout the day. The all-electric bus is based on the Group's modular electrical architecture that will also be the base for the electrification of trucks, construction equipment and other industrial and marine applications.

Watch videos about electric vehicles on volvogroup.com.

## Volvo will bring autonomous electric buses to Singapore

Volvo Buses and Nanyang Technological University (NTU) in Singapore have signed a cooperation agreement on a research and development program for autonomous electric 12-metre buses. The program is part of the Land Transport Authority of Singapore's drive to create new solutions for tomorrow's sustainable public transport.

## Mack Truck test drives new eHighway



Trucks hauling freight from ports emit a lot of greenhouse gases. To experiment with different means of achieving zero-emission goods movement, a new eHighway near busy seaports in California, on which trucks can connect to electric power, is being tested. A Mack Truck is one of three prototype trucks involved in the project, offering the Volvo Group a unique learning opportunity.

## Both Volvo Trucks and Renault Trucks will start selling electric trucks in 2019

In January 2018 both Volvo Trucks and Renault Trucks announced that they will start selling electric medium-duty distribution trucks in Europe 2019. The first units will be put into operation together with a few selected reference customers already this year.

## Key drivers for electrification

- ✓ Sustainable transport solutions are increasingly important for customers.
- ✓ Stricter targets for emissions, air quality and noise in many cities. In Europe, some cities are planning to ban access for diesel vehicles within the next few years.
- ✓ Electricity is both less costly and depending on source more sustainable, partly thanks to the breakthrough in solar energy.
- ✓ Advances in battery technology make it possible to drive vehicles longer distances, at a lower cost and with faster charging.
- ✓ Batteries are becoming less costly.
- ✓ Public transport is becoming much more comfortable and efficient.

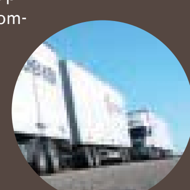

## Fully electric distribution truck from Renault Trucks

On November 10, Renault Trucks President Bruno Blin handed the keys of a prototype of a 13 ton Renault Trucks D 100% Electric equipped with a refrigerated box to Brigitte Delanchy head of Delanchy Transports. Delanchy Transports is specialist in temperature-controlled transport and logistics, has been a customer of Renault Trucks since the company's start 50 years ago and today has a fleet of 700 trucks exclusively from Renault Trucks.

# The automation evolution provides real-life benefits

We believe that automation will redefine the commercial transport solutions that most of us rely on every day. Automation will create real-life benefits for both our customers and the society in terms of productivity and safety as well as energy and fuel efficiency. Since the ideal automation level is determined by its added value for customers and society, Volvo Group will introduce automated applications gradually over time.

## Platooning: saving fuel by driving together



Using connectivity, trucks in a platoon or road-train can communicate with each other. Distance, speed and braking can all be controlled. The follower trucks use radar and camera and receive information from the trucks in front. Today, the average platoon can save up to 10% of a truck's fuel consumption. This figure will rise to 15% in the coming decade, as trucks drive closer and closer to each other. $CO_2$ emissions are also reduced as a result of fuel being saved, while safety is increased by the connected trucks sharing information. Volvo Group is testing platooning in Europe, the US, and Japan, most recently in a trial in Sweden involving Volvo trucks together with trucks from other brands.

The Volvo Group has been at the forefront of this automated evolution for over two decades. The I-Shift automated gearbox has been on the market since the early 2000s, while active safety systems such as Adaptive Cruise Control and Collision Warning with Emergency Brake have set standards as industry leaders in the last few years. As automation advances, new solutions and services and an evolving business model are the inevitable result. The automated solutions currently being developed place the human very much at the center.

The technology might involve replacing the characteristics of a human with those of a machine, but the focus is totally based on the customer experience.

## Meet the refuse truck that drives itself

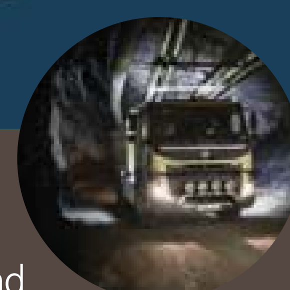
There is a risk of accidents when refuse trucks reverse in housing areas. With a self-driving truck, only one driver is required. The truck reverses automatically, following the driver around houses collecting refuse. This research project with Swedish recycling company Renova helps to increase both productivity and safety.

Watch videos about automated vehicles on. volvogroup.com

## Increasing the sugar cane harvest

A prime example of how automated technology can contribute to profitability. Trucks were previously destroying a significant percentage of this Brazilian sugar cane farmer's crops. Using an automated function, the truck follows the harvesters' footsteps saving thousand of dollars. The driver accelerates and brakes, but is supported by automatic steering. Thus, a great deal of the young plants are saved.

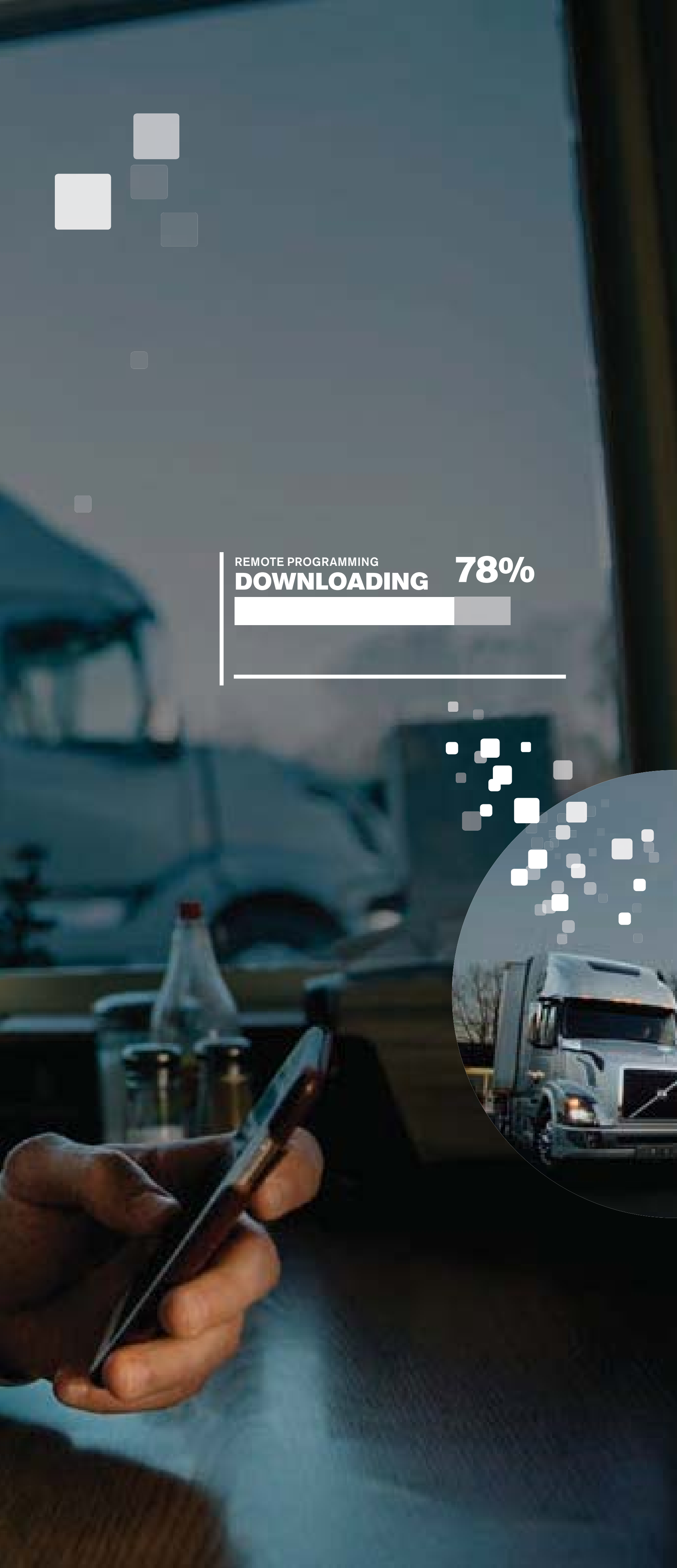
## Autonomous driving – under ground



Self-driving Volvo FMX trucks are being tested in regular operations at Boliden. The trucks contribute to increasing productivity and safety, as they can keep working directly after blasting has taken place. Normally a wait is required before work can commence. This is an example of full automation in a confined area, where no driver is needed.

# Connected services increasing uptime

In the spring of 2017, both Mack Trucks and Volvo Trucks expanded its connected vehicle services with new remote programming to increase truck uptime, reduce downtime costs and improve truck efficiency through Volvo Remote Programming and Mack Over The Air.




Two categories of software updates are available through the new services, one for powertrain components, and the other for vehicle parameters like road speed limits, optimizing performance particularly for customers with trucks that change duty cycles based on factors such as economics, load type and geographic area.

With Volvo Remote Programming and Mack Over The Air, trucks no longer need to be removed from service and routed to a repair facility for certain powertrain software and parameter updates. Improving the availability of trucks equates to more money. On average, each additional day of uptime equates to about USD 1,100 in additional revenue. Additionally, those who have historically not performed software updates due to cost or inconvenience can quickly and easily keep their trucks operating at optimal performance.

**Optimized fleet utilization with telematics**

Information is a means of competitiveness in the transport business. Keeping track of a fleet is necessary to maintain a clear overview of the operation. The bottom line is increased revenue through improved utilization, and lower operating expenses through fuel control and optimized administration. The Volvo Group's different brands offer a range of integrated transport information systems based on the latest digital, wireless communication technologies. Remote Diagnostics and GuardDog Connect are two such systems, which provide Volvo Trucks and Mack Trucks customers in North America with proactive diagnostic and repair planning assistance with detailed analysis of critical diagnostic trouble codes. The remote communication platform facilitates live dealer and customer communication through Volvo Action Service. Certified UpTime Centers are ready to service and repair the trucks when they arrive at the dealer. The Volvo Group's Uptime Solutions Centers provide support to Volvo Trucks, Volvo Buses, Volvo Penta, UD Trucks, Renault Trucks and Mack Trucks in locations around the globe.



# People make transport solutions

ATTRACTING AND ENGAGING EMPLOYEES

The Volvo Group aspires to take the lead in developing prosperity through innovative and sustainable transport solutions. To be successful in this challenging but inspiring context, people are and will continue to be the most important asset in our company. Thus, the key to future success lies in our ability to attract, develop and retain the right people and to create a culture that truly engages employees.

## ADMIRED EMPLOYER

Every organization exists for a reason. Our mission is to drive prosperity through transport solutions. In a world that is changing faster than ever before, disruptive innovation and global competition will continue to increase. Values will increasingly guide people and organizations in how to act and make decisions. Organizations that have a higher purpose and show commitment towards the communities in which they operate will be more successful in attracting and engaging potential as well as current employees.

Since the launch of our strategy in early 2016, we have continually worked on revitalizing our culture. By embedding our values – customer success, trust, passion, change and performance – in our day-to-day behavior we have laid the foundation for a high performance culture and strong employee engagement. By letting our values guide both leaders and employees in their work, we are able to make faster and smarter decisions, create solutions that add more value to customers, increase both internal and external collaboration and have more fun while doing it.

**Engagement drives performance**

A highly engaged workforce makes all the difference for a company, as high engagement fuels both performance and innovation. The voice of the employees is captured yearly in the Volvo Group Attitude Survey (VGAS).

93% of all employees responded in the 2017 edition of the survey. For the second year in a row, there was an increase in the Employee Engagement Index, from 72% engaged employees in 2016 to 75% in 2017.

The open and honest dialogue between employees and leaders across the organization has been a key driver behind the strengthened engagement. To maintain the upward trend, we will continue to focus on dialogue and increased collaboration. Other key areas are enhanced customer experience and simplified structures.

**Securing the competence of tomorrow**

There are many ways to secure the competence of tomorrow and become the most admired employer in our industry. The Volvo Group cooperates with top engineering and business universities worldwide. We create a close connection to selected target groups of students through study visits and internships at Volvo Group and on-campus company activities.

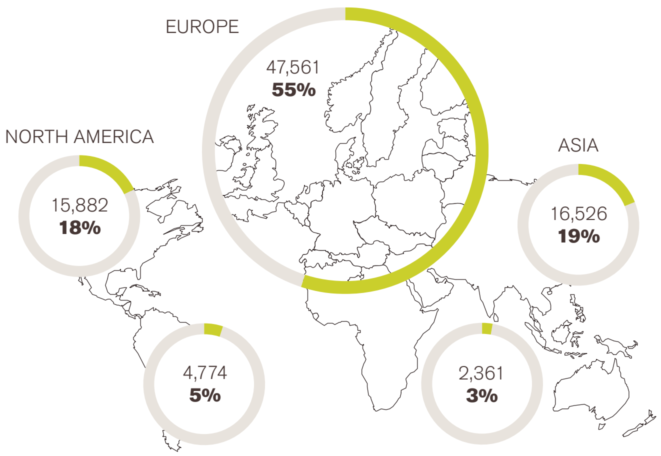
Our Academic Partner Program, APP, is a highly exclusive program for selected universities worldwide. The program consists of 11 preferred partners in Sweden, France, the US, China and Japan that perform research, education and competence development in areas that match the future business needs of the Volvo Group. The program has three different modules – research, talent and learning – designed to provide us with cutting-edge research findings, increased employer attractiveness and the best-in-class trainings and pedagogic methodologies developed by the academic world.

We have expanded our palette of graduate programs and offer two alternatives; the Volvo Group International Graduate Program and the Volvo Group Engineering Graduate program. Both aim at securing future skills and competencies, by recruiting the best global graduates and strengthening the attractiveness of the Volvo Group as an employer.

# A dynamic work environment with many opportunities

A GLOBAL ORGANIZATION

Regular employees 2017



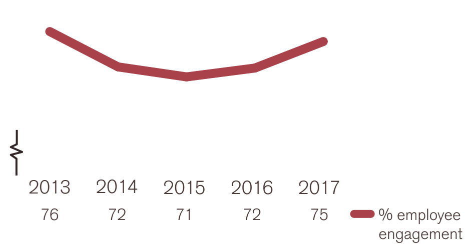

In terms of vocational training, The Volvo Step is a major initiative in Sweden. This program in industrial production is designed to bring young people out of unemployment while at the same time ensuring future competencies for the Group.

**Strategic leader development**

We are in a people business. In the Volvo Group, we consider talent to be a strategic asset as it is our people who turn strategy into action and create value, for customers as well as for the Group. We have a structured process to increase knowledge about our talents and how they can best develop, for the benefit of the company as well as for their own careers. In addition, it secures that we

PROGRESS IN EMPLOYEE ENGAGEMENT

The Volvo Group Attitude Survey results show an improvement in the Employee Engagement Index from 72% in 2016 to 75% in 2017.




EUGENIA WRETMAN

MANAGER, SHEET METAL PURCHASING

"I am a mother of two children, ten and five years old. I am very happy to work at the Volvo Group, because I have the opportunity to have an exciting career and to be able to take care of my family at the same time. I think people who are working at Volvo all over the world feel they are working in a company with a strong culture when it comes to respect for the individual and the environment as well as the absence of hierarchies. For people like me who value a dynamic work environment, with a lot of opportunities and interaction, in the forefront of technological development, the Volvo Group is the right place to work."


Taraneh Vosough, Purchasing Quality Manager at Volvo Buses.

INNOVATIVE LEARNING DESIGN IN THE VOLVO GROUP UNIVERSITY

The world we live in demands of us the ability to absorb new information faster and more efficiently than before. At Volvo Group, we need to meet this new reality by shortening the time to knowledge. One way of doing that is to use the latest findings on how people learn. Another way is to use new instruments for teaching, such as digital tools. In the Volvo Group University, we invest in new ways of learning and innovative training design to provide learning solutions in all our major competence areas. By applying the latest research in training development and using available technology to access knowledge, we aim to help individuals all across the organization to grow and reach their full potential.

Training courses are developed together with the business to make sure the content does not only raise participants' knowledge and sharpen their skills, but also matches the business needs. The broad training offer ranges from virtual, interactive serious games to e-learning and classroom training. Volvo Group University has also developed the award winning concept of Group Talks; a modern, authentic and effective way of spreading knowledge through engaging stories from colleagues, inspired by the "TED Talks" experience.

During 2017, approximately 87,000 participants took part in training through the Volvo Group University.

have a solid and diverse leader pipeline and a succession planning with leaders who lead according to our values and drive business into the future. This takes place at all levels of the company.

**Doing the right things in the right way**

We believe that each individual has the potential to grow and all employees are expected to have a personal business plan that translates our corporate strategic objectives into individual objectives. The plan includes both business-related and competence development-related targets which give the employee essential input for individual growth, both short- and long-term. Every year, employees review their plan together with their manager to ensure mutual understanding of responsibilities, expectations, performance and development potential.

**Compensation Management**

During 2017, the Volvo Group continued to implement and fine-tune a global compensation approach in our 20 major countries. The key focus of this approach is to ensure a link between fair and competitive pay and performance. We will continually review the approach to ensure it remains relevant and enables us to attract and retain our future workforce. ■

## LABOR RELATIONS – A PARTNERSHIP BASED ON TRUST

Having a trustful and collaborative partnership with our employees as well as the unions and works-councils that represent them, is crucial for the long-term success of the Volvo Group. The newly revised Volvo Group Code of Conduct strengthens the expectations on our employee-employer-relationship even further. To enable dialogue and ensure we capture the views of our employees, they are represented in several different forums.

There are three ordinary and two deputy members appointed by employee organizations in the AB Volvo Board of Directors. Members in the Volvo European Works Council (EWC) meet twice a year to focus on European issues and share best-practice. In addition, 9 formal information and consultation meetings were conducted during 2017.

Another important forum is the Volvo Global Works Council (GWC). It has 50 union representatives from the EWC and from wholly-owned Volvo Group companies representing 25 different countries as its members. On a yearly basis, the Volvo Global Dialogue (VGD) gives employee representatives from the GWC the opportunity to meet with the Volvo Group Executive Board and Group Management. In 2017, the VGD was held in Lyon, France and the theme for the event was "How to manage the Volvo Group transformation in order to face future challenges".

### Freedom of association

We respect the right of all employees to form and join a union, just as we respect their choice to refrain from joining a union, as stated in the Code of Conduct. We estimate that more than 42% (41) of our regular employees were members of an independent trade union during 2017. In all our major countries such as Sweden, the US, Japan and Brazil, we note a significantly higher union density rate than the average according to ILO labor statistics.

The Collective Bargaining Agreements (CBA) coverage rate indicator measures the percentage of employees who are covered by a CBA, regardless of whether they belong to a trade union or not. In total, 71% (72) of the Volvo Group's regular employees in 21 (22) countries are covered by a CBA, which means that this indicator is significantly higher than the OECD average.

### An open dialogue creates solutions

The Volvo Group maintains an open dialogue and a respectful, collaborative partnership with employee representatives to solve labor related issues. As a result, the number of working days lost through lockouts or strikes within the Volvo Group were 0.05% (0.33), i.e. remained on a fairly stable and low level with a decreasing trend. Strikes were mainly related to negotiations about salary and working time regulations, but also due to general nation-wide strikes against governmental changes in some countries.

During 2017, the number of compulsory redundancies decreased significantly, to 1.6% of the total regular workforce compared to 3.5% in 2016. In total, the Volvo Group increased by some 4,500 employees due to macroeconomic factors and increased sales volumes, compared to a decrease of 3,000 employees in 2016.

Employee representatives and relevant government authorities are notified about major changes in our organization, in accordance with legal requirements. When there are changes, e.g. layoffs, restructuring or outsourcing, that affect members of trade unions and/or works councils, the Volvo Group enters into consultation and negotiations. 41 (61) consultations and negotiations were held with trade unions during 2017. An additional 30 (84) consultations were held with works councils or similar representative bodies.

When implementing significant changes, we ensure that the notice periods for employees and their representatives that are outlined by country legislation or collective bargaining agreements (CBA) are always respected. In the spirit of the Volvo Group culture, we strive to find reasonable solutions for employees who are laid off. Our measures include internal mobility forums and outplacement support. ■

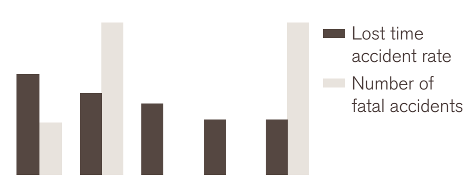
Volvo Penta is making inroads in the agricultural segment, supplying engines and services to a growing number of equipment manufacturers. Pictured here is a beet harvester.

## HEALTH, SAFETY AND WELLBEING ARE HIGH ON THE AGENDA

We work actively to provide sound working conditions and integrate the criteria of health, safety and well-being into the design of our products and facilities. A safe and healthy workplace means caring not only for our employees but also for our customers and shareholders, as wellbeing at work leads to increased performance, higher productivity and stronger employee engagement.

The Volvo Group policy on Health and Safety is founded on the belief that accidents, near misses and work-related illnesses can be prevented. Minimizing the physical and psychological risks in the workplace is essential to ensure the wellbeing of our employees, customers, visitors and suppliers we work with. During 2017, we have taken further steps to improve both the physical and psychological work environment. Among other things, we have introduced a new ergonomics guideline for manufacturing, mindfulness

### HEALTH & SAFETY*




| | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|
| Lost time accident rate | 1.97 | 1.59 | 1.38 | 1.06 | 1.00 |
| Number of fatal accidents | 1 | 3 | 0 | 0 | 3 |

*The scope of employees included in the numbers have increased substantially over the past five years and in 2017 it covers 100%.

exercises, wellbeing measurements and workshops as well as a new Mental Energy Pro app, designed to boost creativity and cognitive performance. Health and Safety is high on the agenda for top management and the Executive Board. The commitment to making health and safety an integral part of daily operations is strong all across management levels.

### A commitment to safety

Our Lost Time Accident Rate was 1.00 in 2017, covering 100% of employees. Compared to 2016, we noted an improvement of 6%. In the last four years we have a decrease in the accident rate. Notwithstanding that, we had 3 fatalities in our retail workshops in 2017. We take this very seriously and have established a particular focus on safety in these activities. The Volvo Group addresses the topic of health and safety in many different ways, e.g. OHSAS 18001 certification, Volvo Production System and health and safety audits. 34 out of 67 production sites were OHSAS 18001 certified in 2017. In 2017 we achieved zero accidents at 21 plants compared to 16 in 2016.

### Award-winning best practices

For more than a decade, the Volvo Group Health & Safety award has highlighted internal best practices. In 2017, 43 initiatives from 15 different countries competed, representing a broad range of innovative improvements. The winners, the Hagerstown Powertrain plant in the US, were awarded for their exceptional journey in terms of health and safety culture. By combining knowledge, collaboration, trust and ownership they developed a broader health and safety perspective and in three years managed to achieve a 50% to 70% reduction in accidents and lost days. ■

## DIVERSITY AND INCLUSION MAKE US STRONGER

In the Volvo Group we know that high performance requires diversity and inclusion, as they increase innovation and employee engagement, help us collaborate across the globe and enable us to better connect with our diverse customer base. We have been working systematically for over a decade to increase both diversity and inclusion and our long-term target is that the Group's employees and management reflect the diversity of the regions where we do business. We strive to create an inclusive culture where each individual's abilities are recognized and everyone is able to contribute to their full potential. Leveraging our diversity is key to developing successful products and services and meeting our mission of driving prosperity through transport solutions.

### Zero tolerance for harassment

In the past year, global consciousness has been raised concerning harassment with such actions as the #MeToo campaign. The update of our Code of Conduct states that we do not tolerate any conduct or comments that create, encourage or permit an offensive or intimidating work environment, from any employee.

### Diversity and inclusion fuel innovation

In October, the Volvo Group celebrated its fourth edition of Diversity and Inclusion Week. The focus was how diversity and inclusion fuel our innovation. Like in previous years, innovative, creative and hands-on activities took place around the globe, allowing everyone to experience what diversity and inclusion truly means.

A diverse group will produce more new ideas, be better at creative problem-solving and have a wider network for detecting new trends. An inclusive mindset means we are open to new ideas and we accept challenges to our current way of seeing the world.

**GENDER DIVERSITY OF THE VOLVO GROUP WORKFORCE**

| % | 2017 | 2016 | 2015 | 2014 | 2013 |
|---|---|---|---|---|---|
| Share of women | 18 | 17 | 18 | 17 | 17 |
| Share of women, presidents and other senior executives | 25 | 24 | 22 | 21 | 19 |

### Diversity and inclusion every day

The leaders of each division and business unit are responsible for making diversity and inclusive leadership part of day-to-day operations. Diversity challenges may differ between countries, regions and units. As a result, the diversity approach needs to be localized, even though diversity itself is considered to be a global competitive force. To maximize the positive effects of diversity and inclusion there are many different local and business specific diversity goals and action plans.

On a global level we use two key performance indicators to measure diversity: The Balanced Team Indicator is a quantitative measure that covers nationality, gender, age and experience across different Volvo Group entities. The results for 2017 show a strong increase in terms of diversity due to an increase in women on the executive board as well as an increase in female managers overall. In the level below the Executive Board, average diversity scores showed a slight improvement. The Inclusiveness Index is based on how employees judge their workplace to be inclusive. The Inclusiveness Index also showed a marked improvement in 2017.

In addition, we measure gender balance in total and at senior management level as described in the gender diversity table. At the end of 2017, women accounted for 18% of the Volvo Group's global workforce. The share of women among presidents and senior executives was 25%. ■



# Business made right is good business

To be a economically, environmentally and socially sustainable company, value creation must be executed responsibly. Business ethics and integrity, tax and legal compliance and human rights are therefore integral components of our work. It provides us with a solid foundation on which to build our societal engagement activities and demonstrate leadership towards sustainable development.

## CONDUCTING BUSINESS ETHICALLY AND IN COMPLIANCE WITH THE LAW

The effects of not behaving ethically or conducting business with integrity and in compliance with the law will not only affect the way companies are perceived, they may also have an impact on profitability. For the Volvo Group, our Code of Conduct sets the framework for everything we do.

### A new Code of Conduct (CoC)

During autumn 2017 a new Volvo Group Code of Conduct was launched. It is a mandatory Group-wide policy that sets the requirements on how to conduct business; ethically and in compliance with the law. The new Code of Conduct states the expectations on how we do business within the Volvo Group everywhere we operate and it focuses on the requirements and expectations on all employees. The Code is publicly available on volvogroup.com. The Code of Conduct is complemented by other policies that describe in more detail how we address the Code's minimum standards. Both the Code of Conduct and a new e-learning are available in 13 languages. In addition, supporting material is provided that will facilitate team discussions. The target is that 90% of all white-collar employees should complete the new e-learning during 2018. In addition, activities will take place to roll out the new Code of Conduct and the e-learning also to all blue-collar employees.

### Complying with legal regulations

Legal compliance forms the basis for everything we do in the Volvo Group. It covers many different areas and involves a variety of employees with expertise and knowledge across the Group such as our work related to complying with emissions regulations.

Two examples from the Code of Conduct are our commitments to comply with antitrust (competition) and anti-corruption laws in all jurisdictions where we conduct business. Our Code of Conduct states that we shall compete in a fair manner on the merits of our products and services and not participate in or endorse any corrupt practices. These principles of compliance are implemented through the Volvo Group Compliance Policy and dedicated compliance programs.

Across the Group we have programs consisting of a number of elements, including policies and guidelines, a comprehensive range of e-learning and tailored face-to-face training, counseling and support, as well as auditing and review. The Volvo Group whistleblower procedures also apply to our compliance programs.

The process for anti-corruption due diligence assessments of business partners aims to enhance the existing processes designed to prevent bribery by third parties carrying out business on behalf of the Volvo Group. The system includes the use of external tools, and applies to existing and new business partners.

Compliance training in the form of e-learning and face-to-face training is provided on a rolling basis with different focus areas each year. In 2015 and 2016, focus was on face-to-face training, and during this period more than 13,800 employees received face-to-face training in compliance. During 2017, the focus was on up-dating the Code of Conduct and preparing for the training activities planned for 2018 linked to the Code of Conduct, including the launch of the new Code of Conduct e-learning in December 2017.

**Monitoring adherence**

Adherence to the Code of Conduct is monitored through management control systems, internal controls and the annual employee survey. A whistleblower policy encourages all employees to report suspected violations to their managers or other management representatives. If reporting to superiors is not feasible or possible, or is not taken seriously, employees have the possibility of escalating suspected violations to Corporate Audit and the opportunity to remain anonymous where permitted by law. The Volvo Group does not tolerate retaliation against a person for making complaints in good faith of violations or suspected violations against the Code of Conduct.

In total, 57 (56) reports were logged by Corporate Audit in 2017 including 20 (27) incident reports sent by management. All cases were addressed, investigated and reported to the Audit Committee of the AB Volvo Board of Directors. In total 0 (5) whistleblower cases and 6 (10) management reports had been substantiated at the end of the year. The most commonly reported categories were workplace management and conflicts of interest. ■

## OUR HUMAN RIGHTS MANAGEMENT

Our products are built by people, used by people, and serve people with goods and services. That is why human rights are important to the Volvo Group and for our long-term business success.

### Social sustainability part of prosperity

As a global company, the Volvo Group has almost 100,000 employees, close to 48,000 suppliers globally, customers in more than 190 countries and is a part of all communities in which we operate. That sums up to a lot of people in our value chain, living and working in different countries around the world, including countries with higher risks of human rights violations. All countries have their own laws, cultural norms, social and economic challenges and varying degrees of state protection for human rights. For the Volvo Group, respecting human rights is a part of our opportunity to drive prosperity throughout our value chain for all people touched by our business.

### The Volvo Group respects human rights

Our human rights management work is integrated into our overall work on responsible and ethical business behavior. During 2017 we updated our Code of Conduct to be clearer on what is expected from employees. This includes the human rights areas which we currently believe are most important for the Volvo Group; harassments, non-discrimination, safe and healthy workplace, freedom of association and collective bargaining, working hours and compensation, as well as modern slavery and child labor. Over time, we may identify other human rights issues which we prioritize. We continuously monitor changes in the international environment, particularly in conflict markets. We also assess changes and potential risks in our own operations and business relationships. This is e.g. done through our human rights due diligence processes, our enterprise risk management process, union dialogues and industry collaboration and benchmarks.

To steer our work with human rights we have established a cross-functional steering committee with members of the Executive Board. The steering committee will also act as an escalation organ for potential severe human rights violations identified in our business or through business relationships.

### Working with human rights

Our human rights work is a continuous journey. We strive to identify, prevent and mitigate potential negative human rights impacts in our own organization and through our business relationships. Our efforts are focused where we believe there are the highest risks of doing harm to people, based on country risk levels for human rights violations (prioritized by relevant indices from a global risk analytics company), high risk segments and/or if there are potential non-conformities brought to our attention. Read more on our people related risks on page 115. For different parts of our business we are continuously

### VOCATIONAL SCHOOLS FOR MECHANICS AND DRIVERS

The Volvo Group has run vocational training schools for mechanics in Africa since 2013. The first school was opened in Ethiopia and several groups of students have now completed the course there. In 2016 schools were opened in Zambia and Morocco.

"This helps to create jobs and promote economic growth in these countries, while also benefiting our business and that of our customers," says Johan Reiman, responsible for the vocational schools within the Group.

The next move is to start a vocational training program for truck drivers in Ethiopia and Morocco during 2018.

The training is based on cooperation with the Swedish International Development Cooperation Agency (SIDA), the American equivalent USAID and the UN Industrial Development Organization.

Read about our vocational schools for mechanics and drivers on volvogroup.com.

tailoring and improving our due diligence processes for optimized results, based on common tools, risk analysis, and aligned with each Business Area's/Truck Division's strategic priorities.

During 2017, we finalized our pilot project for the human rights review process that we have developed and tailored for Volvo Group operations, based on input from the Danish Institute for Business and Human Rights, as well as the UN Global Compact's self-assessment tool. In the pilot, we conducted human rights reviews through self-evaluations and workshops with the management team responsible for the operations of concern, followed by extensive stakeholder dialogues, joint development of mitigation plans with local management and continuous follow-up. During 2017 two assessments where finalized; one in India, being a high risk country, and one to test the first part of the review process in a low risk country, Germany. The assessment included all employees, consultants, and other people working on Volvo Group premises (e.g. service providers). By the end of 2017 we decided to continue with the human rights reviews for Group operations, initially focusing on operations in high risk countries.

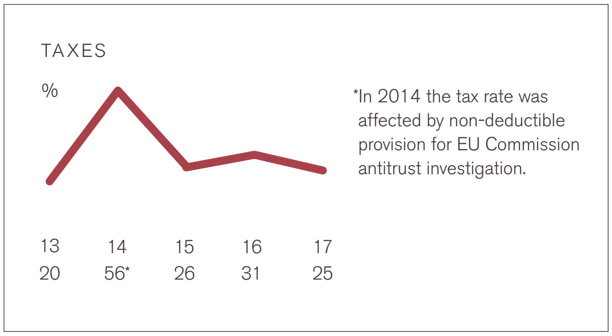
On page 47 there is more information on our Sustainable Purchasing Program and how we work with human rights due diligence in our supply chain, including progress made during 2017.

For our sales, we strive to ensure that we follow all applicable legal and export control regulations, and the products are sold openly and without restrictions. We have limited possibilities to influence how the products will be used as they are resold many times throughout their life. Since 2014 we have continuously developed our Responsible Sales process, read more on page 54.

During the first half of 2017, we published Modern Slavery Statements for relevant companies within the Volvo Group. ■

## RESPONSIBLE TAX PRACTICES

Given the role of taxes as a way to fund public welfare, we regard corporate tax compliance as a matter of responsible business behavior. The Volvo Group shall comply with the tax laws and regulations of each country where we operate. We do not engage in any aggressive tax planning activities through structures in tax havens or otherwise. Where tax laws do not give clear guidance, prudence and transparency shall be the guiding principles. A fundamental objective of our tax policy is to ensure compliance with these principles throughout the Group, and at the same time ensure tax efficiency through tax-conscious management of our operations.




### Reporting in accordance with new regulations

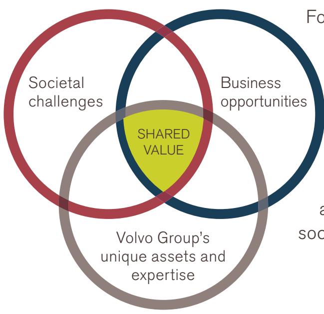
As part of the OECD project on Base Erosion and Profit Shifting (BEPS), new international standards for reporting corporate income tax on a Country-by-Country basis (CBCR) have been developed. The Volvo Group has reported according to these new standards to the Swedish Tax Agency.

The average corporate tax rate of the Volvo Group for the last five years is approximately 28%, whereof SEK 6 billion or 31% of current taxes relate to developing and emerging markets as defined by the IMF. ■

## SOCIETAL ENGAGEMENT

Contributing to prosperity means contributing to the development of the society in many ways. Our approach to societal engagement consists of shared value activities, disaster relief, donations and community support. It involves driving Corporate Social Responsibility (CSR) initiatives, establishing strategic partnerships and encouraging employee participation in volunteering opportunities.

### SHARED VALUE




For the Volvo Group, creating shared value involves moving both our business and society forward. We enhance our competitiveness while simultaneously advancing the economic, environmental and social conditions of the societies in which we operate.

**Creating shared value**

Our 'Creating Shared Value' principle is described in the illustration to the right. To leverage the shared value creation, the approach is connected to the Volvo Group mission, business and expert capabilities. The highest potential for mutual benefit is where our business significantly interacts with society. Therefore, our selected focus areas are: education and skills development, traffic and worksite safety and environmental sustainability.

**Education and skill development**

We have a long-term plan to develop vocational training schools for mechanics, drivers and operators of trucks, buses and construction equipment. At year-end 2017, 1,017 students were participating in our vocational training schools in Ethiopia, Zambia and Morocco. In 2017, two new projects were decided and during 2018 one driver training in Ethiopia and one in Morocco will be established. Learn more about our vocational schools in Africa on page 76 and read about our truck-driver training for women in Peru on page 31.

**Traffic safety awareness campaigns**

Volvo Group runs a variety of traffic safety programs in a majority of the countries where we operate. Our traffic safety campaign Stop, Look, Wave focuses on school children, local communities and professional drivers. The program promotes safety awareness for children in their immediate environment, with the help of specific training kits. Since the launch in 2015 we have reached out to more than 200,000 children.

Similar to Stop, Look, Wave, the Volvo Trucks' See and Be Seen program aims to improve understanding of how unprotected road users and trucks can interact in traffic. The initiative was launched in 2016 and focuses specifically on cyclists and schoolchildren from the age of 12 years, but it is also suitable for traffic safety organizations working with adults. With the fast pace of today's traffic, it is vital that as many people as possible are aware of the risks in order to avoid accidents.

Our truck brands in the US continue to support the American Trucking Associations' Share the Road and America's Road Team outreach programs. Share the Road, sponsored by Mack, is a safety program that sends million miles accident free professional truck drivers, across the country to teach the public how to share the road with large trucks. America's Road Team, sponsored by Volvo Trucks, represents 3.1 million professional truck drivers in the USA and promotes the trucking industry's message of safety, essentiality and professionalism to audiences around the country.

**Partnering with the UN World Food Program**

As a partner of the United Nations (UN) World Food Program (WFP), Renault Trucks uses a mobile unit to train local WFP teams in Africa on truck maintenance and fleet and workshop management. After the success of the first partnership in 2012 and growing demand from WFP the training continues. Over five years, program volunteers have trained 190 WFP staff in twelve countries.

**Disaster relief and donations**

Volvo Group has a disaster relief fund that is approved by AB Volvo Board of Directors. This fund is used to support efforts in response to global natural disasters or catastrophes by providing products or funds to assist the responding relief organizations. During 2017 Volvo Group made donations to support the victims of the serious flooding in the US and to support the severe humanitarian situation caused by famine in South Sudan, Somalia, Nigeria and Yemen. The Volvo Group seasonal charitable gift of SEK 8.5 M was distributed to 16 local societal projects in different countries.

**Responding to Agenda 2030 for Sustainable development**

On January 1, 2016, the UN 2030 Agenda for Sustainable Development, with the 17 Sustainable Development Goals, officially came into force. We focus on those goals most relevant for our business and where we can contribute the most, but not at the expense of the other goals. For the Volvo Group, this means focusing on:

**UN SDG 3 – Good health and wellbeing** and especially the target to halve the number of global deaths and injuries from road traffic accidents by 2020.

Examples of our activities:
• Safety focus in product development, page 40
• Safety features in our vehicles and machines, page 64–65
• Safety training for drivers and operators, page 31 and 78.

**UN SDG 9 – Industry, innovation and infrastructure** with particular emphasis on the targets to develop quality, reliable, sustainable and resilient infrastructure including development in developing countries through enhanced financial, technological and technical support to African countries.

Examples of our activities:
• Efficient and reliable trucks and machines in the construction segment, see page 42–45 and 98–100
• Investments in innovative technologies such as automation, electromobility and connectivity for construction sites, page 34-39 and 62–67
• Vocational schools in Africa, page 76 and 78.

SUSTAINABLE DEVELOPMENT GOALS

**UN SDG 11 – Sustainable cities and communities** and the target to provide access to safe, affordable, accessible and sustainable transport systems for all, by 2020, notably by expanding public transport.

Examples of our activities:
• ElectriCity and increased fleet of hybrid buses, page 36–37 and 62
• Supplies to Zone Management Systems, page 102.

**UN SDG 13 – Climate action** and taking urgent action to combat climate change and its impacts.

Examples of our activities:
• Fuel efficiency and alternative fuel focus in product development, page 34–39
• Activities to lower energy consumption and reduce emissions from operations, page 48–51
• Commitments and action towards emissions and energy efficiency through the WWF Climate Savers program, page 51 and 79. ■

## COOPERATING ON REDUCING EMISSIONS AND INCREASING ENERGY EFFICIENCY

Volvo Group is the only automotive manufacturer in the world that is approved by World Wide Fund for Nature (WWF) for participation in its Climate Savers program. The current agreement, for the 2015-2020 period, includes the following commitments:

• A cumulative reduction in lifetime $CO_2$ emissions from products and production by at least 40 million tons by 2020 compared with 2013.

• Improving energy efficiency in production to save 150 GWh/year, corresponding to 8% of the energy use in the Volvo Group's production sites compared with 2013.

• Reducing $CO_2$ emissions by 20% per produced unit from the Volvo Group's freight transport.

• Developing truck prototypes with substantially lower fuel consumption compared with a corresponding truck today.

• Volvo CE will develop and demonstrate technologies with considerable efficiency improvements.

• Starting up the City Mobility concept in at least five cities.

• Hosting the Construction Climate Challenge (CCC) that aims to create a dialogue with construction industry representatives, academia and politicians and address mutual projects for improvement.

WWF
CLIMATE SAVERS
碳减排先锋
DEFENSORES DO CLIMA
クライメート・セイバーズ
A WWF GLOBAL INITIATIVE WITH BUSINESS

**Follow-up of results**

The results are audited yearly by independent experts. The agreed target should challenge us to be more progressive than "business as usual" and also signal that we are leading our sector in the reduction of greenhouse gas emissions.

• The results for activities undertaken between 2015 and 2017 show a 17 Mton $CO_2$ reduction in lifetime emissions from products.

• More than 600 implemented energy-saving activities implemented since 2015, resulting in 102 GWh/year in energy savings.

• Reduction of Group freight transport $CO_2$ emissions per produced unit is 20% lower 2017 compared to 2015. ■

“

PLATINUM LEVEL, VPS ASSESSMENT

Continuous improvement is embedded across the organization and in place at all levels. The result has to show major improvements, with minor variation and positive trends.

# Better and better day by day

How can I do this even better? Volvo Group employees ask themselves this question every day. Together, they find new ways to improve their work and create value for customers.

Powertrain Production (PTP) in Curitiba, Brazil, is among the best when it comes to continuous improvement. Encouraging new ideas is a key part of the strong culture of continuous improvement at the Curitiba Plant and many are turning to them for inspiration. PTP Curitiba has been recognized as the most advanced Volvo Group plant when it comes to working with the Volvo Production System (VPS). In the VPS Assessments, which are carried out to establish performance at different sites, the PTP Curitiba was the first unit to reach Platinum level.

"We are certainly very proud. It is recognition that comes from years of hard work. Reaching Platinum level reflects the way we work with continuous improvement in all areas of the plant, even at support functions.

It is also a result of having a consistent purpose and clear direction," says Luiz Bohatch, Plant Manager.

Team leader Maria Lucas next to operator Célia Gabardo who makes many of the sketches in the Kaizen forms. From her observations, she produces drawings that make continuous improvement part of PTP Curitiba's DNA.



### SUSTAINABILITY REPORTING INDEX

| | Environmental matters | Social and employee-related matters and prevention of human rights abuses | Instruments in place to fight corruption |
|---|---|---|---|
| Business model | 6–7, 10–11, 24–67 | 6–7, 10–11, 24–77 | 6–7, 54–55, 74–75 |
| Policy and statement about the key areas including control procedures and outcome | Products: 34–41, 79, Production: 48–51 Suppliers: 46–47, Customers: 54–55 Reuse: 60–61 | Health and Safety: 48–51, 68–74 Human Rights: 47, 54–55, 76–77 | 54–55, 74–75 |
| Key risks/issues, how these are managed, and impact on business if they occur | 36-41, 48–51, 60–61, 112–117, 222–223 | 112–116, 222–223 | 112–116, 222–223 |
| Main activities conducted and the outcome of those | 24–67 | 68–77 | 75 |
| KPI and targets, including results and materiality | 50–51, 79, 222–223 | 46–51, 55, 68–77, 222–223 | 74–75 , 222–223 |

This Annual and Sustainability Report is prepared in accordance with the Swedish Annual Accounts Act and Global Reporting Initiative (GRI) G4. We believe we do not have any other non-financial factors that are relevant in our business. For more information, see the GRI (G4) Index at volvogroup.com.

# Global strength in a changing world

Since the streamlining towards commercial vehicles was initiated more than twenty years ago, the Volvo Group has grown into the world's second largest manufacturer of heavy-duty trucks and one of the largest manufacturers of buses, coaches and construction equipment and is today also a leading manufacturer of heavy-duty diesel engines and marine and industrial engines. In 2017, demand improved in many markets around the world.

### NORTH AMERICA

- Net sales: SEK 84,047 M (80,701)
- Share of net sales: 25% (27)
- Number of regular employees: 15,882 (14,245)
- Share of Group regular employees: 18% (17)
- Largest markets: The US, Canada and Mexico.

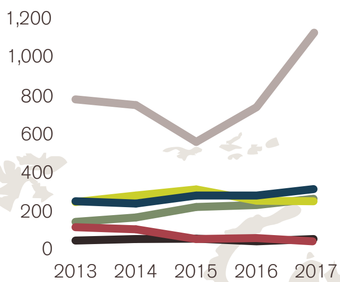
- The heavy-duty truck market was flat compared to 2016, with an increase in demand in the second half of the year.
- Both Volvo Trucks and Mack Trucks lost some market share with Volvo Trucks coming in on 8.3% (9.9) and Mack Trucks on 7.3% (7.8).
- Continued success for the Group's captive engines and gearboxes, with positive implications for the service market.
- Demand in the construction equipment market increased, mainly due to growth for both compact and larger excavators.

### SOUTH AMERICA

- Net sales: SEK 17,257 M (14,863)
- Share of net sales: 5% (5)
- Number of regular employees: 4,774 (4,762)
- Share of Group regular employees: 5% (6)
- Largest markets: Brazil, Peru, Argentina and Chile.

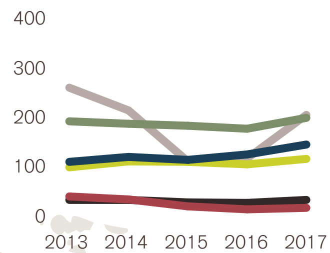
- Demand in the important Brazilian truck market increased, with the total heavy-duty truck market being up 9%.
- Demand in other South American markets was on good levels.
- The South American construction equipment market increased by 20% from very low levels, mainly driven by markets outside Brazil.

### MARKET DEVELOPMENT, HEAVY-DUTY TRUCKS, THOUSANDS



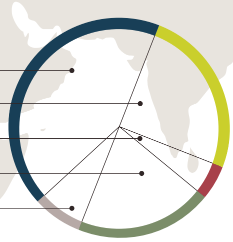

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| Europe 30 | 240 | 228 | 270 | 300 | 307 |
| North America | 236 | 270 | 302 | 243 | 244 |
| Brazil | 104 | 93 | 42 | 30 | 32 |
| Japan | 34 | 42 | 44 | 47 | 47 |
| India | 132 | 155 | 210 | 220 | 251 |
| China | 774 | 744 | 551 | 733 | 1,117 |

### MARKET DEVELOPMENT, CONSTRUCTION EQUIPMENT, THOUSANDS




| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| Europe | 111 | 121 | 115 | 126 | 146 |
| North America | 100 | 112 | 111 | 106 | 117 |
| South America | 41 | 35 | 21 | 15 | 18 |
| Asia (excl. China) | 193 | 188 | 184 | 178 | 200 |
| China | 261 | 215 | 112 | 118 | 206 |
| Africa and Oceania | 34 | 34 | 29 | 28 | 34 |

### DISTRIBUTION OF NET SALES BY MARKET 2017



Europe, 43%
North America, 25%
South America, 5%
Asia, 20%
Africa and Oceania, 7%

## ASIA

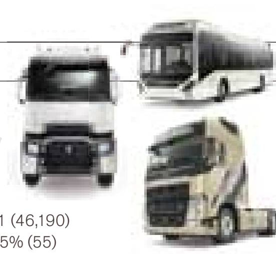
- Net sales: SEK 68,398 M (55,501)
- Share of net sales: 20% (18)
- Number of regular employees: 16,526 (16,469)
- Share of Group regular employees: 19% (19)
- Largest markets: China, Japan, South Korea, India and Indonesia.

- The Chinese market for construction equipment grew strongly, 74%, with larger excavators being up 121% and wheel loaders 50%.
- Out of the Group's main truck markets in Asia, China grew very strongly. India also recorded good growth while demand in Japan was on the same good level as in 2016.

## AFRICA AND OCEANIA

- Net sales: 21,811 M (19,137)
- Share of net sales: 7% (6)
- Number of regular employees: 2,361 (2,373)
- Share of Group regular employees: 3% (3)
- Largest markets: Australia, South Africa, New Zealand, Morocco and Algeria.

- Demand for trucks in Australia continued to be good with support from increasing raw material prices.
- Demand for trucks in South Africa rebounded after the weak 2016.
- I Northern Africa, on the other hand, markets weakened, particularly in Algeria.



## EUROPE

- Net sales: SEK 143,236 M (131,712)
- Share of net sales: 43% (44)
- Number of regular employees: 47,561 (46,190)
- Share of Group regular employees: 55% (55)
- Largest markets: France, the UK, Germany, Sweden and Russia.

- Registrations of heavy-duty trucks in Europe continued to be high, increasing by about 2% compared to 2016.
- The market share of 16.8% for Volvo Trucks in EU28 was stable on historically good levels while Renault Trucks regained market share to 8.7% (8.1).
- The construction equipment market grew by 16%, mainly driven growth in major markets such as the UK, France and Italy.

SIGNIFICANT EVENTS

# Events published in quarterly reports during 2017

2017 was characterized by good or improving demand in many markets and improved profitability as an effect of improved volumes.

**Annual General Meeting of AB Volvo**

The Annual General Meeting of AB Volvo on April 4 approved the Board of Directors' proposal that a dividend of SEK 3.25 per share was to be paid to the shareholders.

Matti Alahuhta, Eckhard Cordes, James W. Griffith, Martin Lundstedt, Kathryn V. Marinello, Martina Merz, Hanne de Mora, Håkan Samuelsson, Helena Stjernholm, Carl-Henric Svanberg and Lars Westerberg were reelected as members of the Board. Carl-Henric Svanberg was reelected as Chairman of the Board. Bengt Kjell, representing AB Industrivärden, Lars Förberg, representing Cevian Capital, Yngve Slyngstad, representing Norges Bank Investment Management, Pär Boman, representing Handelsbanken, SHB Pension Fund, SHB Employee Fund, SHB Pensionskassa and Oktogonen, and the Chairman of the Board were elected members of the Election Committee. A remuneration policy for senior executives was adopted in accordance with the Board of Directors' proposal.

**New heavy-duty and medium-duty trucks from UD**

On March 1, UD Croner was launched. It is an all-new medium-duty truck range, specifically for growth markets. UD Croner comes in up to 21 different basic configurations to suit the specific demands of various industries.

On April 11, UD Trucks launched an all-new and broader heavy-duty UD Quon range. The trucks are among other things equipped with a fuel-efficient 11-liter engine and a new electronically controlled automatic transmission.

**New Volvo truck in North America**

On April 20, Volvo Trucks launched the new Volvo VNR regional haul truck in North America, marking the first step in the renewal of the Volvo range in the North American market.

## VOLVO GROUP PRESS RELEASES 2017

### THE FIRST QUARTER

**1/12/2017** Volvo CE announces headquarters move from Brussels, Belgium to Gothenburg, Sweden · **1/18/2017** Invitation to press and analyst conference in Stockholm · **2/1/2017** Volvo Group – the fourth quarter and full year 2016 · **2/9/2017** Volvo Buses receives order for 90 electric buses from Belgium · **2/28/2017** Volvo Trucks tests a hybrid vehicle for long haul · **3/1/2017** UD Trucks launches Croner to help customers maximize productivity · **3/1/2017** Annual General Meeting of AB Volvo · **3/13/2017** AB Volvo publishes 2016 Annual and Sustainability Report · **3/23/2017** Volvo Buses to deliver 100 city buses to India · **3/30/2017** Invitation to Volvo Group Capital Markets Day 2017

### THE SECOND QUARTER

**4/4/2017** Annual General Meeting of AB Volvo · **4/11/2017** Invitation to press and analyst conference in Stockholm · **4/11/2017** UD Trucks launches the new Quon · **4/12/2017** Volvo scholarship for research on air pollution · **4/21/2017** New Volvo VNR regional haul truck in North America · **4/25/2017** Volvo Group – the first quarter 2017 · **4/27/2017** Assar Gabrielsson award for effective treatment of cancer · **5/9/2017** Volvo Group Innovation Summit to focus on transport in smart cities of the future · **5/10/2017** Volvo Trucks Safety Report focuses on vulnerable road users · **5/17/2017** Volvo pioneers autonomous, self-driving refuse truck in the urban environment · **5/17/2017** Volvo CE unveils 100% electric compact excavator prototype · **5/19/2017** ElectriCity partnership wins UITP Awards 2017 · **5/23/2017** Volvo Group Capital Markets Day

**Melker Jernberg appointed President of Volvo Construction Equipment**

On July 3, it was announced that Melker Jernberg had been appointed President of Volvo Construction Equipment and member of the Volvo Group Executive Board, with effect from January 1, 2018. Melker Jernberg replaced Martin Weissburg, who later in the year was appointed President of Mack Trucks.

**The Volvo Group sold its shares in Deutz AG**

On July 7, the Volvo Group sold its complete holding in the German listed engine manufacturer Deutz AG. Divestment proceeds amounted to SEK 1,897 M, which impacted the Group's cash flow in the same amount. The sale resulted in a capital gain of SEK 400 M.

**New Volvo long-haul tractor in North America**

On July 11, Volvo Trucks revealed the new Volvo VNL series for North America. The Volvo VNL is a long-haul tractor with cutting-edge innovations in efficiency, productivity, safety and uptime. The new truck is available in several configurations, including an all-new, 70-inch sleeper.


**New financial targets for the Volvo Group**

On August 31, it was announced that the Board of Directors of AB Volvo in its annual review had decided to introduce new financial targets for the Volvo Group.

- The Group's operating margin shall exceed 10% measured over a business cycle.
- Financial Services' target remains unchanged with a return on equity of 12–15% at an equity ratio above 8%.
- The Industrial Operations shall under normal conditions have no net financial indebtedness excluding pension liabilities.

**Mack Anthem introduced**

On September 15, Mack Trucks introduced its new, next-generation highway truck, the Mack Anthem. The truck features an all-new exterior design with optimized aerodynamics for improved fuel efficiency by up to 3%. Mack Trucks also introduced updated vocational and regional haul models with all-new interiors to improve ergonomics, while maintaining functionality.

**Volvo Group discontinued the process to divest Governmental Sales**

On October 17, it was announced that Volvo Group had decided to discontinue the process to divest the Governmental Sales business area, since the offers received did not reflect its value.

**Martin Weissburg appointed President of Mack Trucks**

On December 8, it was announced that Martin Weissburg, at the time President of Volvo Construction Equipment, will become President of Mack Trucks effective June 1, 2018, in which capacity he will continue to be a member of the Executive Board for the Volvo Group.

**THE THIRD QUARTER**

**6/8/2017** Self-steering Volvo truck set to increase Brazil's sugar-cane harvest · **6/15/2017** ElectriCity readying for the next phase – expanding traffic with electric vehicles · **6/21/2017** Technology award for wave piston design that lowers fuel consumption · **7/3/2017** Melker Jernberg appointed President of Volvo Construction Equipment · **7/5/2017** Invitation to the Volvo Group report on the first six months 2017 · **7/7/2017** The Volvo Group has sold its shares in Deutz AG · **7/11/2017** Volvo Penta becomes major owner of Seven Marine · **7/12/2017** Volvo Trucks unveils new VNL series · **7/19/2017** Volvo Group – the second quarter 2017 · **8/31/2017** New financial targets for Volvo Group.

**THE FOURTH QUARTER**

**9/4/2017** Focus on the future of transport at the Volvo Group Innovation Summit · **9/15/2017** Mack Anthem – the next-generation highway hero in US · **9/18/2017** Kina Wileke appointed Executive Vice President Group Communications & Sustainability Affairs at AB Volvo · **10/3/2017** New trucks from Volvo running on gas · **10/5/2017** Close cooperation for future transport · **10/6/2017** Invitation to press and analyst conference in Stockholm · **10/11/2017** Volvo Ocean Race – a platform for customer relationships · **10/16/2017** New Volvo 7900 Electric offers greater range and flexibility · **10/16/2017** The protector of the oceans receives the Volvo Environment Prize · **10/17/2017** Volvo Group discontinues the process to divest Governmental Sales · **10/20/2017** Volvo Group – the third quarter 2017 · **11/9/2017** Smart societies of the future in focus at the next Volvo Group Innovation Summit · **11/16/2017** Volvo Group unveils new innovative transport solution to drive safety and productivity · **12/8/2017** Martin Weissburg appointed President of Mack Trucks

FINANCIAL PERFORMANCE

# Improved profitability

For the Volvo Group 2017 was a year with improved profitability and high volumes.

## INCOME STATEMENTS VOLVO GROUP

| SEK M | | Industrial Operations | | Financial Services | | Eliminations | | Volvo Group | |
|---|---|---|---|---|---|---|---|---|---|
| | | **2017** | 2016 | **2017** | 2016 | **2017** | 2016 | **2017** | 2016 |
| **Net sales** | Note 6, 7 | **323,809** | **291,459** | **11,812** | **11,242** | **-873** | **-787** | **334,748** | **301,914** |
| Cost of sales | | −248,382 | −225,797 | −7,072 | −6,591 | 873 | 787 | −254,581 | −231,602 |
| **Gross income** | | **75,428** | **65,662** | **4,740** | **4,651** | **-** | **-** | **80,167** | **70,312** |
| Research and development expenses | | −16,098 | −14,631 | – | – | – | – | −16,098 | −14,631 |
| Selling expenses | | −26,495 | −24,946 | −2,086 | −1,920 | – | – | −28,582 | −26,867 |
| Administrative expenses | | −5,602 | −5,081 | −40 | −40 | – | – | −5,642 | −5,121 |
| Other operating income and expenses | Note 8 | −640 | −2,531 | −421 | −605 | – | – | −1,061 | −3,135 |
| Income from investments in joint ventures and associated companies | Note 5, 6 | 1,407 | 156 | – | – | – | – | 1,407 | 156 |
| Income/loss from other investments | | 135 | 112 | 0 | – | – | – | 135 | 112 |
| **Operating income** | | **28,135** | **18,740** | **2,193** | **2,086** | **-** | **-** | **30,327** | **20,826** |
| Interest income and similar credits | | 164 | 240 | – | – | – | – | 164 | 240 |
| Interest expenses and similar charges | | −1,852 | −1,847 | 0 | – | – | – | −1,852 | −1,847 |
| Other financial income and expenses | Note 9 | −385 | 11 | – | – | – | – | −385 | 11 |
| **Income after financial items** | | **26,062** | **17,144** | **2,192** | **2,086** | **-** | **-** | **28,254** | **19,230** |
| Income taxes | Note 10 | −7,219 | −5,377 | 248 | −631 | – | – | −6,971 | −6,008 |
| **Income for the period** | | **18,843** | **11,767** | **2,440** | **1,455** | **-** | **-** | **21,283** | **13,223** |
| Attributable to: | | | | | | | | | |
| Equity holders of the parent company | | | | | | | | 20,981 | 13,147 |
| Minority interests | | | | | | | | 302 | 75 |
| | | | | | | | | **21,283** | **13,223** |
| Basic earnings per share, SEK | Note 19 | | | | | | | 10.33 | 6.47 |
| Diluted earnings per share, SEK | Note 19 | | | | | | | 10.32 | 6.47 |

## OTHER COMPREHENSIVE INCOME

| SEK M | | **2017** | 2016 |
|---|---|---|---|
| **Income for the period** | | **21,283** | **13,223** |
| *Items that will not be reclassified to income statement:* | | | |
| Remeasurements of defined benefit pension plans | | −827 | −304 |
| *Items that may be reclassified subsequently to income statement:* | | | |
| Exchange differences on translation of foreign operations | | −2,546 | 5,585 |
| Share of OCI related to joint ventures and associated companies | | 25 | −97 |
| Accumulated translation difference reversed to income | | −56 | −48 |
| Available-for-sale investments | Note 19 | −10 | −57 |
| Change in cash flow hedge reserve | Note 19 | −20 | 68 |
| **Other comprehensive income, net of income taxes** | | **-3,434** | **5,147** |
| **Total comprehensive income for the period** | | **17,849** | **18,370** |
| Attributable to: | | | |
| Equity holders of the parent company | | 17,601 | 18,249 |
| Minority interests | | 248 | 121 |
| | | **17,849** | **18,370** |

VOLVO GROUP

### Net sales

Net sales increased with 11% to SEK 335 billion. This was primarily due to higher truck and construction equipment volumes and a positive development of service sales. Also when adjusted for currency movements and acquired and divested operations, net sales increased by 11%. Vehicle sales increased by 12% adjusted for currency movements and service sales increased by 5%.

Net sales in Trucks increased by 8% with all regions contributing. The positive sales development for Construction Equipment was visible in all regions with Asia as the main contributor driven by a strong recovery for excavators and wheel loaders in China. Volvo Penta increased sales through higher volumes, and Buses were slightly positive with North America offsetting decreases in other regions.

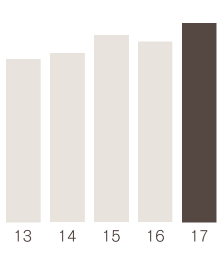
| **NET SALES BY OPERATING SEGMENT,** SEK M | **2017** | 2016 | % |
|---|---|---|---|
| Trucks | 216,480 | 200,650 | 8 |
| Construction Equipment | 66,497 | 50,731 | 31 |
| Buses | 26,078 | 25,386 | 3 |
| Volvo Penta | 11,119 | 9,893 | 12 |
| Group Functions & Other | 6,449 | 7,754 | –17 |
| Eliminations | –2,814 | –2,955 | – |
| **Industrial Operations**[1] | **323,809** | **291,459** | **11** |
| Financial Services | 11,812 | 11,242 | 5 |
| Reclassifications and eliminations | –873 | –787 | – |
| **Volvo Group** | **334,748** | **301,914** | **11** |

[1] Adjusted for changes in currency rates and acquired and divested units, net sales increased by 11%.

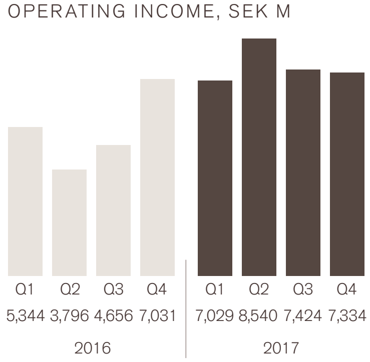
The Volvo Group's sales of defense material, as defined in the Swedish Military Equipment Ordinance (1992:1303) section A, amounted to 0.26% of net sales in 2017, which was the same as in 2016.

| **OPERATING INCOME/LOSS BY OPERATING SEGMENT,** SEK M | **2017** | 2016 |
|---|---|---|
| Trucks | 20,383 | 15,020 |
| Construction Equipment | 7,917 | 2,246 |
| Buses | 928 | 911 |
| Volvo Penta | 1,439 | 1,269 |
| Group Functions & Other | –2,534 | –679 |
| Eliminations | 2 | –28 |
| **Industrial Operations** | **28,135** | **18,740** |
| Financial Services | 2,192 | 2,086 |
| **Volvo Group** | **30,327** | **20,826** |

NET SALES, SEK BN




OPERATING INCOME, SEK M




### Operating income

The adjusted operating income increased with SEK 8.8 billion to SEK 29.9 billion (21.1), including a negative currency effect of SEK 0.4 billion. The adjusted operating margin increased to 8.9% (7.0). The higher adjusted operating income was primarily an effect of significantly improved earnings in Construction Equipment due to higher volumes and increased capacity utilization, higher volumes in the truck business and improved earnings in our joint ventures. Adjusted operating income was negatively impacted by increased expenses for selling, administration and research and development as well as higher costs related to the stretched situation in parts of the supply chain.

Reported operating income in 2017 amounted to SEK 30.3 billion and the difference compared to adjusted operating income is a

| **OPERATING MARGIN,** % | **2017** | 2016 |
|---|---|---|
| Trucks | 9.4 | 7.5 |
| Construction Equipment | 11.9 | 4.4 |
| Buses | 3.6 | 3.6 |
| Volvo Penta | 12.9 | 12.8 |
| **Industrial Operations** | **8.7** | **6.4** |
| **Volvo Group** | **9.1** | **6.9** |

| **CHANGE IN OPERATING INCOME,** SEK BN | Change (excluding currency) | Currency impact | Total |
|---|---|---|---|
| **Operating income 2016** | | | **20.8** |
| Change in gross income Industrial Operations | 10.0 | –0.2 | 9.8 |
| Change in gross income Financial Services | 0.1 | | 0.1 |
| Lower credit losses | 0.5 | | 0.5 |
| Gains on divestment of Group companies | 0.3 | | 0.3 |
| Gain on sale of PPE and intangible assets | 0.3 | | 0.3 |
| Lower capitalization of development cost | –1.0 | | –1.0 |
| Higher research and development expenditures | –0.5 | | –0.5 |
| Higher selling and administrative expenses | –2.1 | –0.1 | –2.2 |
| Sale of shares in Deutz AG 2017 | 0.4 | | 0.4 |
| Income from investments in Joint Ventures and associated companies | 0.9 | | 0.9 |
| Damages and litigations | 0.2 | | 0.2 |
| Provision related to EU antitrust investigation 2016 | 2.5 | | 2.5 |
| Gain on divestment of external IT operations 2016 | –0.9 | | –0.9 |
| Sale of properties in Gothenburg, Sweden 2016 | –1.4 | | –1.4 |
| Restructuring and efficiency program | 0.4 | | 0.4 |
| Other | 0.2 | | 0.2 |
| **Operating income 2017** | **9.9** | **–0.4** | **30.3** |

capital gain of SEK 0.4 billion from the sale of Volvo Group's holding in Deutz AG. Adjustments to operating income in 2016 were: divestment of external IT operation, SEK +0.9 billion, provision related to EU antitrust investigation, SEK –2.5 billion, and sales of properties in Gothenburg, SEK +1.4 billion.

### Net financial items

Net interest expense amounted to SEK 1.7 billion (1.6). Other financial income and expense amounted to –0.4 billion (0.0). The change compared to 2016 was mainly related to a positive effect from unrealized and realized result from derivatives of SEK 0.4 billion in 2016.

» **Read more in Note 9** Other financial income and expenses.

### Income taxes

The tax expense for the year amounted to SEK 7,0 billion (6,0) corresponding to an effective tax rate of 25% (31). The tax rate in 2017 was mainly impacted by a cost of SEK 354 M related to revaluation of deferred tax assets and liabilities due to the tax reform legislation in the USA which will lower the corporate tax rate for 2018.

| **KEY OPERATING RATIOS,** % **INDUSTRIAL OPERATIONS** | **2017** | 2016 |
|---|---|---|
| Gross margin | 23.3 | 22.5 |
| Research and development expenses as percentage of net sales | 5.0 | 5.0 |
| Selling expenses as percentage of net sales | 8.2 | 8.6 |
| Administrative expenses as percentage of net sales | 1.7 | 1.7 |
| **Operating margin** | **8.7** | **6.4** |

| **NET SALES BY MARKET AREA,** SEK M | **2017** | 2016 | % |
|---|---|---|---|
| Europe | 138,557 | 127,352 | 9 |
| North America | 79,903 | 76,500 | 4 |
| South America | 15,919 | 13,628 | 17 |
| Asia | 67,855 | 55,056 | 23 |
| Africa and Oceania | 21,575 | 18,924 | 14 |
| **Total Industrial Operations** | **323,809** | **291,459** | **11** |
| Of which: | | | |
| Vehicles | 252,063 | 223,996 | 13 |
| Services | 71,747 | 67,463 | 6 |

| **IMPACT OF EXCHANGE RATES ON OPERATING INCOME** Compared with preceding year, SEK M **INDUSTRIAL OPERATIONS** | |
|---|---|
| Net sales[1] | 2,026 |
| Cost of sales | –2,263 |
| Research and development expenses | –7 |
| Selling and administrative expenses | –86 |
| Other | –32 |
| **Total effect of changes in exchange rates on operating income** | **-362** |

[1] The Volvo Group sales are reported at monthly average rates.

### Income for the period and earnings per share

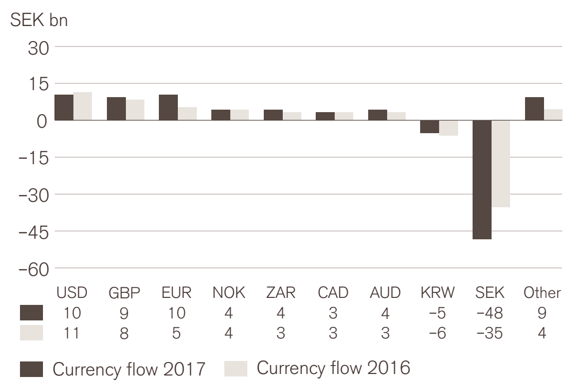
In 2017 the income for the period amounted to SEK 21,283 M (13,223), corresponding to diluted earnings per share of SEK 10.32 (6.47). The return on shareholders' equity was 20.8% (14.9%).

### Impact of exchange rates on operating income

Operating income for 2017 in Industrial Operations was negatively impacted by approximately SEK 0.4 billion from changes in exchange rates in foreign currency. The negative impact was mainly related to net flows in foreign currency by SEK 0.4 billion. Revaluation of receivables and liabilities had a negative impact of SEK 0.2 billion, offset by a positive translation effect of SEK 0.2 billion.

The net flows in foreign currency were negatively impacted by the depreciation of GBP and USD, offset by a positive impact by appreciation from EUR and ZAR. ■

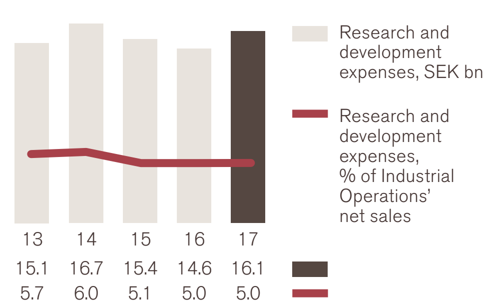
TRANSACTION EXPOSURE FROM OPERATING NET FLOWS[1]




[1] The graph above represents the transaction exposure from commercial operating net cash flows in foreign currency in Industrial Operations, expressed as net surpluses or deficits in key currencies. The deficit in SEK and KRW is mainly an effect of expenses for manufacturing plants in Sweden and Korea, but limited external revenues in those currencies.

» **Read more in Note 4** Goals and policies in financial risk management regarding Industrial Operations transaction exposure from operating net flows as well as currency effects on sales and operating income.

RESEARCH AND DEVELOPMENT EXPENSES



FINANCIAL POSITION

# Strengthened financial position

Net financial position in the Volvo Group's Industrial Operations improved by SEK 27.5 billion and was 26.9% of shareholders' equity excluding provisions for post-emplyment benefits on December 31, 2017.

**Net financial position** in the Industrial Operations, excluding provisions for post-employment benefits, improved from a net financial debt of SEK 1.2 billion by the end of December 2016 to a **net financial asset** of SEK 26.3 billion by the end of December 2017. This equals 26.9% of shareholders' equity.

Including provisions for post-employment benefits, the Industrial Operations' net financial assets amounted to SEK 12.2 billion which is equal to 12.5% of shareholders' equity. The change during the year was mainly explained by a positive operating cash flow of SEK 28.4 billion, the disposal of shares in Deutz AG by SEK 1.9 billion and the divestment of Volvo Construction Equipment's dealer business in the UK by SEK 0.9 billion, reduced by the dividend paid to AB Volvo shareholders and remeasurements of the defined benefit pension obligations by SEK 0.1 billion. During 2017 currency fluctuations had a positive effect on net financial assets in an amount of SEK 1.3 billion.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations regarding the disposal of shares in Deutz AG.

» **Read more in Note 20** Provisions for post-employment benefits.

**Marketable Securities and Liquid funds** amounted to SEK 36.3 billion on December 31, 2017, an increase of SEK 11.1 billion as an effect of the positive operating cash flow. In addition to this, granted but unutilized credit facilities amounted to SEK 45.4 billion. Cash and cash equivalents as of December 31, 2017 include SEK 1.3 (0.8) billion that is not available to use by the Volvo Group and SEK 5.0 (6.0) billion where other limitations exist.

» **Read more in Note 18** Marketable securities and liquid funds.

» **Read more in Note 22** Liabilities regarding the maturity structure on Volvo Group's credit facilities.

**Total assets** in the Volvo Group amounted to SEK 412.5 billion as of December 31, 2017, an increase of SEK 13.6 billion since December 31, 2016. Currency effects had a negative impact of total assets in an amount of SEK 12.9 billion

**Intangible assets** amounted to SEK 35.9 billion (37.9) as of December 31, 2017. The reduction is primarily related to higher amortization than capitalization of research and development expenses amounting to SEK 1.1 billion as well as a reduction of goodwill of SEK 0.6 billion due to currency movements.

» **Read more in Note 12** Intangible assets regarding the impairment test on goodwill.

**Tangible assets** amounted to SEK 90.5 billion, which was the same level as in 2016.

» **Read more in Note 13** Tangible assets.

**Inventories** increased by SEK 4.4 billion (3.9) under 2017, mainly generated by the higher demand in Trucks and Construction Equipment.

» **Read more in Note 17** Inventories.

Assets and liabilities held for sale decreased by SEK 0.3 billion during the year. The decrease is mainly due to the divestment of Volvo Construction Equipment's dealer business in the UK which was completed during 2017.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidaries regarding assets and liabilities held for sale.

**Investments in Joint Ventures and associated companies** decreased by SEK 1.1 billion during the year, mainly driven by the divestment of shares in Deutz AG.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations.

The net value of assets and liabilities related to **pensions and similar obligations** amounted to SEK 14.2 billion as of December 31, 2017, a decrease of SEK 0.4 billion compared to year-end 2016.

» **Read more in Note 20** Provisions for post-employment benefits.

On December 31, 2017 the **shareholders' equity** for the Volvo Group amounted to SEK 109.0 billion compared to SEK 97.8 billion at year-end 2016. The equity ratio was 26.4% (24.5). On the same date the equity ratio in the Industrial operations amounted to 32.5% (30.9). ■

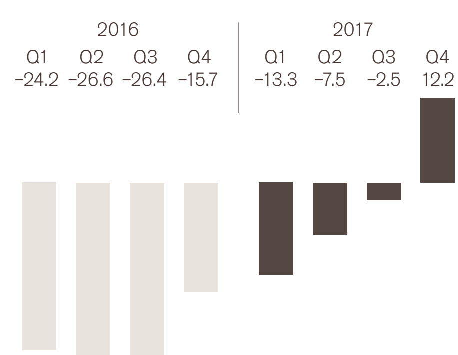
## BALANCE SHEET VOLVO GROUP – ASSETS

| SEK M | | Industrial Operations | | Financial Services | | Eliminations | | Volvo Group | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Dec 31 2017** | Dec 31 2016 | **Dec 31 2017** | Dec 31 2016 | **Dec 31 2017** | Dec 31 2016 | **Dec 31 2017** | Dec 31 2016 |
| **Assets** | | | | | | | | | |
| **Non-current assets** | | | | | | | | | |
| Intangible assets | Note 12 | 35,716 | 37,768 | 178 | 149 | – | – | 35,893 | 37,916 |
| *Tangible assets* | Note 13 | | | | | | | | |
| Property, plant and equipment | | 53,277 | 55,778 | 40 | 64 | – | – | 53,317 | 55,841 |
| Investment property | | 31 | 34 | – | – | – | – | 31 | 34 |
| Assets under operating leases | | 24,051 | 22,752 | 21,075 | 19,556 | –7,959 | –7,615 | 37,166 | 34,693 |
| *Financial assets* | | | | | | | | | |
| Investments in joint ventures and associated companies | Note 5 | 10,525 | 11,643 | – | – | – | – | 10,525 | 11,643 |
| Other shares and participations | Note 5 | 690 | 766 | 10 | 11 | – | – | 699 | 776 |
| Non-current customer-financing receivables | Note 15 | 737 | 965 | 57,180 | 57,830 | –744 | –968 | 57,173 | 57,827 |
| Prepaid pensions | Note 20 | 252 | 79 | – | – | – | – | 252 | 79 |
| Non-current interest-bearing receivables | Note 16 | 2,892 | 2,481 | – | – | –557 | –1,222 | 2,335 | 1,258 |
| Other non-current receivables | Note 16 | 4,186 | 4,083 | 238 | 211 | –143 | –147 | 4,281 | 4,148 |
| Deferred tax assets | Note 10 | 10,948 | 13,332 | 834 | 1,068 | – | – | 11,782 | 14,399 |
| **Total non-current assets** | | **143,304** | **149,679** | **79,554** | **78,888** | **–9,403** | **–9,953** | **213,455** | **218,615** |
| **Current assets** | | | | | | | | | |
| Inventories | Note 17 | 52,231 | 48,080 | 470 | 206 | – | – | 52,701 | 48,287 |
| *Current receivables* | | | | | | | | | |
| Customer-financing receivables | Note 15 | 621 | 733 | 52,294 | 53,082 | –711 | –821 | 52,205 | 52,994 |
| Tax assets | | 1,137 | 1,166 | 430 | 193 | – | – | 1,567 | 1,359 |
| Interest-bearing receivables | Note 16 | 2,075 | 1,935 | – | 191 | –908 | –991 | 1,166 | 1,135 |
| Internal funding[1] | | 15,927 | 7,503 | – | – | –15,927 | –7,503 | – | – |
| Accounts receivable | Note 16 | 39,705 | 33,593 | 1,069 | 826 | – | – | 40,774 | 34,419 |
| Other receivables | Note 16 | 13,667 | 16,003 | 1,527 | 1,348 | –889 | –940 | 14,305 | 16,410 |
| Non interest-bearing assets held for sale | Note 3 | 51 | 525 | – | – | – | – | 51 | 525 |
| Marketable securities | Note 18 | 178 | 1,223 | – | – | – | – | 178 | 1,223 |
| Cash and cash equivalents | Note 18 | 32,269 | 19,653 | 4,892 | 5,175 | –1,069 | –879 | 36,092 | 23,949 |
| **Total current assets** | | **157,861** | **130,414** | **60,682** | **61,021** | **–19,504** | **–11,134** | **199,039** | **180,301** |
| **Total assets** | | **301,165** | **280,093** | **140,236** | **139,910** | **–28,907** | **–21,087** | **412,494** | **398,916** |

1 Internal funding is internal lending from Industrial Operations to Financial Services

| **CHANGE IN NET FINANCIAL POSITION, INDUSTRIAL OPERATIONS,** SEK BN | **2017** | 2016 |
|---|---|---|
| **Net financial position at beginning of period** | **–15.7** | **–13.2** |
| Cash flow from operating activities | 35.8 | 9.9 |
| Investments in fixed assets | –7.8 | –9.6 |
| Disposals | 0.4 | 3.2 |
| **Operating cash flow** | **28.4** | **3.5** |
| Investments and divestments of shares, net | 2.2 | 0.2 |
| Acquired and divested operations, net | 0.9 | 1.4 |
| Capital injections to/from Financial Services | 1.9 | 2.1 |
| Currency effect | 1.3 | –2.7 |
| Dividend paid to AB Volvo shareholders | –6.6 | –6.1 |
| Dividend paid to minority shareholders | 0.0 | –0.2 |
| Remeasurements of defined benefit pension plans | –0.1 | –0.4 |
| Pension payments and costs, net | 0.1 | 0.3 |
| Other changes | –0.1 | –0.6 |
| **Total change** | **27.9** | **–2.4** |
| **Net financial position at end of period** | **12.2** | **–15.7** |

NET FINANCIAL POSITION, INDUSTRIAL OPERATIONS, SEK BN



## BALANCE SHEET VOLVO GROUP – SHAREHOLDERS' EQUITY AND LIABILITIES

| SEK M | | Industrial Operations Dec 31 2017 | Industrial Operations Dec 31 2016 | Financial Services Dec 31 2017 | Financial Services Dec 31 2016 | Eliminations Dec 31 2017 | Eliminations Dec 31 2016 | Volvo Group Dec 31 2017 | Volvo Group Dec 31 2016 |
|---|---|---|---|---|---|---|---|---|---|
| **Equity and liabilities** | | | | | | | | | |
| Equity attributable to the equity holder of the Parent Company | Note 19 | 95,849 | 84,876 | 11,221 | 11,185 | – | – | 107,069 | 96,061 |
| Minority interests | Note 11 | 1,941 | 1,703 | – | – | – | – | 1,941 | 1,703 |
| **Total equity** | | **97,790** | **86,579** | **11,221** | **11,185** | – | – | **109,011** | **97,764** |
| *Non-current provisions* | | | | | | | | | |
| Provisions for post-employment benefits | Note 20 | 14,391 | 14,608 | 85 | 61 | – | – | 14,476 | 14,669 |
| Provisions for deferred taxes | Note 10 | 3,025 | 1,842 | 2,328 | 3,429 | – | – | 5,353 | 5,270 |
| Other provisions | Note 21 | 8,965 | 9,540 | 264 | 252 | 89 | 13 | 9,318 | 9,804 |
| **Total non-current provisions** | | **26,380** | **25,989** | **2,677** | **3,742** | **89** | **13** | **29,147** | **29,744** |
| *Non-current liabilities* | Note 22 | | | | | | | | |
| Bond loans | | 48,962 | 60,653 | – | – | – | – | 48,962 | 60,653 |
| Other loans | | 12,865 | 13,578 | 12,817 | 11,287 | –740 | –968 | 24,942 | 23,898 |
| Internal funding[1] | | –43,522 | –52,487 | 49,934 | 48,071 | –6,413 | 4,415 | – | – |
| Other liabilities | | 26,232 | 24,631 | 1,285 | 934 | –5,208 | –5,243 | 22,309 | 20,322 |
| **Total non-current liabilities** | | **44,538** | **46,376** | **64,037** | **60,293** | **-12,361** | **-1,795** | **96,213** | **104,873** |
| **Current provisions** | Note 21 | **10,690** | **11,164** | **71** | **82** | **45** | **87** | **10,806** | **11,333** |
| *Current liabilities* | Note 22 | | | | | | | | |
| Loans | | 46,331 | 47,976 | 9,312 | 10,165 | –1,872 | –1,644 | 53,771 | 56,497 |
| Internal funding[1] | | –37,635 | –35,777 | 48,527 | 49,964 | –10,891 | –14,187 | – | – |
| Non interest-bearing liabilities held for sale | Note 3 | 0 | 148 | – | – | – | – | 0 | 148 |
| Trade payables | | 64,900 | 54,790 | 445 | 474 | – | – | 65,346 | 55,264 |
| Tax liabilities | | 1,556 | 544 | 143 | 141 | – | – | 1,699 | 685 |
| Other liabilities | Note 22 | 46,615 | 42,305 | 3,803 | 3,864 | –3,917 | –3,560 | 46,501 | 42,608 |
| **Total current liabilities** | | **121,767** | **109,985** | **62,230** | **64,609** | **-16,680** | **-19,391** | **167,317** | **155,202** |
| **Total equity and liabilities** | | **301,165** | **280,093** | **140,236** | **139,910** | **-28,907** | **-21,087** | **412,494** | **398,916** |

1 Internal funding is internal lending from Industrial Operations to Financial Services.

| **NET FINANCIAL POSITION,** SEK M | Industrial Operations Dec 31 2017 | Industrial Operations Dec 31 2016 | Volvo Group Dec 31 2017 | Volvo Group Dec 31 2016 |
|---|---|---|---|---|
| *Non-current interest-bearing assets* | | | | |
| Non-current customer-financing receivables | – | – | 57,173 | 57,827 |
| Non-current interest-bearing receivables | 2,892 | 2,481 | 2,335 | 1,258 |
| *Current interest-bearing assets* | | | | |
| Customer-financing receivables | – | – | 52,205 | 52,994 |
| Interest-bearing receivables | 2,075 | 1,935 | 1,166 | 1,135 |
| Internal funding | 15,927 | 7,503 | – | – |
| Marketable securities | 178 | 1,223 | 178 | 1,223 |
| Cash and cash equivalents | 32,269 | 19,653 | 36,092 | 23,949 |
| **Total interest-bearing financial assets** | **53,340** | **32,793** | **149,149** | **138,386** |
| *Non-current interest-bearing liabilities* | | | | |
| Bond loans | –48,962 | –60,653 | –48,962 | –60,653 |
| Other loans | –12,865 | –13,578 | –24,942 | –23,898 |
| Internal funding | 43,522 | 52,487 | – | – |
| *Current interest-bearing liabilities* | | | | |
| Loans | –46,331 | –47,976 | –53,771 | –56,497 |
| Internal funding | 37,635 | 35,777 | – | – |
| **Total interest-bearing financial liabilities** | **-27,001** | **-33,944** | **-127,676** | **-141,048** |
| **Net financial position excl. post-employment benefits** | **26,339** | **-1,151** | **21,474** | **-2,662** |
| Provision for post-employment benefits, net | –14,139 | –14,529 | –14,224 | –14,590 |
| **Net financial position incl. post-employment benefits** | **12,200** | **-15,679** | **7,250** | **-17,252** |

CASH FLOW STATEMENT

# Strong operating cash flow

During 2017 operating cash flow in the Industrial Operations amounted to SEK 28.4 billion (3.5).

The strong operating cash flow of SEK 28.4 billion within Industrial Operations is primarily related to operating income of SEK 28.1 billion combined with an unchanged level of working capital.

Compared with 2016, the working capital improved mainly related to an increase in trade payables and a decrease in other working capital, offset by higher inventory levels. The increase in trade payables is primarily due to the gradual increase in production volumes during 2017 compared to more even production volumes in 2016. The increase in inventory is mainly an effect of the higher demand in Trucks and Construction Equipment compared to 2016. In 2016 operating cash flow was negatively impacted by the payment of SEK 6.5 billion related to the EU antitrust investigation, partly offset by a positive impact of SEK 2.6 billion from the sale of real estate.

Financial items and taxes had a SEK 5.6 billion negative effect on the operating cash flow in Industrial Operations, mainly through payments of interests and income tax.

Operating cash flow within Financial Services was negative in an amount of SEK 4.2 billion (2.8), mainly due to an increase in customer-financing receivables as an effect of strong level of new business volume in the credit portfolio.

» **Read more in Note 10** Income taxes.

### Investments and disposals

The Industrial Operations' investments in fixed assets and capitalized research and development during 2017 amounted to SEK 7.7 billion (9.5).

Group Trucks investments in fixed assets and capitalized research and development amounted to SEK 5.3 billion (7.0). The major investments related to industrial efficiency measures in our plants continued, with rationalizations and upgrades in our US plants as well as replacement of the E-coat process in Umeå, Sweden. Investments in Köping, Sweden have continued in order to increase capacity for the Volvo Group's automated transmission. Capital expenditures were also related to the Mack and the Volvo series recently introduced in North America with both product development activities and required adaptations in the plants.

The investments in dealer networks and workshops were mainly done in Europe and Japan, primarily for upgrades and replacements.

Investments in Construction Equipment amounted to SEK 0.8 billion (0.9). The major investments in the plants were related to product renewals and capacity increase mainly in Asia but also in Europe. The product related investments during the year were mainly related to continued investments in tooling and required adaptations in the plants for excavators and the new range of rigid haulers.

The investments in Buses were SEK 0.3 billion (0.3), and in Volvo Penta SEK 0.3 billion (0.2).

The investment level for property, plant and equipment during 2017 was lower compared to 2016. During 2018, investments in property, plant and equipment are expected to increase slightly compared to 2017. The optimization of the industrial and logistic footprint, dealer investments and product related tooling will continue to be the main areas as well as the development of Campus Lundby, Gothenburg, Sweden.

### Investments and divestments of shares

During the year the Volvo Group sold its complete ownership in the German listed engine manufacturer Deutz AG. The sale resulted in a positive effect on cash flow of SEK 1.9 billion.

In total, investments and divestments of shares in 2017 had a positive impact on cash flow of SEK 2.2 billion (0.2).

» **Read more in Note 5** Investments in joint venture, associated companies and other shares and participations.

### Acquired and divested operations

During the year the Volvo Group sold Volvo Construction Equipment's dealer business in the UK. The divestment resulted in a positive effect on cash flow of SEK 0.9 billion. The Volvo Group has not made any other acquisitions or divestments during 2017, which solely or jointly have had a significant impact on the Volvo Group's financial statements.

In total acquired and divested operations in 2017 had a positive impact on cash flow of SEK 0.9 billion (1.4).

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries.

### Financing and dividend

Net borrowings decreased cash and cash equivalents by SEK 9.0 billion during 2017. In 2016 the corresponding item decreased cash and cash equivalents by SEK 2.2 billion.

» **Read more in Note 29** Cash flow regarding movements during the year on the net borrowings.

During the year dividend of SEK 6.6 billion, corresponding to SEK 3.25 per share, was paid to the shareholders of AB Volvo.

### Change in cash and cash equivalents

The Volvo Group's cash and cash equivalents increased by SEK 12.1 billion during the year due to the strong operating cash flow and amounted to SEK 36.1 billion at December 31, 2017.

» **Read more in Note 29** Cash flow regarding principles for preparing the cash flow statement.

» **Read more in Note 18** Marketable securities and liquid funds regarding the accounting policy. ■

## CONSOLIDATED CASH FLOW STATEMENTS

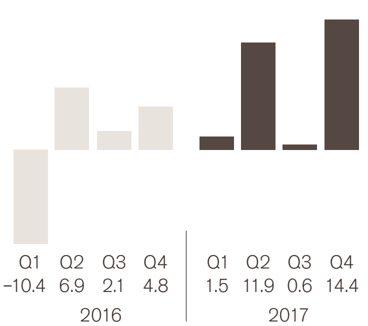
| | | Industrial Operations | | Financial Services | | Eliminations | | Volvo Group | |
|---|---|---|---|---|---|---|---|---|---|
| SEK M | | **2017** | 2016 | **2017** | 2016 | **2017** | 2016 | **2017** | 2016 |
| **Operating activities** | | | | | | | | | |
| Operating income[1] | | 28,135 | 18,740 | 2,193 | 2,086 | – | – | 30,327 | 20,826 |
| Depreciation tangible assets | Note 13 | 6,449 | 6,327 | 6 | 13 | – | – | 6,456 | 6,339 |
| Amortization intangible assets | Note 12 | 3,212 | 3,398 | 34 | 33 | – | – | 3,246 | 3,431 |
| Depreciation leasing vehicles | Note 13 | 2,936 | 2,907 | 4,231 | 4,087 | 0 | 0 | 7,167 | 6,994 |
| Other non-cash items[2 3] | Note 29 | 857 | –1,116 | 563 | 733 | –20 | –47 | 1,400 | –431 |
| Total change in working capital whereof | | –177 | –14,688 | –4,144 | 892 | –384 | –97 | –4,704 | –13,893 |
| *Change in accounts receivable* | | *–6,925* | *–3,747* | *–245* | *–296* | *0* | *0* | *–7,171* | *–4,043* |
| *Change in customer-financing receivables* | | *187* | *266* | *–3,922* | *1,003* | *–334* | *–207* | *–4,070* | *1,062* |
| *Change in inventories* | | *–7,378* | *–1,601* | *–159* | *33* | *–* | *0* | *–7,537* | *–1,568* |
| *Change in trade payables* | | *11,141* | *–2,973* | *–28* | *50* | *–* | *0* | *11,113* | *–2,923* |
| *Other changes in working capital*[1] | | *2,799* | *–6,633* | *211* | *102* | *–49* | *111* | *2,960* | *–6,420* |
| Interest and similar items received | | 273 | 300 | – | – | 1 | 46 | 274 | 346 |
| Interest and similar items paid | | –1,621 | –1,586 | – | – | 19 | 2 | –1,602 | –1,584 |
| Other financial items | | –206 | –253 | – | – | – | – | –206 | –253 |
| Income taxes paid | | –4,083 | –4,095 | –675 | –124 | 0 | 0 | –4,758 | –4,219 |
| **Cash flow from operating activities** | | **35,775** | **9,934** | **2,208** | **7,720** | **-384** | **-97** | **37,599** | **17,559** |
| **Investing activities** | | | | | | | | | |
| Investments in tangible assets | | –5,730 | –6,619 | –4 | –24 | – | – | –5,734 | –6,643 |
| Investments in intangible assets | | –1,951 | –2,829 | –55 | –53 | – | – | –2,006 | –2,882 |
| Investment in leasing vehicles | | –84 | –125 | –11,410 | –10,692 | 0 | 0 | –11,494 | –10,817 |
| Disposals of fixed assets and leasing vehicles[2] | | 363 | 3,170 | 5,029 | 5,865 | 0 | – | 5,392 | 9,035 |
| **Operating cash flow** | | **28,372** | **3,531** | **-4,231** | **2,816** | **-384** | **-97** | **23,757** | **6,251** |
| Investments and divestments of shares, net | Note 5, 29 | | | | | | | 2,182 | 224 |
| Acquired and divested operations, net[3] | Note 29 | | | | | | | 928 | 1,425 |
| Interest-bearing receivables incl marketable securities | | | | | | | | 1,586 | 2,531 |
| **Cash flow after net investments** | | | | | | | | **28,454** | **10,431** |
| **Financing activities** | | | | | | | | | |
| Change in loans, net | Note 29 | | | | | | | –8,996 | –2,245 |
| Dividend to AB Volvo's shareholders | | | | | | | | –6,603 | –6,093 |
| Dividend to minority shareholders | | | | | | | | –13 | –206 |
| Other | | | | | | | | –31 | –9 |
| **Change in cash and cash equivalents excl. translation differences** | | | | | | | | **12,811** | **1,878** |
| Translation difference on cash and cash equivalents | | | | | | | | –667 | 1,023 |
| **Change in cash and cash equivalents** | | | | | | | | **12,144** | **2,901** |
| **Cash and cash equivalents, beginning of year** | Note 18 | | | | | | | **23,949** | **21,048** |
| **Cash and cash equivalents, end of year** | Note 18 | | | | | | | **36,092** | **23,949** |

1 In 2016 the payment of the EU antitrust investigation settlement impacted Operating income by SEK 2.6 bn. Other changes in working capital was impacted by reversed provisions of SEK 3.9 bn recognized in 2014.

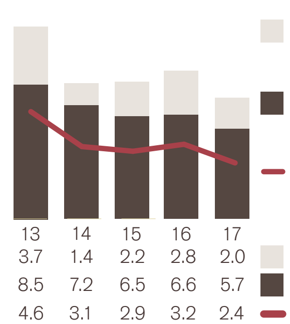
2 In 2016 the gain on sale of real estate of SEK 1.4 bn was reclassified from Other non-cash items to Disposals of fixed assets and leasing vehicles. The total positive operating cash flow impact from the sale amounted to SEK 2.6 bn.

3 In 2016 the gain on sale of IT operations of SEK 0.9 bn was reclassified from Other non-cash items to Acquired and divested operations, net. The total positive cash flow impact from the sale amounted to SEK 1.1 bn.

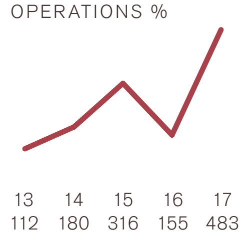
OPERATING CASH FLOW, INDUSTRIAL OPERATIONS, SEK BN




CAPITAL EXPENDITURES, INDUSTRIAL OPERATIONS




SELF-FINANCING RATIO, INDUSTRIAL OPERATIONS %




Cash-flow from operating activities divided by net investments in fixed assets and leasing assets.

TRUCKS

# Increased sales and improved profitability

During 2017 total deliveries of trucks increased by 6% compared to 2016. The truck operations continued to increase its profitability during the year.

The higher truck deliveries were mainly driven by continued good demand in Europe, Asia and South America. The Brazilian market rebounded strongly from low levels and the Chinese truck market had high growth. In North America, demand picked up in the latter part of the year.

**Strong or improving truck markets**

The truck market in Europe remained strong in 2017. High demand for transport resulted in high capacity utilization for truck fleets and good customer profitability. This led to continued renewal and expansion of fleets.

In North America, good economic activity and high demand for freight combined with a tighter transport capacity led to improving freight rates. Demand for construction trucks continued to be good, while highway trucks saw the biggest increase in demand.

Demand for heavy-duty trucks in Brazil rebounded strongly in the second half of 2017 with high order activity, although from low levels.

STRONG POSITIONS GLOBALLY

**IN BRIEF**

The truck operation's product offer stretches from heavy-duty trucks for long-haulage and construction work to light-duty trucks for distribution.
The offering also includes maintenance and repair services, financing and leasing.

**Position on world market**
Volvo Group is the world's second largest manufacturer of heavy-duty trucks.

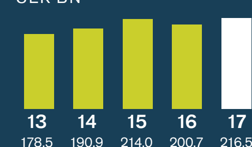
**Number of regular employees**
55,026 (52,154).

**Brands**

**SHARE OF GROUP SALES**

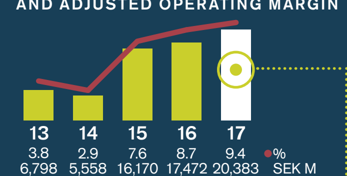
65%

**NET SALES 2017, SEK BN**




216.5 SEK bn

**ADJUSTED OPERATING INCOME* AND ADJUSTED OPERATING MARGIN**




20,383 SEK M

* For information on adjusted operating income, please see Alternative Performance Measures on page 211.

The Volvo Group has strong positions globally with a very competitive product and services offer providing customers with increased uptime and supporting their profitability.

In India, demand improved as a result of good economic activity and improving business confidence.

The Chinese heavy-duty truck market reached an all-time high level in 2017, driven by a good freight environment, higher construction activity and by new emission and weight legislation, which led to the need for early renewal and expansion of fleets.

In Japan, demand remained good through 2017, with support from some customers deciding to buy trucks ahead of new emission regulations for rigid trucks, which came into effect in September.

**Orders and deliveries**

In 2017, a total of 202,402 trucks where delivered from the Group's wholly-owned operations, an increase of 6% compared with 2016. Deliveries increased in all markets with the exception of North America. The biggest increases were in South America, Asia and Europe.

Order intake to the Group's wholly-owned operations increased by 23% to 232,439 (188,898) trucks. All markets showed improvements with the strongest growth coming from South America and North America and with Europe increasing from already high levels.

**Improved profitability**

In 2017, net sales in the truck operations increased by 8% to SEK 216,480 M (200,650). Adjusted for currency movements, net sales increased by 7%, of which vehicle sales grew by 8% while service sales increased by 5%.

In 2017, both adjusted and reported operating income amounted to SEK 20,383 M corresponding to an operating margin of 9.4%. In 2016, adjusted operating income amounted to SEK 17,472 M, corresponding to an adjusted operating margin of 8.7%. For information on adjustments in 2016, please see Alternative Performance Measures on page 211. Reported operating income in 2016 amounted to SEK 15,020 M.

The increase in earnings was mainly a result of higher volumes and increased earnings in the joint ventures. This was partly offset by higher selling and R&D costs as well as costs related to a stretched situation in parts of the supply chain. For more information on the Group's joint ventures and associated companies, please see Note 5. Currency movements had a negative impact of SEK 15 M compared with 2016.

**Important events**

In March, UD Croner, an all-new medium-duty truck range, was launched. It is tailored specifically to growth markets. UD Croner has 21 different basic configurations to suit specific demands of various industries. In April, UD Trucks launched its all-new heavy-duty UD Quon truck range. The trucks are equipped with an upgraded, fuel-efficient 11-liter engine and a new electronically controlled automatic transmission with anticipatory solutions that use GPS. All models feature disc brakes as standard, a first for any Japanese manufacturer.

In April, Volvo Trucks launched the new Volvo VNR regional haul truck, marking the first step in the renewal of the Volvo range in the North American market. Another very important step was taken in July with the announcement of the new Volvo VNL long haul series. It is a ground-breaking tractor with cutting-edge innovations in fuel efficiency, driver productivity, safety and uptime. The new truck features a new cab with improved aerodynamics and interior, including an all-new 70-inch sleeper. The new trucks were ramped-up in production gradually during the second half of 2017.

Also in North America, Mack Trucks in September announced an upgrade of its vocational and regional haul lineup as well as an expansion into the long haul segment with the new Mack Anthem sleeper cab. The new trucks will be ramped-up in production gradually during the first half of 2018. Together with the launches from Volvo earlier in the year, these new products mark the Group's biggest upgrade of the North American truck range in 20 years.

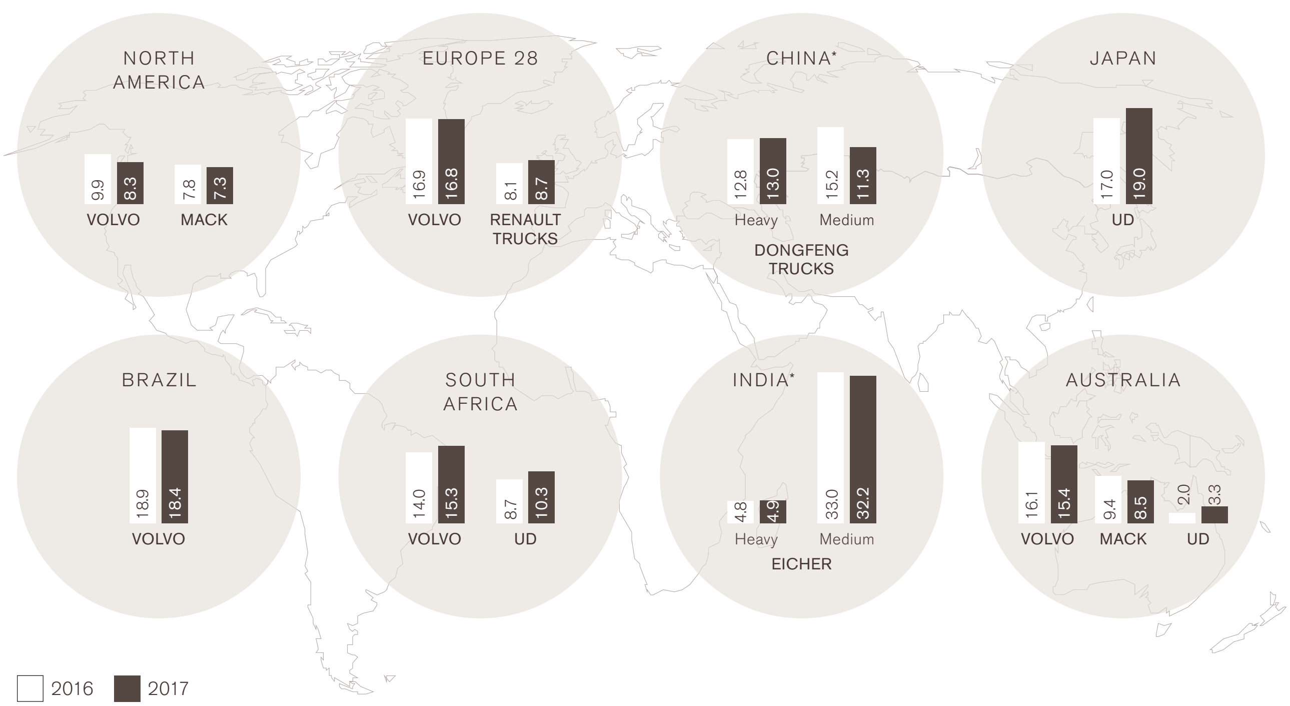
In Europe, Volvo Trucks announced long haul trucks running on liquefied natural gas (LNG) or liquefied biogas (LBG). The new trucks have the same performance, drivability and fuel consumption as the diesel-powered models, but their $CO_2$ emissions are 20% lower compared with diesel when running on LNG and 100% lower when running on LBG.

Also in Europe, the Volvo FH Performance Edition truck was announced winner of the "Young Professionals Truck Award 2017", based on test driving by young truck drivers in Germany. The award was part of the "Best Commercial Vehicles 2017" event. Renault Trucks T High Edition came in second place.

At the Volvo Group Innovation Summit in Beijing on November 15, a self-driving truck, driving autonomously from one hub to another was unveiled. The truck is part of a development project exploring how automation can contribute to increased productivity, enhanced safety and lower environmental impact.

On January 23, 2018, it was announced that Volvo Trucks will start selling electric medium-duty trucks for city distribution in Europe in 2019. The first of these trucks will be put into operation together with selected customers in 2018. Renault Trucks will also start selling electric medium-duty trucks in 2019. The electric trucks are based on the Group's modular technology. ■

## MARKET SHARES, HEAVY DUTY TRUCKS, %




* Volvo Group holds 45.6% in VECV, which produces Eicher trucks, and 45% in DFCV, which produces Dongfeng trucks.

| NET SALES AND OPERATING INCOME, SEK M | 2017 | 2016 |
|---|---|---|
| Europe | 99,642 | 91,468 |
| North America | 52,405 | 51,849 |
| South America | 12,789 | 10,613 |
| Asia | 36,998 | 33,464 |
| Africa and Oceania | 14,646 | 13,256 |
| **Total net sales** | **216,480** | **200,650** |
| **Of which** | | |
| Vehicles | 163,895 | 150,911 |
| Services | 52,585 | 49,739 |
| **Adjusted operating income[1]** | **20,383** | **17,472** |
| Adjustments[1] | – | –2,453 |
| **Operating income** | **20,383** | **15,020** |
| Adjusted operating margin, % | 9.4 | 8.7 |
| Operating margin, % | 9.4 | 7.5 |

[1] For information on adjusted operating capital, please see Alternative Performance Measures on page 211.

| DELIVERIES BY MARKET | 2017 | 2016 |
|---|---|---|
| Number of trucks | | |
| Europe | 105,432 | 97,909 |
| North America | 37,941 | 39,193 |
| South America | 11,073 | 9,442 |
| Asia | 35,476 | 31,502 |
| Africa and Oceania | 12,480 | 12,378 |
| **Total deliveries** | **202,402** | **190,424** |
| Heavy duty (>16 tons) | 171,963 | 158,025 |
| Medium duty (7–16 tons) | 14,331 | 15,691 |
| Light duty (<7 tons) | 16,108 | 16,708 |
| **Total deliveries** | **202,402** | **190,424** |
| Volvo | 112,245 | 102,857 |
| UD | 20,583 | 20,738 |
| Renault Trucks | 49,930 | 47,983 |
| Mack | 19,644 | 18,846 |
| **Total deliveries** | **202,402** | **190,424** |
| **Non-consolidated operations** | | |
| VE Commercial Vehicles (Eicher) | 47,376 | 42,929 |
| Dongfeng Commercial Vehicle Company (Dongfeng Trucks) | 170,655 | 128,501 |

CONSTRUCTION EQUIPMENT

# Strong earnings improvement

After years of tough market conditions, the global construction business grew in 2017. Higher volumes linked with internal efficiency and a lower cost base helped deliver improved profitability. Sales rose by 31% and operating income by 252%.

With a history dating back 185 years Volvo Construction Equipment (Volvo CE) is one of the longest established global producers of products and services for the construction, extraction, waste processing, forestry and materials handling sectors. Principal equipment includes excavators, wheel loaders and haulers, as well as road machinery. A wide range of services is also offered. Marketed under the Volvo, SDLG and Terex Trucks brands, the company's products and services are sold and supported via a global network of dealers.

**Recovery in construction and mining**

Demand for construction equipment improved worldwide in 2017, driven by increased construction activity in many markets and also a clear recovery in the mining segment. The European market was up 16% and North America 11%, while South America improved from low levels, rising 20%. Asia (excluding China) was up 13% while China recovered strongly, growing by 74% during the year.

STRONG IMPROVEMENT IN PROFITABILITY

**IN BRIEF**

Founded in 1832 in Eskilstuna, Sweden Volvo Construction Equipment has grown to become one of the leaders in the development of products and services for the construction, extraction, waste processing, forestry and materials handling sectors.

**Position on world market**
Volvo CE is the world's leading manufacturer of articulated haulers and one of the world's leading manufacturers of wheel loaders and excavators. Volvo CE also offers road construction machines and compact equipment.

**Number of regular employees**
12,788 (13,397).

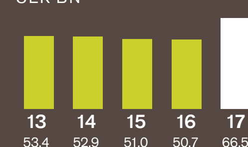
**Brands**

VOLVO SDLG TEREX

SHARE OF GROUP SALES

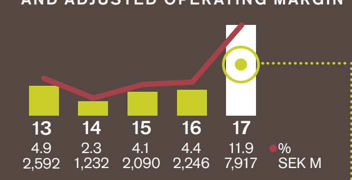
20%

NET SALES 2017, SEK BN




66.5 SEK bn

ADJUSTED OPERATING INCOME* AND ADJUSTED OPERATING MARGIN




7,917 SEK M

* For information on adjusted operating income, please see Alternative Performance Measures on page 211.


L260H

The new L260H wheel loader from Volvo Construction Equipment is a true global two-pass loader that is purpose-built to take on the toughest jobs, ensuring optimum performance, profitability and a 10% fuel efficiency improvement.

**Real time support**

Volvo CE launched ActiveCare Direct in North America; a telematics monitoring service that relieves customers from having to sort through large quantities of data of machine operating parameters, and instead delivers analysis and recommendations. Each month, Volvo generates a comprehensive telematics report for the customer, highlighting areas of opportunity to increase productivity and reduce operating costs.

The year also saw Volvo CE introduce Real Time Technical Support, a platform that allows technicians to video call Volvo CE's product support team to show them complicated problems, and get advice on how to fix them.

**Improved internal efficiency combined with higher volumes deliver profitability**

Net sales rose by 31% to SEK 66,497 M (50,731). Adjusted for currency movements, net sales increased by 30%, of which machine sales grew by 35% while service sales increased by 9%.

Volvo CE's focus on core products, reduced breakeven and tight control over costs as volumes returned resulted in a significant improvement in profitability. Operating income was positively impacted by the higher volumes and by increased capacity utilization in the industrial system. Both adjusted and reported operating income rose to SEK 7,917 M (2,246), corresponding to an operating margin of 11.9% (4.4). No adjustments were made in 2016 or 2017. Currency movements had a negative impact of SEK 219 M compared with 2016.

In 2017, Volvo CE also had an increase in order intake, which rose by 45% to 66,795 machines. Order intake increased in all markets, with a particularly strong development in Asia, Africa and Oceania and South America. Order intake in China was particularly strong, rising by 108%, driven by increased demand for SDLG wheel loaders and SDLG and Volvo excavators.

Total deliveries were up 45% during the year and amounted to 64,127 machines.

**Focus on technical innovation**

More than half a century after inventing the concept, 2017 saw Volvo CE celebrate the production of its 75,000th articulated hauler, a product segment where Volvo CE has more than a third of the world market. Having produced more than half of the articulated haulers ever made, 50,000 Volvo haulers are still in regular use around the world.

Showcasing a total of 28 machines, including the launch of its new flagship 50 ton class wheel loader – the L350H – Volvo offered a confident message at the CONEXPO/CON-AGG exhibition in Las Vegas.

| NET SALES AND OPERATING INCOME, SEK M | 2017 | 2016 |
|---|---|---|
| Europe | 22,977 | 19,739 |
| North America | 12,234 | 10,724 |
| South America | 1,760 | 1,414 |
| Asia | 25,058 | 15,765 |
| Africa and Oceania | 4,468 | 3,088 |
| **Total net sales** | **66,497** | **50,731** |
| **Of which:** | | |
| Construction Equipment | 56,097 | 41,279 |
| Services | 10,400 | 9,452 |
| **Adjusted operating income[1]** | **7,917** | **2,246** |
| Adjustments[1] | – | – |
| **Operating income** | **7,917** | **2,246** |
| Adjusted operating margin, % | 11.9 | 4.4 |
| Operating margin, % | 11.9 | 4.4 |

1 For information on adjusted operating income, please see Alternative Performance Measures on page 211.

| DELIVERIES BY MARKET | 2017 | 2016 |
|---|---|---|
| Number of machines | | |
| Europe | 17,519 | 14,700 |
| North America | 5,685 | 5,105 |
| South America | 1,372 | 1,175 |
| Asia | 36,254 | 21,072 |
| Africa and Oceania | 3,297 | 2,254 |
| **Total deliveries** | **64,127** | **44,306** |
| Large and medium construction equipment[1] | 48,139 | 33,054 |
| Compact construction equipment[2] | 15,988 | 11,252 |
| **Total deliveries** | **64,127** | **44,306** |
| **Of which:** | | |
| Volvo | 37,876 | 30,473 |
| SDLG | 26,046 | 13,681 |
| Of which in China | 21,698 | 10,744 |

1 Excavators >10 tons, wheel loaders engine power >120 hp, articulated haulers, rigid haulers and road machinery products.

2 Excavators <10 tons, wheel loaders engine power <120 hp, skid steer loaders and backhoe loaders.

Looking to the future, 2017 also saw Volvo CE unveil its latest concept machine – the EX2. The 100% electric compact excavator prototype delivers zero emissions, 10 times higher efficiency, 10 times lower noise levels and reduced total cost of ownership, compared to its conventional counterparts. Believed to be the world's first fully electric compact excavator prototype, the EX2 is part of a research project. ■

BUSES

# Higher sales with stable earnings

Volvo Buses had a year of record sales volumes. Profitability was supported by internal efficiency improvements and increased service sales but hampered by adverse currency movements.

The strategic priorities are to enhance competitiveness and increase profitability by improving customer focus, quality and reducing product cost. Key drivers are increased operational excellence and improved customer service offering through expanding the service network and increasing cooperation with Volvo Trucks. Improved quality and service has led to new major orders of transit buses and coaches. Volvo Buses has also taken the next step in electromobility by introducing a new version of the all-electric bus Volvo 7900 Electric.

### Increasing order volumes of electric buses

Volvo Buses continues to invest in end-to-end system solutions for electrified buses. The customer offering includes several electromobility products, battery and charging infrastructure options, and repair and maintenance services. The product range includes hybrid chassis, a range of electrified buses for the European markets, and Nova Bus hybrid and electric buses for the North American markets. Charging station infrastructure is developed in cooperation with ABB and Siemens with the common interface OppCharge, which can be used independent of manufacturer.

During 2017, the order volume accelerated and 780 orders for Volvo branded hybrids and electric buses were received from operators in cities such as Singapore, Latrobe Valley; Australia, Barcelona; Spain, London and Harrogate; UK, Göttingen; Germany, Namur; Belgium, Trondheim; Norway, and Malmö and Värnamo; Sweden. Operational implementation is a success and has led to additional orders from the same customer in Differdange, Luxembourg.

In total more than 3,800 Volvo branded electrified buses have been sold since the start 2010. With this progress, Volvo is the leader in Europe in electrified buses.

**IN BRIEF**

Volvo Buses is a leader in the development of sustainable public transport solutions and is one of the world's largest manufacturers of buses, coaches and bus chassis.

**Product range** The overall offering includes city buses, intercity buses and coaches as well as complete transport systems, financial services and services for vehicle and traffic information.

**Geographic reach**
Volvo Buses has sales in 85 countries and a global service network, with more than 1,500 dealerships and workshops. Production facilities are found in Europe, North America, South America and Asia.

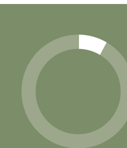
**Position on world market**
Volvo Buses is one of the world's largest producers of buses and coaches in the premium segment.

**Number of regular employees**
7,943 (7,353).

**Brands**

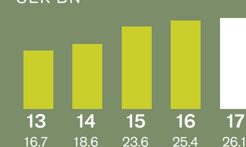
VOLVO, PREVOST, NOVABUS, UD BUSES

SHARE OF GROUP SALES



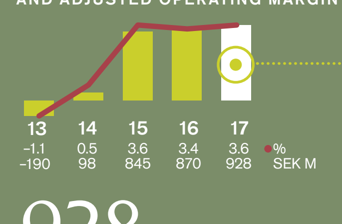
8%

NET SALES 2017, SEK BN




26.1 SEK bn

ADJUSTED OPERATING INCOME* AND ADJUSTED OPERATING MARGIN




928 SEK M

* For information on adjusted operating income, please see Alternative Performance Measures on page 211.

The Volvo Pedestrian and Cyclist Detection System, Dynamic Steering, and Zone Management System are good examples of innovative technology in the areas of automation and connectivity. These recently launched safety features minimize fatalities or other injuries between human beings and heavy-duty vehicles.

The ElectriCity partnership for electrified transportation in Gothenburg, Sweden where Volvo is a major partner, won first prize in the "Operational and technical excellence" category when the prestigious UITP (Union Internationale des Transports Publics) Awards 2017 were announced in Montreal in May 2017.

As part of the Land and Transport Authority of Singapore's drive to create new solutions for tomorrow's sustainable public transport, Volvo Buses and Nanyang Technological University in Singapore in January 2018 signed a cooperation agreement on a research and development program for autonomous electrified 12-meter buses.

### Product introductions

A new version of the all-electric Volvo 7900 Electric, offering both end stop fast-charging and plug-in depot charging was launched in October. The battery capacity has been significantly extended compared to earlier versions, and the new 7900 Electric is now available with a capacity of 150, 200 and with the new version of 250 kWh.

In April Volvo Buses globally launched its latest chassis powered by the 8-liter in-house Volvo diesel engine. The B8R and B8RLE replaced the top-selling B7R and B7RLE. Higher power output, lower fuel consumption, longer oil-change intervals and a high safety level are some of the features of the new chassis models.

The new B8L, a double deck chassis with a new fuel efficient Euro 6 engine, was introduced to the Asia Pacific region in January, 2018. Benefits include less fuel consumption and interior noise, more torque and free floor space, tighter turning circle and an enhanced departure angle. The B8L offers a solution to highly congested cities which need high capacity transport.

### Profitability improved despite adverse currency effects

Global demand for heavy-duty buses remained high during 2017, with the exception of South America which still was at low levels. In total, Volvo Buses delivered 9.393 buses and bus chassis (9,553). With its complete and commercial range of buses and systems for electrified public transport, Volvo Buses has maintained its strong position in sustainable transport solutions. Volvo Buses has kept its strong market position in Europe, and further improved its sales and market presence in North America and Asia. The service business and offerings continue to grow significantly in all regions.

Net sales increased by 3% to SEK 26,078 M (25,386). When adjusted for currency movements the increase was 3%, of which sales of buses increased by 2% and service sales increased by 6%.

In 2017, both adjusted and reported operating income amounted to SEK 928 M corresponding to an operating margin of 3.6%. In 2016, adjusted operating income amounted to SEK 870 M and the adjusted operating margin to 3.4%. For information on adjustments please see Alternative Performance Measures on page 211. Earnings were positively impacted by higher service sales and continued improvements from the efficiency program. At the same time, earnings were negatively impacted by unfavorable currency movement. Currency movements had a negative impact of SEK 233 M compared to 2016. ■

#### THE NEW VOLVO 7900 ELECTRIC

The new bus offers operators even greater range and flexibility.

- All-electric propulsion, 2-axle 12-meter city bus with low floor and three doors
- Quiet and emission-free operation
- 80% lower energy consumption versus corresponding diesel bus
- Battery capacity 150, 200 or 250 kWh
- Fast charged via OppCharge or overnight charged via CCS Combo 2
- Operating range up to 200 km (250 kWh) depending on topography and driving conditions
- Volvo Dynamic Steering (VDS)
- Volvo Pedestrian and Cyclist Detection Warning System
- Zone Management System

| NET SALES AND OPERATING INCOME, SEK M | 2017 | 2016 |
|---|---|---|
| Europe | 7,753 | 7,861 |
| North America | 12,512 | 11,345 |
| South America | 1,148 | 1,363 |
| Asia | 3,135 | 3.067 |
| Africa and Oceania | 1,530 | 1,749 |
| **Total net sales** | **26,078** | **25,386** |
| **Of which:** | | |
| Vehicles | 21,712 | 21,295 |
| Services | 4,366 | 4,091 |
| **Adjusted operating income[1]** | **928** | **870** |
| Adjustments[1] | – | 41 |
| **Operating income** | **928** | **911** |
| Adjusted operating margin, % | 3.6 | 3.4 |
| Operating margin, % | 3.6 | 3.6 |

[1] For information on adjusted operating income, please see Alternative Performance Measures on page 211.

| DELIVERIES BY MARKET | 2017 | 2016 |
|---|---|---|
| Number of buses | | |
| Europe | 2,645 | 2,676 |
| North America | 2,973 | 2,659 |
| South America | 784 | 1,149 |
| Asia | 2,186 | 1,849 |
| Other markets | 805 | 1,220 |
| **Total deliveries** | **9,393** | **9,553** |
| **Non-consolidated operations** | | |
| VE Commercial Vehicles | 12,762 | 13,883 |
| Dongfeng Commercial Vehicle Company | 1,471 | 4,540 |

During 2106 the share of ownership in the joint venture Shanghai Sunwin Bus Co decreased to less than 20% and thus there deliveries are no longer reported.

VOLVO PENTA

# Increased sales and good profitability

Volvo Penta's engine deliveries increased by 10% in 2017 and net sales grew by 12%. Profitability continued to be good.

Volvo Penta operates in two businesses: Marine (leisure and commercial) and Industrial (off-road and power generation). In the marine segments, Volvo Penta aims to lead the industry, continuing to develop its own innovative products and solutions. In the Industrial segments, Volvo Penta will seek maximum leverage of the Volvo Group's engine range and other assets in its total offer, and add value for customers in its application and integration expertise.

**Volvo Penta strategy**

Volvo Penta's challenge is to grow profitably with the existing product offer, delivering an excellent total customer experience, while transforming the total offer to include new technologies and business models. To succeed, it is essential to excel at the following aspects of business, all of which work together. Customers: Volvo Penta's business is all about its customers and how well their needs are served. Total Solutions: Providing total solutions is about delivering end-to-end solutions to enhance the entire customer experience. People: Engaged, motivated, and high-performing employees working together are keys to success. Growth: Secure growth ambitions, through new business opportunities by both segments and parts & service sales. Profitability: Ensure the business is run in an efficient and effective manner, minimizing wasted resources, while maintaining the ability to deliver innovative and competitive products and services.

## IN BRIEF

Volvo Penta aims to be the most forward thinking and customer focused supplier of sustainable power solutions. Volvo Penta provides engines and power solutions for leisure and commercial boats, as well as for power generation and industrial, off-road applications.

**Position on world market**
Volvo Penta is the world's largest producer of diesel engines for leisure boats and a leading, independent producer of industrial engines.

**Number of regular employees**
1,622 (1,530).

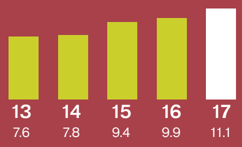
**Brands**

VOLVO PENTA

SHARE OF GROUP SALES

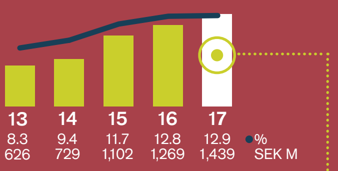
3%

NET SALES 2017, SEK BN




11.1 SEK bn

ADJUSTED OPERATING INCOME* AND ADJUSTED OPERATING MARGIN




1,439 SEK M

* For information on adjusted operating income, please see Alternative Performance Measures on page 211.

### Market development and engine shipments

The market for marine leisure engines had a modest growth and Volvo Penta continued to gain market share. The marine commercial market had a positive development in sub-segments, such as offshore energy and people transportation, as well increased interest for hybrid and electrified solutions.

The market for industrial off-road engines continued to grow, including increased demand in mining and material handling segments, as well as continued growth in construction and agriculture. The market for industrial power generation engines was flat, with positive signs in construction and data centers.

In total, Volvo Penta's engine deliveries increased by 10% to 40,997 engines.

### Positive sales trend

Volvo Penta's net sales increased by 12% to SEK 11,119 M compared with SEK 9,893 M in 2016. Adjusted for currency movements, net sales increased by 11%, of which engine sales increased by 13% and service sales increased by 5%.

Both adjusted and reported operating income amounted to SEK 1,439 M (1,269), corresponding to an operating margin of 12.9% (12.8). No adjustments were made during 2016 and 2017. Earnings were positively impacted by higher sales volumes, which were partly offset by higher costs for research and development. Changes in currency movements had a positive impact in an amount of SEK 72 M.

### Further strengthened customer offer

During 2017, a wide range of new products were launched in both the marine and industrial segments. In February, Volvo Penta unveiled its new 380 and 430 hp gasoline sterndrive engines and received an innovation award for its joystick for inboard solutions. Volvo Penta also introduced its most powerful 16 liter power generation engine to date with the highest power density in its class.

In March, Volvo Penta launched its concept to meet European Stage V emissions legislation for the full engine range between 5 and 16 liters. Throughout the year, Volvo Penta revealed the engines in its EU Stage V range at international trade fairs in the construction, material handling, forestry, and agriculture segments. Volvo Penta continues to see momentum in the industrial off-road engine segment, gaining new customers.

In May, Volvo Penta revealed its concept to meet future marine emission standards, IMO Tier III, taking a step towards increased sustainability for the marine commercial segment.

In July, Volvo Penta acquired a majority in the US-based, outboard motor manufacturer, Seven Marine, which produces the most powerful outboard models in the world, running at 557 and 627 hp. This deal broadens Volvo Penta's marine leisure technology platform, securing an entry in the outboard motor market.

During August, Volvo Penta successfully launched its most powerful marine leisure engine ever – a 13 liter, diesel engine with 1,000 horsepower. The new engine is perfectly matched with an upgraded IPS pod drive, offering customers an even more powerful option for yachts up to 120 feet. A number of yachts above 60 feet were revealed with the new D13-1000 hp engine during the second half of the year, supporting the company's ambitions to grow in the larger yacht segment.

Throughout the year, Volvo Penta secured increased business with new and existing customers, thanks to the wide range of new products. In the parts and services area, work continued with the development of a competitive offer per segment, as well as to increase penetration of service agreements. ■

| NET SALES AND OPERATING INCOME, SEK M | 2017 | 2016 |
|---|---|---|
| Europe | 5,727 | 4,973 |
| North America | 2,456 | 2,191 |
| South America | 289 | 291 |
| Asia | 2,082 | 1,891 |
| Africa and Oceania | 566 | 546 |
| **Total net sales** | **11,119** | **9,893** |
| **Of which:** | | |
| Engines | 8,125 | 7,078 |
| Services | 2,995 | 2,815 |
| **Adjusted operating income[1]** | **1,439** | **1,269** |
| Adjustments[1] | – | – |
| **Operating income** | **1,439** | **1,269** |
| Adjusted operating margin, % | 12.9 | 12.8 |
| Operating margin, % | 12.9 | 12.8 |

[1] For information on adjusted operating income, please see Alternative Performance Measures on page 211.

| DELIVERIES PER SEGMENT | 2017 | 2016 |
|---|---|---|
| Number of units | | |
| Marine engines[1] | 19,565 | 18,016 |
| Industrial engines | 21,432 | 19,251 |
| **Total deliveries** | **40,997** | **37,267** |

[1] Excluding outboard engines.

FINANCIAL SERVICES

# Good profitability, portfolio performance and volume

In 2017, Volvo Financial Services (VFS) continued to grow the credit portfolio and increase profitability.

VFS financial solutions support the sales of Group vehicles and equipment, and are available with other services such as repair and maintenance contracts, insurance, etc. at the point-of-sale at the Group's dealers. This integrated approach gives customers a convenient one stop-shopping experience.

**Strategic focus**

VFS' mission is to be the best captive in industry, which is defined by three aspirations: To be the Employer of Choice and Provider of Choice in our industry, and to Deliver Shareholder Value. To reach these objectives, VFS executed on activities that support each aspiration. Employer of Choice means to be the most attractive employer in the industry, a market position that is critical in order to attract, develop and retain the right people. To achieve this goal, VFS continued to invest in employee development and mobility programs, and in its certification process with the Great Place to Work institute, gaining certifications in markets such as Canada, Italy, and the US.

Provider of Choice means VFS is one of the main reasons a customer decides to purchase a Group product. During the year, VFS focused on five business aspects for which excellence is required to achieve this goal, and to build a strong position of relevance towards our business partners: 1) increase integration with Group brand partners to optimize the total offer, 2) make it easy for customers to access Group products and services by selling them as a total offer, 3) drive loyalty through lifecycle management activities, 4) position VFS products in ways that grow service sales for the Group, and 5) lead through new technologies and business models to maintain a

## IN BRIEF

Volvo Financial Services offers competitive financial solutions which strengthen long-term relationships with Volvo Group customers and dealers. As the number one provider of financial solutions for Volvo Group products, VFS delivers value to customers and builds loyalty to the Volvo Group brands through ease of doing business, speed to market, and knowledge and expertise of the industry.

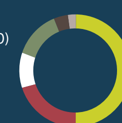
**Position on world market**

VFS conducts customer financing in 45 countries in the world and manages a credit portfolio of SEK 130 billion with more than 200,000 customers.

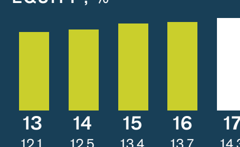
**Number of regular employees**

1,363 (1,328).

**DISTRIBUTION OF CREDIT PORTFOLIO, %**

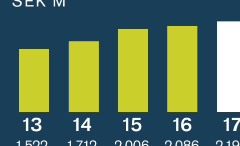



**RETURN ON SHAREHOLDERS' EQUITY[1], %**




14.3%

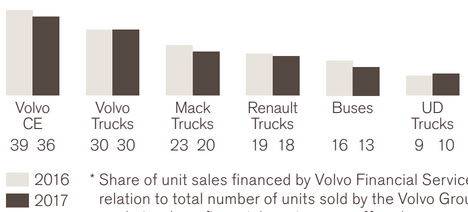
**OPERATING INCOME, SEK M**




2,192 SEK M

[1] Excluding the positive impact of SEK 897 M from the revaluation of deferred tax liabilities related to the year 2017 tax reform in the United States. Including the impact the return was 22.6%.

PENETRATION RATE*, %




* Share of unit sales financed by Volvo Financial Services in relation to total number of units sold by the Volvo Group in markets where financial services are offered.

competitive position and deliver products and services that help customers be successful. To expand customer reach, a captive finance operation was established in South Africa and financing resources through alliances were devoted to such markets as the Philippines, Indonesia and South Korea. VFS achieved the #1 position in market share in almost every market in which we operate, and customer and dealer satisfaction indices during the year indicated that customers are satisfied with our products, service levels and market competitiveness.

Delivering Shareholder Value means to drive sales, protect Group assets, and manage risk while generating strong returns in every market where VFS does business. To deliver on this, VFS focused on managing and balancing price realization, risk appetite and volume.

### Portfolio performance

Portfolio performance continued to be good, highlighted by historically low levels of overdues and credit losses in most markets. Repossessions, inventories and write off levels remained low, supporting good profitability. North America stabilized and, despite a softened market, produced strong profitability and commercial results. Brazil began to stabilize and the recovery plan in place was executed to effectively manage the environment. China deliveries began to increase and penetration remained strong, while delinquencies decreased. Europe had continued good growth and portfolio performance.

### Good overall performance

Higher levels of new business volume were recorded during the year. Total new financing volume in 2017 amounted to SEK 57.9 billion (54.6), an increase of 6% compared to 2016, adjusted for currency.

In total, 51,919 new Volvo Group vehicles and machines (49,809) were financed during the year. In the markets where financing is offered, the average penetration rate was 25% (26). The net credit portfolio of SEK 130,334 M (130,241) increased by 4% on a currency-adjusted basis compared to 2016. The funding of the credit portfolio is matched in terms of maturity, interest rates and currencies in accordance with Group policy. For further information, see Note 4.

Operating income amounted to SEK 2,192 M (2,086) and the return on shareholders' equity was 14.3% (13.7) excluding a positive impact from the revaluation of deferred tax liabilities due to the new tax reform legislation in the United States. Reported return on shareholders' equity amounted to 22.6% for the year. The equity ratio at the end of the year was 8.0% (8.0). Pricing discipline, good portfolio performance and retail portfolio growth were the drivers of the overall increase in profitability.

During the year, credit provision expenses amounted to SEK 534 M (677) while write-offs of SEK 483 M (627) were recorded. The write-off ratio for 2017 was 0.38% (0.49). At the end of December 31, 2017, credit reserves were 1.35% (1.43) of the credit portfolio. ■

| KEY RATIOS, FINANCIAL SERVICES | 2017 | 2016 |
|---|---|---|
| Number of financed units | 51,919 | 49,809 |
| Total penetration rate[1], % | 25 | 26 |
| New financing volume, SEK billion | 57.9 | 54.6 |
| Credit portfolio net, SEK billion | 130 | 130 |
| Credit provision expenses, SEK M | 534 | 677 |
| Operating income, SEK M | 2,192 | 2,086 |
| Credit reserves, % of credit portfolio | 1.35 | 1.43 |
| Return on shareholders' equity, rolling 12 months[2], % | 22.6 | 13.7 |

[1] Share of unit sales financed by Volvo Financial Services in relation to the total number of units sold by the Volvo Group in markets where financial services are offered.

[2] Including the positive impact of SEK 897 M from the revaluation of deferred tax liabilities related to the year 2017 tax reform in the US. Excluding the impact the return was 14.3%.

| INCOME STATEMENT FINANCIAL SERVICES, SEK M | 2017 | 2016 |
|---|---|---|
| Finance and lease income | 11,812 | 11,242 |
| Finance and lease expenses | –7,072 | –6,591 |
| **Gross income** | **4 ,740** | **4,651** |
| Selling and administrative expenses | –2,126 | –1,960 |
| Credit provision expenses | –534 | –677 |
| Other operating income and expenses | 113 | 72 |
| **Operating income** | **2,192** | **2,086** |
| Income taxes | 248 | –631 |
| **Income for the period** | **2,440** | **1,455** |
| Return on Equity, % | 22.6 | 13.7 |

FINANCIAL MANAGEMENT

# Balancing the requirements of different stakeholders

The objectives of the financial management in the Volvo Group is to assure shareholders long-term attractive and stable total return and debt providers the financial strength and flexibility to secure proceeds and repayment.

A long-term competitive business requires access to capital to be able to invest. Financial management ensures that the capital is used in the best possible way through well-defined ratios and objectives for the Industrial Operations as well as for the customer finance operations in Financial Services. The objective on Group operating margin and return on equity for Financial Services are intended to secure the return requirements from shareholders. The restrictions on net debt to equity for the Industrial Operations and the equity ratio for Financial Services are there to secure financial stability and flexibility for debt providers.

**Steering principles to ensure financial flexibility over the business cycle**

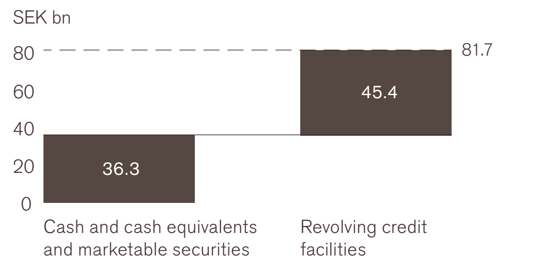
To ensure financial stability and flexibility throughout the business cycle the Volvo Group holds a strong liquidity position. Besides cash and marketable securities the liquidity position is built up of committed credit facilities. The funding and lending is in local currency and the Financial Services portfolio is matched both from an interest and a liquidity risk perspective, in accordance with the Volvo Group policy. For further information, please see Note 4 to the Consolidated financial statements.

**Diversified funding sources give flexibility and support the global presence**

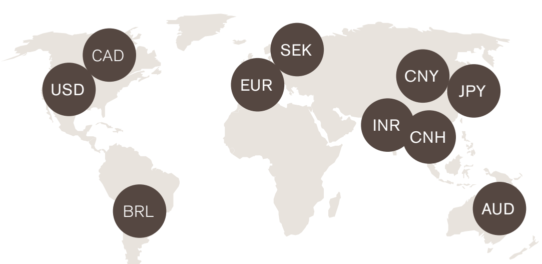
The Volvo Group has centralized the portfolio management of all financial assets and liabilities, funding operations and cash management through the internal bank, Volvo Treasury. The liability portfolio is separated into two portfolios, one for Industrial Operations and one for Financial Services, to correspond to the needs of the different operations.

Volvo Treasury is increasing the possibility to access capital markets at all times through diversified funding sources. Furthermore, the Volvo Group's global presence is supported by bond programs on all major debt capital markets in the world. Besides the access to capital markets around the world, the Volvo Group uses different instruments, such as bilateral bank funding, corporate bonds and certificates, hybrid bonds, agency funding as well as securitization of assets in Financial Services' credit portfolio. An increasingly important part of the treasury work is also to manage increased funding needs in new growth markets for the Group.

VOLVO GROUP LIQUIDITY POSITION, DECEMBER 31, 2017




GEOGRAPHICALLY DIVERSIFIED MARKET PROGRAMS




| CREDIT RATING, MARCH 6, 2018 | Short-term | Long-term |
|---|---|---|
| Moody's (Corporate Rating) | P-2 | Baa1, stable |
| S&P (Corporate Rating) | A2 | BBB+, stable |
| DBRS (Canada) | – | BBB, (high) positive |
| R&I (Japan) | a-1 | A, stable |

**A strong and stable credit rating is important**

Being a large issuer with a growing customer financing business, it is critical to have a strong and stable credit rating. The level of the credit rating is not only important for debt investors but also for a number of other stakeholders when it comes to creating long-term relationships. A strong credit rating has a positive effect on the ability to attract and finance customers' purchases of the Group's products and on the trust from suppliers. It also gives access to more funding sources and lower cost of funds.

The Volvo Group has contractual relations with two global Credit Rating Agencies for solicited credit ratings; Standard & Poors' Rating Services (S&P) and Moody's Investors Service (Moody's). In 2017, Moody's upgraded its rating from Baa2, stable to Baa1, stable. S&P upgraded its rating from BBB, positive to BBB+, stable. ■

# CHANGES IN CONSOLIDATED SHAREHOLDERS' EQUITY

| | | Shareholders' equity attributable to equity holders of the Parent Company | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SEK M | | Share capital | Other reserves[1] | Translation reserve | Retained earnings | Total | Minority interests | Total equity |
| **Balance at December 31, 2015** | | **2,554** | **259** | **-933** | **81,930** | **83,810** | **1,801** | **85,610** |
| Income for the period | | – | – | – | 13,147 | 13,147 | 75 | 13,223 |
| *Other comprehensive income* | | | | | | | | |
| Translation differences on foreign operations | | – | – | 5,540 | – | 5,540 | 45 | 5,585 |
| Share of Other comprehensive income related to Joint Ventures and associated companies | | – | – | – | –97 | –97 | – | –97 |
| Accumulated translation differences reversed to income | | – | – | –48 | – | –48 | – | –48 |
| Available-for-sale investments: | Note 5, 19 | | | | | | | |
| Gains/losses at valuation to fair value | | – | –57 | – | – | –57 | – | –57 |
| Change in cash flow hedge reserve | Note 19 | – | 68 | – | – | 68 | – | 68 |
| Remeasurements of defined benefit plans | Note 20 | – | – | – | –304 | –304 | – | –304 |
| Other comprehensive income for the period | | – | 11 | 5,492 | –401 | 5,102 | 45 | 5,147 |
| **Total income for the period** | | **-** | **11** | **5,492** | **12,746** | **18,250** | **120** | **18,370** |
| *Transactions with shareholders* | | | | | | | | |
| Dividends to shareholders | | – | – | – | –6,093 | –6,093 | –206 | –6,299 |
| Transactions with minority interests | | – | – | – | – | – | – | – |
| Share based payments | Note 27 | – | – | – | 58 | 58 | – | 58 |
| Changes in minority interests | | – | – | – | – | – | – | – |
| Other changes | | – | – | – | 37 | 37 | –12 | 25 |
| Transactions with shareholders | | – | – | – | –5,998 | –5,998 | -218 | –6,216 |
| **Balance at December 31, 2016** | | **2,554** | **270** | **4,559** | **88,678** | **96,061** | **1,703** | **97,764** |
| Income for the period | | – | – | – | 20,981 | 20,981 | 302 | 21,283 |
| *Other comprehensive income* | | | | | | | | |
| Translation differences on foreign operations | | – | – | –2,493 | – | –2,493 | –54 | –2,546 |
| Share of Other comprehensive income related to Joint Ventures and associated companies | | – | – | – | 25 | 25 | – | 25 |
| Accumulated translation differences reversed to income | | – | – | –56 | – | –56 | – | –56 |
| Available-for-sale investments: | Note 5, 19 | – | – | – | – | – | – | – |
| Gains/losses at valuation to fair value | | – | –10 | – | – | –10 | – | –10 |
| Change in cash flow hedge reserve | Note 19 | – | –20 | – | – | –20 | – | –20 |
| Remeasurements of defined benefit plans | Note 20 | – | – | – | –827 | –827 | – | –827 |
| Other comprehensive income for the period | | – | –30 | –2,549 | –802 | –3,381 | –54 | –3,434 |
| **Total income for the period** | | – | **–30** | **–2,549** | **20,179** | **17,601** | **248** | **17,849** |
| *Transactions with shareholders* | | | | | | | | |
| Dividends to shareholders | | – | – | – | –6,603 | –6,603 | –13 | –6,616 |
| Transactions with minority interests | | – | – | – | – | – | – | – |
| Share based payments | Note 27 | – | – | – | 38 | 38 | – | 38 |
| Changes in minority interests | | – | – | – | – | – | – | – |
| Other changes | | – | – | – | –27 | –27 | 3 | –24 |
| Transactions with shareholders | | – | – | – | –6,592 | –6,592 | –10 | –6,602 |
| **Balance at December 31, 2017** | | **2,554** | **240** | **2,010** | **102,265** | **107,069** | **1,941** | **109,011** |

1 Read more in Note 19 Equity and number of shares regarding specification of other reserves.

THE SHARE

# Sharp rise in the share price in 2017

Most of the world's leading stock markets had a positive development during 2017. The price of the Volvo B share increased by 44% during the year.

The Volvo share is listed on the stock exchange Nasdaq Stockholm, Sweden. One A share carries one vote at Annual General Meetings and one B share carries one tenth of a vote. Dividends are the same for both classes of shares. The Volvo share is included in a large number of indices that are compiled by Dow Jones, FTSE, S&P and Nasdaq Nordic.

### The Volvo share price increased

In general, the leading stock exchanges rose during 2017. On Nasdaq Stockholm, the broad OMXSPI index rose by 6% (9).

On Nasdaq Stockholm the share price for the Volvo A share rose by 43%, and at year-end the price for the Volvo A share was SEK 153.10 (107.20). The lowest closing price was SEK 107.40 on January 3, and the highest closing price was SEK 169.80 on November 3. The share price for the Volvo B share rose by 44% and at year-end the price was SEK 152.70 (106.40). The lowest closing price was SEK 106.60 on January 2, and the highest closing price was SEK 169.40 on November 3.

In 2017, a total of 1.4 billion (1.7) Volvo shares at a value of SEK 195 billion (158) were traded on Nasdaq Stockholm, corresponding to a daily average of 5.5 million shares (6.9). The Volvo share was the third most traded share on Nasdaq Stockholm in 2017. At year-end, Volvo's market capitalization totalled SEK 325 billion (227).

According to Fidessa, the trading on Nasdaq Stockholm accounted for 36% of all the trading in the Volvo B share. CBOE Global Markets (BATS) accounted for 37%, LSE Group for 16% and BOAT for 3%.

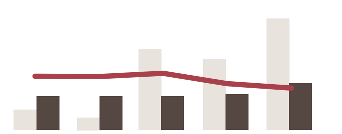
### Share conversion option

In accordance with a resolution on the AGM on April 6, 2011, the Articles of Association have been amended to include a conversion clause, stipulating that series A shares may be converted into series B shares, after a request sent to the Board. During 2017 a total of 12,549,713 A shares were converted to B shares, representing 2.6% of the A shares that were outstanding at the end of 2016. Further information on the procedure is available on the Volvo Group's web site: www.volvogroup.com

WHY INVEST IN VOLVO?

- Competitive products and services
- Strong market positions globally
- Well-invested
- Lowered structural cost-level after restructuring program
- Improved profitability and cash flow in recent years
- Improved financial position

EARNINGS AND DIVIDEND PER SHARE, DIVIDEND YIELD



| | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|
| Diluted earnings per share, SEK | 1.76 | 1.03 | 7.41 | 6.47 | 10.32 |
| Dividend per share, SEK | 3.00 | 3.00 | 3.00 | 3.25 | 4.25[1] |
| Dividend yield, % | 3.6 | 3.5 | 3.8 | 3.1 | 2.8 |

1 Proposed by the Board of Directors

### Ownership changes

During the year Norges Bank Investment Management decreased its holding from 4.8% of the outstanding capital to 2.7%. At year end Industrivärden was the largest owner followed by Cevian Capital, Norges Bank Investment Management, SHB and Alecta, when measured as share of voting rights. According to a press release on December 27, Cevian Capital had reached an agreement to sell its entire holding to Geely Holding. The sale, however, was not visible in the share register on December 31, 2017.

### Dividend

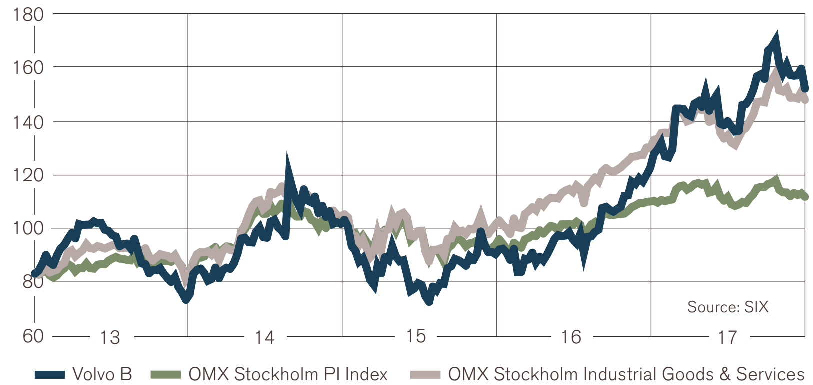
The Board proposes a dividend of SEK 4.25 per share for the financial year of 2017, which would mean that a total of SEK 8,636 M would be transferred to AB Volvo's shareholders. For the preceding year a dividend of SEK 3.25 per share was paid out.

**Communication with shareholders**

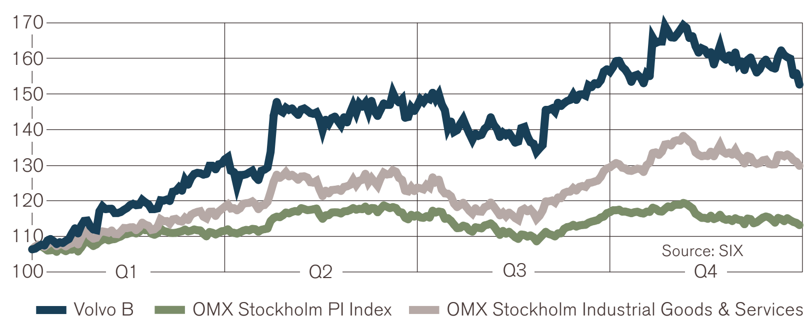
Dialogue with the shareholders is important for Volvo. In addition to the Annual General Meeting and a number of larger activities aimed at professional investors, private shareholders and stock market analysts, the relationship between Volvo and the stock market is maintained through such events as press and telephone conferences in conjunction with the publication of interim reports, meetings with retail shareholders' associations, investor meetings and visits, as well as road shows in Europe and North America.

On volvogroup.com it is possible to access financial reports, search for information concerning the share and statistics for truck deliveries. It is also possible to access information concerning the Group's governance, including information about the Annual General Meeting, the Board of Directors, Group Management and other areas that are regulated in the "Swedish Code of Corporate Governance." The website also offers the possibility to subscribe to information from Volvo. ■

PRICE TREND, VOLVO SERIES B SHARES, 2013–2017, SEK




PRICE TREND, VOLVO SERIES B SHARES, 2017, SEK




**The shareholders with the largest voting rights in AB Volvo, December 31, 2017**[1]

| | Voting rights, % | Capital, % |
|---|---|---|
| Industrivärden | 23.1 | 7.0 |
| Cevian Capital | 15.9 | 8.7 |
| Norges Bank Investment Management | 5.4 | 2.7 |
| SHB | 5.1 | 1.5 |
| Alecta | 4.8 | 4.4 |

1 Adjusted for shares owned by AB Volvo, which carry no voting rights at the AGM. AB Volvo held 20,728,135 class A shares and 75,837,801 class B shares comprising in total 4.5% of the number of registered shares on December 31, 2017.

**Share capital, December 31, 2017**

| | |
|---|---|
| Registered number of shares[1] | 2,128,420,220 |
| of which, Series A shares[2] | 479,975,508 |
| of which, Series B shares[3] | 1,648,444,712 |
| Quota value, SEK | 1.20 |
| Share capital, SEK M | 2,554 |
| Number of shareholders | 240,521 |
| Private persons | 227,492 |
| Legal entities | 13,029 |

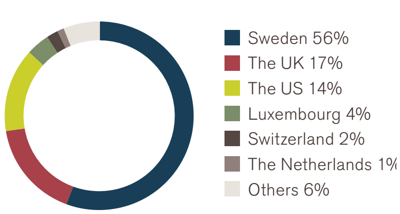
For further details on the Volvo share, see Note 19.

1 The number of outstanding shares was 2,031,854,284 on December 31, 2017.

2 Series A shares carry one vote each.

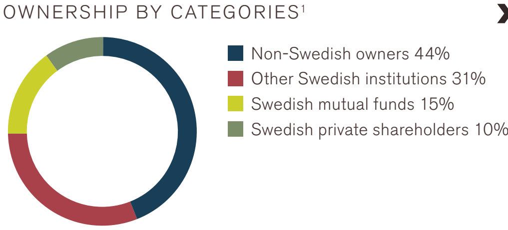
3 Series B shares carry one tenth of a vote each.

OWNERSHIP BY COUNTRY[1]




1 Share of capital, registered shares.

OWNERSHIP BY CATEGORIES[1]




» More details on the Volvo share and Volvo's holding of treasury shares are provided in Note 19 to the financial statements and in the Eleven-year summary.

1 Share of capital, registered shares.
The employees' ownership of shares in Volvo through pension foundations is insignificant.

FTSE GROUP CONFIRMS that Volvo Group has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE-4Good Index Series. Companies in the FTSE4Good Index Series have met stringent environmental, social and governance criteria, and are positioned to capitalise on the benefits of responsible business practice.

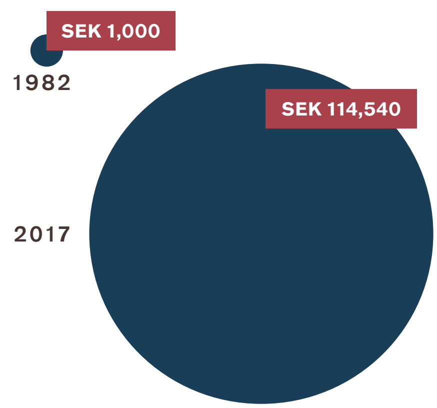
## SHAREHOLDER VALUE – LONG-TERM VALUE CREATION

The Volvo Group strives to create long-term value for its shareholders.

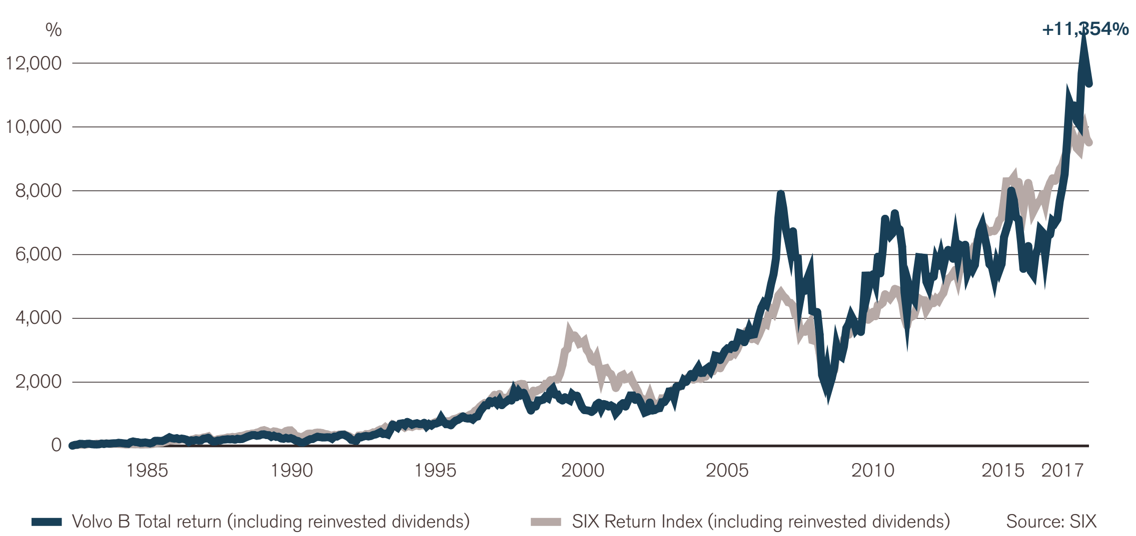
The Volvo Group's origins can be traced to 1927, when the first serial produced Volvo car rolled out of the factory in Göteborg, Sweden. The first serial produced truck saw the light of day in 1928 and was an immediate success. In 1935, AB Volvo was listed on the Stockholm Stock Exchange.

The graph shows the total return for the Volvo B share, measured as the share price development with all dividends re-invested, since December 30, 1982, which is as far back as the comparison index, SIX Return Index, stretches. SIX Return Index measures the total return for the Stockholm Stock Exchange as whole.
The graph shows that SEK 1,000 invested in the Volvo B-share in 1982 had grown to SEK 114,540 at the end of 2017, under the condition that all dividends have been reinvested in Volvo B shares.

**SEK 1,000 invested in Volvo B shares on December 30, 1982, was worth SEK 114,540 at the end of 2017.**




### ACCUMULATED TOTAL RETURN OF THE VOLVO B SHARE



RISKS AND UNCERTAINTIES

# Managed risk-taking

All business operations involve risks – managed risk-taking is a condition of maintaining a sustained favorable profitability.

Uncertainties may be due to events in the world and can affect industries and markets and thus have an impact on the Volvo Group's aspirations, vision and mission. These uncertainties may provide opportunities that the Volvo Group tries to capture in its strategy. In some cases, the Group can influence the likelihood that a risk-related event will occur. In other cases, when such events are beyond the Group's control, the Group strives to minimize the impact. A number of the risks that the Volvo Group is facing are presented on the following pages.

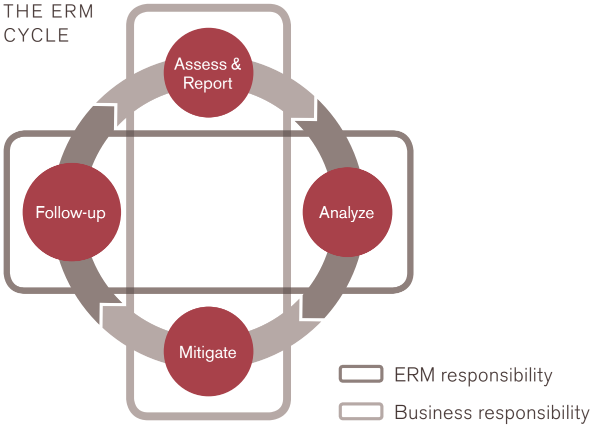
**The Volvo Group's risk management**

Volvo Group is working with enterprise risk management (ERM), a systematic and structured process to assess, report, analyze, mitigate and follow-up the risks that might impact the Group's business. The objective of the ERM process is to improve business performance and optimize the cost of managing risks; i.e. creating, enhancing and protecting the Group's enterprise value as well as enhancing and protecting the Group's assets.

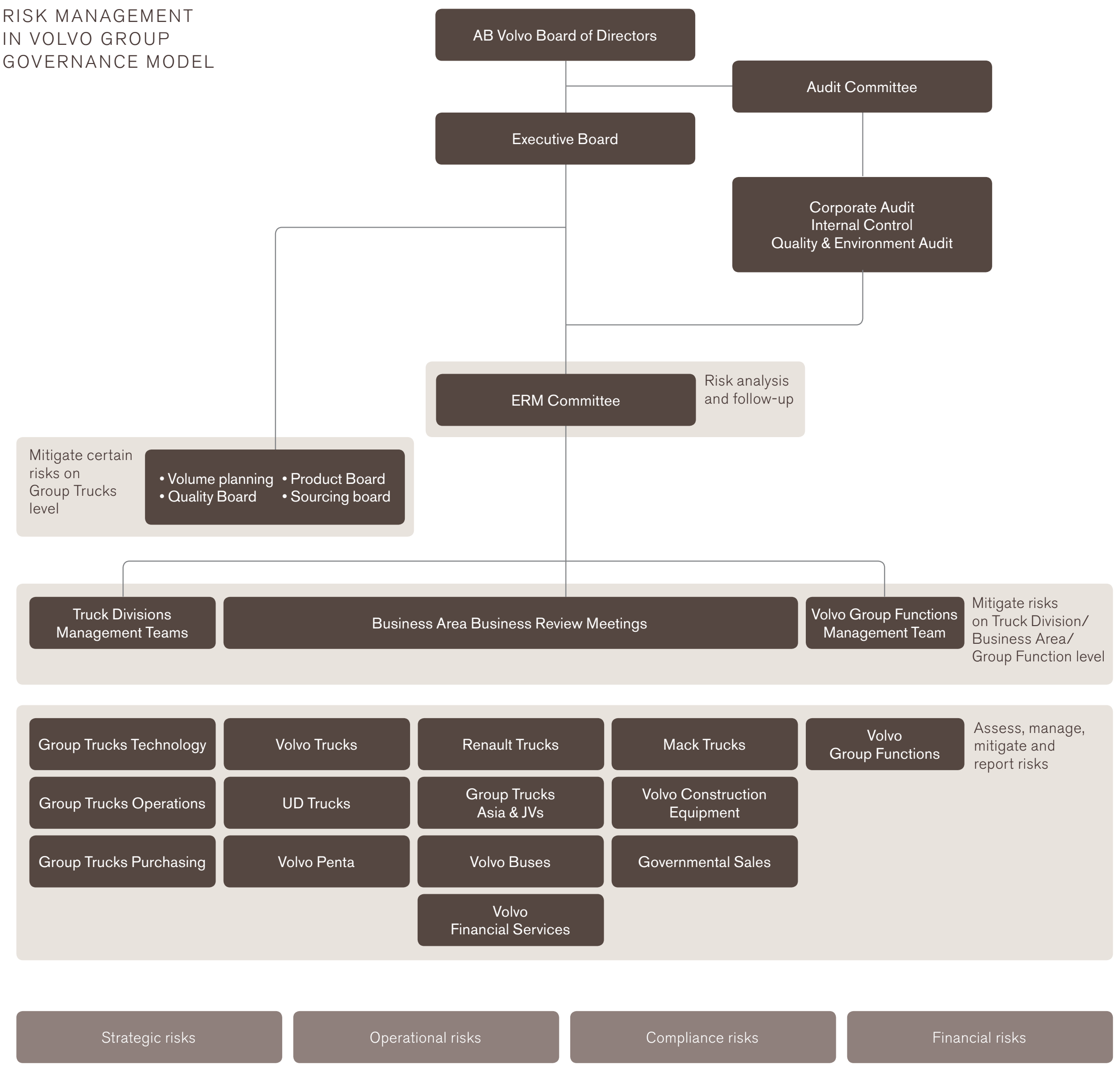
| | | DEFINITIONS | MANAGEMENT |
|---|---|---|---|
| Long-term | STRATEGIC RISKS Create value | Strategic risks may affect our ability to create value, the long-term development of the business and the possibility to reach our vision and aspirations. | Strategic risks are managed through strategies and strategic plans set by executive management and management teams throughout Volvo Group. |
| Short- and medium-term | OPERATIONAL RISKS Enhance value | Operational risks may affect our ability to enhance value and are important for the daily business while delivering our mission and living up to our aspirations. | Operational risks are managed through tactical and operational business decisions as well as in operations in all business throughout Volvo Group on all levels, by all employees. |
| | COMPLIANCE RISKS Protect value | Compliance risks may affect our ability to protect value through threats posed on our financial, organizational, or reputational standing. They are important to Volvo Group in order to follow our values. | Risks related to compliance rules and regulations are managed in tactical and operational business decisions and operations through all business in Volvo Group on all levels, by all employees. The guiding directive is the Volvo Group Code of Conduct. |
| | FINANCIAL RISKS Enhance & protect value | Financial risks may affect our ability to enhance and protect values from potential effects on the Group's financial position. They are important to Volvo Group in order to fulfill our aspirations through our values. | Financial risks are managed in tactical and operational business decisions in all business throughout Volvo Group on all levels , by all employees. All following the financial framework, Volvo Group Financial Policies and Procedures. |

Integrated in the ERM process there are several risk management processes active within Volvo Group to cover specific topics such as projects, suppliers, environment and business continuity. These processes report on a materiality level to the ERM function via the Business Areas, Truck Divisions and Group Functions. The ERM function compiles all relevant data and analyzes where there are systematic risks or gaps in risk mitigation. Ownership of risk mitigation resides within the business while the ERM function follows up on the progress of the mitigation activities.

THE ERM CYCLE




RISK MANAGEMENT IN VOLVO GROUP GOVERNANCE MODEL



## STRATEGIC RISKS

For a large global company such as Volvo Group, navigating through political, economic and social trends is important and crucial to define our place in the global context of markets and competitors. From a Volvo Group perspective, there are a number of trends and challenges driving our work to develop and deliver transport and infrastructure solutions today and tomorrow. Strategic risks may affect our ability to create value, long-term development of the business and our possibility to reach our mission, vision and aspirations.

**Cyclical commercial vehicles industry**

The Volvo Group's customers operate all over the world, some within a single state, and others across borders. A multitude of global and regional economic, regulatory, digital, technological and environmental factors create strategic as well as operational challenges for the industry. Like many capital industries, the commercial vehicle industry generally has been cyclical, with a strong correlation to GDP, the need to replace aging vehicles and machines, as well as laws and regulations. Although there is a continued shift in focus in the commercial vehicle industry from product to service, the cyclicality in sales and profitability remains. The changing business landscape as well as the divergence between emerging and developed markets, influences demand for our customers' services and our customers' success. The fluctuating demand for the Group's products and services makes the financial result of the operations dependent on the Group's ability to react quickly to market changes. In particular, the Volvo Group strives to continually balance production levels and operating expenses, as well as enhance business agility in fulfilling demands for new services. *Key aspect: 7*

**Geopolitical instability**

The Volvo Group is active in more than 190 countries and political instability, armed conflicts and civil unrest may impact the Group's ability to trade in affected areas. Rapid change in inflation, devaluations or regulations can sustain Volvo significant losses, impairment of assets or costs due to underutilized assets. *Key aspect: 7*

**Intense competition**

Continued consolidation in the industry is expected to create fewer but stronger competitors. The major global competitors are Daimler, Volkswagen (Scania and MAN), Paccar (Kenworth, DAF and Peterbuilt), Caterpillar and Komatsu. There are also strong local brands, for example in China, India and Russia, active in their domestic markets, which are expected to increase their presence in other parts of the world. Further, overcapacity within the industry can occur if there is a lack of demand, potentially leading to increased price pressure. Proactive risk management is important to anticipate and protect Volvo Group's brands' market positions. *Key aspect: 7*

**Extensive government regulation**

Regulations regarding exhaust emission levels, noise, safety and levels of pollutants from production plants for our products are extensive within for the industry. Most of the regulatory challenges regarding products relate to reduced emissions. The product development capacity within the Volvo Group is coordinated to be able to focus resources for research and development to meet the tougher emission regulations. Local protectionism leading to changes to local content requirements can put the Volvo Group at a disadvantage compared to local competitors, cause increased sourcing costs or require Volvo to make significant investments not necessary from an operational point of view. Read more about product development and emissions regulations on page 34–41. *Key aspects: 1, 2, 3, 5, 9*

**Change in technology**

As part of the global automotive and logistics industry the Volvo Group is driving prosperity for society and for our customers. While shaping offerings to improve our customers' productivity and profitability we are taking changes which emerge through new technological breakthroughs and legislatory changes into account. As any company the Volvo Group has limited resources and we must at all times select and invest into the new technologies we believe provide the best prosperity for society and for our customers. The Volvo Group's approach to prevent the associated risks is to continuously scan and assess new technologies and only bring those new technologies to product development and commercialization that have proven levels of desired customer benefit, quality, safety and environmental impact. Read more on future technologies on page 34–41 and 62–67. *Key aspects: 1, 3, 4, 5, 6, 7, 8, 9*

## OPERATIONAL RISKS

For Volvo Group, steering the tactical and operational work is crucial to reach our aspirations in terms of customer satisfaction, admired employer and leading profitability. To enhance business value, all decisions and operations are based on knowledge regarding short and medium term operational risks. These risks are actively managed throughout the Volvo Group in accordance with our governance model. Operational risks may affect our ability to create value, which means knowledge of these risks are important for the daily business.

**Definitions of key aspects from a materiality standpoint in alphabetical order**
1) Admired employer. 2) Business ethics and integrity. 3) Legal compliance. 4) Customer success. 5) Emissions (products). 6) Energy efficiency (products). 7) Financial health. 8) Intelligent technology. 9) Product safety and security.
More information on material issues is available on page 222.

**Customer satisfaction**

Top priority for Volvo Group is to support the customers' businesses and profitability in order for them to succeed, regardless of segment, brand, product or service. Customer satisfaction is reliant on the total offer of products, services or features on new or used vehicles. The satisfaction is at risk if a product or service is not at the expected level or price point. An aspect is also how the customer is met in interactions with the brands in the Volvo Group, from personal interactions at retailer or workshop level, to searching for information on a web page or in calling an assistance service. To prevent possible risks, staff at retailers and workshops are continuously trained and provided with instructions or guidelines on how to interact with their customers. Web pages are aligned, positioned and developed towards the brand's targeted customers. Read more on page 54–55. *Key aspects: 1, 2, 3, 4, 5, 6, 7, 8, 9*

**Product development**

For Volvo Group our products are a key part of the total offer to our customers. The Group could be at risk of losing customers and market shares if not developing products to new legislations on time or not providing products fulfilling customer expectations. Each development project monitors risks regarding project and product quality, cost, project lead time and product features. To ensure that product development is executed in an efficient way the Group has implemented a project gate model, governance model as well as global processes and instructions to monitor project execution and balance project and product portfolio. *Key aspects: 3, 4, 5, 6, 7, 8, 9*

**Reliance on suppliers and scarce materials**

The Volvo Group purchases raw materials and components from numerous external suppliers. Our suppliers and business partners come from all around the world with different cultures. Sustainable solutions and close collaboration with our suppliers are key for the success of our customers. The purchase cost can vary significantly over a business cycle due to changes in world market prices for raw materials and currency impact. Times of sales and order growth in major markets at the same time, which is positive from an overall Group standpoint, can create extraordinary capacity constraints in the supply chain. High demand as well as suppliers' financial instability could also result in delivery disturbances. Possible effects of delivery disturbances vary depending on the components' lead time and complexity as well as on the availability of alternative suppliers. Some components are standard throughout the industry, other are Volvo Group unique. Proactive efforts are put forth in establishing a robust and flexible supply chain. To manage the high volatility in the commercial vehicle market, this work will continue by an even more professionalized capacity management in close cooperation with our suppliers and business partners. Read more about how we work with our suppliers on page 46–47, and reuse on page 60–61. *Key aspects: 4, 7*

**Operation of plants**

For Volvo Group the industrial system is crucial in providing customers with the right products at the right time. It is a large operation with machines and human beings interacting in an efficient and timely manner in relation to volatility in production volumes. Interruptions or inefficiencies in the system can have a negative impact. Risk management is crucial to foresee and prevent possible stops in production, injuries on personnel as well as ensuring the correct execution of activities with potential impact on the environment. There is a large number of instructions on how to perform different tasks to avoid implications, as well as audits and assessments performed to ensure that the instructions are followed. Read more on how we manage risk in our production and logistics operation on page 48–51. *Key aspects: 1, 4, 7*

**Human capital**

Employees and other stakeholder expectations are changing quickly, which requires a stronger focus on several different aspects: leadership, empowerment, engagement, and human rights and company values. A potential failure in doing the right things according to basic human rights and company's values can negatively impact our image as an employer, Volvo Group's reputation, and the ability of our employees to develop the knowledge and skills necessary to satisfy market demands. Risk management incorporates the monitoring of changing legislation and securing the availability of properly skilled and engaged employees. Our diversity is a basis upon which our strength depends to be a successful multinational company. By executing the Volvo Group Attitude Survey and driving employee dialogues, we build an inclusive leadership. The human resource strategy embraces a flexible workforce and agile organization in order to constantly adapt to an increasingly dynamic, complex and uncertain environment. Read more on how we manage risks related to human capital on page: 68–74, 76–77. *Key aspects: 1, 2, 3, 7*

**Human rights**

People are at the core of what we do. We currently believe the most essential risks for our operations and/or through our business relationships, are connected to the areas highlighted in our new Code of Conduct, including but not limited to; harassments, non-discrimination, safe and healthy workplace, freedom of association and collective bargaining, as well as working hours and compensation. These risks may potentially materialize not only in our own organization, but also through our business relationships and in our value chain. We are aware that conducting business in certain parts of the world constitutes higher risks for potential human rights violation, and we have identified 17 countries where the Volvo Group has a substantial number of employees and/or close business partners which we consider high risk countries in this respect. We are also aware that potential linkage through our supply chain, products and services to segments such as the electronics industry, mining industry and heavy infrastructure projects constitutes higher risks for human rights violations. The consequences of these risks for the Group depend on if the Volvo Group is seen as causing, contributing to or having a linkage to the harm done, and could be anything from legal liability to reputational and brand damage, depending also on the severity of its nature. Read more on how we manage human rights on page 76–77. *Key aspects: 1, 2, 3, 7*

**Residual value commitments**

When selling products the Volvo Group at times enters into residual value commitments. Predicting future development of used vehicle prices can be challenging, for example when introducing new models or when large swings in demand occur. At the time of the sale the future evolution of the used commercial vehicle market and equipment market may be uncertain, potentially leading to too high commitments, impacting the future profitability. In order to mitigate these risks, diligent analysis is performed prior to entering into residual value commitments. *Key aspect: 7*

**Malicious intents**

On-going malicious acts in the world cause for example an increased frequency of cyber-attacks and a general perceived risk of insecurity. The Volvo Group monitors and implements preventive and mitigating actions to create a safe environment for employees, associates, partners and operations. *Key aspects: 3, 4, 8*

**Corruption**

Corruption risks are primarily linked to the activities of our business partners (distributors and agents), for which we may be responsible as well as to the behaviors of our employees in sales situations in relation to public officials. The overall risk level is also affected by the fact that Volvo pursues business operations in many high-risk markets from a corruption perspective. Corruption related risks are managed via our Anti-Corruption Compliance Program under which we make anti-corruption due diligence of business partners. This is to ensure that we select the right business partners to prevent corrupt practices in connection with the sale of our products and services. As regards employees and contractors, it is clearly stated in our Code of Conduct that Volvo employees and contractors may not participate in or endorse any corrupt practices. Corruption may involve severe negative impacts for our business operations, including reputational damage, fines and imprisonment of employees. Read more about our anti-corruption program on page 74–75. *Key aspects: 1, 2, 3, 4*

## COMPLIANCE RISKS

In our operations we are obliged to follow a number of laws and regulations and has made the conscious decision to comply with global standards. Compliance risks may affect our ability to protect value through threats posed to the Group's reputation or financial position.

**Intangible assets**

The Volvo Group owns or otherwise has rights to patents, trademarks, designs and copyrights that relate to the products and services that the Group manufactures and markets. These rights have been developed or acquired over a number of years and are valuable to the operations of the Volvo Group. Further, in order to safeguard investments in R&D, the Volvo Group has an intellectual property plan defining the creation and use of its intellectual property rights. AB Volvo and Volvo Car Corporation jointly own the Volvo brand and trademarks through Volvo Trademark Holding AB. AB Volvo has the exclusive right to use the Volvo name and trademark for its products and services. Similarly, Volvo Car Corporation has the exclusive right to use the Volvo name and trademark for its products and services. The Volvo Group's rights to use the Renault brand and trademarks are related to the truck operations only and are regulated by a license from Renault s.a.s., which owns the Renault brand and trademarks. In addition, the Volvo Group owns several other trademarks relating to its business. Brand usage in conflict with third-party intellectual property rights may have significant business impact on the Group. Therefore, the Volvo Group is continually assessing intellectual property rights of third parties as well as possible infringements by third parties of the Group's intellectual property rights. *Key aspects: 2, 3, 7, 8*

**Contractual conditions related to takeover bids**

Provisions stipulating that an agreement can be changed or terminated if the control of the company is changed are included in some of the agreements whereby Renault Trucks has been given the right to sell Renault s.a.s.' and Nissan Motor Co. Ltd's light-duty trucks as well as in some of the Group's purchasing agreements. *Key aspects: 2, 7*

**Complaints and legal actions**

The Volvo Group may be the target of complaints and legal actions initiated by customers, employees and other third parties alleging health, environmental, safety or business related issues, or failure to comply with applicable legislation and regulations. Information about legal proceedings involving entities within the Volvo Group are found in Note 21 Other Provisions and in Note 24 Contingent Liabilities. Even if such disputes are resolved successfully, without having adverse consequences financially or on our values, they could negatively impact the Group's reputation and take up resources that could be used for other purposes. *Key aspects: 1, 2, 3, 4, 5, 6, 7, 9*

**Environmental regulations**

The Volvo Group could be at risk for complaints and legal actions initiated by customers, employees and other third parties alleging environmental related issues. Environmental legislation is fast changing and there are increased demands in many areas, for instance chemical management as well as on emission standards for the vehicles themselves. The Group invests a great deal of resources to adhere to different legislation throughout the entire value chain. Recent developments in international standards in environmental and quality management are further emphasizing the need for risk management in these areas. Even if potential problems in these areas are resolved and handled without adverse impact financially or on our values, they could have a negative impact on Group reputation and divert resources that would have been brought to better use in the Group's development. Read more on how we manage Environmental risks in the section Value Chain page 34–61. *Key aspects: 1, 2, 3, 4, 5, 6, 7*

## FINANCIAL RISKS

For the Volvo Group, steering and monitoring financial risk is important, both from an operational and compliance perspective. Group-wide policies, Volvo Group Financial Policies and Procedures, are updated and decided upon annually, and form the basis for each Group company's management of these risks. The financial risks may affect our ability to enhance and protect value from potential effects on the Group's financial position. They may affect the Volvo Group's ability to live by our values or to fulfill our aspirations.

### Interest rate risk

Volvo Group's debt structure is connected to the aspiration to have industry-leading profitability. Movements in interest-rate levels may impact the Group's net income and cash flow or the value of financial assets and liabilities. Financial Services funding and lending shall be matched to mitigate undesired volatility in profitability due to interest-rate risk. The Industrial Operations' interest-rate fixing is kept short, to leverage on the countercyclical relationship of interest-rate movements. *Key aspect: 7*

### Currency risk

The Volvo Group's global presence means that business is conducted in many different regions. More than 95% of the net sales of the Volvo Group are generated in countries other than Sweden. A majority of the Group's costs also stem from countries other than Sweden. As such the Volvo Group's cash flow and profitability is impacted by uncertainties in foreign exchange rates which impact the Volvo Group's operating income, balance sheet and cash flow, as well as an indirect impact over time on Volvo's competitiveness. The Volvo Group strives to have manufacturing located in the major markets which offsets structural currency exposures, and actively manages currency flows and translation risk to reduce the impact on profitability and cash flow. *Key aspects: 4, 7*

### Liquidity risk

The Volvo Group needs to ensure that it has adequate payment capabilities over time, in order to capture both business opportunities and expectations from external stakeholders. Sudden changes in the business cycle, or unforeseen events within the financial markets can affect the Volvo Group both in a direct or indirect way. Our customers can experience difficulties in financing products bought from the Volvo Group, our suppliers can face challenges in assuring their delivery of components to the Volvo Group production, and the Volvo Group can face challenges in delivering according to expectations. The Volvo Group ensures sound financial preparedness by always keeping a certain percent of its sales in liquid assets. A sound balance between short and long term debt maturities as well as long-term committed credit facilities and cash, are intended to secure liquidity preparedness and thus the Volvo Group's payment capability. *Key aspect: 7*

### Credit risk

There are three main areas of credit risk for the Volvo Group. Firstly, within its Industrial Operations the Group sells products with open credits to customers and issues credit guarantees for customers' commercial vehicles and equipment. The majority of the outstanding credit guarantees at year-end relates to Chinese retail customers within Construction Equipment. Secondly, the customer-financing activity in Volvo Financial Services manages a significant credit portfolio, equivalent to SEK 130 billion at year-end 2017. The portfolio is largely secured by the title to the financed commercial vehicles and equipment. However, in the case of customer default, the value of the repossessed commercial vehicles and equipment may not necessarily cover the outstanding financed amount. Lastly, a part of the Group's credit risk is related to the investment of the financial assets of the Group. The majority has been deposited with the banks the Group is working with. *Key aspect: 4*

### Market risk from investments in shares or similar instruments

The Volvo Group has invested in listed shares with a direct exposure to the capital markets. The majority of this exposure relates to the investment in Inner Mongolia North Hauler Joint Stock Co., Ltd. Please see Note 5 for further information. Furthermore, the Volvo Group is indirectly exposed to market risks from shares and other similar instruments as a result of assets being managed in independent pension plans with exposure to these types of instruments. Please see Note 20 for further information. *Key aspect: 7*

### Impairment

The Volvo Group verifies annually, or more frequently if necessary, the goodwill value and other intangible assets. The size of the surplus value differs between the business areas and they are, to a varying degree, sensitive to changes in the business environment. Instability in the business recovery and volatility in interest and currency rates may lead to indications of impairment. For further information on intangible assets, see Note 12. *Key aspects: 3, 7*

### Change of control clauses

Some of Volvo Group's long-term loan agreements contain conditions stipulating the right for a bondholder to request repayment in advance under certain conditions following a change of the control of the company. These clauses are not unusual in loan agreements. In AB Volvo's opinion it has been necessary to accept those conditions in order to receive financing on otherwise acceptable terms. *Key aspect: 7* ■

# Group performance 2017
# Notes

## FINANCIAL STATEMENTS

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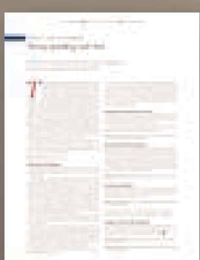

Cash flow statement
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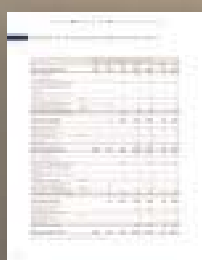

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## NOTES



Amounts in SEK M unless otherwise specified. The amounts within parentheses refer to the preceding year, 2016.

# Notes to the Financial Statements

Amounts in SEK M unless otherwise specified. The amounts within parentheses refer to the preceding year, 2016.

## NOTE 1 ACCOUNTING POLICIES

The consolidated financial statements for AB Volvo and its subsidiaries have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), as adopted by the European Union, EU. This Annual Report is prepared in accordance with IAS 1 Presentation of Financial Statements and with the Swedish Annual Accounts Act. In addition, RFR 1 Supplementary Rules for Groups, has been applied, which is issued by the Swedish Financial Reporting Board.

*How should the Volvo Group's accounting policies be read?*
The Volvo Group describes the accounting policies in conjunction with each note in the aim of providing enhanced understanding of each accounting area. The Volvo Group focuses on describing the accounting choices made within the framework of the prevailing IFRS policy and avoids repeating the actual text of the standard, unless the Volvo Group considers it particularly important to the understanding of the note's content. The following symbols I/S and B/S show which amounts in the notes that can be found in the income statement or balance sheet. The total amount in tables and statements might not always summarize as there are rounding differences. The aim is to have each line item corresponding to the source and it might therefore be rounding differences in the total. Refer to the table below to see the note in which each accounting policy is listed and for the relevant and material IFRS standard.

| Accounting policies | Note | IFRS-standard |
|---|---|---|
| Non-current assets held for sale and discontinued operations | 3, Acquisitions and divestments of shares in subsidiaries | IFRS 5, IFRS 13 |
| Business combinations | 3, Acquisitions and divestments of shares in subsidiaries | IFRS 3 |
| Joint ventures | 5, Investments in joint ventures, associated companies and other shares and participations | IFRS 11, IFRS 12, IAS 28 |
| Associated companies | 5, Investments in joint ventures, associated companies and other shares and participations | IFRS 12, IAS 28 |
| Operating segments | 6, Segment reporting | IFRS 8 |
| Revenue | 7, Revenue | IAS 17, IAS 18 |
| Shares and participations | 5, Investments in joint ventures, associated companies and other shares and participations | IFRS 7, IFRS 13, IAS 28, IAS 32, IAS 36, IAS 39 |
| Financial income and expenses | 9, Other financial income and expenses | IAS 39 |
| Income taxes | 10, Income taxes | IAS 12 |
| Minority interests | 11, Minority interests | IFRS 10, IFRS 12 |
| Research and development expenses | 12, Intangible assets | IAS 23, IAS 36, IAS 38 |
| Goodwill | 12, Intangible assets | IAS 36, IAS 38 |
| Tangible assets | 13, Tangible assets | IFRS 13, IAS 16, IAS 23, IAS 36, IAS 40 |
| Leasing | 14, Leasing | IAS 17 |
| Customer-financing receivables | 15, Customer-financing receivables | IFRS 7, IFRS 13, IAS 17, IAS 18, IAS 32, IAS 39 |
| Inventories | 17, Inventories | IAS 2 |
| Earnings per share | 19, Equity and number of shares | IAS 33 |
| Pensions and similar obligations | 20, Provisions for post-employment benefits | IAS 19 |
| Provisions for residual value risks | 21, Other provisions | IAS 17, IAS 18, IAS 37 |
| Warranty expenses | 21, Other provisions | IAS 37 |
| Restructuring costs | 21, Other provisions | IAS 19, IAS 37 |
| Liabilities | 22, Liabilities | IFRS 7, IFRS 13, IAS 32, IAS 37, IAS 39 |
| Contingent liabilities | 24, Contingent liabilities | IAS 37 |
| Transactions with related parties | 25, Transactions with related parties | IAS 24 |
| Government grants | 26, Government grants | IAS 20 |
| Share-based payments | 27, Personnel | IFRS 2 |
| Cash-flow statement | 29, Cash flow | IAS 7 |
| Financial instruments | 4, Goals and policies in financial risk management | IFRS 7, IFRS 13, IAS 32, IAS 39 |
| | 16, Receivables | |
| | 18, Marketable securities and liquid funds | |
| | 30, Financial instruments | |

### Consolidated financial statements

Principles for consolidation

The consolidated financial statements comprise the parent company, subsidiaries, joint ventures and associated companies. Intra-group transactions as well as gains on transactions with joint ventures and associated companies are eliminated in the consolidated financial statements.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations about definitions of subsidiaries, joint ventures and associated companies.

Translation to Swedish kronor when consolidating companies have other functional currencies

The functional currency of each Volvo Group company is determined based on the currency in which the company primarily generates and expends cash, normally the currency of the country where the company is located. AB Volvo's and the Volvo Group's presentation currency is SEK. In preparing the consolidated financial statements, items in the income statements of foreign subsidiaries (except for subsidiaries in hyperinflationary economies) are translated to SEK using monthly average exchange rates. Balance sheet items are translated into SEK using exchange rates at year end (closing rate). Exchange differences are recognized in other comprehensive income and accumulated in equity.

The accumulated translation differences related to a certain subsidiary, joint venture or associated company are reversed to the income statement as a part of the gain/loss arising from disposal of such a company or repayment of capital contribution from such a company.

### Receivables and liabilities in foreign currency

Receivables and liabilities in currencies other than the functional currency of the reporting entity (foreign currencies) are translated to the functional currency using the closing rate. Exchange rate gains and losses arising from operating assets and liabilities in foreign currency, both on payments during the year and on measurements at year end, impact operating income in the year in which they are incurred, while exchange rate gains and losses arising from financial assets and liabilities impact financial income and expenses. Interest-bearing financial assets and liabilities are defined as items included in the net financial position of the Volvo Group (see section Alternative Performance Measure). Exchange rate differences on loans and other financial instruments in foreign currency, which are used to hedge net assets in foreign subsidiaries and associated companies, are offset against translation differences in the shareholders' equity of the respective companies.

» **Read more in Note 4** Goals and policies in financial risk management about currency exposure and currency risk management.

The most important exchange rates applied in the consolidated financial statements are shown in the table.

**Exchange rates**

| | | Average rate | | Closing rate as of Dec 31 | |
|---|---|---|---|---|---|
| Country | Currency | 2017 | 2016 | 2017 | 2016 |
| Australia | AUD | 6.5434 | 6.3743 | 6.4235 | 6.5688 |
| Brazil | BRL | 2.6768 | 2.4777 | 2.4853 | 2.7950 |
| Euro Zone | EUR | 9.6395 | 9.4801 | 9.8497 | 9.5762 |
| Japan | JPY | 0.0761 | 0.0791 | 0.0731 | 0.0778 |
| Canada | CAD | 6.5814 | 6.4697 | 6.5642 | 6.7472 |
| China | CNY | 1.2631 | 1.2878 | 1.2642 | 1.3091 |
| Norway | NOK | 1.0337 | 1.0212 | 1.0011 | 1.0550 |
| Great Britain | GBP | 10.9943 | 11.5680 | 11.1045 | 11.1850 |
| South Africa | ZAR | 0.6415 | 0.5859 | 0.6696 | 0.6675 |
| South Korea | KRW | 0.0076 | 0.0074 | 0.0077 | 0.0076 |
| United States | USD | 8.5390 | 8.5630 | 8.2322 | 9.0984 |

### New accounting policies for 2017

There are no new accounting standards and interpretations that came into effect as of January 1, 2017 that significantly effects the Volvo Group's financial statements.

### New accounting policies for 2018 and later

A number of accounting standards and interpretations have been published, but have not yet become effective.

*IFRS 9 Financial instruments*

IFRS 9 represents a new framework for financial instruments and will become effective from January 1, 2018. The major impact of the new standard for the Volvo Group and the effect of implementation are disclosed in Note 31.

*IFRS 15 Revenue from Contracts with Customers*

IFRS 15 represents a new framework for recognizing revenue from external customers and will become effective from January 1, 2018. The major impact of the new standard for the Volvo Group and the effect of implementation are disclosed in Note 31.

*IFRS 16 Leases*

IFRS 16 Leases was published in January 2016 and is replacing the former IAS 17 Leases and the related interpretations IFRIC 4, SIC-15 and SIC-27. IFRS 16 will not imply any significant changes to lessor accounting but lessee accounting will change. For a lessee, lease contracts will be recognized on the balance sheet. For the Volvo Group this means that rental contracts for real estate, company cars and other major items will be recognized on the balance sheet. The model reflects that, at the start of a lease, the lessee obtains the right to use an asset for a period of time and has an obligation to pay for that right. The right-of-use asset and the lease liability will be recognized at the present value of future lease payments. Costs related to the leased asset will consist of depreciation of the asset and interest on the lease liability. There is however exceptions from the lessee accounting model to consider. If a contract includes a low value asset or has a lease term of less than 12 months, the lease payments can still be recognized as an operating expense. Furthermore, it is only the lease component of a contract that needs to be recognized on the balance sheet, thus the service components can continue to be recognized as an operating expense. The future focus for the Volvo Group will be on analyzing the effect related to these exceptions and how they will be applied.

Applying the new lease accounting for lessees will increase the balance sheet but will also have a positive impact on operating income compared to today, as a part of the lease payments will be recognized as interest expense within the finance net. Implementing IFRS 16 will also lead to an increase in interest-bearing liabilities.

The standard is effective for annual periods beginning on or after January 1, 2019. The new standard will be applied retrospectively, but prior period reported numbers will not be adjusted. Hence, the opening balance for 2019 will be adjusted in accordance with the new standard and the effect of implementation recognized in equity. IFRS 16 Leases has been endorsed by the EU.

Other new or revised accounting standards are not considered to have a material impact on the Volvo Group's financial statements.

## NOTE 2 KEY SOURCES OF ESTIMATION UNCERTAINTY

The Volvo Group's most significant accounting policies are described together with the applicable note, read more in Note 1, Accounting Policies for a specification. The preparation of AB Volvo's Consolidated Financial Statements requires the use of estimates and assumptions that may affect the recognized amounts of assets and liabilities at the date of the financial statements. In addition, the recognized amounts of net sales and expenses during the periods presented are affected. In preparing these financial statements, management has made its best judgments of certain amounts included in the financial statements, materiality taken into account. Actual results may differ from previously made estimates. In accordance with IAS 1, the company is required to disclose the assumptions and other major sources of estimation uncertainties that, if actual results differ, may have a material impact on the financial statements.

**!** The sources of uncertainty which have been identified by the Volvo Group and which are considered to fulfill these criteria are presented in connection to the items considered to be affected. The table discloses where to find these descriptions.

| Source of estimation uncertainty | Note | |
|---|---|---|
| Buy-back agreements and residual value guarantees | 7, | Revenue |
| Deferred taxes | 10, | Income taxes |
| Impairment of goodwill and other intangible assets | 12, | Intangible assets |
| Impairment of tangible assets | 13, | Tangible assets |
| Credit loss reserves | 15,<br>16, | Customer-financing receivables<br>Receivables |
| Inventory obsolescence | 17, | Inventories |
| Assumptions when calculating pensions and other post-employment benefits | 20, | Provisions for post-employment benefits |
| Provision for product warranty | 21, | Other provisions |
| Provisions for extended coverage and service contracts | 21, | Other provisions |
| Legal proceedings | 21, | Other provisions |
| Residual value risks | 21, | Other provisions |

## NOTE 3 ACQUISITIONS AND DIVESTMENTS OF SHARES IN SUBSIDIARIES

### ACCOUNTING POLICY

*Recognition of business combinations*

All business combinations are recognized in accordance with the purchase method. Volvo Group measures acquired identifiable assets, tangible and intangible, and liabilities at fair value. Any surplus amount from the purchase price, possible minority interests and fair value of previously held equity interests at the acquisition date compared to the Volvo Group's share of acquired net assets is recognized as goodwill. Any deficit amount, known as negative goodwill, is recognized in the income statement.

In step acquisitions, a business combination occurs only on the date control is achieved, which is also the time when goodwill is calculated. Transactions with the minority are recognized as equity as long as control of the subsidiary is retained. For each business combination, the Volvo Group decides whether the minority interest shall be valued at fair value or at the minority interest's proportionate share of the net assets of the acquiree. All acquisition-related costs are expensed. Companies acquired during the year are consolidated as of the date of acquisition. Companies that have been divested are included in the consolidated financial statements up to and including the date of the divestment.

*Non-current assets held for sale and discontinued operations*

In a global group like the Volvo Group, processes are continuously ongoing regarding the sale of assets or groups of assets at minor values. When the criteria for being classified as a non-current asset held for sale are fulfilled and the asset or group of assets are of significant value, the asset or group of assets, both current and non-current, and the related liabilities are recognized on a separate line in the balance sheet. The asset or group of assets are measured at the lower of its carrying amount and fair value after deductions for selling expenses. The balance sheet items and the potential income effect resulting from the revaluation to fair value less selling expenses are normally recognized in the segment Group functions & Other, until the sale is completed and the result is distributed to the relevant segments.

AB Volvo's holding of shares in subsidiaries as of December 31, 2017 is disclosed in Note 13 for the Parent Company. Significant acquisitions, formations and divestments within the Group are listed below.

**Business combinations during the period**

The Volvo Group has not made any acquisitions of subsidiaries during 2016 and 2017, which solely or jointly have had a significant impact on the Volvo Group's financial statements.

### Divestments

*Volvo Construction Equipment's British dealership*

Volvo Group completed the sale of Volvo Construction Equipment's British dealership during 2017 with a positive effect on operating income of SEK 253 M.

The Volvo Group has not made any other divestments during 2017, which solely or jointly have had a significant impact on the Volvo Group's financial statements. Divestment of operations with the main purpose to dispose fixed assets is treated as disposal of fixed assets. For clarification of effect in the cash flow read more in Note 29 Cash flow.

Comparative figures for 2016 include the divestment of the external IT operation and outsourcing of the IT infrastructure. The Volvo Group has not made any other divestments during 2016, which solely or jointly have had a significant impact on the Volvo Group's financial statements.

The impact on the Volvo Group's balance sheet and cash flow statement in connection with the divestment of subsidiaries and other business units are specified in the following table:

| Divestments | 2017 | 2016 |
|---|---|---|
| Intangible assets | – | –8 |
| Property, plant and equipment | –84 | –353 |
| Assets under operating lease | –413 | –180 |
| Inventories | –516 | –115 |
| Other receivables | –244 | –143 |
| Cash and cash equivalents | –35 | –3 |
| Other provisions | 64 | 4 |
| Other liabilities | 579 | 262 |
| Divested net assets | –649 | –536 |
| Goodwill | –169 | –9 |
| **Total** | **–818** | **–545** |
| **Additional purchase price** | **–** | **–** |
| Cash and cash equivalents received | 1,137 | 1,483 |
| Cash and cash equivalents, divested companies | –34 | –3 |
| **Effect on Volvo Group cash and cash equivalents** | **1,103** | **1,480** |
| **Effect on Volvo Group net financial position** | **1,167** | **1,557** |

### Assets and liabilities held for sale

As of December 31, 2017, the Volvo Group recognized assets amounting to SEK 51 M as assets held for sale. No translation differences on foreign operations were recognized in other comprehensive income related to the reclassified assets and liabilities held for sale.

For the comparative year 2016, the Volvo Group recognized assets amounting to SEK 525 M and liabilities amounting to SEK 148 M as assets and liabilities held for sale. Those mainly pertained to planned dealer divestments which have been completed during 2017. No translation differences on foreign operations were recognized in other comprehensive income related to the reclassified assets and liabilities held for sale.

| Assets and liabilities held for sale | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Tangible assets | 51 | 300 |
| Inventories | – | 98 |
| Other current receivables | 0 | 76 |
| Other assets | 0 | 51 |
| B/S **Total assets** | **51** | **525** |
| Trade payables | 0 | 0 |
| Provisions | 0 | 0 |
| Other current liabilities | 0 | 148 |
| Other liabilities | – | – |
| B/S **Total liabilities** | **0** | **148** |

### Acquisitions and divestments after the end of the period

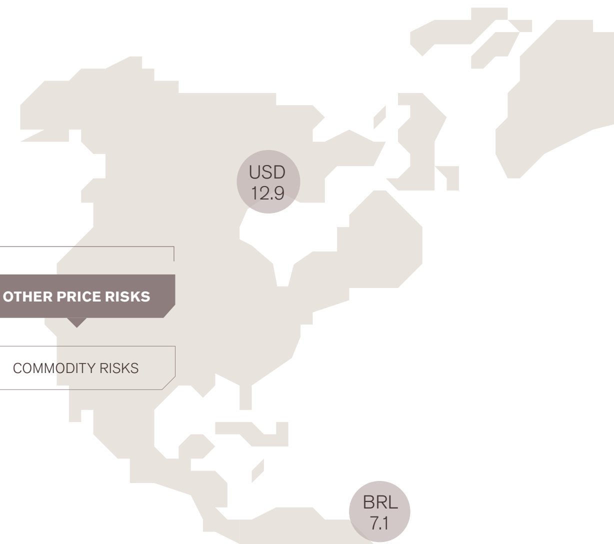
Volvo Group has not made any acquisitions or divestments after the end of the period that have had any significant impact on the Volvo Group.

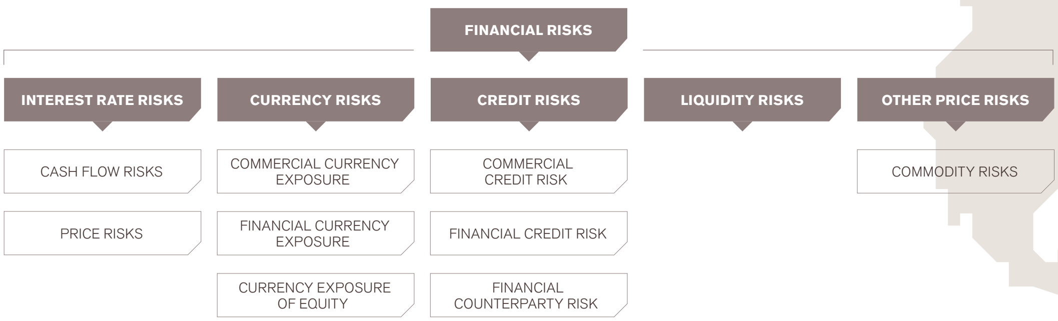
# NOTE 4 GOALS AND POLICIES IN FINANCIAL RISK MANAGEMENT

The Volvo Group's global operations expose the Group to financial risks in the form of interest rate risks, currency risks, credit risks, liquidity risks and other price risks. The Volvo Group manages financial risk as an integrated element of the business/operations. The Volvo Group strive to minimize these risks by optimizing the Group's capital costs by utilizing economies of scale, minimize negative effects on income as a result of changes in currency or interest rates and to minimize risk exposure. All risks are managed pursuant to the Volvo Group's established policies in these areas.

» **Read more in Note 30** Financial Instruments about accounting policies for financial instruments.

» **Read more** in section Financial Management about financial risk management, page 107.




INTEREST RATE RISKS

## INTEREST RATE RISKS A

Interest rate risk refers to the risk that changed interest rate will affect the Volvo Group's net income and cash flow (cash flow risks) or the fair value of financial assets and liabilities (price risks).

### POLICY

Matching the interest fixing terms of financial assets and liabilities reduces the exposure. Interest rate swaps are used to change/influence the interest fixing term for the Volvo Group's financial assets and liabilities. Currency interest rate swaps enable borrowing in foreign currencies from different markets without introducing currency risk. The Volvo Group may from time to time use other types of forward contracts (futures) and forward rate agreements (FRAs). Most of these contracts are used to hedge interest rate levels for short-term borrowing or investments.

### Cash flow risks

The effect of changed interest rate levels on future currency and interest rate flows primarily pertains to Financial Services and Industrial Operations net financial items. Financial Services measure the degree of matching interest rate fixing on borrowing and lending. The calculation of the matching degree excludes equity, which amounted to 8% in Financial Services. At year end 2017, the degree of such matching ratio was 99% (98) in Financial Services which is according to the Group policy. In addition to the financial assets in Financial Services, the Volvo Group's interest-bearing assets consisted primarily of cash and cash equivalents. On December 31, 2017, the average interest on Industrial Operations financial assets was 0.3% (0.6). The Industrial Operations results and profitability are closely aligned to the business cycle. Therefore in order to minimize the interest rate risks, outstanding loans had interest terms corresponding to an interest rate fixing of between one to three months. The average interest on Industrial Operations financial liabilities at year end amounted to 4.3% (4.2), including the Volvo Group's credit costs.

The following table 4:1 shows the effect on earnings before taxes in Industrial Operations net financial position, excluding pensions and similar obligations, if interest rates were to increase by 1 percentage point, (100 basis points) assuming an average interest rate fixed term of three months on the liability side.* The impact on equity is earnings after tax.

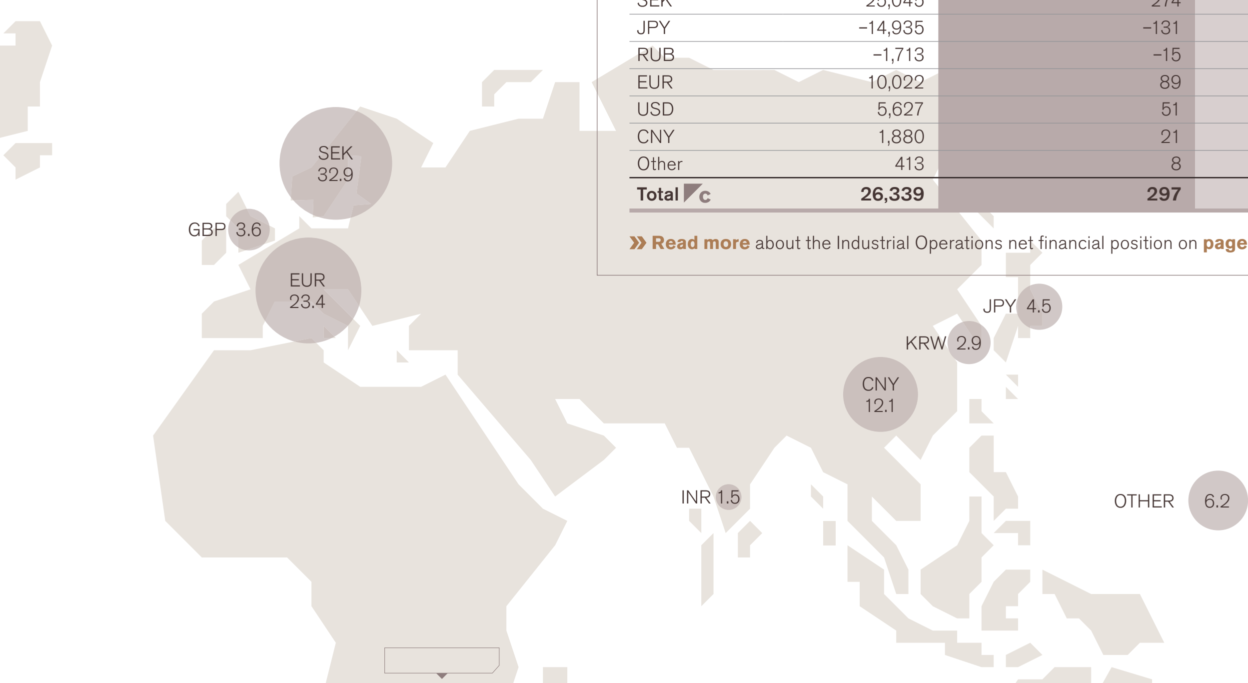
### Price risks C

Exposure to price risks as a result of changed interest rate refers to financial assets and liabilities with a longer interest rate fixing term (fixed interest). This is not a risk for Industrial Operations since all outstanding loans are taken up with a short interest rate fixing.

* The sensitivity analysis on interest rate risks is based on simplified assumptions. It is not unlikely for market interest rates to change by one percentage point (100 basis points) on an annual basis. However, in reality, these rates often rise or decline at different points in time. The sensitivity analysis also assumes a parallel deferment of the return curve, and that the interest rates on assets and liabilities will be equally impacted by changes in market interest rates. Accordingly, the impact of real interest rate changes may differ from the analysis presented in table 4:1.

» **Read more in Note 20** Provisions for post-employment benefits regarding sensitivity analysis on the defined benefit obligations when changes in the applied assumptions for discount rate and inflations are made.

THE VOLVO GROUP'S NET ASSETS IN DIFFERENT CURRENCIES (SEK BN) =




| Risk net financial position Dec 31, 2017<br>SEK M | Net financial position excl. pensions | Impact on Income after financial items if interest rate rises 1%<br>A (Interest rate risks) | Impact on Net financial position if SEK appreciates against other currencies 10%<br>B (Currency risks) |
|---|---|---|---|
| SEK | 25,045 | 274 | – |
| JPY | –14,935 | –131 | 1,494 |
| RUB | –1,713 | –15 | 171 |
| EUR | 10,022 | 89 | –1,002 |
| USD | 5,627 | 51 | –563 |
| CNY | 1,880 | 21 | –188 |
| Other | 413 | 8 | –41 |
| **Total** C | **26,339** | **297** | **–129** |

» **Read more** about the Industrial Operations net financial position on **page 89**.

4:1

CURRENCY RISKS

## CURRENCY RISKS B

The balance sheet may be affected by changes in different exchange rates. Currency risks in the Volvo Group's operations are related to changes in the value of contracted and expected future payment flows (commercial currency exposure), changes in the value of loans and investments (financial currency exposure) and changes in the value of assets and liabilities in foreign subsidiaries (currency exposure of equity).

## POLICY

The aim of the Volvo Group's currency risk management is to secure cash flow from firm flows through currency hedges pursuant to the established Financial risk policy, and to minimize the exposure of financial items in the Volvo Group's balance sheet. Below is a presentation on how this work is conducted for commercial and financial currency exposure, and for currency exposure of equity.

VOLVO GROUP'S OUTSTANDING DERIVATIVES HEDGING COMMERCIAL CURRENCY RISKS DECEMBER 31, 2017

| Millions | EUR/RUB | EUR/USD | GBP/SEK | USD/KRW | USD/SEK |
|---|---|---|---|---|---|
| Due date 2018 | –32 | 21 | 86 | 204 | 197 |
| Due date 2019 | – | – | – | – | – |
| **Total local currency** | **–32** | **21** | **86** | **204** | **197** |
| Average contract rate | 71.57 | 1.10 | 10.86 | 1,096.70 | 8.19 |
| **Market value of outstanding forward contracts, SEK M** | **–4** | **–19** | **–18** | **48** | **0** |

4:2

## Goals and policies in financial risk management (cont.)

SENSITIVITY ANALYSIS*

| Risk currency exposure 2017<br>SEK bn | Transaction exposure from operating net flows | Impact on operating income if currency rate appreciates against all other currencies by 10%<br>B (Currency risks) |
|---|---|---|
| SEK | –48 | –4.8 |
| KRW | –5 | –0.5 |
| EUR | 10 | 1.0 |
| GBP | 9 | 0.9 |
| USD | 10 | 1.0 |

The deficit in transaction exposure in SEK is mainly generated from flows in USD, GBP, EUR, NOK and ZAR against SEK.

4:3

### Commercial currency exposure

*Transaction exposure from commercial flows*

The Volvo Group conducts manufacturing in 18 countries around the globe and more than 95% of net sales are generated in countries other than Sweden. Transaction exposure from commercial flows in foreign currency is generated from internal purchases and sales between manufacturing units and market companies and external sales and purchases in foreign currency around the globe. As the predominant parts of the operations in the Volvo Group are situated outside Sweden, the fluctuations in currency rates affecting the transaction flows in foreign currency are in many cases not against SEK. Industrial Operations' transaction exposure in key currencies is presented in graph 4:5. The graph represents the transaction exposure from commercial operating net cash flows in foreign currency, expressed as net surpluses or deficits in key currencies. The deficit in SEK and KRW is mainly an effect of manufacturing costs in the plants in Sweden and Korea, but limited external revenues in those currencies. The surplus in EUR on the other hand, is the net of significant gross volumes of sales and purchases made by many entities around the globe in EUR. The surplus in USD is mainly generated from external sales to entities in the USA and emerging markets. The surplus in GBP is generated from external sales to the UK.

The hedging of the Volvo Group's commercial currency exposure is executed centrally. The Volvo Group's consolidated currency portfolio exposure is the value of forecasted flows in foreign currency. The Volvo Group only hedge the part of the forecasted portfolio that is considered highly probable to occur, i.e. firm flows, where the main parts will be realized within six months. The Volvo Group uses forward contracts and currency options to hedge the portion of the value of forecasted future payment flows in foreign currency. The hedged amount of firm flows for all periods fall within the framework of the Volvo Group's Financial risk policy. Table 4:2 shows outstanding forward and option contracts for the hedging of commercial currency risks.

*Translation exposure from the consolidation of operating income in foreign subsidiaries*

In conjunction with the translation of operating income in foreign subsidiaries, the Volvo Group's earnings are impacted if currency rates change. The Volvo Group does not hedge this risk. Graph 4:7 shows the translation effect in key currencies when consolidating operating income for 2017 in foreign subsidiaries in Industrial Operations.

» **Read more** in section Currency exposure of equity.

*Sensitivity analysis for transaction exposure**

The table 4:3 illustrates the impact on operating income if key currencies for Industrial Operations appreciate by 10% against all other currencies. Hedge accounting is not applied on derivatives hedging cash flows in foreign currency. As a consequence the impact on equity equals the impact on operating income before tax.

*Industrial Operations currency review*

The tables and graphs 4:4 4:5 4:6 4:7 and 4:8 on the next page illustrate the currency impact on sales and operating income in key currencies. The effect arises from translation during the consolidation of foreign currencies and from commercial net flows in foreign currency.

» **Read more** about Industrial Operations transaction exposure in section Commercial currency exposure above.

### Financial currency exposure

Loans and investments in the Volvo Group's subsidiaries are performed mainly in local currencies through Volvo Group Treasury, which minimizes individual companies' financial currency exposure. Volvo Group Treasury uses various derivatives to facilitate lending and borrowing in different currencies without increasing the risk for the Volvo Group. The net financial position of the Volvo Group is affected by currency fluctuations since financial assets and liabilities are distributed among the Volvo Group companies that conduct their operations using different currencies.

Table 4:1 discloses the impact on earnings before tax on Industrial Operations net financial position, excluding pensions and similar net obligations, if SEK were to strengthen by 10%.

### Currency exposure of equity

The carrying amount of assets and liabilities in foreign subsidiaries are affected by current exchange rates in conjunction with the translation of assets and liabilities to SEK. To minimize currency exposure of equity, the size of equity in foreign subsidiaries is continuously optimized with respect to commercial and legal conditions. Currency hedging of equity may occur in cases where a foreign subsidiary is considered overcapitalized. Net assets in foreign subsidiaries, associated companies and joint ventures amounted at year end 2017 to SEK 74 billion (71). The need to undertake currency hedging relating to investments in associated companies, joint ventures and other companies is assessed on a case-by-case basis.

On the map on the previous pages the Volvo Group's net assets in different currencies (SEK bn) are displayed.

» **Read more in Note 30** Financial Instruments about Volvo Group's policy choice on hedge accounting.

* The sensitivity analysis on currency rate risks is based on simplified assumptions. It is not unlikely for a currency to appreciate by 10% in relation to other currencies. In reality however, all currencies usually do not change in the same direction at any given time, so the actual effect of exchange rate changes may differ from the sensitivity analysis. **Please refer** to tables 4:1 4:3

THE VOLVO GROUP'S CURRENCY REVIEW

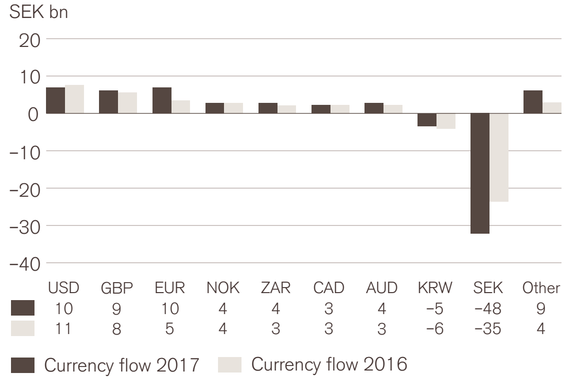
When the Volvo Group communicates the currency impact on operating income for Industrial Operations, the following factors are included:

| Currency impact on operating income, Industrial Operations, SEK billion | 2017 | 2016 | Change |
|---|---|---|---|
| Net flows in foreign currency | | | −0.4 |
| Realized and unrealized gains and losses on hedging contracts | −0.0 | 0.0 | −0.1 |
| Unrealized gains and losses on receivables and liabilities in foreign currency | −0.1 | 0.0 | −0.2 |
| Translation effect on operating income in foreign subsidiaries | | | 0.2 |
| **Total currency impact on operating income Industrial Operations** | | | **−0.4** |

Currency impact on net flows in foreign currency is detailed in graph 4:6 and Translation effect on operating income in foreign subsidiaries is detailed in graph 4:7 in key currencies.

4:4

TRANSACTION EXPOSURE FROM OPERATING NET FLOWS IN 2017 AND 2016

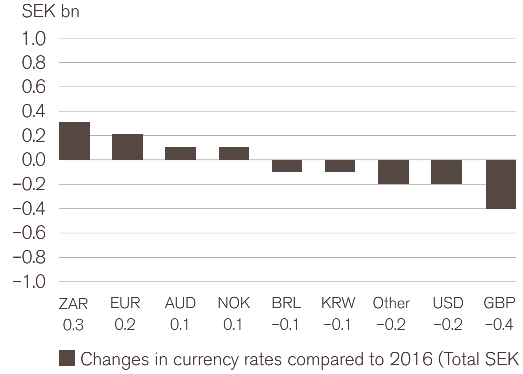



The graph above represents the transaction exposure from commercial operating net cash flows in foreign currency, expressed as net surpluses or deficits in key currencies.

» **Read more** in section Commercial currency exposure.

4:5

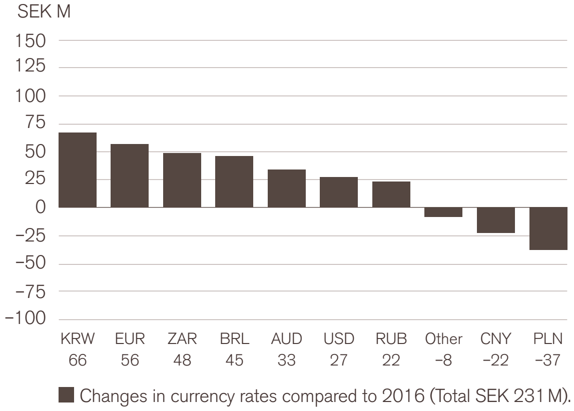
CURRENCY EFFECT FROM NET FLOWS IN FOREIGN CURRENCY 2017 VERSUS 2016




Currency effect on operating income from net flows in foreign currency in Industrial Operations is presented in the graph above.

4:6

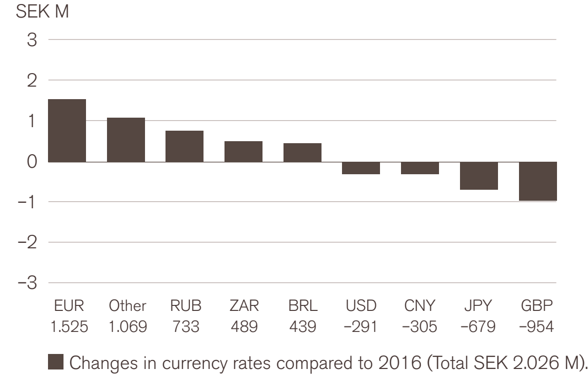
TRANSLATION EFFECT ON OPERATING INCOME IN FOREIGN SUBSIDIARIES IN 2017 VERSUS 2016




Translation effect when consolidating operating income in foreign subsidiaries for Industrial Operations is presented in the graph above.

4:7

CURRENCY EFFECT ON NET SALES IN 2017 VERSUS 2016




Currency effect on Net sales from inflows in foreign currency and translation effect when consolidating Net sales in foreign subsidiaries for Industrial Operations is presented in the graph above.

4:8

## Goals and policies in financial risk management (cont.)

CREDIT RISKS

### CREDIT RISKS

Credit risks are defined as the risk that the Volvo Group does not receive payment for recognized accounts receivable and customer-financing receivables (commercial credit risk), that the Volvo Group's investments are unable to be realized (financial credit risk) and that potential profit is not realized due to the counterparty not fulfilling its part of the contract when using derivative instruments (financial counterparty risk).

### POLICY

The objective of the Volvo Group's credit risk management is to define and measure the credit exposure and control the risk of losses deriving from credits to customers, credits to suppliers, financial credit risk, counterparty risk and customer finance activities within Financial Services.

**Commercial credit risk**

The Volvo Group's credit granting is steered by group policies and customer-classification rules. The credit portfolio should contain a distribution among different customer categories and industries. The credit risks are managed through active credit monitoring, follow-up routines and, where applicable, product repossession. Moreover, regular monitoring ensures that the necessary allowances are made for incurred losses on doubtful receivables. In Notes 15 and 16, ageing analysis are presented of customer-financing receivables overdue and accounts receivables overdue in relation to the reserves made.

The customer-financing receivables in Financial Services amounted at December 31, 2017 to approximately net SEK 109 billion (111). The credit risk of this portfolio is distributed over a large number of retail customers and dealers. Collaterals are provided in the form of the financed products. In the credit granting the Volvo Group strives for a balance between risk exposure and expected return.

» **Read more in Note 15** Customer-financing receivables about Volvo's credit risk in Financial Services.

The Volvo Group's accounts receivables as of December 31, 2017 amounted to approximately net SEK 41 billion (34).

**Financial credit risk**

The Volvo Group's financial assets are to large extent managed by Volvo Group Treasury and invested in the money market and capital markets. All investments must meet the requirements of low credit risk and high liquidity. According to the Volvo Group's financial risk policy, counterparties for investments and derivative transactions should have a rating better or equivalent to A– from one of the well-established credit rating institutions or similar.

Liquid funds and marketable securities amounted as of December 31, 2017 to approximately SEK 36 billion (25).

» **Read more in Note 18** Marketable securities and liquid funds.

**Financial counterparty risk**

The use of derivatives involves a counterparty risk, in that a potential loss may not be possible to offset (in full or in part) against a potential gain if the counterparty fails to fulfil its part of the contract. To reduce the exposure, the Volvo Group enters into master netting agreements, so called ISDA agreements, with all counterparts eligible for derivative transactions. The netting agreements provide the possibility for assets and liabilities to be set off under certain circumstances, such as in the case of the counterpart's insolvency. A Credit Support Annex (CSA) often accompanies the ISDA agreement. The CSA stipulates the terms and conditions under which the two parties are required to make cash transfers to each other to further reduce the exposure from the net open positions. The netting agreements have no effect on profit, loss or the position of the Volvo Group, since derivative transactions are accounted for on a gross basis. The Volvo Group's gross exposure from positive derivatives, amounting to SEK 3,890 M (3,026) is reduced by 82% (65) to SEK 706 M (1,049) by netting agreements and cash deposits. The Volvo Group is actively working with limits per counterpart in order to reduce risk for high net amounts towards individual counterparts.

» **Read more in Note 30** Financial instruments about the Volvo Group's gross exposure from positive derivatives per type of instrument.

## LIQUIDITY RISKS

Liquidity risk is defined as the risk that the Volvo Group would be unable to finance or refinance its assets or fulfill its payment obligations.

### POLICY

The Volvo Group ensures sound financial preparedness by always keeping a certain percentage of its sales in liquid assets. A sound balance between short and long-term debt maturities, as well as long-term committed credit facilities, are intended to secure liquidity preparedness, and thus the Volvo Group's payment capability.

The Volvo Group's liquid funds, i.e. cash and cash equivalents and marketable securities combined, amounted to SEK 36.3 billion (25.2) on December 31, 2017. In addition to this, granted but unutilized credit facilities amounted to SEK 45.4 billion (42.5). The adjacent graph 4:9 discloses expected future cash flows including derivatives related to financial liabilities. Capital flow refers to expected payments of loans and derivatives, see Note 22. Expected interest flow refers to the future interest payments on loans and derivatives based on interest rates expected by the market. The interest flow is recognized within cash flow from operating activities.

In addition to derivatives included in capital flow in the adjacent graph 4:9 there are also derivatives related to financial liabilities with a positive fair value recognized as assets, which are expected to give a future capital flow of SEK 2.9 billion (1.3) and a future interest flow of SEK 0.1 billion (1.5).

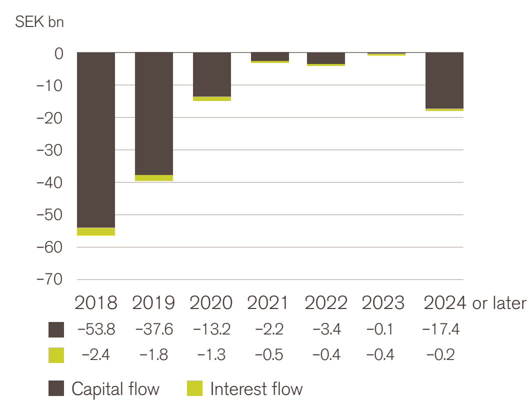
The predominant part of expected future cash flows that expires within 2018 and 2019 is an effect of the Volvo Group's normal business cycle, with shorter duration in the portfolio within Financial Services compared to Industrial Operations.

Financial Services measure the degree to which the duration of borrowing and lending matches. The calculation of the matching degree excludes equity, which amounted to 8% in Financial Services. At year-end 2017, the degree of such matching was 99% (98) for the segment Financial Services, which was in line with the Volvo Group's policy. Volvo Group Treasury has, for practical as well as business reasons, the mandate to mismatch the portfolio for Financial Services between a matching ratio of 80–120%. At year-end 2017, the matching ratio was 88% (92). Any gains or losses from the mismatch impact the segment Group functions & other within industrial Operations.

The hybrid bond in Volvo Treasury amounting to EUR 1.5 billion was issued in 2014 in order to further strengthen the Volvo Group's balance sheet and prolong the maturity structure of the debt portfolio. The hybrid bond is classified as a loan with duration of 61.6 years, subordinated to all other financial liabilities currently outstanding.

» **Read more in Note 14** Leasing about contractual term analysis of the Volvo Group's future payments from non-cancellable financial and operational lease contracts.

FUTURE CASH FLOW INCLUDING DERIVATIVES RELATED TO NON-CURRENT AND CURRENT FINANCIAL LIABILITIES




4:9



## OTHER PRICE RISKS

**Commodity risks**

Commodity risks refer to the risk that changed commodity prices will affect the consolidated earnings within the Volvo Group. Procurement of commodities such as steel, precious metals and electricity are made on a regular basis where prices are set in the global markets.

### POLICY

Changes in commodity prices are included in the product cost calculation. Increased commodity prices are therefore reflected in the sales price of the Volvo Group's final products. Purchasing agreements with commodity suppliers may also be long-term in nature or structured in a way that short-term volatility in commodity prices have less direct effect on Volvo Group's cost base.

# NOTE 5 INVESTMENTS IN JOINT VENTURES, ASSOCIATED COMPANIES AND OTHER SHARES AND PARTICIPATIONS

## ACCOUNTING POLICY

*Subsidiaries*

The Volvo Group has production facilities in 18 countries and sales of products in more than 190 markets which means that the Volvo Group has subsidiaries in many parts of the world. A subsidiary is defined as an entity that is controlled by the Volvo Group. A subsidiary is controlled by a parent company when it has power over the investee, exposure, or rights, to variable returns from its involvement with the investee and the ability to use its power over the investee to affect the amount of the investor's return. Most of the Volvo Group's subsidiaries are owned to 100% by the Volvo Group and are therefore considered to be controlled by the Volvo Group. For some subsidiaries there are restrictions on the Volvo Group's ability to access or use cash from these subsidiaries.

» **Read more in Note 18** Marketable securities and liquid funds about cash that is not available for use, or where other limitations exists.

» **Read more in Note 11** Minority interests.

» **Read more in Note 13** Investments in shares and participations in the Parent company about the composition of the Volvo Group.

*Joint ventures*

Joint ventures are companies over which the Volvo Group has controlling influence together with one or more external parties. Joint ventures are recognized by applying equity method accounting. The investment in VE Commercial Vehicles, Ltd., (VECV) is of a business related nature and aims at strengthening the Volvo Group's position in India. VECV is included in the Trucks segment.

*Associated companies*

Associated companies are companies in which the Volvo Group has a significant influence. A strong indication of such influence is when the Group's holdings equal at least 20% but less than 50% of the voting rights. Holdings in associated companies are recognized in accordance with the equity method. The ownership in the Chinese automotive manufacturer Dongfeng Commercial Vehicles Co., Ltd (DFCV) is classified as an associated company and is included in the Trucks segment.

*Equity method*

The Volvo Group's share of income in companies recognized according to the equity method is included in the consolidated income statement under Income/loss from investments in joint ventures and associated companies, less, where appropriate, depreciation of surplus values and the effect of applying different accounting policies. Income from companies recognized in accordance with the equity method is included in operating income since the Volvo Group's investments are of business related nature. For practical reasons, some of the associated companies are included in the consolidated financial statements with a certain time lag, normally up to one quarter. Dividends from joint ventures and associated companies are not included in the consolidated income. In the consolidated balance sheet, investments in joint ventures and associated companies are affected by the Volvo Group's share of the company's net income, less depreciation of surplus values and dividends received. Investments in joint ventures and associated companies are also affected by the Volvo Group's share of the company's other comprehensive income and by the translation difference from translating the company's equity in the Volvo Group.

When applying the equity method, including recognizing the associate's or joint venture's losses, additional impairment losses might be recognized given any indication of impairment. A significant or prolonged decline in the fair value of the shares is an indication of impairment. Investments accounted for in accordance with the equity method cannot be of a negative carrying value and therefore losses are not provided for if the holding is of a negative amount. Additional losses are provided for to the extent that the Volvo Group has incurred legal or constructive obligations or made payments on behalf of the joint venture or the associated company.

*Other shares and participations*

Holding of shares that do not provide the Volvo Group with significant influence, which generally means that Volvo Group's holding of shares corresponds to less than 20% of the votes, are recognized as other shares and participations. For listed shares, the carrying amount is equivalent to the market value. Unlisted shares and participations, for which a fair value cannot reasonably be determined, are measured at acquisition cost less any impairment.

Any change in value is recognized directly in Other comprehensive income, unless the decline is significant or prolonged. Then the impairment is recognized in the income statement. The cumulative gain or loss recognized in Other comprehensive income is recycled in the income statement at the time of sale of the asset.

Earned or paid interest attributable to these assets is recognized in the income statement as part of net financial items in accordance with the effective interest method. Dividends received attributable to these assets are recognized in the income statement as Income from other investments.

*Joint ventures*

The Volvo Group's investments in joint ventures are listed below.

| Shares in joint ventures | Dec 31, 2017 Holding percentage | Dec 31, 2016 Holding percentage |
|---|---|---|
| VE Commercial Vehicles, Ltd., India[1] | 45.6 | 45.6 |

1 VE Commercial Vehicles, Ltd., is considered to be a joint venture as the Volvo Group and Eicher Motors Ltd. have signed an agreement which states that common agreement is needed for important matters related to the governance of VECV.

The following tables present summarized financial information for the Volvo Group's joint ventures:

| Summarized income statements | 2017 | | | 2016 | | |
|---|---|---|---|---|---|---|
| | VE Commercial Vehicles, Ltd. | Other joint ventures | Total | VE Commercial Vehicles, Ltd. | Other joint ventures | Total |
| Net sales | 12,370 | – | 12,370 | 10,204 | 77 | 10,281 |
| Operating income[1] | 668 | – | 668 | 424 | –97 | 327 |
| Interest income and similar credits | 68 | – | 68 | 43 | 0 | 43 |
| Interest expense and similar charges | –19 | – | –19 | –18 | –22 | –40 |
| Other financial income and expenses | 0 | – | 0 | 5 | 0 | 5 |
| Income taxes | –199 | – | –199 | –131 | 0 | –131 |
| **Income for the period[2]** | **518** | **–** | **518** | **323** | **–118** | **205** |
| **Other comprehensive income[3]** | **5** | **–** | **5** | **4** | **–** | **4** |
| **Total comprehensive income** | **523** | **–** | **523** | **327** | **–118** | **209** |

1 Depreciation and amortization of SEK 363 M (356) are included within operating income whereof SEK 363 M (337) is related to VECV.
2 Income for the period in joint ventures includes depreciation of surplus values.
3 Including the Volvo Group's share of OCI related to joint ventures. Translation differences from translating joint ventures' equity in the Volvo Group are excluded.

| Summarized balance sheets | Dec 31, 2017 | | | Dec 31, 2016 | | |
|---|---|---|---|---|---|---|
| | VE Commercial Vehicles, Ltd. | Other joint ventures | Total | VE Commercial Vehicles, Ltd. | Other joint ventures | Total |
| Non-current assets | 4,880 | – | 4,880 | 4,980 | 114 | 5,094 |
| Marketable securities, cash and cash equivalents | 1,695 | – | 1,695 | 749 | 40 | 789 |
| Other current assets | 4,691 | – | 4,691 | 3,432 | 28 | 3,460 |
| **Total assets** | **11,266** | **–** | **11,266** | **9,161** | **182** | **9,343** |
| Equity[1] | 5,492 | – | 5,492 | 5,358 | –115 | 5,243 |
| Non-current financial liabilities | 12 | – | 12 | 8 | 0 | 8 |
| Other non-current liabilities | 309 | – | 309 | 320 | 7 | 327 |
| Current financial liabilities | 3,530 | – | 3,530 | 1,853 | 284 | 2,137 |
| Other current liabilities | 1,923 | – | 1,923 | 1,622 | 6 | 1,628 |
| **Total equity and liabilities** | **11,266** | **–** | **11,266** | **9,161** | **182** | **9,343** |

1 Including the translation differences from translating joint ventures' equity in the Volvo Group.

| Investments in joint ventures | Percentage holding | Dec 31, 2017 Carrying value | Dec 31, 2016 Carrying value |
|---|---|---|---|
| VE Commercial Vehicles, Ltd., India | 45.6 | 2,504 | 2,389 |
| Other holdings in joint ventures | – | 0 | 0 |
| **Investments in joint ventures** | | **2,504** | **2,389** |

Net financial position for the joint ventures (excluding post-employment benefits) amounted to SEK 1,352 M (73) as of December 31, 2017.

As of December 31, 2017, the Volvo Group's share of contingent liabilities in its joint ventures amounted to SEK 146 M (152). Dividend received from VECV amounted to SEK 59 M (67).

*Associated companies*

The following tables present summarized financial information for the Volvo Group's associated companies:

| Summarized income statements | 2017 | | | | 2016 | | | |
|---|---|---|---|---|---|---|---|---|
| | DFCV | Deutz AG | Other associated companies | Total | DFCV | Deutz AG | Other associated companies | Total |
| Net sales | 49,641 | 9,937 | 4,056 | 63,634 | 37,086 | 11,888 | 4,551 | 53,525 |
| Operating income | 1,575 | 234 | 110 | 1,919 | –248 | 76 | –108 | –280 |
| **Income for the period[1]** | **1,600** | **113** | **267** | **1,980** | **–64** | **106** | **–267** | **–226** |
| **Other comprehensive income[2]** | **–27** | **–3** | **–** | **–30** | **62** | **31** | **–** | **93** |
| **Total comprehensive income** | **1,573** | **110** | **267** | **1,950** | **–2** | **137** | **–267** | **–133** |

1 Income for the period in associated companies includes depreciation of surplus values and internal transactions.

2 Including the Volvo Group's share of Other comprehensive income related to associated companies. Translation differences from translating the associated companies' equity in the Volvo Group are excluded.

| Summarized balance sheets | Dec 31, 2017 | | | | Dec 31, 2016 | | | |
|---|---|---|---|---|---|---|---|---|
| | DFCV[1] | Deutz AG[2] | Other associated companies | Total | DFCV[1] | Deutz AG[2] | Other associated companies | Total |
| Non-current assets | 17,709 | – | 1,645 | 19,354 | 18,216 | 7,055 | 2,095 | 27,366 |
| Current assets | 37,407 | – | 3,213 | 40,620 | 29,414 | 4,695 | 3,525 | 37,634 |
| **Total assets** | **55,116** | **–** | **4,858** | **59,974** | **47,630** | **11,750** | **5,620** | **65,000** |
| Equity | 16,313 | – | 2,009 | 18,322 | 15,363 | 6,062 | 2,359 | 23,784 |
| Non-current liabilities | 2,554 | – | 603 | 3,157 | 2,601 | 2,834 | 584 | 6,019 |
| Current liabilities | 36,249 | – | 2,246 | 38,495 | 29,666 | 2,854 | 2,677 | 35,197 |
| **Total equity and liabilities** | **55,116** | **–** | **4,858** | **59,974** | **47,630** | **11,750** | **5,620** | **65,000** |

1 No dividend was received during financial year 2017 from DFCV (–).

2 Dividends of SEK 20 M (19) was received from Deutz AG.

| Investments in associated companies | Percentage holding | Dec 31, 2017 Carrying value | Dec 31, 2016 Carrying value |
|---|---|---|---|
| Dongfeng Commercial Vehicles Co., Ltd (DFCV) China | 45.0 | 7,341 | 6,946 |
| Deutz AG, Germany[1] | – | – | 1,515 |
| Other holdings in associated companies[2] | | 680 | 793 |
| **Investments in associated companies** | | **8,021** | **9,254** |

1 During the year the Volvo Group divested the share of ownership in the associated company Deutz AG.

2 Other holdings include the investment in Inner Mongolia North Hauler Joint Stock Co., Ltd., China., two dealers in Japan and Blue Chip Jet.

| Income/loss from investments in joint ventures and associated companies | 2017 | 2016 |
|---|---|---|
| **Income/loss joint ventures** | | |
| VECV | 236 | 147 |
| Other joint ventures | – | 0 |
| **Subtotal** | **236** | **147** |
| **Income/loss associated companies** | | |
| DFCV[1] | 720 | –29 |
| Deutz AG | 28 | 27 |
| Other companies | 24 | –41 |
| **Subtotal** | **771** | **–43** |
| **Revaluation, write-down and gain on divestment of shares associated companies** | | |
| Deutz AG[2] | 400 | – |
| Other companies | 0 | 52 |
| **Subtotal** | **400** | **52** |
| **I/S Income/loss from investments in joint ventures and associated companies[3]** | **1,407** | **156** |

1 Income/loss includes an internal profit elimination of net SEK 15 M (195).

2 Income/loss includes gain from divestment of the Volvo Group's share of ownership in Deutz AG in an amount of SEK 400 M.

3 Income/loss from investments in joint ventures include the Volvo Group's share of depreciation of surplus values of SEK 20 M (24) and associated companies include depreciation of surplus values of SEK 46 M (48).

*Other shares and participations*

The carrying amount of the Volvo Group's holding of shares and participations in other companies as of December 31, 2017, is disclosed in the table below.

» **Read more in Note 30** Financial Instruments regarding financial assets classified as available for sale.

| Holding of shares in listed companies | Dec 31, 2017 Carrying value | Dec 31, 2016 Carrying value |
|---|---|---|
| Holdings in Japanese companies | 461 | 409 |
| Holdings in other listed companies | 1 | 82 |
| **Holding of shares in listed companies** | **462** | **491** |
| Holding of shares in non-listed companies | 237 | 285 |
| **B/S Other shares and participations** | **699** | **777** |

## NOTE 6 SEGMENT REPORTING

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Group Executive Board that makes strategic decisions.

The Volvo Group comprises ten business areas: Volvo Trucks, UD Trucks, Mack Trucks, Renault Trucks, Group Trucks Asia & JVs, Volvo Construction Equipment, Volvo Buses, Volvo Penta, Governmental Sales and Volvo Financial Services.

Each business area, except for the truck brands and Governmental Sales, is seen as a separate segment. Governmental Sales is part of the segment Group functions & Other. The truck brands are seen as one segment since the operations are highly integrated and the assessment of the performance is done for the truck brands in total.

The Volvo Group has shared operations in both the Trucks segment and in the segment Group functions & Other. Shared operations for production, development and logistics for powertrain and parts are included in the Trucks segment. Volvo IT and Volvo Real Estate are seen as business support functions and are part of Group functions & Other. The cost of these operations is shared between the different business areas based on utilization according to principles set by the Volvo Group.

| 2017 | Trucks | Construction Equipment | Buses | Volvo Penta | Group functions & Other incl. elim. | Industrial Operations | Financial Services | Eliminations | Volvo Group |
|---|---|---|---|---|---|---|---|---|---|
| Net sales, external customers | 215,795 | 66,298 | 25,295 | 10,743 | 5,267 | 323,398 | 11,351 | – | 334,748 |
| Net sales, internal | 685 | 199 | 783 | 376 | –1,632 | 412 | 461 | –873 | – |
| **I/S Net sales** | **216,480** | **66,497** | **26,078** | **11,119** | **3,635** | **323,809** | **11,812** | **–873** | **334,748** |
| Expenses | –197,058 | –58,591 | –25,155 | –9,682 | –6,596 | –297,082 | –9,619 | 873 | –305,828 |
| I/S Income from investments in joint ventures and associated companies | 961 | 10 | 5 | 2 | 430 | 1,407 | – | – | 1,407 |
| **I/S Operating income** | **20,383** | **7,917** | **928** | **1,439** | **–2,532** | **28,135** | **2,193** | **–** | **30,327** |
| I/S Interest income and similar credits | | | | | | 164 | – | – | 164 |
| I/S Interest expense and similar charges | | | | | | –1,852 | 0 | – | –1,852 |
| I/S Other financial income and expense | | | | | | –385 | – | – | –385 |
| **I/S Income after financial items** | | | | | | **26,062** | **2,192** | **–** | **28,254** |
| **Other segment information** | | | | | | | | | |
| Depreciation, amortization and impairment | –10,802 | –2,081 | –402 | –243 | 931 | –12,597 | –4,272 | – | –16,869 |
| Restructuring costs | 41 | –105 | – | 0 | 38 | –26 | – | – | –26 |
| Gains/losses from divestments | 66 | 250 | – | – | 4 | 320 | 0 | – | 320 |
| Investments in fixed assets | 5,490 | 811 | 327 | 348 | 956 | 7,932 | 11,469 | – | 19,401 |
| B/S Investments in joint ventures and associated companies (the equity method) | 10,098 | 255 | 64 | 31 | 78 | 10,525 | – | – | 10,525 |
| B/S Assets held for sale | | | | | | 51 | – | – | 51 |
| B/S Liabilities held for sale | | | | | | 0 | – | – | 0 |

| 2016 | Trucks | Construction Equipment | Buses | Volvo Penta | Group functions & Other incl. elim. | Industrial Operations | Financial Services | Eliminations | Volvo Group |
|---|---|---|---|---|---|---|---|---|---|
| Net sales, external customers | 200,118 | 50,490 | 24,397 | 9,575 | 6,567 | 291,147 | 10,767 | – | 301,914 |
| Net sales, internal | 532 | 241 | 989 | 318 | –1,769 | 312 | 475 | –787 | – |
| **I/S Net sales** | **200,650** | **50,731** | **25,386** | **9,893** | **4,799** | **291,459** | **11,242** | **–787** | **301,914** |
| Expenses | –185,764 | –48,447 | –24,543 | –8,623 | –5,499 | –272,875 | –9,155 | 787 | –281,243 |
| I/S Income from investments in joint ventures and associated companies | 134 | –38 | 68 | –1 | –8 | 156 | – | – | 156 |
| **I/S Operating income** | **15,020** | **2,246** | **911** | **1,269** | **–707** | **18,740** | **2,086** | **–** | **20,826** |
| I/S Interest income and similar credits | | | | | | 240 | – | – | 240 |
| I/S Interest expense and similar charges | | | | | | –1,847 | – | – | –1,847 |
| I/S Other financial income and expense | | | | | | 11 | – | – | 11 |
| **I/S Income after financial items** | | | | | | **17,144** | **2,086** | **–** | **19,230** |
| **Other segment information** | | | | | | | | | |
| Depreciation, amortization and impairment | –10,769 | –2,162 | –398 | –218 | 915 | –12,633 | –4,133 | – | –16,766 |
| Restructuring costs | –19 | –18 | 1 | –4 | – | –40 | – | – | –40 |
| Gains/losses from divestments | 40 | 18 | – | – | 877 | 936 | – | – | 936 |
| Investments in fixed assets | 7,270 | 981 | 302 | 232 | 1,243 | 10,026 | 10,770 | – | 20,796 |
| B/S Investments in joint ventures and associated companies (the equity method) | 9,595 | 254 | 74 | 29 | 1,691 | 11,643 | – | – | 11,643 |
| B/S Assets held for sale | | | | | | 525 | – | – | 525 |
| B/S Liabilities held for sale | | | | | | –148 | – | – | –148 |

| Reporting by market | Net sales | | Non-current assets[1] | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Europe | 143,236 | 131,712 | 62,007 | 60,672 |
| *of which Sweden* | *9,023* | *9,177* | *13,402* | *14,499* |
| *of which France* | *26,899* | *24,887* | *14,634* | *14,856* |
| North America | 84,047 | 80,701 | 18,946 | 20,452 |
| *of which USA* | *66,625* | *65,738* | *17,413* | *18,829* |
| South America | 17,257 | 14,863 | 2,798 | 2,837 |
| *of which Brazil* | *8,862* | *7,471* | *2,395* | *2,440* |
| Asia | 68,398 | 55,501 | 18,415 | 19,902 |
| *of which China* | *17,663* | *9,346* | *1,845* | *1,999* |
| *of which Japan* | *17,278* | *17,159* | *11,816* | *12,835* |
| Other markets | 21,811 | 19,137 | 1,461 | 1,255 |
| **I/S B/S Total** | **334,748** | **301,914** | **103,627** | **105,118** |

1 Non-current assets include tangible and intangible assets excluding goodwill.

The reporting of net sales by market is based on where the delivery of the goods or services took place.

## NOTE 7 REVENUE

### ACCOUNTING POLICY

The Volvo Group's recognized net sales pertain mainly to revenues from sales of goods and services. Net sales are, if the occasion arises, reduced by the value of rebates granted and by returns.

Revenue from the sale of goods is recognized when significant risks and rewards of ownership have been transferred to external parties, normally when the goods are delivered to the customer.

However, if the sale of goods is combined with a buy-back agreement or a residual value guarantee, the transaction is recognized as an operating lease transaction if significant risks in regard to the goods are retained in Volvo Group. Revenue is then recognized over the period of the residual value commitment. If the residual value risk commitment is not significant or the sale was made to an independent party before Volvo Group is committed to the residual value risk the revenue is recognized at the time of sale and a provision is made to reflect the estimated residual value risk.

If sale is in combination with a commitment from the customer to buy a new product in connection to a buy-back option, revenue is recognized at the time of the sale.

Revenue from the sale of workshop services is recognized when the service is provided.

Interest income in conjunction with finance leasing or instalment credit contracts are recognized as net sales within Financial Services during the underlying contract period.

Revenue for maintenance contracts are recognized in line with the allocation of associated costs over the contract period.

Interest income is recognized on a continuous basis and dividend income when the right to receive dividend is obtained.

### SOURCE OF ESTIMATION UNCERTAINTY

*Buy-back agreements and residual value guarantees*

In certain cases, Volvo Group enters into a buy-back agreement or residual value guarantee after having sold the product to an independent party or in combination with an undertaking from the customer to purchase a new product in the event of a buy-back. In such cases, there may be a question of judgement regarding whether or not significant risks and rewards of ownership have been transferred to the customer. If it is determined that such an assessment is incorrect, the Volvo Group's recognized revenue and income for the period will decline and instead be distributed over several reporting periods.

» **Read more in Note 21** Other provisions, for a description of residual value risks.

**Vehicles and Services**

The Volvo Group's product range is divided into Vehicles and Services. The sale of new vehicles, machinery and engines comprise Vehicles as well as the sale of used vehicles and machines, trailers, superstructures and special vehicles. Services are defined as the sale of spare parts, maintenance service and other aftermarket products.

During 2017, Services represented approximately 22% (23) of the net sales in Industrial Operations.

» **Read more in Note 6** Segment reporting regarding net sales by segment and market.

## NOTE 8 OTHER OPERATING INCOME AND EXPENSES

Changes in provisions for doubtful accounts receivables and customer-financing receivables are among other things recognized in Other operating income and expenses.

| Other operating income and expense | 2017 | 2016 |
|---|---|---|
| Gains/losses on divestment of Group companies[1] | 320 | 936 |
| Change in allowances and write-offs for doubtful customer-financing receivables | –534 | –677 |
| Change in allowances and write-offs for other doubtful receivables[2] | –24 | –397 |
| Damages and litigations[3] | –234 | –2,912 |
| Restructuring costs[4] | –26 | –460 |
| Volvo profit sharing program | –430 | –498 |
| Other income and expenses[5, 6] | –133 | 873 |
| I/S **Total** | **–1,061** | **–3,135** |

1 In 2016 the capital gain from the sale of external IT-operations of SEK 885 M was included.
2 Including SEK 13 M (–247) for Construction Equipment in China.
3 In 2016 cost of SEK 2,524 M related to the EU antitrust investigation was included.
4 In 2016 costs mainly related to outsourcing of IT infrastructure operations were included.
5 Including SEK 29 M (–72) for Construction Equipment in China due to lower credit losses.
6 In 2016 the gain on sale of properties in Gothenburg, Sweden of SEK 1,371 M was included.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries about gains/losses on divestment of Group companies.

» **Read more in Note 4** Goals and policies in financial risk management regarding the company's management of credit risk and credit reserves.

» **Read more in Note 15** Customer finance receivables.

» **Read more in Note 16** Receivables.

» **Read more in Note 21** Other provisions and **Note 24** Contingent liabilities about damages and litigations.

» **Read more in Note 24** Contingent liabilities about credit losses in China.

## NOTE 9 OTHER FINANCIAL INCOME AND EXPENSES

### ACCOUNTING POLICY

Unrealized revaluation on derivatives used to hedge interest rate exposure and realized result and unrealized revaluation on derivatives used to hedge future cash flow exposure in foreign currency are recognized in other financial income and expenses. Hedge accounting is not applied on those derivatives. The unrealized revaluation on derivatives used to hedge interest rate exposure was mainly related to the debt portfolio within Industrial Operations and customer-financing portfolio within Financial Services.

» **Read more in Note 1** Accounting policies about receivables and liabilities in foreign currency.

» **Read more in Note 30** Financial Instruments regarding the accounting policy for financial assets at fair value through the income statement.

| Other financial income and expense | 2017 | 2016 |
|---|---|---|
| Unrealized revaluation on derivatives used to hedge interest rate exposure | –182 | 386 |
| Realized result and unrealized revaluation on derivatives used to hedge future cash flow exposure in foreign currency | 226 | 11 |
| **Financial instruments at fair value through income statement** | **45** | **397** |
| Exchange rate gains and losses on financial assets and liabilities | –215 | –5 |
| Financial income and expenses related to taxes | 57 | –23 |
| Costs for Treasury function, credit facilities, etc[1] | –271 | –357 |
| I/S **Total**[2] | **–385** | **11** |

1 In 2016 a write-down of an entrustment loan was included of SEK –97 M.
2 Other financial income and expense attributable to financial instruments amounted to –170 M (392) and is included in the table presenting gains, losses interest income and expenses related to financial instruments in note 30 Financial Instruments.

# NOTE 10 INCOME TAXES

## ACCOUNTING POLICY

Income tax for the period includes current and deferred taxes. Current taxes are calculated on the basis of the tax regulations prevailing in the countries where the Group companies have operations.

Deferred taxes are recognized on differences that arise between the taxable value and carrying value of assets and liabilities as well as on tax-loss carryforwards. Furthermore deferred tax assets are recognized to the extent it is probable that they will be utilized against future taxable income.

Deferred tax liabilities on temporary differences on participations in subsidiaries, joint ventures and associated companies are recognized in the balance sheet except when the Volvo Group control the timing of the reversal of the temporary difference related to accumulated undistributed earnings and it is probable that a reversal will not be done in the foreseeable future.

Tax laws in Sweden and certain other countries allow companies to defer payment of taxes through allocations to untaxed reserves. In the consolidated financial statements untaxed reserves are recognized as temporary differences, which are partly recognized as deferred tax liability and partly as equity. In the consolidated income statements changes of untaxed reserves are split between deferred taxes and net income for the year.

Provisions have been made for estimated tax charges that are probable as a result of identified tax risks. Volvo Group evaluates tax processes on a regular basis and provisions are made for the estimated outcome when a reasonable assessment can be made. Tax claims, for which no provision is considered required, are generally recognized as contingent liabilities.

» **Read more in Note 24** Contingent Liabilities.

## SOURCE OF ESTIMATION UNCERTAINTY

*Deferred taxes*

The Volvo Group recognizes valuation allowances for deferred tax assets where management does not expect such assets to be realized based upon current forecasts. In the event that actual results differ from these estimates or adjustments are made to future periods in these estimates, changes in the valuation allowance may be required. This could have significant impact on the financial position and the income for the period.

The Volvo Group recognizes deferred tax assets related to substantial tax-loss carryforwards that are assessed as being probable to be utilized due to sufficient income generated in the coming years. The base for this assessment is possibilities to offset tax assets and tax liabilities and that a significant part of tax-loss carryforwards is related to countries with long or indefinite periods of utilization. In order to determine the probability of utilization of such tax-loss carryforwards business plans are used.

| Distribution of Income taxes | 2017 | 2016 |
|---|---|---|
| Current taxes relating to the period | –5,592 | –3,831 |
| Adjustment of current taxes for prior periods | –42 | –113 |
| Deferred taxes originated or reversed during the period | –1,587 | –1,749 |
| Remeasurements of deferred tax assets | 251 | –315 |
| I/S **Total income taxes** | **–6,971** | **–6,008** |

The Swedish corporate income tax rate amounted to 22% in 2017. Next table explains the major reasons for the difference between the Swedish corporate income tax rate and the Volvo Group's effective tax rate, based on income after financial items.

| Reconciliation of effective tax rate | 2017, % | 2016, % |
|---|---|---|
| **Swedish corporate income tax rate** | **22** | **22** |
| Difference between corporate tax rate in Sweden and other countries | 3 | 3 |
| Non-taxable income | –3 | –5 |
| Non-deductible expenses | 1 | 5 |
| Current taxes related to prior years | 0 | 0 |
| Remeasurement of deferred tax assets | 0 | 5 |
| Other differences | 1 | 2 |
| **Effective tax rate for the Volvo Group** | **25** | **31** |

The effective tax rate for the Volvo Group, as of December 31 2017, was mainly impacted by a cost of SEK 354 M related to revaluation of deferred tax assets and liabilities due to the tax reform legislation in the USA which will lower the corporate tax rate for 2018.

| Specification of deferred tax assets and liabilities | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Deferred tax assets: | | |
| Unused tax-loss carryforwards | 2,938 | 3,596 |
| Other unused tax credits | 183 | 167 |
| Intercompany profit in inventories | 1,524 | 1,302 |
| Allowance for inventory obsolescence | 535 | 740 |
| Valuation allowance for doubtful receivables | 971 | 1,329 |
| Provisions for warranties | 2,690 | 4,317 |
| Provisions for residual value risks | 345 | 250 |
| Provisions for post-employment benefits | 3,780 | 4,535 |
| Provisions for restructuring measures | 35 | 130 |
| Land | 1,141 | 1,218 |
| Other deductible temporary differences | 4,732 | 5,442 |
| **Deferred tax assets before deduction for valuation allowance** | **18,875** | **23,025** |
| Valuation allowance | –1,011 | –1,348 |
| **Deferred tax assets after deduction for valuation allowance** | **17,864** | **21,677** |
| Netting of deferred tax assets and liabilities | –6,082 | –7,277 |
| B/S **Deferred tax assets, net** | **11,782** | **14,399** |
| Deferred tax liabilities: | | |
| Accelerated depreciation on property, plant and equipment | 2,073 | 2,496 |
| Accelerated depreciation on leasing assets | 2,449 | 3,547 |
| LIFO valuation of inventories | 365 | 591 |
| Capitalized product and software development | 2,278 | 2,576 |
| Adjustment to fair value at corporate acquisitions/divestments | 45 | 35 |
| Untaxed reserves | 1,397 | 643 |
| Provisions for post-employment benefits | 84 | 66 |
| Other taxable temporary differences | 2,744 | 2,593 |
| **Deferred tax liabilities** | **11,435** | **12,547** |
| Netting of deferred tax assets and liabilities | –6,082 | –7,277 |
| B/S **Deferred tax liabilities, net** | **5,353** | **5,270** |
| **Deferred tax assets and liabilities, net**[1] | **6,429** | **9,129** |

1 The deferred tax assets and liabilities are recognized in the balance sheet partially on a net basis after taking into account offsetting possibilities. Deferred tax assets and liabilities have been measured at the tax rates that are expected to be applied during the period when the asset is realized or the liability is settled, according to the tax rates and tax regulations that have been resolved or enacted at the balance sheet date.

The total valuation allowance for deferred tax assets amounted to SEK 1,011 M (1,348) as of December 31, 2017. Most of the reserve, SEK 953 M (1,224), consisted of valuation allowance for unused tax-loss carryforwards, mainly related to Japan.

As of December 31, 2017, the Volvo Group's gross unused tax-loss carryforwards amounted to SEK 10,418 M (12,394) pertaining to deferred tax assets of SEK 2,938 M (3,596) recognized in the balance sheet. After deduction for valuation allowance, deferred tax assets attributable to unused tax-loss carryforwards amounted to SEK 1,985 M (2,372) of which SEK 978 M (1,122) pertains to France and SEK 433 M (448) to Japan.

The gross unused tax-loss carryforwards expire according to the following table:

| Due date, unused tax-loss carryforwards gross | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| after 1 year | 875 | 534 |
| after 2 years | 328 | 931 |
| after 3 years | 1,900 | 375 |
| after 4 years | 617 | 1,621 |
| after 5 years | 337 | 1,469 |
| after 6 years or more[1] | 6,360 | 7,463 |
| **Total** | **10,418** | **12,394** |

1 Tax-loss carryforwards with long or indefinite periods of utilization were mainly related to France. Tax-loss carryforwards with indefinite periods of utilization amounted to SEK 5,633 M (6,169) which corresponds to 54% (50) of the total unused tax-losses carryforward.

| Changes in deferred tax assets and liabilities, net | 2017 | 2016 |
|---|---|---|
| **Deferred tax assets and liabilities, net, opening balance** | **9,129** | **9,955** |
| Recognized in Income statement | –1,337 | –2,064 |
| Recognized in Other comprehensive income, whereof: | | |
| Remeasurements of defined-benefit pension plans[1] | –678 | 76 |
| Cash flow hedge reserve | 6 | –19 |
| Available-for-sale reserve | –16 | –5 |
| Translation differences and other changes | –675 | 1,186 |
| **Deferred tax assets and liabilities, net, as of December 31** | **6,429** | **9,129** |

1 Due to the new tax reform legislation in the USA deferred tax assets related to provisions for post-employment benefits were revaluated for 2017. The revaluation was mainly recognized in Other comprehensive income, SEK 449 M.

The cumulative amount of undistributed earnings in foreign subsidiaries, which the Volvo Group currently intends to indefinitely reinvest outside of Sweden and which no deferred income tax have been accounted for, amounted to SEK 27 billion (23) at year end. Undistributed earnings pertaining to countries where the dividends are not taxable are excluded.

» **Read more in Note 4** Goals and policies in financial risk management about how the Volvo Group handles equity currency risk.

## NOTE 11 MINORITY INTERESTS

### ACCOUNTING POLICY

Minority interests are interest attributable to non-controlling shareholders. Minority interests are presented in equity, separately from equity of the owners of the parent company. At business combinations minority interests are valued either at fair value or at the minority's proportionate share of the acquiree's net assets. Minority interests are assigned the minority shareholder's portion of the equity of the subsidiary. Changes in a parent's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

The Volvo Group has a few non-wholly owned subsidiaries of which one of the subsidiaries is considered to have a significant minority interest. Shandong Lingong Construction Machinery Co. (Lingong), in China has a minority interest holding amounting to 30% share and voting rights in the company. During the year, the profit allocated to the minority interest of Lingong amounted to 294 (61) and the accumulated minority interest at the end of December 31, 2017, amounted to 1,884 (1,648).

The following table presents summarized financial information for Shandong Lingong Construction Machinery Co.:

| Summarized income statement | 2017 | 2016 |
|---|---|---|
| Net sales | 10,539 | 5,384 |
| Operating income | 1,116 | 160 |
| **Income for the period** | **981** | **202** |
| Other comprehensive income[1] | –193 | 117 |
| Total comprehensive income[1] | 788 | 319 |
| Dividends paid to minority interest | – | 200 |

| Summarized balance sheet | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Non-current assets | 2,129 | 1,734 |
| Marketable securities, cash and cash equivalents | 2,603 | 2,116 |
| Current assets | 8,692 | 5,646 |
| **Total assets** | **13,424** | **9,496** |
| Non-current liabilities | 144 | 188 |
| Current liabilities | 6,999 | 3,815 |
| **Total liabilities** | **7,143** | **4,003** |
| Equity attributable to the Volvo Group's shareholders | 4,397 | 3,845 |
| Minority interests[1] | 1,884 | 1,648 |

1 Includes translation differences from translating equity in foreign subsidiaries in the Volvo Group.

# NOTE 12 INTANGIBLE ASSETS

## ACCOUNTING POLICY

Volvo Group applies the cost method for recognition of intangible assets. Borrowing costs are included in the cost of assets that are expected to take more than twelve months to complete for their intended use or sale.

When participating in industrial projects in partnership with other companies the Volvo Group in certain cases pays an entrance fee to participate. These entrance fees are capitalized as intangible assets.

*Research and development expenses*

Expenditures for the development of new products and software are recognized as intangible assets if such expenditures, with a high degree of certainty, will result in future financial benefits for the company. The cost for such intangible assets is amortized over the estimated useful life of the assets.

The rules require stringent criteria to be met for these development expenditures to be recognized as assets. For example, it must be possible to prove the technical functionality of a new product or software prior to its development expenditure being recognized as an asset. In normal cases, this means that expenditures are capitalized only during the industrialization phase of a product development project. Other research and development expenses are recognized in the income statement as incurred.

The Volvo Group has developed a process for conducting product development projects, which has six phases focused on separate parts of the project. Every phase starts and ends with a reconciliation point, known as a gate, for which the criteria must be met for the project's decision making committee to open the gate and allow the project to progress to the next phase. During the industrialization phase, the industrial system is prepared for serial production and the product is launched. A corresponding process is developed for software development.

*Goodwill*

Goodwill is recognized as an intangible asset with indefinite useful life. For non-depreciable assets such as goodwill, impairment tests are performed annually, as well as if there are indications of impairments during the year, by calculating the asset's recovery value. If the calculated recovery value is less than the carrying value, the asset is written down to its recovery value.

The Volvo Group's valuation model is based on a discounted cash flow model, with a forecast period of four years. Valuation is performed on cash generating units, identified as the Volvo Group's operating segments. Each operating segment is fully integrated ensuring maximum synergy, hence no independent cash flows exists on a lower level.

Goodwill is allocated to these cash generating units based on expected future benefit. The valuation is based on a business plan which is an integral part of the Volvo Group's financial planning process and represents management's best estimate of the development of the Group's operations. Assumption of 2% (2) long-term market growth beyond the forecast period and the Group's expected performance in this environment is a basis for the valuation. In the model, the Volvo Group is expected to maintain stable capital efficiency over time. Other parameters considered in the calculation are operating income, mix of products and services, expenses and level of capital expenditures. Measurements are based on nominal values and a general rate of inflation applicable for the main markets where the Volvo Group operates. The Volvo Group uses a discount rate at 12% (12) before tax for 2017.

In 2017, the estimated/calculated value of Volvo Group's operations exceeded the carrying amount of goodwill for all operating segments, thus no impairment was recognized. The Volvo Group has also analyzed whether a negative adjustment of one percentage point to the aforementioned parameters would result in impairment for any goodwill value, however none of the operating segments would be impaired as a result of this test. The operating parameters applied in the valuation are based on management's strategy and could indicate higher value than historical performance for each operating segment. Furthermore the Volvo Group is operating in a cyclical industry why performance could vary over time.

The surplus values differ between the operating segments why they are sensitive to changes in the assumptions described above to a varying degree. Therefore, the Volvo Group continuously follows the performance of the operating segments whose surplus value is dependent on the fulfillment of the Volvo Group's assessments. Instability in the recovery of the market and volatility in interest and currency rates may lead to indications of a need for impairment. The most important factors for the future operations of the Volvo Group are described in the Volvo Group operating segment section, as well as in the Risk management section.

*Amortization and impairment*

Amortization is made on a straight line basis based on the cost of the assets, adjusted in appropriate cases by impairments, and estimated useful lives. Amortization is recognized in the respective function to which it belongs, meaning that amortization of product development is part of the research and development expenses in the income statement. Impairment tests for amortizable assets are performed if there are indications of impairment at the balance sheet date.

**Amortization periods**

| | |
|---|---|
| Trademarks | 20 years |
| Distribution networks | 10 years |
| Product and software development | 3 to 8 years |

## SOURCE OF ESTIMATION UNCERTAINTY

*Impairment of goodwill and other intangible assets*

Intangible assets other than goodwill are amortized and depreciated over their useful lives. Useful lives are based on estimates of the period in which the assets will generate revenue. If, at the date of the financial statements, any indication exists that an intangible non-current asset has been impaired, the recoverable amount of the asset is calculated. The recoverable amount is the higher of the asset's net selling price and its value in use, estimated with reference to management's projections of future cash flows. If the recoverable amount of the asset is less than the carrying amount, an impairment is recognized and the carrying amount of the asset is reduced to the recoverable amount. Determination of the recoverable amount is based upon management's projections of future cash flows, which are generally based on internal business plans or forecasts. While management believes that estimates of future cash flows are reasonable, different assumptions regarding such cash flows could materially affect valuations. The need for impairment of goodwill is determined on an annual basis, or more frequently if required through calculation of the value of the asset. Such an impairment review will require management to determine the fair value of the Volvo Group's cash generating units, on the basis of projected cash flows and internal business plans and forecasts. Surplus values differ between the operating segments and they are, to a varying degree, sensitive to changes in assumptions and the business environment. The Volvo Group has performed similar impairment reviews since 2002. No impairment was recognized for the period 2002 until 2017. The goodwill related to planned divestments has been revaluated in accordance with IFRS 5.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries, for further information.

| Intangible assets, acquisition costs | Goodwill | Capitalized product and software development | Other intangible assets[1] | Total intangible assets |
|---|---|---|---|---|
| **Opening balance 2016** | 22,088 | 40,133 | 7,531 | **69,752** |
| Investments | – | 2,937 | 11 | **2,947** |
| Sales/scrapping | – | –545 | –49 | **–594** |
| Acquired and divested operations | 28 | –2 | 44 | **69** |
| Translation differences | 1,338 | 1,829 | 409 | **3,576** |
| Reclassification at divestment | – | – | 47 | **47** |
| Reclassifications and other | –16 | 29 | 188 | **202** |
| **Acquisition cost as of Dec 31, 2016** | **23,438** | **44,382** | **8,180** | **75,999** |
| Investments[2] | – | 2,017 | 19 | **2,036** |
| Sales/scrapping | – | –29 | –12 | **–41** |
| Acquired and divested operations | –33 | – | 63 | **30** |
| Translation differences | –568 | –1,072 | –185 | **–1,826** |
| Reclassification at divestment | 17 | 3 | 1 | **20** |
| Reclassifications and other | 0 | –34 | 44 | **10** |
| **Acquisition cost as of Dec 31, 2017** | **22,853** | **45,266** | **8,109** | **76,228** |

| Intangible assets, accumulated amortization and impairment | Goodwill | Capitalized product and software development | Other intangible assets[1] | Total intangible assets |
|---|---|---|---|---|
| **Opening balance 2016** | – | 28,431 | 4,905 | **33,336** |
| Amortization | – | 2,836 | 372 | **3,208** |
| Impairment | – | 20 | 132 | **152** |
| Revaluation | 71 | – | – | **71** |
| Sales/scrapping | – | –503 | –49 | **–552** |
| Acquired and divested operations | – | –2 | –7 | **–10** |
| Translation differences | – | 1,426 | 208 | **1,634** |
| Reclassification at divestment | – | – | 46 | **46** |
| Reclassifications and other | – | 8 | 189 | **198** |
| **Accumulated amortization and impairment as of Dec 31, 2016** | **71** | **32,217** | **5,794** | **38,083** |
| Amortization | – | 2,840 | 320 | **3,160** |
| Impairment | – | – | 86 | **86** |
| Sales/scrapping | – | –21 | –12 | **–33** |
| Acquired and divested operations | – | 0 | 1 | **1** |
| Translation differences | – | –851 | –100 | **–951** |
| Reclassification at divestment | – | 0 | 0 | **0** |
| Reclassifications and other | – | –35 | 24 | **–11** |
| **Accumulated amortization and impairment as of Dec 31, 2017** | **71** | **34,150** | **6,113** | **40,334** |
| **B/S Net value in balance sheet as of December 31, 2016[3]** | **23,366** | **12,164** | **2,386** | **37,916** |
| **B/S Net value in balance sheet as of December 31, 2017[3]** | **22,781** | **11,116** | **1,996** | **35,893** |

1 Other intangible assets mainly consist of entrance fees in industrial programs, trademarks and distribution networks.
2 Including capitalized borrowing costs of SEK 30 M (65).
3 Acquisition costs less accumulated amortization and impairments.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries, for a description of acquired and divested operations.

| Goodwill per Operating Segment | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Trucks | 12,496 | 12,865 |
| Construction Equipment | 8,514 | 8,873 |
| Buses | 1,042 | 1,059 |
| Other operating segments | 729 | 570 |
| **Total goodwill value** | **22,781** | **23,366** |

# NOTE 13 TANGIBLE ASSETS

## ACCOUNTING POLICY

The Volvo Group applies the cost method for measurement of tangible assets. Borrowing costs are included in the acquisition value of assets that are expected to take more than 12 months to complete for their intended use or sale.

Investment properties are properties owned for the purpose of obtaining rental income and appreciation in value. Investment properties are recognized at cost. For disclosure purposes, information regarding the estimated fair value of investment properties is based on an internal discounted cash flow projection. The required return is based on current property market conditions for comparable properties in comparable locations. The applied valuation method is classified as level 3 as per the fair value hierarchy in IFRS 13 and there have not been any changes in valuation method during the year.

Investment properties are classified as buildings. Land contains land and land improvements. Machinery is machinery, type-bound tools and other equipment. Ongoing projects are assets under construction and advanced payments. Operating leases are assets owned by the Group, which are subject of operating lease agreements with customers. Rental fleet is assets used in a fleet for rental business. Sales with residual value commitment are sales where the operating lease model is applied.

### Depreciation and impairment

Property, plant and equipment are depreciated over their useful lives. Useful lives are based on estimates of the period over which the assets will generate revenue. Land is not depreciated.

Depreciation is recognized on a straight-line basis based on the cost of the assets, adjusted in appropriate cases by impairments, and estimated useful lives. Depreciation is recognized in the respective function to which it belongs. Impairment tests for depreciable non-current assets are performed if there are indications of impairment at the balance-sheet date.

| Depreciation periods | |
|---|---|
| Type-specific tools | 3 to 8 years |
| Operating leases, Rental fleet | 3 to 5 years |
| Sales with residual value commitments | 3 to 5 years |
| Machinery | 5 to 20 years |
| Buildings and investment properties | 20 to 50 years |
| Land improvements | 20 years |

## SOURCE OF ESTIMATION UNCERTAINTY

*Impairment of tangible assets*

If, at the balance-sheet date, there is any indication that a tangible asset has been impaired, the recoverable amount of the asset should be estimated. The recoverable amount is the higher of the asset's net selling price and its value in use, estimated with reference to management's projections of future cash flows. If the recoverable amount of the asset is less than the carrying amount, an impairment loss is recognized and the carrying amount of the asset is reduced to the recoverable amount. To determine the recoverable amount, management's projections of future cash flows are used, which are generally based upon internal business plans or forecasts. While management believes that estimates of future cash flows are reasonable, different assumptions regarding such cash flows could materially affect valuations.

| Tangible assets, Acquisition cost | Buildings | Land | Machinery[3] | Ongoing projects | Operating leases | Rental fleet | Sales w. residual value commitments[5] | Total tangible assets |
|---|---|---|---|---|---|---|---|---|
| **Opening balance 2016** | 34,835 | 11,522 | 74,795 | 4,303 | 26,578 | 3,545 | 14,917 | **170,494** |
| Investments | 944 | 152 | 1,803 | 4,134 | 10,720 | – | – | **17,752** |
| Sales/scrapping | –2,539 | –866 | –2,621 | –61 | –9,998 | – | – | **–16,085** |
| Acquired and divested operations | –163 | –53 | –979 | – | – | –315 | – | **–1,510** |
| Translation differences | 2,095 | 905 | 3,583 | 350 | 953 | 121 | 721 | **8,729** |
| Reclassified at divestment | 365 | 306 | 976 | 36 | – | –52 | – | **1,632** |
| Reclassifications and other | 1,115 | 95 | 2,511 | –3,859 | –126 | 900 | 398 | **1,035** |
| **Acquisition costs as of Dec 31, 2016** | **36,652** | **12,062** | **80,068** | **4,902** | **28,127** | **4,198** | **16,036** | **182,046** |
| Investments[1] | 316 | 78 | 1,643 | 3,831 | 11,496 | – | – | **17,364** |
| Sales/scrapping | –390 | –62 | –2,268 | –15 | –8,547 | – | – | **–11,281** |
| Acquired and divested operations | –80 | –8 | –78 | 0 | 0 | –9 | –108 | **–283** |
| Translation differences | –916 | –338 | –1,526 | –239 | –672 | –56 | 28 | **–3,719** |
| Reclassified at divestment | 46 | –13 | 5 | 0 | – | 343 | – | **382** |
| Reclassifications and other | 1,329 | 53 | 2,827 | –4,399 | –316 | 794 | 1,242 | **1,530** |
| **Acquisition costs as of Dec 31, 2017** | **36,957** | **11,772** | **80,672** | **4,081** | **30,087** | **5,271** | **17,199** | **186,040** |

| Tangible assets, Accumulated depreciation and impairments | Buildings | Land | Machinery[3] | Ongoing projects | Operating leases | Rental fleet | Sales w. residual value commitments[5] | **Total tangible assets** |
|---|---|---|---|---|---|---|---|---|
| **Opening balance 2016** | 17,347 | 1,198 | 53,281 | 11 | 7,884 | 821 | 3,802 | **84,345** |
| Depreciation | 1,325 | 85 | 4,888 | – | 4,164 | 657 | 2,016 | **13,135** |
| Impairment | 22 | 22 | –3 | – | – | –88 | 245 | **199** |
| Sales/scrapping | –1,558 | –176 | –2,367 | – | –4,091 | – | – | **–8,192** |
| Acquired and divested operations | –113 | –7 | –721 | – | – | –138 | – | **–979** |
| Translation differences | 1,023 | 72 | 2,609 | – | 256 | 28 | 213 | **4,201** |
| Reclassified at divestment | 256 | 29 | 728 | – | – | 51 | – | **1,065** |
| Reclassifications and other | –76 | –2 | –64 | – | 4 | –247 | –1,911 | **–2,296** |
| **Accumulated depreciation and impairments as of Dec 31, 2016** | **18,227** | **1,221** | **58,351** | **11** | **8,217** | **1,085** | **4,366** | **91,477** |
| Depreciation | 1,313 | 88 | 5,063 | – | 4,311 | 759 | 1,972 | **13,507** |
| Impairment | 0 | 0 | –13 | 4 | – | 0 | 125 | **116** |
| Sales/scrapping | –304 | –37 | –2,133 | – | –3,419 | – | – | **–5,893** |
| Acquired and divested operations | –43 | –1 | –53 | – | – | –1 | –36 | **–135** |
| Translation differences | –478 | –19 | –1,114 | – | –181 | –5 | –35 | **–1,832** |
| Reclassified at divestment | 36 | 16 | 4 | – | – | 81 | – | **138** |
| Reclassifications and other | 8 | –3 | –8 | – | –164 | –448 | –1,238 | **–1,853** |
| **Accumulated depreciation and impairments as of Dec 31, 2017** | **18,759** | **1,265** | **60,097** | **15** | **8,765** | **1,471** | **5,154** | **95,526** |
| B/S **Net value in balance sheet as of Dec 31, 2016**[2, 4] | **18,425** | **10,842** | **21,717** | **4,891** | **19,910** | **3,113** | **11,670** | **90,568** |
| B/S **Net value in balance sheet as of Dec 31, 2017**[2, 4] | **18,198** | **10,507** | **20,575** | **4,066** | **21,322** | **3,800** | **12,045** | **90,514** |

1 Including capitalized borrowing costs of SEK 0 M (33).
2 Acquisition costs less accumulated depreciation and impairments.
3 Machinery and equipment pertains mainly to production related assets.
4 Of which investment property SEK 31 M (34) and property, plant and equipment as well as ongoing projects SEK 53,317 M (55,841).
5 » **Read more in Note 7** Revenue about sales with residual value commitments.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries, for a description of acquired and divested operations.

Reclassifications and other presented in the table above mainly consist of assets within sales with residual value commitments related to legal sales transactions, where revenue is deferred and accounted for as operating lease revenue. Assets classified as inventory will, when the operating lease model is applied for revenue recognition, be reclassified from inventory to sales with residual value commitments, when the legal sales transaction occurs. If the product is returned after the lease period, there will be a reclassification from sales with residual value commitments back to inventory. When a buy-back agreement has expired, but the related product is not returned, the cost and the accumulated depreciation are reversed in reclassifications and other, within the line item sales with residual value commitments. Most reclassifications within tangible assets relate to construction in progress, which are reclassified to the respective category within property, plant and equipment. Most reclassifications within rental fleet relate to assets moved from inventory to rental fleet during the time the product is used in the rental business. When the product is de-fleeted it is reclassified back to inventory from rental fleet on the line reclassifications and other.

**Investment properties**

The acquisition value of investment properties at year-end amounted to SEK 72 M (73). Capital expenditures during 2017 amounted to SEK 0 M (1) and reclassifications amounted to SEK –1 M (0). Accumulated depreciation amounted to SEK 41 M (38) at year-end, of which SEK 2 M (24) refers to 2017. The estimated fair value of investment properties amounted to SEK 62 M (61) at year-end and 98% (98) of the area available for lease was leased out during the year. Operating income was affected by rental income from investment properties that amounted to SEK 6 M (88) and direct costs that amounted to SEK 1 M (22). The change compared with the previous year was mainly due to divestment of properties in Gothenburg in 2016.

# NOTE 14 LEASING

## ACCOUNTING POLICY

*Volvo Group as the lessor*

Leasing contracts are defined in two categories, operating and finance leases, depending on the contract's financial implications. Operating lease contracts are recognized as non-current assets in Assets under operating leases. Income from operating lease is recognized equally distributed over the leasing period. Straight-line depreciation is applied to these assets in accordance with the terms of the undertaking and the depreciation amount is adjusted to correspond to the estimated realizable value when the undertaking expires. Assessed impairments are charged to the income statement. The product's assessed realizable value at expiration of the undertaking is reviewed continuously on an individual basis.

Finance lease contracts are recognized as either non-current or current receivables in Financial Services. Payments from finance lease contracts are distributed between interest income and amortization of the receivable in Financial Services.

*Volvo Group as the lessee*

As for lessors, leases are divided into operating and finance lease. Finance lease are those cases when risks and rewards related to ownership are substantially held by the Volvo Group. Volvo Group recognizes the asset and related obligation in the balance sheet at the lower of the leased asset's fair value or the present value of minimum lease payments. Future lease fee commitments are recognized as obligations. The lease asset is depreciated in accordance with the Volvo Group's policy for the respective tangible asset. The lease payments made are allocated between amortization and interest expenses. If the lease contract is considered to be an operating lease, lease payments are recognized as operating expenses in profit or loss over the lease contract period.

### Volvo Group as the lessor

As of December 31, 2017, future rental income from non-cancellable finance and operating leases (minimum lease fees excluding sales with residual value commitments) amounted to SEK 66,210 M (61,517).

| Future rental income | Finance leases | Operating leases |
|---|---|---|
| 2018 | 16,812 | 7,053 |
| 2019–2022 | 26,379 | 14,227 |
| 2023 or later | 1,065 | 674 |
| **Total** | **44,256** | **21,954** |
| Allowance for uncollectible future rental income | –651 | |
| Unearned rental income | –2,741 | |
| Present value of future rental income related to non-cancellable leases | 40,863 | |

» **Read more in Note 15** Customer-financing receivables about finance leases.

### Volvo Group as a lessee

As of December 31, 2017, future rental payments (minimum leasing fees) related to non-cancellable leases amounted to SEK 6,736 M (6,534).

| Future rental payments | Finance leases | Operating leases |
|---|---|---|
| 2018 | 206 | 1,619 |
| 2019–2022 | 586 | 2,838 |
| 2023 or later | 400 | 1,087 |
| **Total** | **1,192** | **5,544** |

| Rental expenses | 2017 | 2016 |
|---|---|---|
| Finance leases: | | |
| Contingent rents | –7 | –6 |
| Operating leases: | | |
| Contingent rents | –33 | –37 |
| Rental payments | –1,840 | –1,638 |
| Sublease payments | 14 | 7 |
| **Total** | **–1,866** | **–1,674** |

| Carrying amount of assets subject to financial leases | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Acquisition value: | | |
| Buildings | 732 | 670 |
| Land | 81 | 80 |
| Machinery | 811 | 661 |
| Assets under operating lease and rental fleet[1] | 370 | 538 |
| **Total** | **1,995** | **1,948** |
| Accumulated depreciation: | | |
| Buildings | –174 | –117 |
| Land | –7 | –5 |
| Machinery | –475 | –340 |
| Assets under operating lease and rental fleet[1] | –148 | –177 |
| **Total** | **–805** | **–640** |
| Carrying amount in the balance sheet: | | |
| Buildings | 557 | 552 |
| Land | 74 | 74 |
| Machinery | 336 | 321 |
| Assets under operating lease and rental fleet[1] | 222 | 361 |
| **Total** | **1,189** | **1,309** |

1 Refer to assets leased by the Volvo Group as finance lease which are later leased to customers as operating lease.

# NOTE 15 CUSTOMER-FINANCING RECEIVABLES

## ACCOUNTING POLICY

Installment credits, dealer financing and other receivables are valued at amortized cost in accordance with the effective interest method. For information on recognition and classification on financial leasing see Note 14 Leasing. Changes to the credit loss reserves are recognized in Other operating income and expense.

## SOURCE OF ESTIMATION UNCERTAINTY

*Credit loss reserves*

The assessment of credit loss reserves on customer-financing receivables is dependent on estimates including assumptions regarding past dues, repossession rates and the recovery rate on the underlying collaterals. The impairment requirement is primarily evaluated for each respective asset. If, based on objective grounds, it cannot be determined that one or more assets are subject to an impairment loss, the assets are grouped in units based, for example, on similar credit risks to evaluate the impairment loss requirement collectively. This is in order to cover credit losses incurred but not yet individually identified in a larger population. Individually impaired assets or assets impaired during previous periods are not included when grouping assets for collective assessment. If the conditions that gave rise to the recognition of an impairment loss later prove to no longer be valid the impairment loss is reversed in the income statement as long as the carrying amount does not exceed the amortized cost at the time of the reversal.

As of December 31, 2017, the total credit loss reserves in Financial Services amounted to 1.35% (1.43) of the total credit portfolio in Financial Services. This reserve ratio, which is used as an important measure for Financial Services, includes operating leases and inventory, whereas this note specifies the balance sheet item customer-financing receivables for the Volvo Group and thereby excludes operating leases and inventory as they are recognized elsewhere in the balance sheet.

» **Read more in Note 4** Goals and policies in financial risk management for a description of the credit risk, interest and currency risks.

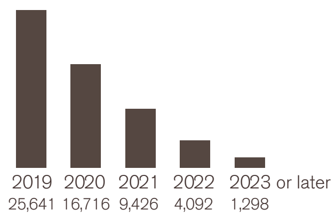
» **Read more in Note 30** Financial instruments for further information regarding customer-financing receivables.

| **Non-current customer-financing receivables** | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Installment credits | 30,237 | 32,752 |
| Financial leasing | 26,038 | 24,011 |
| Other receivables | 898 | 1,064 |
| B/S **Non-current customer-financing receivables** | **57,173** | **57,827** |

The effective interest rate for non-current customer-financing receivables amounted to 4.78% (4.80) as of December 31, 2017.

15:1

NON-CURRENT CUSTOMER-FINANCING RECEIVABLES MATURITIES, SEK M




15:2

| **Current customer-financing receivables** | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Installment credits | 18,227 | 18,926 |
| Financial leasing | 14,825 | 13,649 |
| Dealer financing | 17,777 | 18,996 |
| Other receivables | 1,375 | 1,424 |
| B/S **Current customer-financing receivables** | **52,205** | **52,994** |

The effective interest rate for current customer-financing receivables amounted to 4.84% (4.83) as of December 31, 2017.

15:3

| **Credit risk in customer-financing receivables** | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Customer-financing receivables gross | 110,954 | 112,510 |
| Valuation allowance for doubtful customer-financing receivables | –1,576 | –1,689 |
| *Whereof specific reserve* | *–348* | *–413* |
| *Whereof other reserve* | *–1,228* | *–1,276* |
| **Customer-financing receivables, net of allowance** | **109,378** | **110,821** |

15:4

| **Change of valuation allowance for doubtful customer-financing receivables** | 2017 | 2016 |
|---|---|---|
| Opening balance | 1,689 | 1,514 |
| New valuation allowance charged to income | 568 | 751 |
| Reversal of valuation allowance charged to income | –98 | –46 |
| Utilization of valuation allowance related to actual losses | –503 | –679 |
| Translation differences | –79 | 148 |
| **Valuation allowance for doubtful customer-financing receivables as of December 31** | **1,576** | **1,689** |

15:5

| Overdues in relation to specific reserves for customer-financing receivables | Dec 31, 2017 | | | | | Dec 31, 2016 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Not due | 1–30 | 31–90 | >90 | **Total** | Not due | 1–30 | 31–90 | >90 | **Total** |
| Overdue amount | 0 | 842 | 167 | 59 | **1,068** | 0 | 556 | 176 | 50 | **782** |
| Valuation allowance for doubtful customer-financing receivables, specific reserve | –142 | –34 | –88 | –84 | **–348** | –107 | –65 | –85 | –155 | **–412** |
| **Customer-financing receivables after deduction of specific reserve** | **–142** | **808** | **79** | **–25** | **720** | **–107** | **491** | **91** | **–105** | **370** |

15:6

The table above presents overdue payments within Financial Services in relation to specific reserves. It is not unusual for a receivable to be settled a couple of days after its due date, which impacts the age interval of 1–30 days. Valuation allowance presented within the interval not due and the higher valuation allowance compared to the overdue amount presented in the interval > 90 days, is mainly an effect of recognition of allowance on portions of contracts that have not yet been invoiced. The total contractual amount to which the overdue payments pertain are presented in the table below. In order to provide for occurred but not yet identified customer-financing receivables overdue, there were additional reserves of 1,228 (1,276), included in table 15:4. The remaining exposure was secured by liens on the financed equipment and, in certain circumstances, other credit enhancements such as personal guarantees, credit insurance, liens on other property owned by the borrower etc.

Collaterals taken in possession that meet the criteria for recognition in the Balance sheet amounted to SEK 230 M (135) as of December 31, 2017.

| Customer-financing receivables total exposure | Dec 31, 2017 | | | | | Dec 31, 2016 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Not due | 1–30 | 31–90 | >90 | **Total** | Not due | 1–30 | 31–90 | >90 | **Total** |
| **Customer financing receivables** | 96,545 | 12,770 | 1,458 | 181 | **110,954** | 101,478 | 9,003 | 1,739 | 290 | **112,510** |

15:7

### Concentration of credit risk

Customer concentration

The ten largest customers within Financial Services account for 6.3% (7.3) of the total asset portfolio. The rest of the portfolio is pertinent to a large number of customers. Hence the credit risk is spread across many markets and customers.

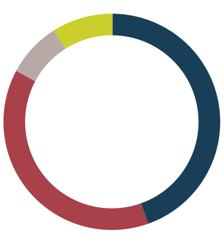
Concentration by geographical market

The adjacent table discloses the concentration of Financial Services portfolio divided into geographical markets.

» **Read more in Note 4** Goals and policies in financial risk management about credit risks.

» **Read more about** Financial Services' development during the year in the Board of Directors' Report.

GEOGRAPHIC MARKET, PERCENTAGE OF CUSTOMER-FINANCING PORTFOLIO (%).




15:8

## NOTE 16 RECEIVABLES

### ACCOUNTING POLICY

Receivables are recognized at amortized cost. Changes to the credit loss reserves as well as any interest and gain or loss upon divestment of receivables are recognized in Other operating income and expense.

» **Read more in Note 30** Financial Instruments in section Derecognition of financial assets, for receivables subject to cash enhancement activities.

### SOURCE OF ESTIMATION UNCERTAINTY

*Credit loss reserves*

An allowance for account receivables is recognized as soon as it is probable that a credit loss has incurred, that is when there has been an event that has triggered the customer's inability to pay. As of December 31, 2017, the total credit loss reserves for account receivables amounted to 2.76% (4.02) of total account receivables.

» **Read more in Note 4** Goals and policies in financial risk management regarding credit risk.

| Non-current receivables | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Other interest-bearing loans to external parties[1] | 383 | 700 |
| Other receivables | 3,465 | 3,046 |
| Outstanding interest and currency risk derivatives[2] | 2,769 | 1,648 |
| Outstanding raw materials derivatives | – | 11 |
| **Non-current receivables** | **6,616** | **5,406** |

1 The amount is the non-current part of Other interest-bearing receivables in table 30:1 in Note 30.
2 The amount is the non-current part of Outstanding interest and currency risk derivatives in table 30:1 in Note 30.

| Current receivables | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Other interest-bearing receivables[1] | 205 | 405 |
| Other interest-bearing financial receivables | – | 27 |
| Accounts receivable | 40,774 | 34,419 |
| Prepaid expenses and accrued income | 2,888 | 3,120 |
| VAT receivables | 3,656 | 4,025 |
| Outstanding interest and currency risk derivatives[2] | 1,122 | 1,378 |
| Other receivables | 7,601 | 8,570 |
| Outstanding raw materials derivatives | – | 21 |
| **Current receivables, after deduction of valuation allowances for doubtful accounts receivable** | **56,245** | **51,964** |

1 The amount is the current part of Other interest-bearing receivables in table 30:1 in Note 30.
2 The amount is the current part of Outstanding interest and currency risk derivatives in table 30:1 in Note 30.

*Credit risks in accounts receivable*

| Change of valuation allowance for doubtful accounts receivable | 2017 | 2016 |
|---|---|---|
| Opening balance | 1,443 | 1,219 |
| New valuation allowance charged to income | 260 | 655 |
| Reversal of valuation allowance charged to income | –254 | –275 |
| Utilization of valuation allowance related to actual losses | –252 | –221 |
| Acquired and divested operations | –2 | –1 |
| Translation differences | –40 | 43 |
| Reclassifications, etc | 1 | 23 |
| **Valuation allowance for doubtful accounts receivables as of December 31** | **1,156** | **1,443** |

» **Read more in Note 8** Other operating income and expenses for information regarding credit provisions for Construction Equipment in China.

» **Read more in Note 15** Customer-financing receivables for information regarding credit risk.

» **Read more in Note 30** Financial instruments.

| Age analysis of portfolio value – Accounts receivable | Dec 31, 2017 | | | | | Dec 31, 2016 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Not Due | 1–30 | 31–90 | >90 | **Total** | Not Due | 1–30 | 31–90 | >90 | **Total** |
| Accounts receivable gross | 38,387 | 1,402 | 617 | 1,523 | **41,930** | 32,094 | 1,317 | 521 | 1,929 | **35,862** |
| Provision for doubtful accounts receivable | –407 | –13 | –15 | –721 | **–1,156** | –414 | –19 | –17 | –992 | **–1,443** |
| **B/S Accounts receivable net** | **37,981** | **1,389** | **602** | **801** | **40,774** | **31,679** | **1,298** | **504** | **937** | **34,419** |

## NOTE 17 INVENTORIES

### ACCOUNTING POLICY

Inventories are recognized at the lower of cost and net realizable value.

The cost is established using the first-in, first-out principle (FIFO) and is based on the standard cost method, including costs for all direct manufacturing expenses and the attributable share of capacity and other manufacturing-related costs. The standard costs are tested regularly and adjustments are made based on current conditions. Costs for research and development, selling, administration and financial expenses are not included.

Net realizable value is calculated as the selling price less costs attributable to the sale.

### SOURCE OF ESTIMATION UNCERTAINTY

*Inventory obsolescence*

If the net realizable value is lower than cost, a valuation allowance is established for inventory obsolescence. The total inventory value, net of inventory obsolescence allowance, was SEK 52,701 M (48,287) as of December 31, 2017.

| Inventory | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Finished products | 32,304 | 31,012 |
| Production materials, etc. | 20,397 | 17,275 |
| **B/S Inventory** | **52,701** | **48,287** |

Inventories recognized as cost of sold products during the period amounted to SEK 235,620 M (212,398).

| Increase (decrease) in allowance for inventory obsolescence | 2017 | 2016 |
|---|---|---|
| **Opening balance** | **3,683** | **3,624** |
| Change in allowance for inventory obsolescence charged to income | 304 | 480 |
| Scrapping | –391 | –576 |
| Translation differences | –116 | 177 |
| Reclassifications etc. | 8 | –23 |
| **Allowance for inventory obsolescence as of December 31** | **3,489** | **3,683** |

## NOTE 18 MARKETABLE SECURITIES AND LIQUID FUNDS

### ACCOUNTING POLICY

Cash and cash equivalents include highly liquid interest-bearing securities that are considered easily convertible to cash. This includes marketable securities, with a date of maturity within three months at the time of investment. Interest-bearing securities that fail to meet this definition are recognized as marketable securities.

| Marketable securities | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Government securities | 178 | 201 |
| Banks and financial institutions | – | 1,000 |
| Real estate financial institutions | – | 21 |
| B/S **Marketable securities** | **178** | **1,223** |

| Cash and cash equivalents | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Cash in banks | 27,336 | 22,226 |
| Bank certificates | 747 | 531 |
| Time deposits in banks | 8,009 | 1,192 |
| B/S **Cash and cash equivalents** | **36,092** | **23,949** |

Cash and cash equivalents as of December 31, 2017, include SEK 1.3 billion (0.8) that is not available for use by the Volvo Group and SEK 5.0 billion (6.0) where other limitations exist, mainly liquid funds in countries where exchange controls or other legal restrictions apply. Therefore it is not possible to immediately use these liquid funds in other parts of the Volvo Group, however there is normally no limitation to use them for the Volvo Group's operation in the respective country.

## NOTE 19 EQUITY AND NUMBER OF SHARES

### ACCOUNTING POLICY

Earnings per share before dilution is calculated as income for the period, attributable to the Parent Company's shareholders, divided by the Parent Company's average number of shares outstanding for the fiscal year. Diluted earnings per share is calculated as income for the period attributable to the Parent Company's shareholders divided by the average number of shares outstanding plus the average number of shares that would be issued as an effect of ongoing share-based incentive programs. If during the year there were potential shares redeemed or expired during the period, these are also included in the average number of shares used to calculate the earnings per share after dilution.

The shares of the Parent Company is divided into two series of shares, A and B. Both series carry the same rights, except that each Series A share carries the right to one vote and each Series B share carries the right to one tenth of a vote. The shares' quota value is SEK 1.20.

Cash dividend 2017, decided by the Annual General Meeting 2016, was SEK 3.25 (3.00) per share or totally SEK 6,603 M (6,093).

During 2017 AB Volvo transferred, free of consideration, 412,599 treasury B-shares, with a total quota value of 495,118 SEK, to participants in the long-term share-based incentive program for Group and senior executives in the Volvo Group, as accelerated allotment. The transferred treasury shares represent an insignificant portion of the share capital of AB Volvo.

During 2017 AB Volvo converted a total of 12,549,713 Series A shares to Series B shares.

Unrestricted equity in the Parent Company as of December 31, 2017 amounted to SEK 45,643 M (33,207).

» **Read more in Note 27** Personnel about the Volvo Group share-based incentive program.

| Information regarding number of shares | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Own Series A shares | 20,728,135 | 20,728,135 |
| Own Series B shares | 75,837,801 | 76,250,400 |
| **Total own shares** | **96,565,936** | **96,978,535** |
| Own shares in % of total registered shares | 4.54 | 4.77 |
| Outstanding Series A shares | 459,247,373 | 471,797,086 |
| Outstanding Series B shares | 1,572,606,911 | 1,559,644,599 |
| **Total outstanding shares** | **2,031,854,284** | **2,031,441,685** |
| Total registered Series A shares | 479,975,508 | 492,525,221 |
| Total registered Series B shares | 1,648,444,712 | 1,635,894,999 |
| **Total registered shares** | **2,128,420,220** | **2,128,420,220** |
| Average number of outstanding shares | 2,031,651,288 | 2,031,173,306 |

| Information regarding shares | 2017 | 2016 |
|---|---|---|
| Number of outstanding shares, December 31, in millions | 2,032 | 2,031 |
| Average number of shares before dilution in millions | 2,032 | 2,031 |
| Shares that would be issued as an effect of ongoing shared-based incentive programs, in millions | 2 | 2 |
| Average number of shares after dilution in millions | 2,033 | 2,033 |
| Average share price, SEK | 140.93 | 91.19 |
| Net income attributable to Parent Company shareholders | 20,981 | 13,147 |
| Basic earnings per share, SEK | 10.33 | 6.47 |
| Diluted earnings per share, SEK | 10.32 | 6.47 |

| Change in other reserves | Hedge reserve | Available-for-sale reserve | Total |
|---|---|---|---|
| Opening balance 2017 | 20 | 251 | 271 |
| Other changes | –20 | | –20 |
| Fair value adjustments regarding holdings in Japanese companies | | 65 | 65 |
| Fair value adjustments regarding other companies | | –76 | –76 |
| **Balance as of December 31, 2017** | **0** | **240** | **240** |

## NOTE 20 PROVISIONS FOR POST-EMPLOYMENT BENEFITS

The Volvo Group's post-employment benefits, such as pensions, healthcare and other benefits are mainly settled by means of regular payments to independent authorities or bodies that assume pension obligations and administer pensions through defined contribution plans.

The remaining post-employment benefits are defined benefit plans; that is, the obligations remain within the Volvo Group or are secured by proprietary pension foundations. The Volvo Group's defined benefit plans relate mainly to subsidiaries in the USA and comprise both pensions and other benefits, such as healthcare. Other large-scale defined benefit plans apply to white collar employees in Sweden (mainly through the ITP pension plan) and employees in France and Great Britain.

### ACCOUNTING POLICY

Actuarial calculations are made for all defined benefit plans in order to determine the present value of obligation for benefits vested by its current and former employees. The actuarial calculations are prepared annually and are based upon actuarial assumptions that are determined at the balance sheet date each year. Changes in the present value of obligations due to revised actuarial assumptions and experience adjustments constitute remeasurements.

Provisions for post-employment benefits in the Volvo Group's balance sheet correspond to the present value of obligations at year-end, less fair value of plan assets. Discount rate is used when calculating the net interest income or expense on the net defined benefit liability (asset). All changes in the net defined liability (asset) are recognized when they occur. Service cost and net interest income or expense are recognized in the income statement, while remeasurements such as actuarial gains and losses are recognized in other comprehensive income. Special payroll tax is included in the pension liability in pension plans in Sweden and Belgium.

For defined contribution plans, premiums are recognized in the income statement as incurred, split by function.

### ! SOURCE OF ESTIMATION UNCERTAINTY

*Assumptions when calculating pensions and other post-employment benefits*

Provisions and costs for post-employment benefits, mainly pensions and health care benefits, are dependent on assumptions used by actuaries when calculating these amounts. The appropriate assumptions and actuarial calculations are made separately for the respective countries of the Volvo Group's operations which result in obligations for post-employment benefits. The assumptions include discount rates, health care cost trends rates, inflation, salary increase, retirement rates, mortality rates and other factors. Healthcare cost trend assumptions are based on historical cost data, the near-term outlook and an assessment of likely long-term trends. Inflation assumptions are based on an evaluation of external market indicators. The salary increase assumptions reflect the historical trend, the near-term outlook and assumed inflation. Retirement and mortality rates are based primarily on officially available mortality statistics. The actuarial assumptions are reviewed annually by the Volvo Group and modified when deemed appropriate.

The following tables disclose information about defined benefit plans. The Volvo Group recognizes the difference between the obligations and the plan assets in the balance sheet. The disclosures refer to assumptions applied for actuarial calculations, recognized costs during the financial year and the value of obligations and plan assets at year-end. The tables also include a reconciliation of obligations and plan assets during the year.

| Summary of provision for post-employment benefits | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Obligations | –54,976 | –53,508 |
| Fair value of plan assets | 40,753 | 38,917 |
| **Net provision for post-employment benefits** | **–14,224** | **–14,590** |

**Sweden**

The main defined benefit plan in Sweden is the ITP2 plan and it is based on final salary. The plan is semi-closed, meaning that only new employees born before 1979 have the possibility to choose the ITP2 solution. The Volvo Group's pension foundation in Sweden was formed in 1996 to secure obligations relating to retirement pensions for white collar workers in Sweden in accordance with the ITP plan. Plan assets amounting to SEK 2,456 M were contributed to the foundation at its formation, corresponding to the value of the pension obligations at that time. Since its formation, net contributions of SEK 3,414 M have been made to the foundation. No contributions were made during 2017, instead a reimbursement of SEK 5 M was paid out from the foundation. The plan assets in the Volvo Group's Swedish pension foundation are invested in Swedish and foreign stocks and mutual funds, and in interest-bearing securities, in accordance with a distribution that is determined by the foundation's Board of Directors. As of December 31, 2017, the fair value of the foundation's plan assets amounted to SEK 12,187 M (11,354), of which 44% (47) was invested in equity instruments. At the same date, retirement pension obligations attributable to the ITP plan amounted to SEK 16,940 M (14,437).

Swedish companies can secure new pension obligations through balance sheet provisions or pension fund contributions. Furthermore, a credit insurance policy must be taken out for the value of the obligations. In addition to benefits relating to retirement pensions, the ITP plan also includes, for example, a collective family pension, which the Volvo Group finances through an insurance policy with the Alecta insurance company. According to an interpretation from the Swedish Financial Reporting Board, this is a multi-employer defined benefit plan. For fiscal year 2017, the Volvo Group did not have access to information from Alecta that would have enabled this plan to be recognized as a defined benefit plan. Accordingly, the plan has been recognized as a defined contribution plan. The Volvo Group estimates it will pay premiums of about SEK 278 M to Alecta in 2018. The collective consolidation level measures the apportionable assets in relation to the insurance commitment. According to Alecta's consolidation policy for defined benefit pension insurance, the collective consolidation level is normally allowed to vary between 125% and 155%. Alecta's consolidation ratio amounts to 154% (149). If the consolidation level falls short or exceeds the normal interval one measure may be to increase the contract price for new subscription and expanding existing benefits or introduce premium reductions.

The Volvo Group's share of the total saving premiums for ITP2 in Alecta as of December 31, 2017 amounted to 0.33% (0.33) and the share of the total number of active policy holders amounted to 1.69% (1.67).

All employees in Sweden benefit from a jubilee awards plan according to which they receive a certain number of shares after they have rendered 25, 35 and 45 years of services. This plan is accounted for as a share-based payment program.

**Read more in Note 27** Personnel about accounting policy on share-based payments.

**USA**

In the USA, the Volvo Group has tax qualified pension plans, post-retirement medical plans and non qualified pension plans. The tax qualified pension plans are funded while the other plans are generally unfunded. There are five funded defined benefit plans, whereof one is closed, one is partially closed and three are open to new entrants. All plans are open for future accruals. The Volvo Group's subsidiaries in the USA mainly secure their pension obligations through transfer of funds to pension plans. The US Retirement Trust manages the assets related to the five funded plans. The strategic allocation of plan assets must comply with the investment policy as decided by the Board of Directors of the Trust. All members of the board are nominated by the company although each member is subject to strict regulatory requirements on fiduciary responsibility. At the end of 2017, the total value of pension obligations secured by pension plans of this type amounted to SEK 17,536 M (19,071). At the same point in time, the total value of the plan assets in these plans amounted to SEK 17,488 M (17,481), of which 48% (45) was invested in equity instruments. The regulations for securing pension obligations stipulate certain minimum levels concerning the ratio between the value of the plan assets and the value of the obligations. During 2017, the Volvo Group contributed SEK 515 M (399) to the American pension plans.

**France**

In France, the Volvo Group has two types of defined benefit plans, Indemnité de Fin de Carrière (IFC) and jubilee award plan. The plans are unfunded. The retirement indemnities plan is compulsory in France. The benefits are based on the Collective Bargaining Agreement applicable in the company, on the employee's seniority at retirement date and on the final pay. The benefit payment is due only if employees are working for the company when they retire. The jubilee awards plan is an internal agreement. The benefit is based on the employee's seniority career at 20, 30, 35 and 40 years. As of December 31, 2017 the total value of pension obligations amounted to SEK 2,947 M (2,992).

**Great Britain**

In Great Britain the Volvo Group has five defined benefit pension plans, which are all funded. The defined benefit pension plans provides benefits which are linked to each member's final pay at the earlier of their date of leaving or retirement. The pension funds are set up as separate legal entities, which are governed by a trustee board common for all schemes, which is responsible for the governance. The common trustee board is composed of representatives from the employees and an independent professional trustee. All plans are closed to new entrants and two of the plans are closed to future accrual. Members of the plans also have the option to commute an amount of their pension benefit as cash at retirement as permitted by UK legislation.

The strategic allocation of plan assets must comply with the investment guidelines agreed between the common trustee board and the company. If a net surplus is recognized in the balance sheet when the pension scheme runs-off the Volvo Goup has an unconditional right to the surplus of that plan or plans.

At the end of 2017, the total value of pension obligations secured by pension plans amounted to SEK 6,994 M (7,114). The total value of the plan assets in these plans amounted to SEK 7,241 M (7,186).

During 2017, the Volvo Group has made extra contributions to the pension plans in Great Britain in the amount of SEK 81 M (104).

| Assumptions applied for actuarial calculations, % | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| **Sweden** | | |
| Discount rate[1] | 2.70 | 3.00 |
| Expected salary increase | 2.90 | 2.90 |
| Inflation | 1.75 | 1.50 |
| **USA** | | |
| Discount rate[1,2] | 2.58–3.83 | 2.50–4.29 |
| Expected salary increase | 2.60–3.50 | 2.60–3.50 |
| Inflation | 2.20 | 2.20 |
| **France** | | |
| Discount rate[1] | 1.10–1.90 | 1.10–1.80 |
| Expected salary increase | 3.00 | 3.00 |
| Inflation | 1.50 | 1.50 |
| **Great Britain** | | |
| Discount rate[1] | 2.70 | 2.80–2.95 |
| Expected salary increases | 2.65 | 3.25–3.80 |
| Inflation | 3.15 | 3.25–3.30 |

1 The discount rate for each country is determined by reference to market yields on high quality corporate bonds. In countries where there is no functioning market in such bonds, the market yields on government bonds are used. The discount rate for the Swedish pension obligation is determined by extrapolating current market rates along the yield curve of mortgage bonds.

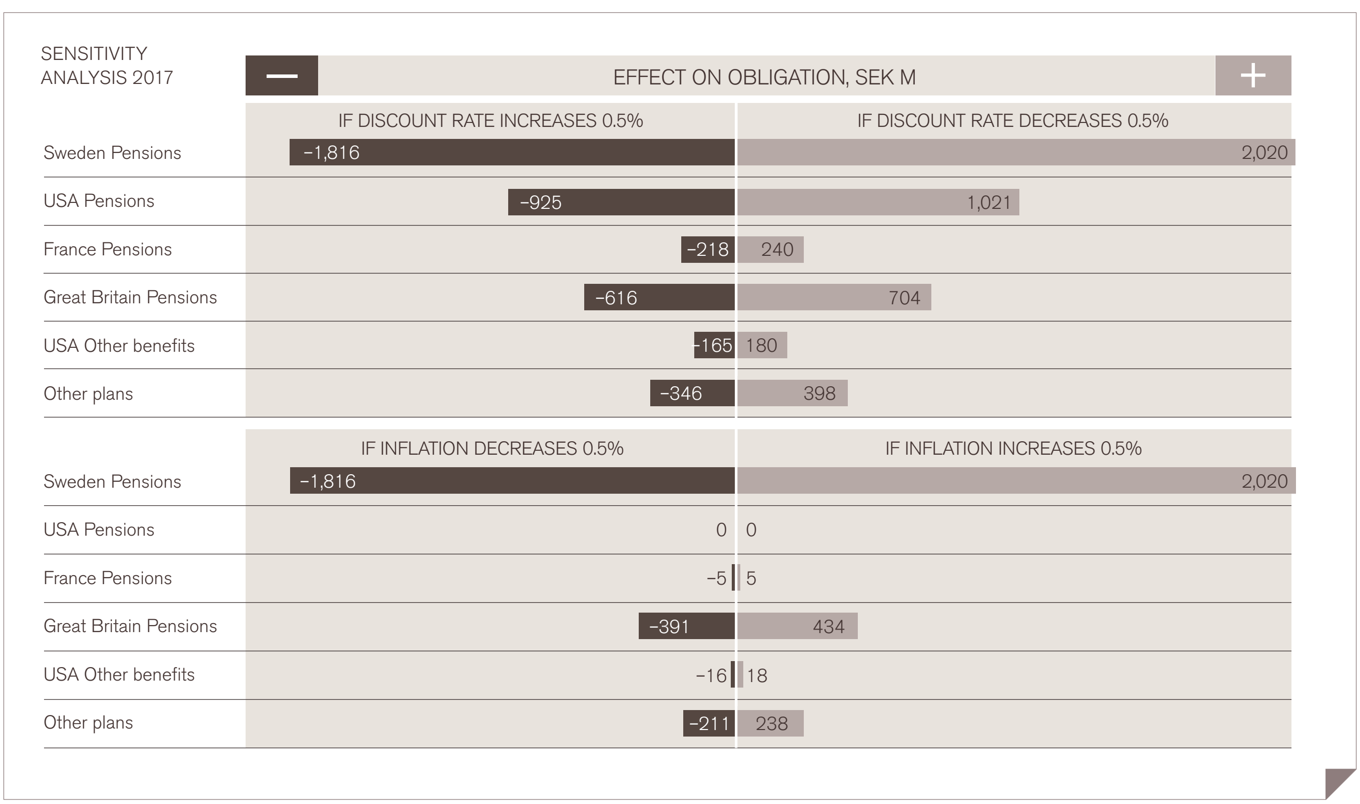
2 For all plans except three the discount rate used is within the range 3.43–3.83% (3.67–4.29).

| Pension costs | 2017 | 2016 |
|---|---|---|
| Current year service costs | 1,423 | 1,447 |
| Interest costs | 1,475 | 1,557 |
| Interest income | −1,219 | −1,284 |
| Past service costs | −35 | −3 |
| Gain/loss on settlements | −73 | −2 |
| **Pension costs for the period, defined benefit plans** | **1,571** | **1,715** |
| Pension costs for defined contribution plans | 2,293 | 2,169 |
| **Total pension costs for the period** | **3,864** | **3,884** |

| Costs for the period, post-employment benefits other than pensions | 2017 | 2016 |
|---|---|---|
| Current year service costs | 112 | 77 |
| Interest costs | 139 | 151 |
| Interest income | −2 | −4 |
| Past service costs | 56 | – |
| Gain/loss on settlements | – | −1 |
| Remeasurements | 96 | 20 |
| **Total costs for the period** | **400** | **243** |

| | Sweden Pensions | USA Pensions | France Pensions | Great Britain Pensions | USA Other benefits |
|---|---|---|---|---|---|
| Average duration of the obligation, years | 22.0 | 10.9 | 15.4 | 18.8 | 10.0 |

The analysis below presents the sensitivity of the defined benefit obligations when changes in the applied assumptions for discount rate and inflation are made. The sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. In practice, this is not probable, and changes in some of the assumptions may be correlated. Depending on local regulations, facts and circumstances in the separate countries the sensitivity effect on the obligation differs for the respective assumptions.

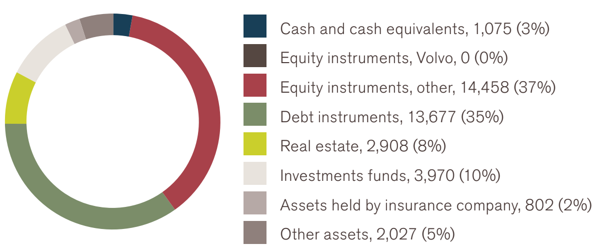


| Obligations in defined benefit plans | Sweden Pensions | USA Pensions | France Pensions | Great Britain Pensions | USA Other benefits | Other plans | Total |
|---|---|---|---|---|---|---|---|
| **Obligations opening balance 2016** | **13,302** | **18,048** | **2,574** | **6,820** | **3,673** | **4,621** | **49,038** |
| Acquisitions, divestments and other changes | – | 2 | –5 | –10 | –2 | –84 | **–98** |
| Current year service costs | 592 | 370 | 89 | 59 | 56 | 357 | **1,524** |
| Interest costs | 458 | 715 | 57 | 233 | 140 | 106 | **1,709** |
| Past service costs | 67 | 60 | – | – | – | –93 | **35** |
| Settlements | 20 | – | –2 | – | – | –2 | **15** |
| Employee contributions | – | – | – | 12 | – | 7 | **19** |
| Remeasurements: | | | | | | | |
| – Effect of changes in demographic assumptions | – | –68 | –7 | – | –122 | –3 | **–200** |
| – Effect of changes in financial assumptions | 1,523 | 219 | 382 | 1,059 | 43 | 284 | **3,510** |
| – Effect of experience adjustments | –717 | 104 | –103 | –100 | –33 | –45 | **–894** |
| Exchange rate translation | – | 1,692 | 118 | –690 | 326 | 307 | **1,753** |
| Benefits paid | –449 | –1,358 | –110 | –269 | –398 | –317 | **–2,902** |
| **Obligations as of December 31, 2016** | **14,796** | **19,786** | **2,992** | **7,114** | **3,683** | **5,137** | **53,508** |
| of which | | | | | | | |
| Funded defined benefit plans | 14,460 | 19,071 | 12 | 7,114 | 10 | 3,595 | **44,263** |
| Acquisitions, divestments and other changes | 0 | –11 | 0 | – | – | 379 | **368** |
| Current year service costs | 535 | 386 | 105 | 43 | 85 | 382 | **1,535** |
| Interest costs | 437 | 705 | 53 | 199 | 126 | 95 | **1,614** |
| Past service costs | 33 | – | 2 | –51 | 53 | –19 | **18** |
| Settlements | –54 | –220 | –30 | 0 | – | – | **–305** |
| Employee contributions | 0 | – | – | 9 | – | 3 | **12** |
| Remeasurements: | | | | | | | |
| – Effect of changes in demographic assumptions | – | –88 | –25 | –213 | 10 | 8 | **–308** |
| – Effect of changes in financial assumptions | 1,804 | 654 | –45 | 83 | 104 | –112 | **2,488** |
| – Effect of experience adjustments | 172 | 13 | –34 | 226 | 126 | 453 | **956** |
| Exchange rate translation | – | –1,903 | 86 | –45 | –349 | 42 | **–2,169** |
| Benefits paid | –463 | –1,110 | –157 | –370 | –359 | –283 | **–2,741** |
| **Obligations as of December 31, 2017** | **17,260** | **18,211** | **2,947** | **6,994** | **3,478** | **6,085** | **54,976** |
| of which | | | | | | | |
| Funded defined benefit plans | 16,963 | 17,536 | 11 | 6,994 | – | 4,640 | **46,145** |

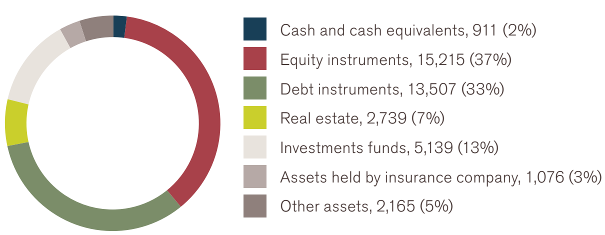
| Fair value of plan assets in funded plans | Sweden Pensions | USA Pensions | France Pensions | Great Britain Pensions | USA Other benefits | Other plans | Total |
|---|---|---|---|---|---|---|---|
| **Plan assets opening balance 2016** | **10,270** | **15,774** | **9** | **6,847** | **23** | **2,477** | **35,400** |
| Acquisitions, divestments and other changes | 0 | –1 | – | –9 | – | –50 | **–59** |
| Interest income | 359 | 630 | – | 236 | 1 | 61 | **1,287** |
| Settlements | – | – | – | – | – | – | **–** |
| Remeasurements | 494 | 519 | –1 | 960 | –1 | 43 | **2,014** |
| Employer contributions | 252 | 399 | 3 | 104 | – | 332 | **1,090** |
| Employee contributions | – | – | – | 12 | – | 3 | **15** |
| Exchange rate translation | – | 1,481 | – | –695 | 2 | 143 | **931** |
| Benefits paid | –1 | –1,321 | – | –269 | –15 | –154 | **–1,761** |
| **Plan assets as of December 31, 2016** | **11,374** | **17,481** | **11** | **7,186** | **9** | **2,855** | **38,917** |
| Acquisitions, divestments and other changes | 0 | –13 | – | – | – | 365 | **352** |
| Interest income | 341 | 619 | 0 | 203 | 0 | 58 | **1,222** |
| Settlements | – | –177 | – | – | – | 0 | **–177** |
| Remeasurements | 497 | 1,850 | –1 | 179 | 0 | 368 | **2,893** |
| Employer contributions | –5 | 515 | – | 81 | – | 234 | **826** |
| Employee contributions | – | – | – | 9 | – | 3 | **11** |
| Exchange rate translation | – | –1,716 | 0 | –47 | 0 | 48 | **–1,716** |
| Benefits paid | –1 | –1,070 | 0 | –370 | –9 | –125 | **–1,575** |
| **Plan assets as of December 31, 2017** | **12,207** | **17,488** | **10** | **7,241** | **–** | **3,806** | **40,753** |

| Net provisions for post-employment benefits | Sweden Pensions | USA Pensions | France Pensions | Great Britain Pensions | USA Other benefits | Other plans | Total |
|---|---|---|---|---|---|---|---|
| **Net provisions for post-employment benefits as of December 31, 2016** | **–3,422** | **–2,305** | **–2,981** | **72** | **–3,674** | **–2,283** | **–14,590** |
| of which reported as: | | | | | | | |
| B/S Prepaid pensions | – | – | – | 72 | – | 7 | **79** |
| B/S Provisions for post-employment benefits | –3,422 | –2,305 | –2,981 | – | –3,674 | –2,289 | **–14,669** |
| **Net provisions for post-employment benefits as of December 31, 2017** | **–5,054** | **–723** | **–2,936** | **247** | **–3,478** | **–2,279** | **–14,224** |
| of which reported as: | | | | | | | |
| B/S Prepaid pensions | – | – | – | 247 | – | 5 | **252** |
| B/S Provisions for post-employment benefits | –5,054 | –723 | –2,936 | – | –3,478 | –2,284 | **–14,476** |

PLAN ASSETS BY CATEGORY AS OF DECEMBER 31, 2016




PLAN ASSETS BY CATEGORY AS OF DECEMBER 31, 2017




Actual return on plan assets amounted to SEK 4,115 M (3,301).

| Fair value of plan assets | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| *With a quoted market price* | | |
| Cash and cash equivalents | 911 | 1,075 |
| Equity instruments | 15,215 | 14,458 |
| Debt instruments | 13,507 | 13,486 |
| Real estate | 2,043 | 2,236 |
| Derivatives | –9 | –29 |
| Investments funds | 3,143 | 2,810 |
| Other | 2,100 | 1,952 |
| *With an unquoted market price* | | |
| Other | 3,842 | 2,928 |
| **Total** | **40,753** | **38,917** |

**Investment strategy and risk management**

The Volvo Group manages the allocation and investment of pension plan assets with the purpose of meeting the long term objectives. The main objectives are to meet present and future benefit obligations, provide sufficient liquidity to meet such payment requirements and to provide a total return that maximizes the ratio of the plan assets in relation to the plan liabilities by maximizing return on the assets at an appropriate level of risk. The final investment decision often resides with the local trustee, but the investment policy for all plans ensures that the risks in the investment portfolios are well diversified. The primary risk mitigating activity in the long run is to close defined benefit plans to new entrants or to future accruals for existing members and replace with defined contribution plans when and where possible. The risks related to already accrued pension obligations, e.g. longevity and inflation, as well as buy out premiums and matching strategies are also monitored on an ongoing basis in order to further limit the Volvo Group's exposure where and when possible.

In the last couple of years, some of the defined benefit plans have been closed to new entrants and replaced by defined contribution plans in order to reduce risk for the Volvo Group.

In Sweden the minimum funding target is decided by PRI Pensionsgaranti, this is mandatory in order to stay in the system and get insurance for the pension liability. The contributions usually represents one year's new accrued benefits plus any shortfall towards the minimum funding target, unless there is a surplus according to local scheme valuation principles.

In the USA the minimum funding target is decided by the company in order to avoid penalties, keep flexibility and avoid extensive filing with the IRS and participants. The contributions usually represent one year's accrued benefits plus a seventh of any deficit, unless a scheme is showing a surplus according to local scheme valuation principles.

In Great Britain there is no minimum funding ratio. There is a regulatory requirement for each scheme to perform triennial valuations whereby any scheme showing a deficit must develop a recovery plan that returns the scheme to a fully funded basis within a reasonable timeframe. The recovery plan shall be agreed with the company and submitted to the regulator for approval.

In 2018 the Volvo Group estimates to transfer an amount of SEK 0.5–1.5 billion to pension plans.

## NOTE 21 OTHER PROVISIONS

### ACCOUNTING POLICY

Provisions are recognized when a legal or constructive obligation exists as a result of a past event and it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated.

*Provisions for residual value risks*
Residual value risks are attributable to operating lease contracts or sales transactions combined with buy-back agreements or residual value guarantees. Residual value risks are the risks that the Volvo Group in the future would have to dispose used products at a loss if the price development of these products is worse than what was expected when the contracts were entered. Provisions for residual value risks are made on a continuing basis based upon estimations of the used products' future net realizable values. The estimations of future net realizable values are made with consideration to current prices, expected future price development, expected inventory lead-time and expected direct and indirect selling expenses. If the residual value risks pertain to products that are recognized as tangible assets in the Volvo Group's balance sheet, these risks are reflected by depreciation or write-down of the carrying value of these assets. If the residual value risks pertain to products, which are not recognized as assets in the Volvo Group's balance sheet, these risks are reflected under provisions.

» **Read more in Note 7** Revenue.

*Provision for product warranty*
Estimated provision for product warranties are recognized when the products are sold. The provision includes both expected contractual warranties and so called technical goodwill warranties and is determined based on historical statistics considering known quality improvements, costs for remedy of defaults etc. Provision for campaigns in connection with specific quality problems are recognized when the campaign is decided.

*Provision for restructuring costs*
A provision for decided restructuring measures is recognized when a detailed plan for the implementation of the measures is complete and when this plan is communicated to those who are affected. A provision and costs for termination benefits as a result of a voluntary termination program is recognized when the employee accepts the offer. Normally restructuring costs are included in other operating income and expenses.

### SOURCE OF ESTIMATION UNCERTAINTY

The uncertainties about the amount or timing of outflows vary for different kind of provisions. Regarding provisions for warranty, extended coverage, residual value risks and service contracts, the provisions are based on historical statistics and estimated future costs, why the provided amount has a higher correlation with the outflow of resources. Regarding provisions for disputes, like tax and legal disputes, the uncertainty is higher.

*Residual value risks*
In the course of its operations, the Volvo Group is exposed to residual value risks through operating lease agreements and sales combined with repurchase agreements. Residual value commitments amounted to SEK 28,282 M (25,822) as of December 31, 2017. Residual value risks are reflected in different ways in the Volvo Group's consolidated financial statements depending on the extent to which the risk remains with the Volvo Group.

In cases where significant risks pertaining to the product remain with the Volvo Group, the products, primarily trucks, are generally recognized in the balance sheet as assets under operating leases. Depreciation of these products is recognized on a straight-line basis over the term of the commitment and the depreciable amount is adjusted to correspond to estimated net realizable value at the end of the commitment. The estimated net realizable value of the products at the end of the commitment is monitored individually on a continuing basis. A decline in prices for used trucks and construction equipments may negatively affect the Volvo Group's operating income. High inventories in the truck industry and the construction equipment industry and low demand may have a negative impact on the prices of new and used trucks and construction equipments. In monitoring estimated net realizable value of each product under a residual value commitment, management makes considerations of current price-level of the used product model, value of options, mileage, condition, future price deterioration due to expected change of market conditions, alternative distribution channels, inventory lead-time, repair and reconditioning costs, handling costs and indirect costs associated with the sale of used products. Additional depreciations and estimated impairment losses are immediately recognized in the income statement.

In cases where the products have been recognized as assets under operating leases, the residual value commitment agreed with the customer is recognized as current and non-current residual value liabilities. For contracts which have been financed by Financial Services the residual value liability is being eliminated on Group level and instead recognized as finance liability both in the Financial Services and Group Balance Sheet.

» **Read more in Note 22** Liabilities about residual value liabilities.

If the residual value risk commitment is not significant, independent from the sale transaction or in combination with a commitment from the customer to buy a new product in connection to a buy-back option, the asset is not recognized on the balance sheet. Instead, the risk that the Volvo Group would have to dispose the used products at a loss is reported as a residual value provision.

To the extent the residual value exposure does not meet the definition of a provision, the gross exposure is reported as a contingent liability. For contracts which have been financed by Financial Services the residual value commitment is recognized as finance liability, hence no contingent liabilities are recognized for these contracts.

» **Read more in Note 24** Contingent liabilities.

*Provision for product warranty*
Warranty provisions are estimated with consideration of historical claims statistics, the warranty period, the average time-lag between faults occurring and claims to the company and anticipated changes in quality indexes. Estimated costs for product warranties are recognized as cost of sales when the products are sold. Estimated warranty costs include contractual warranty and goodwill warranty (warranty cover in excess of contractual warranty or campaigns which is accepted as a matter of policy or normal practice in order to maintain a good business relation with the customer). Differences between actual warranty claims and the estimated final claims cost affect the recognized expense and provisions in future periods. Refunds from suppliers, that decrease the Volvo Group's warranty costs, are recognized to the extent these are considered to be certain.

*Provisions for extended coverage*
An extended coverage is a product insurance sold to a customer to cover a product according to specific conditions for an agreed period and/or content in addition to the factory contractual warranty. The provision is intended to cover the risk that the expected cost of providing services under the contract exceed the expected revenue.

*Provision for service contracts*
Service contracts offer the customer preventive maintenance according to an agreed service plan. The provision is intended to cover the risk that the expected cost of providing services and repairs under the contract exceeds the expected revenue.

*Legal proceedings*
Provisions for legal disputes are included within Other provisions in the table below.

The Volvo Group recognizes obligations as provisions or other liabilities only in cases where the Volvo Group has a present obligation from a past event, where a financial responsibility is probable and the Volvo Group can make a reliable estimate of the amount. When these criteria are not met, a contingent liability may be recognized.

The Volvo Group regularly reviews the development of significant outstanding legal disputes in which the Volvo Group companies are parties, both regarding civil law and tax disputes, in order to assess the need for provisions and contingent liabilities in the financial statements. Among the factors that the Volvo Group considers in making decisions on provisions and contingent liabilities are the nature of the dispute, the amount claimed, the progress of the case, the opinions of legal and other advisers, experience in similar cases, and any decision of the Volvo Group's management as to how the Volvo Group intends to handle the dispute. The actual outcome of a legal dispute may deviate from the expected outcome of the dispute. The difference between actual and expected outcome of a dispute might materially affect future financial statements, with an adverse impact upon the Volvo Group's operating income, financial position and liquidity.

» **Read more in Note 24** Contingent liabilities.

*Provisions in insurance operations*
Volvo Group has a captive insurance company and the provisions in insurance operations consist of the claims reserve related to third party claims addressed to companies within the Volvo Group. The claims reserve also includes a provision for unreported losses based on past experience. The unearned premium reserve is reported as an accrued expense within other current liabilities.

*Other provisions*
Other provisions mainly includes provisions for tax disputes, provisions for legal disputes, provisions for externally issued credit guarantees and other provisions, unless separately specified and commented in the table and text.

| | Carrying value as of Dec 31, 2016 | Provisions | Reversals | Utilizations | Acquired and divested companies | Translation differ-ences | Other reclassi-fications | Carrying value as of Dec 31, 2017 | Of which due within 12 months | Of which due after 12 months |
|---|---|---|---|---|---|---|---|---|---|---|
| Warranties | 12,821 | 8,423 | –1,912 | –6,859 | –54 | –624 | 10 | 11,804 | 6,915 | 4,889 |
| Provisions for extended coverage | 1,005 | 455 | –212 | –362 | – | –20 | –9 | 858 | 306 | 553 |
| Provisions in insurance operations | 654 | 102 | –19 | –87 | – | –45 | – | 606 | – | 606 |
| Restructuring measures | 586 | 147 | –176 | –440 | – | –3 | –5 | 109 | 109 | – |
| Provisions for residual value risks | 1,135 | 965 | –275 | –413 | – | –25 | –6 | 1,380 | 518 | 862 |
| Provisions for service contracts | 344 | 398 | –150 | –126 | – | 2 | –9 | 459 | 323 | 136 |
| Other provisions | 4,592 | 3,253 | –991 | –1,752 | 0 | –215 | 22 | 4,908 | 2,636 | 2,273 |
| B/S **Total** | **21,137** | **13,743** | **–3,735** | **–10,040** | **–54** | **–930** | **3** | **20,124** | **10,806** | **9,318** |

Long-term provisions as above are expected to be settled within 2 to 3 years.

» **Read more in Note 8** Other operating income and expenses about restructuring costs.

» **Read more in Note 24** Contingent liabilities about provisions for residual value risks.

## NOTE 22 LIABILITIES

### ACCOUNTING POLICY

Loans are valued at amortized cost using the effective interest rate method. A hybrid bond issued by AB Volvo is classified as debt in the Volvo Group's accounts as it constitutes a contractual obligation to make interest payments to the holder of the instrument.

*Non-current liabilities*

The tables below disclose the Volvo Group's non-current liabilities with the largest loans listed by currency. Loans in the Volvo Group's subsidiaries are mainly in local currencies through Volvo Group Treasury which minimizes the currency exposure in the individual companies. Volvo Group Treasury uses various derivatives to facilitate lending and borrowing in different currencies without increasing the risk for the Volvo Group.

» **Read more in Note 4** Goals and policies in financial risk management.

» **Read more in Note 30** Financial Instruments.

**Non-current liabilities**

| Currency/start year/maturity | Actual interest rate Dec 31, 2017, % | Effective interest rate Dec 31, 2017, % | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|---|---|
| **Bond loans** | | | | |
| EUR 2012–2017/2019–2078[1] | 0.00–4.86 | 0.00–4.86 | 36,896 | 48,215 |
| SEK 2014–2017/2019–2020 | 0.02–2.71 | 0.02–2.71 | 12,066 | 12,438 |
| B/S **Total Bond loans[2]** | | | **48,962** | **60,653** |
| **Other loans** | | | | |
| USD 2014–2017/2019–2024 | 1.54–3.00 | 1.73–3.00 | 8,268 | 6,157 |
| EUR 2008–2017/2019–2027 | 0.04–6.50 | 0.04–6.50 | 4,400 | 1,817 |
| CAD 2016–2017/2019–2020 | 2.49–2.54 | 2.52–2.56 | 788 | 472 |
| MXN 2015–2017/2020–2021 | 8.38–8.96 | 8.70–8.96 | 1,212 | 747 |
| JPY 2009–2017/2019–2026 | 0.26–0.85 | 0.26–0.85 | 3,521 | 6,688 |
| BRL 2010–2017/2019–2026 | 3.00–6.53 | 3.00–6.78 | 3,720 | 5,659 |
| AUD 2015–2017/2019–2021 | 2.71–2.86 | 2.74–2.90 | 702 | 597 |
| CNY 2016–2017/2019–2020 | 4.33–5.46 | 4.33–5.46 | 831 | 518 |
| Other loans | | | 1,378 | 837 |
| Revaluation of outstanding derivatives to SEK[3] | | | 123 | 406 |
| B/S **Total Other loans[2]** | | | **24,942** | **23,898** |
| **Total Bond loans and Other loans[4]** | | | **73,904** | **84,551** |
| **Other liabilities** | | | | |
| Deferred leasing income | | | 2,501 | 2,709 |
| Residual value liabilities | | | 6,884 | 5,942 |
| Deferred service revenue | | | 9,882 | 9,285 |
| Outstanding interest and currency risk derivatives[3] | | | 86 | 176 |
| Other non-current liabilities | | | 2,955 | 2,210 |
| Outstanding raw material derivatives | | | – | 0 |
| B/S **Total Other liabilities** | | | **22,309** | **20,322** |
| **Total non-current liabilities** | | | **96,213** | **104,873** |

1 Including the hybrid bond of EUR 1,5 bn. This bond consists of two tranches, EUR 0.9 bn with a first call in 2020 and final maturity in 2075 and EUR 0.6 bn with a first call in 2023 and final maturity in 2078.

2 Of which loans raised to finance the credit portfolio of Financial Services amounted to SEK 33,755 M (44,669) in Bond loans and SEK 22,054 M (19,003) in Other loans.

3 » **Read more in Note 30** Financial Instruments, regarding non-current part of Outstanding interest and currency risk derivatives included in table 30:1.

4 Of the above non-current loans, SEK 7,831 M (5,213) were secured by assets pledged.

» **Read more in Note 23** Assets pledged.

| **Maturity** Year | Bond loans and other loans | Not utilized non-current credit facilities[1] |
|---|---|---|
| 2019 | 37,590 | 6,992 |
| 2020 | 13,183 | 1,000 |
| 2021 | 2,201 | 19,699 |
| 2022 | 3,370 | 14,775 |
| 2023 | 125 | – |
| 2024 or later | 17,436 | – |
| **Total** | **73,904** | **42,466** |

1 Not utilized current credit facilities amounted to SEK 2,955 M (958).

» **Read more in Note 15** Customer-financing receivables, table 15:2 for maturities of non-current receivables in the Financial Services operations.

AB Volvo issued a hybrid bond in 2014, amounting to EUR 1.5 bn with a maturity of 61.6 years, in order to further strengthen the Volvo Group's balance sheet and prolong the maturity structure of the debt portfolio. The predominant part of non-current loans that mature in 2019 is an effect of the Volvo Group's normal business cycle, with shorter duration in the Financial Services portfolio compared to Industrial Operations.

Granted but not utilized credit facilities consist of stand-by facilities for loans. A fee is charged for granted credit facilities, this is recognized in profit or loss within other financial income and expenses.

» **Read more in Note 9** Other financial income and expenses.

*Current liabilities*

| **Loans** | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Bank loans | 9,950 | 13,309 |
| Other loans | 43,821 | 43,187 |
| B/S **Loans**[1, 2] | **53,771** | **56,497** |

1 Of which loans raised to finance the credit portfolio of Financial Services amounted to SEK 46,638 M (45,876) and outstanding derivatives, at fair value, amounted to SEK 329 M (717).
2 Current loans amounting to SEK 3,744 M (5,027) were secured by assets pledged.

Bank loans include current maturities of non-current loans SEK 4,652 M (4,805). Other loans include current maturities of non-current loans, SEK 37,399 M (30,004), and commercial papers, SEK 1,249 M (8,213).

Non-interest-bearing current liabilities amounted to SEK 113,546 M (98,705), or 68% (64) of the Volvo Group's total current liabilities.

The table below presents the Volvo Group's other current liabilities. In addition to this non-interest-bearing current liabilities also include trade payables of SEK 65,346 M (55,264), current tax liabilities of SEK 1,699 M (685) and non-interest-bearing liabilities held for sale of SEK 0 M (148).

| **Other current liabilities** | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Advances from customers | 4,986 | 4,356 |
| Wages, salaries and withholding taxes | 11,088 | 8,558 |
| VAT liabilities | 2,373 | 2,301 |
| Accrued expenses for dealer bonuses and rebates[1] | 5,686 | 5,129 |
| Other accrued expenses and deferred income | 13,801 | 12,945 |
| Deferred leasing income | 1,944 | 2,026 |
| Residual value liability | 2,677 | 2,590 |
| Other financial liabilities | 183 | 485 |
| Other liabilities | 3,616 | 3,971 |
| Outstanding interest and currency risk derivatives[2] | 147 | 241 |
| Outstanding raw material derivatives | – | 7 |
| B/S **Other current liabilities** | **46,501** | **42,608** |

1 » **Read more in Note 21** Other provisions.
2 » **Read more in Note 30** Financial Instruments, regarding current part of Outstanding interest and currency risk derivatives included in table 30:1.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries, table Assets and liabilities held for sale.

» **Read more in Note 23** Assets pledged.

## NOTE 23 ASSETS PLEDGED

| **Assets pledged** | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Property, plant and equipment – mortgages | 75 | 85 |
| Assets under operating leases | 158 | 228 |
| Customer-financing receivables | 12,557 | 10,259 |
| Cash, loans and marketable securities | 0 | 20 |
| **Total** | **12,791** | **10,592** |

Non-current and current loans of SEK 11,575 M (10,240) were secured by assets pledged to an amount of SEK 12,791 M (10,592).

Under the terms of asset-backed securitizations, SEK 11,421 M (10,031) of securities have been issued tied to US-based loans, secured by customer-financing receivables, SEK 12,557 M (10,259), recognized on the balance sheet with trucks and construction equipment assets as collaterals, whereof SEK 8,430 M (6,031) were signed in 2017.

» **Read more in Note 22** Liabilities.

# NOTE 24 CONTINGENT LIABILITIES

### ACCOUNTING POLICY

*Contingent liabilities*
A contingent liability is recognized for a possible obligation, for which it is not yet confirmed that a present obligation exists that could lead to an outflow of resources. Alternatively a present obligation that does not meet the definitions of a provision or a liability as it is not probable that an outflow of resources will be required to settle the obligation or when a sufficiently reliable estimate of the amount cannot be made.

| Contingent liabilities | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Credit guarantees issued for customers and others | 1,352 | 1,406 |
| Tax claims | 5,159 | 5,090 |
| Residual value commitments | 4,355 | 4,014 |
| Other contingent liabilities | 4,376 | 5,546 |
| **Total contingent liabilities** | **15,242** | **16,056** |

Total contingent liabilities at December 31, 2017, amounted to net SEK 15,242 M (16,056) and included no contingent assets.

*Credit guarantees issued* amounted to SEK 1,352 M (1,406). The recognized amount for credit guarantees corresponds to the gross exposure and has not been reduced by the value of counter guarantees received or other collaterals such as the right to repossess the products in cases where a legal offsetting right does not exist. The value of counter guarantees and other collaterals reducing the exposure is dependent on the development of used products prices and on the possibility to repossess the products.

A major part of the credit guarantees still pertains to the credit guarantees related to Chinese dealers and retail customers within Construction Equipment. The credit guarantees are primarily related to the period prior to 2016 and are on the same level compared to December 31, 2016.

The improved market and financial situation in China is reflected by a lower credit risk. The provisions for externally issued credit guarantees decreased during 2017 and amounted to SEK 11 M (94) at December 31, 2017 affecting other operating income and expenses positively. This was partly offset by additional provisions for credit losses for receivables with a negative effect on other operating income and expenses. The net effect on other operating income and expenses was SEK 42 M (–319) during 2017.

*Tax claims* amounted to SEK 5,159 M (5,090) and pertained to charges against the Volvo Group for which the criteria for recognizing a provision were not met. Global companies such as the Volvo Group are occasionally involved in tax processes of varying scope and in various stages. Volvo Group regularly assesses these tax processes. When it is probable that additional taxes must be paid and the outcome can be reasonably estimated, the required provision is made. Out of total tax claims, SEK 2.1 billion (2.2) is related to a transfer price audit in Brazil and SEK 1.1 billion (1.1) to a custom duties audit in India.

*Residual value commitments* amounted to SEK 4,355 M (4,014) and were attributable to sales transactions combined with buy back agreements or residual value guarantees for which assets are not recognized in the balance sheet. The recognized amount corresponds to the gross exposure and has not been reduced by the estimated net selling price of used products taken as collaterals. To the extent the used products pertaining to those transactions are expected to be disposed at a loss, a provision for residual value risk is recognized.

» **Read more in Note 21** Other provisions about provisions for residual value risks.

*Other contingent liabilities* amounted to SEK 4,376 M (5,546) and included for example bid and performance clauses and legal proceedings.

*Legal proceedings*
In January 2011, the Volvo Group and a number of other companies in the truck industry became part of an investigation by the European Commission regarding a possible violation of EU antitrust rules. The Volvo Group co-operated fully with the European Commission in the investigation. In July 2016, the Volvo Group reached a settlement with the European Commission in the investigation. Following the adoption of the European Commission's settlement decision, the Volvo Group has received and will be dealing with numerous private damages claims from customers and other third parties alleging that they suffered loss by reason of the conduct covered in the decision. At this stage it is not possible to make a reliable estimate of the amount of any liability that could arise from any such proceedings.

The Volvo Group is also involved in a number of legal proceedings other than those described above. The Volvo Group's assessment is that such other legal proceedings in aggregate are not likely to entail any risk of having a material effect on the Volvo Group's financial position.

## NOTE 25 TRANSACTIONS WITH RELATED PARTIES

Transactions between AB Volvo and its subsidiaries, which are related parties to AB Volvo, have been eliminated in the Group and are not disclosed in this note.

| Transactions with associated companies | 2017 | 2016 |
|---|---|---|
| Sales to associated companies | 1,426 | 1,771 |
| Purchase from associated companies | 1,354 | 2,062 |
| Receivables from associated companies, Dec 31 | 369 | 352 |
| Liabilities to associated companies, Dec 31 | 93 | 438 |

The Volvo Group engages in transactions with some of its associated companies. The transactions consist mainly of sales of vehicles and parts to dealers and importers. As an effect from the divestment of shares in Deutz AG, transactions with associated companies have decreased.

Commercial terms and market prices apply for the supply of goods and services to/from associated companies.

| Transactions with joint ventures | 2017 | 2016 |
|---|---|---|
| Sales to joint ventures | 2,059 | 1,756 |
| Purchase from joint ventures | 901 | 801 |
| Receivables from joint ventures, Dec 31 | 419 | 182 |
| Liabilities to joint ventures, Dec 31 | 63 | 169 |

The Volvo Group engages in transactions with its joint ventures. The transactions consist mainly of sales of vehicles and parts and purchase of engine long blocks and services. Commercial terms and market prices apply for the supply of goods and services to/from joint ventures.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations

## NOTE 26 GOVERNMENT GRANTS

### ACCOUNTING POLICY

Government grants are financial grants from governmental or supranational bodies received by the Volvo Group in exchange for fulfillment of certain conditions.

Governmental grants related to assets are presented in the balance sheet by deducting the grants in arriving at the carrying amount of the asset. Governmental grants related to income are reported as a deferred income and recognized in the income statement over the periods necessary to match the related costs. If the costs incur before the grants have been received, but there is an agreement that grants will be received, grants are recognized in the income statement to compensate the relevant costs.

In 2017, government grants of SEK 661 M (687) were received, and SEK 706 M (592) were recognized in the income statement. The amount includes tax credits of SEK 313 M (290) related to product development, which were primarily received in France and in the United States. Other grants were mainly received from Swedish, Chinese and US governmental organizations and from the European Commission.

# NOTE 27 PERSONNEL

## ACCOUNTING POLICY

*Incentive programs*

The Volvo Group has a long-term incentive program in accordance with IAS19 Employee benefits. During the vesting period, it is recognized as an expense and as a short-term liability.

The Volvo Group also has share-based incentive programs for the year 2013 and for the years 2014 to 2015. The fair value of the equity-settled payments is determined at the grant date, recognized as an expense during the vesting period and offset in equity. The fair value is based on the share price reduced by dividends connected with the share during the vesting period.

The cash-settled payment is revalued at each balance sheet date and is recognized as an expense during the vesting period and as a short-term liability.

### Remuneration policy decided at the Annual General Meeting in 2017

The Annual General Meeting of 2017 decided upon a policy on remuneration and other employment terms for the members of the Volvo Group Executive Board. The decided principles are summarized as follows:

The remuneration and the other terms of employment of the Executives shall be competitive so that the Volvo Group can attract and retain competent Executives. The total remuneration to Executives consists of fixed salary, short-term and long-term incentives, pension and other benefits. Short-term and long-term incentives shall be linked to predetermined and measurable criteria relating to EBIT and cash flow targets for the Volvo Group, devised to promote the long-term value creation of the Volvo Group and strengthen the link between achieved performance targets and rewards. The criteria for short-term and long-term incentives shall be determined by the Board annually.

Short-term incentive may, as regards the President and CEO, amount to a maximum of 100% of the fixed salary and, as regards other Executives, a maximum of 80% of the fixed salary.

Long-term incentive may, as regards the President and CEO, amount to a maximum of 100% of the fixed salary and, as regards other Executives, a maximum of 80% of the fixed salary. The long-term incentive program for the Volvo Group's top executives, including the Executives, is cash-based. Awards under the program, based on how well the performance targets are achieved, are disbursed in cash to the participants on the condition that they invest the net award in AB Volvo shares and that they retain the shares for at least three years.

Any new share-based incentive program, will, where applicable, be resolved by the General Meeting, but no such program is currently proposed.

For Executives resident in Sweden, the notice period upon termination by the company shall not exceed 12 months and the notice period upon termination by the Executive shall not exceed 6 months. In addition, in the event of termination by the company, the Executive may be entitled to a maximum of 12 months' severance pay.

Executives resident outside Sweden or resident in Sweden but having a material connection to or having been resident in a country other than Sweden may be offered notice periods for termination and severance payment that are competitive in the country where the Executives are or have been resident or to which the Executives have a material connection, preferably solutions comparable to the solutions applied to Executives resident in Sweden.

The Board of Directors may deviate from this policy if there are special reasons to do so in an individual case.

### Fee paid to the Board of Directors

According to a resolution adopted at the Annual General Meeting 2017, the fee to the Board of Directors appointed at the Annual General Meeting for the period until the close of the Annual General Meeting 2018 shall be paid as follows: The Chairman of the Board should be awarded SEK 3,400,000 and each of the other members SEK 1,000,000 with exception of the President and Chief Executive Officer of AB Volvo, who does not receive a director's fee. In addition, SEK 350,000 should be awarded to the Chairman of the Audit Committee and SEK 160,000 to each of the other members of the Audit Committee, and SEK 140,000 to the Chairman of the Remuneration Committee and SEK 105,000 to each of the members of the Remuneration Committee. Finally, SEK 175,000 should be awared to the Chairman of the Volvo CE Committee and the other members of the Volvo CE Committee SEK 150,000 each.

### Terms of employment and remuneration to the CEO

*Fixed salary, short-term and long-term incentives*

The President and CEO is entitled to a remuneration consisting of a fixed annual salary and short-term and long-term incentives. During the financial year 2017, the short-term and long-term incentives are based on EBIT and cash flow for the Volvo Group. The short-term and long-term incentives, each, amounts to a maximum of 100% of the annual base salary.

For the financial year 2017, Martin Lundstedt received a fixed salary including vacation payment of SEK 13,109,085 and a short-term incentive of SEK 12,928,092. The short-term incentive is 100% of the base salary. Other benefits, mainly pertaining to car and housing, amounted to SEK 364,959 in 2017. Martin Lundstedt was also participating in the long-term incentive program decided by the Board of Directors. During the financial year the outcome of the long-term incentive program amounted to SEK 12,928,092, which is 100% of the base salary. The full net amount shall be invested in Volvo B shares. There is to be no pay-out of the amount if the Annual Meeting held in 2018 decides not to distribute any dividends to the shareholders for 2017.

*Pensions*

The President and CEO is covered both by pension benefits provided under collective bargain agreements and by the Volvo Management Pension (VMP) and Volvo Executive Pension (VEP) plans. The retirement benefit under the Volvo executive pension plans is a defined contribution plan. The pensionable salary consists of the annual salary and a calculated short-term variable pay. The premium for the VMP is SEK 30,000 plus 20% of the pensionable salary over 30 income base amounts and the premium for VEP is 10% of pensionable salary. There are no commitments other than the payment of the premiums. In addition to the collective bargain agreement the disability pension is 40% of pensionable salary between 30–50 income base amounts. The right to disability pension is conditional to employment and will cease upon termination of employment.

The President and CEO is also covered by Volvo Företagspension, a defined contribution plan for additional retirement benefit. The premium is negotiated each year. For 2017, the premium amounted to SEK 7,734 for the full year.

Total pension premiums 2017 amounted to SEK 4,575,562 for Martin Lundstedt.

*Severance payments*

Martin Lundstedt has a 6 months notice of termination on his own initiative and 12 months notice of termination from AB Volvo. If terminated by the company, Martin Lundstedt is entitled to a severance payment equivalent to 12 months' salary. In the event he gains employment during the severance period, severance pay is reduced with an amount equal to 100% of the income from the new employment.

### Remuneration to the Group Executive Board

*Fixed salary, short-term and long-term incentives*

Members of the Group Executive Board receive short-term and long-term incentives in addition to fixed salaries. During the financial year 2017, the short-term and long-term incentives are based on EBIT and cash flow for the Volvo Group. In 2017, short-term and long-term incentives, for Group Executive Board members excluding the CEO, could each amount to a maximum of 80% of the annual base salary.

For the financial year 2017, fixed salaries amounted to SEK 76,425,965 and short-term incentive amounted to SEK 55,913,489 for Group Executive Board members excluding the CEO. The short-term incentive is in average 78,1% of the base salary. The Group Executive Board comprised, excluding the CEO, of 12 members at the beginning and 12 at the end of the year. Other benefits, mainly pertaining to car and housing, amounted to SEK 10,353,525 in 2017.

Group Executive Board members, also participate in the long-term share-based incentive programs decided by the Annual General Meeting 2014. During 2017, 48,652 shares granted under the 2013, 2014 and 2015 programs corresponding to a taxable value of SEK 6,564,546 have been allotted to Group Executive Board members.

The Group Executive Board was also participating in the long-term incentive program decided by the Board of Directors in 2017. During the financial year the outcome of the long-term incentive program, for the Executive Board members, excluding the CEO, amounted to SEK 57,242,908 of which the full net amount shall be invested in Volvo B shares. There is to be no pay-out of the amount if the Annual Meeting held in 2018 decides not to declare any dividends to the shareholders for 2017.

*Pensions*

Group Executive Board members enrolled in Swedish pension plan are also covered by a defined contribution plan, Volvo Executive Pension plan with pension premium payments at the longest to the age of 65 years. The premium constitutes 10% of the pensionable salary. As complement to the collective bargain agreement regarding occupational pension, members of the Group Executive Board born before 1979 are covered by a defined contribution pension plan, Volvo Management Pension. The premium constitutes of SEK 30,000 plus 20% of the pensionable salary over 30 income base amounts. The pensionable salary consists of the annual salary and a calculated short-term variable pay. Pension premiums for the Group Executive Board excluding the CEO amounted to SEK 31,260,917 in 2017.

*Severance payments*

The employment contracts for Group Executive Board members contain rules governing severance payments when the company terminates the employment. For Executives resident in Sweden, the notice period upon termination by the company shall not exceed 12 months and the notice period upon termination by the Executive shall not exceed 6 months. In addition, in the event of termination by the company, the Executive may be entitled to a maximum of 12 months' severance pay.

Executives resident outside Sweden or resident in Sweden but having a material connection to or having resident in a country other than Sweden may be offered notice periods for termination and severance payment that are competitive in the country where the Executives are or have been resident or to which the Executives have a material connection, preferably solutions comparable to the solutions applied to Executives resident in Sweden.

### Volvo Group's total costs for remuneration and benefits to the Group Executive Board

The total costs for remuneration and benefits to the Group Executive Board amounted to SEK 333 M (175) and pertained to fixed salary, short-term and long-term incentives, other benefits and pensions. It also included social fees on salaries and benefits, special pension tax and additional costs for other benefits. The cost related to the long-term share-based incentive program is reflected over the vesting period and amounted to SEK 13 M (18) for 2017. The remuneration model of the Volvo Group is to a main part designed to follow changes in the profitability of the Volvo Group.

### Long-term incentive programs

*Long-term share-based incentive program 2013*

The Annual General Meeting held in 2011 approved a long-term share-based incentive program for up to 300 Volvo Group and senior executives and comprising the years 2011 to 2013. During 2017, a part of the shares granted under the program during 2013 has been allotted to the participants (see further information in the table Long-term share-based incentive program on the next page).

*Long-term share-based incentive program 2014–2015*

The Annual General Meeting held in 2014 approved a long-term share-based incentive program for up to 300 Group and senior executives and comprising the years 2014 to 2016. The Board of Director's has in 2016 approved this program to be replaced by a new program as from 2016 with the effect of terminating current program one year in advance. During 2017, a part of the shares granted under the programs during 2014 and 2015 have been allotted to the participants (see further information in the table Long-term share-based incentive program on the next page).

*Long-term incentive program valid from 2016*

The Board of Director's has in 2016 approved a long-term cash-based incentive program comprising the top 300 executives in the Volvo Group. This program replaces the previous long-term share-based incentive program approved in 2014. A prerequisite for participation in the program is that the participants shall undertake to invest the annual net (after tax) payout amounts under the plan in Volvo B-shares and to hold those shares for at least three years.

Long-term incentive may, as regards the President & CEO, amount to a maximum of 100% of the fixed salary and, as regards other Executives, a maximum of 80% of the fixed salary. There will however be no payout under the long-term incentive program if the Annual General Meeting to be held in the year following the performance year, decides not to distribute any dividend to the shareholders.

| Long-term share-based incentive program (equity-settled version) | Shares granted conditional under the plan but not yet allotted (in thousand shares) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Vesting year | Beginning of the year | Adjustment | Cancelled/ forfeited 2017 | Allotments during 2017 | End of the year | Cost 2017 (SEK M)[1] |
| **Year 2013 incentive program** | 2016/2017 | **121** | – | –10 | –111 | – | –0.4 |
| **Year 2014 Incentive program** | 2017/2018 | **372** | – | –13 | –229 | 130 | 11.4 |
| **Year 2015 incentive program** | 2018/2019 | **1,630** | – | –51 | –66 | 1,512 | 59.2 |
| **Total** | | **2,122** | **–** | **–74** | **–406** | **1,642** | **70.2** |

1 The fair value of the payments is determined based on the share price at the grant date reduced by the discounted value of expected dividends connected with the share during the vesting period. The cost for the program is recognized over the vesting period. The cost includes social security cost.

The cost for the cash-settled version of the incentive program amounted to SEK 16 M (14) including social security cost during 2017, and the total liability amounted to SEK 31 M (14) as of December 31, 2017.

The allotment during the year 2017 mainly pertained to the shares granted under the program during the years 2013 and 2014. During 2017, for the equity-settled plan, a total of 405,901 shares (725,210) have been allotted to participants. For the cash-settled plan, a total of SEK – M (2) has been allotted during 2017.

| Average number of employees | 2017 | | 2016 | |
|---|---|---|---|---|
| | Number of employees | of which women, % | Number of employees | of which women, % |
| **AB Volvo** | | | | |
| Sweden | 305 | 50 | 314 | 50 |
| **Subsidiaries** | | | | |
| Sweden | 18,669 | 21 | 18,606 | 21 |
| Western Europe (excl. Sweden) | 20,956 | 16 | 21,022 | 15 |
| Eastern Europe | 6,253 | 22 | 5,566 | 21 |
| North America | 14,868 | 19 | 14,150 | 19 |
| South America | 4,894 | 16 | 5,279 | 15 |
| Asia | 17,069 | 13 | 17,279 | 13 |
| Other countries | 2,389 | 16 | 2,437 | 16 |
| **Group total** | **85,403** | **18** | **84,653** | **17** |

| Board members[1] and other senior executives | 2017 | | 2016 | |
|---|---|---|---|---|
| | Number at year-end | of which women, % | Number at year-end | of which women, % |
| **AB Volvo** | | | | |
| Board members[1] | 11 | 36 | 11 | 36 |
| CEO and other senior executives | 13 | 31 | 12 | 17 |
| **Volvo Group** | | | | |
| Board members[1] | 477 | 23 | 483 | 22 |
| Presidents and other senior executives | 595 | 25 | 613 | 24 |

1 Excluding deputy Board members.

| Wages, salaries and other remunerations | 2017 | | | 2016 | | |
|---|---|---|---|---|---|---|
| SEK M | Board and Presidents[1] | of which variable salaries | Other employees | Board and Presidents[1] | of which variable salaries | Other employees |
| AB Volvo | 53.7 | 26.3 | 429.0 | 30.2 | 5.1 | 350.4 |
| Subsidiaries | 618.6 | 117.2 | 40,594.4 | 578.9 | 63.8 | 38,109.9 |
| **Group total** | **672.3** | **143.5** | **41,023.4** | **609.1** | **68.9** | **38,460.3** |

| Wages, salaries and other remunerations and social costs | 2017 | | | 2016 | | |
|---|---|---|---|---|---|---|
| SEK M | Wages, salaries remuneration | Social costs | Pension costs | Wages, salaries remuneration | Social costs | Pension costs |
| AB Volvo[2] | 482.7 | 156.4 | 128.0 | 380.6 | 106.8 | 114.2 |
| Subsidiaries | 41,213.0 | 8,876.6 | 3,735.6 | 38,688.9 | 8,121.3 | 3,769.6 |
| **Group total[3]** | **41,695.7** | **9,033.0** | **3,863.6** | **39,069.4** | **8,228.1** | **3,883.8** |

1 Including current and former Board members, Presidents and Executive Vice Presidents.

2 The Parent Company's pension costs, pertaining to Board members and Presidents are disclosed in Note 3 Administrative expenses in the annual report of the Parent Company.

3 Of the Volvo Group's pension costs, SEK 76 M (93) pertain to Board members and Presidents, including current and former Board members, Presidents and Executive Vice Presidents. The Volvo Group's outstanding pension obligations to these individuals amount to SEK 676 M (687). The cost for non-monetary benefits in the Volvo Group amounted to SEK 2,845 M (2,472) of which SEK 41 M (150) to Board members and Presidents. The cost for non-monetary benefits in the Parent Company amounted to SEK 13.2 M (11.6) of which SEK 0.6 M (0.5) to Board members and Presidents.

## NOTE 28 FEES TO THE AUDITORS

| Fees to the auditors | 2017 | 2016 |
|---|---|---|
| PricewaterhouseCoopers | | |
| – Audit fees | 103 | 104 |
| *whereof to PricewaterhouseCoopers AB** | *34* | |
| – Audit-related fees | 4 | 4 |
| *whereof to PricewaterhouseCoopers AB** | *2* | |
| – Tax advisory services | 8 | 9 |
| *whereof to PricewaterhouseCoopers AB** | *0* | |
| – Other fees | 2 | 4 |
| *whereof to PricewaterhouseCoopers AB** | *1* | |
| **Total** | **117** | **121** |
| Audit fees to others | 3 | 3 |
| **Volvo Group Total** | **120** | **124** |

* As from financial year 2017, the audit fee concerning the audit firm in Sweden elected by the Annual General Meeting are disclosed

The audit assignment involves review of the Annual report and financial accounting and the administration by the Board and the President. Audit-related assignments mean quality assurance services required by enactment, articles of association, regulations or agreement. The amount includes the fee for reviewing the half-year report. Tax services include both tax consultancy and tax compliance services. All other tasks are defined as other.

## NOTE 29 CASH FLOW

### ACCOUNTING POLICY

*Cash flow analysis*

The cash flow statement is prepared in accordance with the indirect method. The cash flow statements of foreign group companies are translated at the average rate. Changes in group structure, acquisitions and divestments, are recognized net, excluding cash and cash equivalents, in the item Acquired and divested operations and are included in cash flow from investing activities.

» **Read more in Note 18** Marketable securities and liquid funds.

| Other non-cash items | 2017 | 2016 |
|---|---|---|
| Risk provisions and losses related to doubtful accounts receivable/customer-financing receivables[1] | 567 | 1,084 |
| Capital gains/losses on divested operations[2] | –320 | –937 |
| Unrealized exchange rate gains/losses on accounts receivable and payable | 156 | –156 |
| Unrealized exchange rate gains/losses on other operating assets and liabilities | –25 | 122 |
| Provision for profit sharing program | 486 | 350 |
| Provision for incentive program | 1,603 | 484 |
| Gains/losses on sale of tangible and intangible assets[3] | 8 | –1,083 |
| Gains/losses on sale of shares and participations[4] | –515 | –131 |
| Provision for expected credit losses in Construction Equipment[1] | 0 | –32 |
| Income from investments in JV | –1,014 | –106 |
| Anticipated contract loss in Governmental Sales in the USA | 308 | - |
| Other changes | 146 | –26 |
| **Total Other non-cash items** | **1,400** | **–431** |

1 SEK 13 M (-247) is included in risk provisions and losses related to doubtful accounts receivables in China.

2 In 2016 Volvo Group divested the external IT operation with a capital gain of SEK 885 M.

3 In 2016 Volvo Group divested real estate with a capital gain of SEK 1.371 M.

4 In 2017 Volvo Group divested shares in Deutz AG with a capital gain of SEK 400 M.

» **Read more in Note 8** Other operating income and expenses about expected credit losses in Construction Equipment in China.

| Investments and divestments of shares, net | 2017 | 2016 |
|---|---|---|
| New issue of shares | –1 | –3 |
| Capital contribution | 92 | –1 |
| Acquisitions | –18 | –10 |
| Divestments | 2,102 | 265 |
| Other | 7 | –27 |
| **Total cash flow from investments and divestments of shares, net** | **2,182** | **224** |

In 2017 Volvo Group divested shares in Deutz AG which generated a positive cash flow of SEK 1.9 billion.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations about divested shares in Deutz AG.

| Acquired and divested operations, net | 2017 | 2016 |
|---|---|---|
| Acquired subsidiaries and other business units | –175 | –56 |
| Divested subsidiaries and other business units | 1,103 | 1,480 |
| **Total cash flow from acquired and divested operations, net** | **928** | **1,425** |

In 2017 Volvo Group divested Volvo Construction Equipment's dealer business in the UK. The sale generated a positive cash flow of SEK 0.9 billion.

» **Read more in Note 3** Acquisitions and divestments of shares in subsidiaries about the effect on net financial position from the acquisitions and divestments.

| Changes in loans, net | December 31, 2016 | Cash flows | Non-cash items: Unrealized currency effects | Non-cash items: Currency translation | December 31, 2017 |
|---|---|---|---|---|---|
| Current loans | 56,497 | –785 | –388 | –1,551 | 53,771 |
| Non-current loans | 84,551 | –8,790 | –283 | –1,573 | 73,904 |
| Interest and currency risk derivatives | –1,247 | – | –1,711 | – | –2,957 |
| Other | – | 579 | – | – | – |
| **Total** | | **–8,996** | | | |

In 2017, the Volvo Group decreased its borrowings as a consequence of the strong operating cash flow, the disposal of shares in Deutz AG and the divestment of Volvo Construction Equipment's dealer business in the UK, reduced by the dividend paid to AB Volvo shareholders.

Syndications were performed in Financial Services to an amount of SEK 6.2 billion (5.6). All syndications impacted cash flow this year.

» **Read more in Note 22** Liabilities regarding Current loans and Non-current loans.

» **Read more in Group performance** about Cash flow statement and Financial position.

## NOTE 30 FINANCIAL INSTRUMENTS

### ACCOUNTING POLICY

Purchases and sales of financial assets and liabilities are recognized on the transaction date. Transaction expenses are included in the assets' fair value, except in cases in which the change in value is recognized in the income statement. The transaction costs that arise in conjunction with the admission of financial liabilities are amortized over the term of the loan as financial cost.

A financial asset is derecognized from the balance sheet when all significant risks and benefits related to the asset have been transferred to a third party.

The fair value of assets is determined based on valid market prices, when available. If market prices are unavailable, the fair value is determined for each asset through the use of various measurement techniques.

Financial instruments are classified based on the degree that market values have been utilized when measuring fair value. The majority of financial instruments measured at fair value held by Volvo Group are classified as level 2. The valuation of level 2 instruments is based on market conditions using quoted market data existing at each balance sheet date. The basis for the interest is the zero-coupon-curve in each currency which is used to calculate the present value of all the estimated future cash flows. For forward exchange contracts the basis is the forward premium based on current spot rate for each currency and future date. The fair value is then discounted based on the forward rates as per the balance sheet date.

Shares and participations are classified as level 1 for listed shares and level 3 for not listed shares. Call options are classified as level 3 and are based on the Black & Scholes option pricing formula.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations.

#### Financial assets at fair value through the income statement

All of the Volvo Group's financial assets that are recognized at fair value through the income statement are classified as held for trading. As presented in the table on the next page, these instruments are derivatives, used for hedging interest and currency risks, and marketable securities (further presented in note 18).

Derivatives used for hedging interest rate exposure in the customer-financing portfolio within Financial Services as well as the debt portfolio in Industrial Operations are included in this category. Unrealized gains and losses from fluctuations in the fair values of the financial instruments are recognized in Other financial income and expenses. The Volvo Group intends to hold these derivatives to maturity, which is why, over time, the market valuation will be offset by the interest-rate fixing on borrowing and lending in Financial Services, and thus not affect Net income or cash flow.

Financial instruments used for hedging currency risks arising from future firm commercial cash flows are also recognized under this category. Realized result and unrealized revaluation of derivatives are recognized in Other financial income and expenses to be able to net all internal flows before entering into external derivatives to hedge future currency risk. When hedging future cash flows for specific orders the classification in the income statement is decided on a case by case basis, according to the Volvo Group financial risk policy. In 2017 gains and losses from derivatives hedging currency risks for specific orders of SEK -9 (51) M have been recognized in Operating income and SEK 27 (61) M in Other financial income and expenses.

» **Read more in Note 9** Other financial income and expenses.

Hedge Accounting is not applied by the Volvo Group. In previous years hedging of certain net investments in foreign operations was performed. The result of such hedges was recognized as a separate item in Other comprehensive income (OCI). In the event of a divestment, the accumulated result from the hedge will be recognized in the income statement.

#### Loan receivables and other receivables

Included in this category are accounts receivables, customer-finance receivables and other interest-bearing receivables.

» **Read more in Note 15** Customer-financing receivables.

» **Read more in Note 16** Receivables.

#### Assets available for sale

This category includes assets available for sale and assets that have not been classified in any of the other categories. For the Volvo Group this category contains holding of shares in listed and non-listed companies.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations.

**Information regarding carrying amounts and fair values**
In the table below, carrying amounts are compared with fair values for all of the Volvo Group's financial instruments.

| **Carrying amounts and fair values on Financial Instruments** | | Dec 31, 2017 | | Dec 31, 2016 | |
|---|---|---|---|---|---|
| SEK M | | Carrying value | Fair value | Carrying value | Fair value |
| **Assets** | | | | | |
| **Financial assets at fair value through the income statement** | | | | | |
| The Volvo Group's outstanding interest and currency risk derivatives[1] | Note 16 | 3,890 | 3,890 | 3,026 | 3,026 |
| The Volvo Group's outstanding raw material derivatives | Note 16 | – | – | 33 | 33 |
| Other derivatives[2] | | 564 | 564 | 564 | 564 |
| B/S Marketable securities | Note 18 | 178 | 178 | 1,223 | 1,223 |
| | | 4,632 | 4,632 | 4,845 | 4,845 |
| **Loans and receivables** | | | | | |
| B/S Accounts receivable | Note 16 | 40,774 | – | 34,419 | – |
| Customer financing receivables[3] | Note 15 | 109,378 | – | 110,821 | – |
| Other interest-bearing receivables | Note 16 | 587 | – | 1,105 | – |
| | | 150,739 | – | 146,345 | – |
| **Financial assets available for sale** | | | | | |
| Holding of shares in listed companies | Note 5 | 462 | 462 | 491 | 491 |
| Holding of shares in non-listed companies | Note 5 | 237 | – | 285 | – |
| | | 699 | 462 | 777 | 491 |
| B/S **Cash and cash equivalents** | Note 18 | 36,092 | 36,092 | 23,949 | 23,949 |
| **Liabilities** | Note 22 | | | | |
| **Financial liabilities at fair value through the income statement** | | | | | |
| The Volvo Group's outstanding interest and currency risks derivatives | | 685 | 685 | 1,540 | 1,540 |
| The Volvo Group's outstanding raw material derivatives | | – | – | 6 | 6 |
| | | 685 | 685 | 1,546 | 1,546 |
| **Financial liabilities valued at amortized cost**[4] | | | | | |
| Long term bond loans and other loans | | 73,781 | 76,338 | 84,145 | 86,926 |
| Short term bank loans and other loans | | 53,422 | 53,452 | 55,780 | 55,720 |
| | | 127,224 | 129,790 | 139,925 | 142,646 |
| B/S **Trade Payables** | | 65,346 | – | 55,264 | – |

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1 The Volvo Group's gross exposure from derivatives reported as assets is reduced by 82% (65) by netting agreements and cash deposits to SEK 706 M (1,049).
2 The input data used in the valuation model for calculating the fair value has not changed during 2017.
3 The Volvo Group does not estimate the risk premium for customer-financing receivables and therefore chooses not to disclose fair value for this category.
4 In the Volvo Group balance sheet, financial liabilities include loan-related derivatives amounting to SEK –452 M (–1,122). The credit risk is included in the fair value of loans.

» **Read more in Note 4** Goals and policies in financial risk management.

### Derecognition of financial assets

The Volvo Group is involved in cash enhancement activities such as discounting. Financial assets that have been transferred are included in full or in part in the recognized assets of the Volvo Group dependent on the risk and rewards related to the asset that have been transferred to the recipient. An evaluation is performed to establish whether, substantially, all the risks and rewards have been transferred to an external party. Where the Volvo Group concludes that this is not the case, the portion of the financial assets corresponding to the Volvo Group's continuous involvement is recognized. When all the risk and rewards are considered not to be transferred the amount is kept on the balance sheet in full. Transferred financial assets that do not fulfill the requirements for derecognition amounted to SEK 1.4 bn (0.5).

Financial assets for which substantially all risks and rewards have been transferred are derecognized from the Volvo Group's balance sheet. Involvement in these assets is reflected in the Volvo Group's balance sheet as part of the external credit guarantees, which are recognized at fair value as provisions in the balance sheet and amount to SEK 0.2 bn (0.2).

The Volvo Group's maximum exposure to loss is considered being the total recourse relating to transferred assets that are part of the recognized credit guarantees, i.e. the total amount Volvo Group would have to pay in case of default of the customers. The likelihood for all customers going into default at the same time is considered to be low. The gross exposure for the Volvo Group amounted to SEK 1.4 bn (1.4) related to credit guarantees issued for customers and others and is part of the Volvo Group's contingent liabilities. This amount has not been reduced by the value of counter guarantees received or other collaterals such as the right to repossess the product.

» **Read more in Note 21** Other provisions.

» **Read more in Note 24** Contingent Liabilities.

### Gains, losses, interest income and expenses from financial instruments

The table below shows how gains and losses, as well as interest income and expenses, have affected income after financial items in the Volvo Group divided by the different categories of financial instruments.

| **Recognized in operating income**[1] | 2017 | | | 2016 | | |
|---|---|---|---|---|---|---|
| SEK M | Gain/loss | Interest income | Interest expense | Gain/loss | Interest income | Interest expense |
| **Financial assets and liabilities at fair value through the income statement**[2] | | | | | | |
| Currency risk derivatives[3] | –9 | – | – | 51 | – | – |
| **Loans receivable and other receivables** | | | | | | |
| Accounts receivables/trade payables[1] | 46 | – | – | –757 | – | – |
| Customer financing receivables Financial Services[1] | 67 | 5,419 | – | 62 | 5,235 | – |
| **Financial assets available for sale** | | | | | | |
| Shares and participations for which a market value can be calculated | 37 | – | – | 37 | – | – |
| Shares and participations for which a market value cannot be calculated | 175 | – | – | 114 | – | – |
| **Financial liabilities valued at amortized cost**[4] | – | – | –2,001 | – | – | –1,845 |
| **Impact on operating income** | **316** | **5,419** | **–2,001** | **–494** | **5,235** | **–1,845** |
| **Recognized in net financial items**[5,6] | | | | | | |
| **Financial assets and liabilities at fair value through the income statement** | | | | | | |
| Marketable securities | – | 1 | – | – | 7 | – |
| Interest and currency rate risk derivatives[2,3] | 4,404 | –6 | –623 | –952 | 3 | –235 |
| **Loans receivable and other receivables** | | | | | | |
| Cash and Cash equivalents | – | 169 | – | – | 229 | – |
| **Financial liabilities valued at amortized cost** | –4,753 | – | –845 | 1,344 | – | –1,200 |
| **Impact on net financial items**[5,6] | **–170** | **164** | **–1,468** | **392** | **240** | **–1,435** |

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1 Information is provided regarding changes in customer-financing and provisions for doubtful receivables in Notes 15 Customer-financing receivables and Note 16 Accounts receivables, as well as in Note 8 Other operating income and expenses.

2 Accrued and realized interest is included in gains and losses related to Financial assets and liabilities at fair value through the income statement.

3 The Volvo Group uses forward contracts and currency options to hedge the value of future cash flows in foreign currency. Both unrealized and realized result of currency risk contracts are included in the table.

4 Interest expenses attributable to financial liabilities valued at amortized cost recognized in operating income include interest expenses for financing operating lease activities, which are not classified as Financial Instruments.

5 In gain, loss, interest income and expenses related to financial instruments recognized in Net financial items, SEK -170 M (392) was recognized under Other financial income and expenses.

6 Interest expenses reported in net financial items attributable to pensions, SEK 384 M (411) are not included in this table.

» **Read more in Note 4** Goals and policies in financial risk management.

» **Read more in Note 9** Other financial income and expenses.

» **Read more in Note 5** Investments in joint ventures, associated companies and other shares and participations.

In the table below outstanding derivatives hedging currency and interest rate risks is presented.

**Outstanding derivative instruments**

| SEK M | Dec 31, 2017 | | Dec 31, 2016 | |
|---|---|---|---|---|
| | Nominal amount | Carrying value | Nominal amount | Carrying value |
| Interest-rate swaps | | | | |
| – receivable position | 116,645 | 3,431 | 88,715 | 2,413 |
| – payable position | 77,016 | –274 | 74,249 | –1,072 |
| Forwards and futures | | | | |
| – receivable position | – | – | 2,000 | – |
| Foreign exchange derivatives | | | | |
| – receivable position | 33,375 | 452 | 25,136 | 593 |
| – payable position | 21,526 | –409 | 18,776 | –452 |
| Options purchased | | | | |
| – receivable position | 1,381 | 7 | 1,518 | 20 |
| – payable position | 41 | – | 48 | – |
| Options written | | | | |
| – receivable position | – | – | 48 | 0 |
| – payable position | 715 | –1 | 1,413 | –16 |
| **Subtotal** | | **3,206** | | **1,486** |
| Raw material derivatives | | | | |
| – receivable position | – | – | 180 | 33 |
| – payable position | – | – | 259 | –6 |
| **Total** | | **3,206** | | **1,512** |

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# NOTE 31 CHANGES IN VOLVO GROUP FINANCIAL REPORTING 2018

**Implementation of new accounting standards**
As from January 1, 2018 Volvo Group applies IFRS 9 Financial instruments and IFRS 15 Revenue from Contracts with Customers. These standards are applied retrospectively but with the difference in relation to presenting comparative financial information for 2017.

*Opening balance 2017*
For IFRS 15, the opening balance for 2017 is adjusted in accordance with the new standard and the transition effect is recognized as a decrease in equity with SEK 712 M. The reported financial information for 2017 is restated accordingly for comparison purposes. For IFRS 9, the opening balance for 2017 has not been affected.

*IFRS 9 Financial instruments*
IFRS 9 is divided in three parts: Classification and Measurement, Impairment and Hedge Accounting, and replaces the current IAS 39 Financial Instruments: recognition and measurement. All financial instruments within the Volvo Group are classified and valued at amortized cost, except marketable securities, derivatives and holding of shares, which are classified and valued at fair value through the income statement. The new rules regarding classification and valuation have no impact on the Volvo Group. The new hedge accounting rules are not affecting the Volvo Group as no hedge accounting is applied.

The impact of the new standard is related to impairment and the new expected credit loss model. Volvo Group applies the simplified approach to measure lifetime expected credit losses. Compared with the former applied incurred loss model, the new requirements imply an earlier recognition of credit losses. Historical information is used regarding credit loss experience to forecast future credit losses. In addition, current and forward-looking information is used to reflect current and future conditions. The new model increased loss allowance by SEK 500 M mainly affecting customer-financing receivables negatively within Financial Services with a corresponding decrease in equity amounting to SEK 371 M (net of tax) as of January 1, 2018.

» **Read more in Note 30** Financial instruments regarding accounting policy for 2017.

The effect from the transition to IFRS 9 is presented on page 176–177 in the restated balance sheet and net financial position as of January 1, 2018.

*IFRS 15 Revenue from Contracts with Customers*
IFRS 15 replaces IAS 11 Construction contracts, IAS 18 Revenue and the related interpretations IFRIC 13, 15, 18 and SIC-31. IFRS 15 represents a new framework for recognizing revenue from contracts with customers and with additional disclosure requirements.

The major impact of implementation of IFRS 15 is related to sales transactions of vehicles with various residual value commitments, e.g. buybacks and tradebacks, and the assessment if control has been transferred from Volvo Group to the customer.

The criterion of transferring control is based on if the customer has a significant economic incentive to exercise the residual value commitment or not. If the customer is considered to have a significant economic incentive to exercise the residual value commitment to return the vehicle, revenue is recognized over the residual value commitment period as an operating lease transaction in accordance with IAS 17.

Various factors are assessed when considering if significant economic incentives exist, such as repurchase price in relation to the expected market value at the date of the repurchase and historical return rates. These are new criteria compared with the former revenue recognition model, where the residual value was compared with the sales price. The accounting model has not change, however the criteria for when to apply the model are different.

If the customer is not considered to have a significant economic incentive to exercise the residual value commitment to return the vehicle, the revenue is recognized in accordance with the right of return model. Hence, a major portion of revenue and margin is recognized at inception of the contract. A refund liability and an asset related to the right to recover the vehicle from the customer on settling the refund liability are recognized in the balance sheet. If the vehicle is not returned the refund liability is recognized as revenue and the asset is expensed. This is a change compared to the former model, where full revenue is recognized at the inception of the contract with a contingent liability.

The effect of the two new models is a later recognition of revenue with an increase of assets with SEK 6,516 M mainly related to assets under operating lease and right of return assets and an increase of liabilities with SEK 7,725 M mainly related to deferred leasing income and residual value liabilities as of December 31, 2017. The corresponding effect is a net decrease in equity with SEK 1,209 M (net of tax) consisting of opening balance effect of SEK 712 M and a decrease of Income for the period for 2017 with SEK 497 M, whereof SEK 650 M affecting Operating income for 2017.

» **Read more in Note 7** Revenue regarding accounting policy for 2017.

The effect from the transition to IFRS 15 is presented on page 168–176 with restatements on net sales, operating income and operating margin divided by segment and quarter. Further is a presentation of income statement per quarter and full year for 2017, the opening balance sheet for 2017 and balance sheet per quarter and year to date.

**Accounting policy for customer-financing receivables and receivables as from January 1, 2018**

*Customer-financing receivables (Note 15)*

**ACCOUNTING POLICY**

Installment credits, dealer financing and other receivables within customer-finance receivables have contractual cash flows that are solely payments of principal and interest and are held as part of a business model whose objective is to collect contractual cash flows. They are valued at amortized cost in accordance with the effective interest method. For information on recognition and classification on financial leasing see Note 14 Leasing. Volvo Group is applying the simplified expected credit loss model for customer finance receivables, under which the loss allowance is measured at an amount equal to lifetime expected credit losses and is recorded at initial recognition. Changes to credit loss reserves are recognized in Other operating income and expense.

*Receivables (Note 16)*

**ACCOUNTING POLICY**

Receivables are classified and measured at amortized cost. Volvo Group is applying the simplified expected credit loss model on accounts receivables, under which the loss allowance is measured at an amount equal to lifetime expected credit losses and is recorded at initial recognition. Changes to credit loss reserves are recognized in Other operating income and expense.

**Accounting policy for revenue as from January 1, 2018**

*Revenue (Note 7)*

**ACCOUNTING POLICY**

The Volvo Group's recognized net sales pertain mainly to revenues from sales of vehicles and services. Revenue from vehicles and services are recognized when control has been transferred from Volvo Group to the customer. Control refers to the customers' ability to use vehicles or services in its operations and to obtain the associated cash flow. Vehicles and services may be sold separately or as a combined offer. In combined offers where the vehicle and services are separable from each other and the customer can benefit from the vehicle and the service independently, the received payment is allocated between the different vehicles and services.

Interest income related to finance leasing and installment credit contracts are recognized as net sales within Financial Services during the underlying contract period.

The below table includes a description of vehicles and services in terms of nature, timing of recognizing revenue and payment terms.

| VEHICLES | SERVICES |
|---|---|
| Vehicles include sales of new vehicles, machinery and engines as well as sales of used vehicles, machines, trailers, superstructures and special vehicles. A standard contractual warranty is included as part of the sales. Read more in note 21 Other provisions.<br>Revenue is recognized when the control of the vehicle has been transferred to the customer, normally at one point in time which is when the vehicle has been delivered to the customer.<br>Revenue is reduced by the value of rebates, returns and variable consideration. The variable consideration is assessed at contract inception with continuous reassessment at each reporting period.<br>However, if the sale of the vehicle is combined with residual value commitment and there is a significant economic incentive for the customer to exercise the option, the control has not been transferred to the customer and the transaction is accounted for as an operating lease transaction in accordance with IAS 17. Revenue, in these transactions, is recognized over the residual value commitment period.<br>If the customer is not considered to have a significant economic incentive to exercise the residual value commitment to return the vehicle, the revenue will be recognized in accordance with the right of return model.<br>The customer can pay for the vehicle at the point of sale or defer the payment by entering into agreements such as installment credits, financial leasing or operating leasing. | Services include sale of spare parts, maintenance services and other aftermarket products.<br>Revenue is recognized when the control of the service has been transferred to the customer, normally over time which is when the customer can benefit from the use of the delivered services. The services are considered to be delivered at the same time as Volvo Group incurs the associated cost to deliver the service.<br>When payments for maintenance contracts are received in advance from the customers, the payments are recognized as contract liabilities. |

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# SEGMENT REPORTING

| Net sales | First quarter | | | Second quarter | | |
|---|---|---|---|---|---|---|
| SEK M | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** |
| Trucks | 49,467 | –366 | 49,101 | 56,366 | –432 | 55,934 |
| Construction Equipment | 16,163 | –61 | 16,101 | 18,511 | –72 | 18,439 |
| Buses | 5,548 | –7 | 5,540 | 6,971 | –51 | 6,920 |
| Volvo Penta | 2,701 | – | 2,701 | 3,081 | – | 3,081 |
| Group Functions & Other incl. eliminations | 773 | – | 773 | 738 | – | 738 |
| **Industrial Operations** | **74,652** | **–435** | **74,217** | **85,668** | **–555** | **85,113** |
| Financial Services | 2,892 | – | 2,892 | 2,946 | – | 2,946 |
| Eliminations | –179 | – | –179 | –205 | – | –205 |
| **Volvo Group** | **77,365** | **–435** | **76,930** | **88,409** | **–555** | **87,854** |

| Operating income | First quarter | | | Second quarter | | |
|---|---|---|---|---|---|---|
| SEK M | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** |
| Trucks | 4,910 | –182 | 4,728 | 5,417 | –134 | 5,282 |
| Construction Equipment | 1,617 | –2 | 1,615 | 2,460 | –1 | 2,460 |
| Buses | 101 | –11 | 90 | 320 | –4 | 317 |
| Volvo Penta | 419 | – | 419 | 479 | – | 479 |
| Group Functions & Other incl. eliminations | –549 | – | –549 | –658 | – | –658 |
| **Industrial Operations** | **6,499** | **–195** | **6,304** | **8,019** | **–139** | **7,881** |
| Financial Services | 531 | – | 531 | 521 | – | 521 |
| **Volvo Group** | **7,029** | **–195** | **6,834** | **8,540** | **–139** | **8,402** |

| Operating margin | First quarter | | Second quarter | |
|---|---|---|---|---|
| % | Previously reported 2017 | **After restatement** | Previously reported 2017 | **After restatement** |
| Trucks | 9.9 | 9.6 | 9.6 | 9.4 |
| Construction Equipment | 10.0 | 10.0 | 13.3 | 13.3 |
| Buses | 1.8 | 1.6 | 4.6 | 4.6 |
| Volvo Penta | 15.5 | 15.5 | 15.5 | 15.5 |
| **Industrial Operations** | **8.7** | **8.5** | **9.4** | **9.3** |
| **Volvo Group** | **9.1** | **8.9** | **9.7** | **9.6** |

| | Third quarter | | | Fourth quarter | | | Year 2017 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** |
| | 49,798 | –602 | 49,196 | 60,849 | –226 | 60,622 | 216,480 | –1,626 | 214,854 |
| | 15,091 | –48 | 15,042 | 16,733 | –3 | 16,730 | 66,497 | –184 | 66,313 |
| | 6,539 | –176 | 6,363 | 7,020 | 34 | 7,055 | 26,078 | –200 | 25,878 |
| | 2,662 | – | 2,662 | 2,676 | – | 2,676 | 11,119 | – | 11,119 |
| | 432 | – | 432 | 1,690 | – | 1,690 | 3,634 | – | 3,634 |
| | **74,522** | **–826** | **73,696** | **88,968** | **–195** | **88,773** | **323,809** | **–2,010** | **321,799** |
| | 2,896 | – | 2,896 | 3,078 | – | 3,078 | 11,812 | – | 11,812 |
| | –193 | – | –193 | –296 | – | –296 | –873 | – | –873 |
| | **77,225** | **–826** | **76,400** | **91,749** | **–195** | **91,554** | **334,748** | **–2,010** | **332,738** |

| | Third quarter | | | Fourth quarter | | | Year 2017 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** |
| | 4,261 | –76 | 4,184 | 5,796 | –206 | 5,590 | 20,383 | –599 | 19,785 |
| | 2,024 | –1 | 2,023 | 1,816 | 4 | 1,820 | 7,917 | 0 | 7,917 |
| | 218 | –10 | 208 | 288 | –27 | 261 | 928 | –51 | 876 |
| | 353 | – | 353 | 187 | – | 187 | 1,439 | – | 1,439 |
| | 16 | – | 16 | –1,342 | – | –1,342 | –2,532 | – | –2,532 |
| | **6,871** | **–87** | **6,785** | **6,746** | **–229** | **6,516** | **28,135** | **–650** | **27,485** |
| | 553 | – | 553 | 588 | – | 588 | 2,192 | – | 2,192 |
| | **7,424** | **–87** | **7,337** | **7,334** | **–229** | **7,105** | **30,327** | **–650** | **29,678** |

| | Third quarter | | Fourth quarter | | Year 2017 | |
|---|---|---|---|---|---|---|
| | Previously reported 2017 | **After restatement** | Previously reported 2017 | **After restatement** | Previously reported 2017 | **After restatement** |
| | 8.6 | 8.5 | 9.5 | 9.2 | 9.4 | 9.2 |
| | 13.4 | 13.4 | 10.9 | 10.9 | 11.9 | 11.9 |
| | 3.3 | 3.3 | 4.1 | 3.7 | 3.6 | 3.4 |
| | 13.3 | 13.3 | 7.0 | 7.0 | 12.9 | 12.9 |
| | **9.2** | **9.2** | **7.6** | **7.3** | **8.7** | **8.5** |
| | **9.6** | **9.6** | **8.0** | **7.8** | **9.1** | **8.9** |

# CONSOLIDATED INCOME STATEMENT

| SEK M | First quarter | | | Second quarter | | |
|---|---|---|---|---|---|---|
| | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** |
| **Net sales** | **77,365** | **–435** | **76,930** | **88,409** | **–555** | **87,854** |
| Cost of sales | –57,835 | 239 | –57,596 | –67,017 | 416 | –66,601 |
| **Gross income** | **19,530** | **–195** | **19,335** | **21,392** | **–139** | **21,254** |
| Research and development expenses | –3,994 | – | –3,994 | –4,126 | – | –4,126 |
| Selling expenses | –6,942 | – | –6,942 | –7,247 | – | –7,247 |
| Administrative expenses | –1,286 | – | –1,286 | –1,443 | – | –1,443 |
| Other operating income and expenses | –616 | – | –616 | –395 | – | –395 |
| Income/loss from investments in Joint Ventures and associated companies | 340 | – | 340 | 268 | – | 268 |
| Income from other investments | –2 | – | –2 | 91 | – | 91 |
| **Operating income** | **7,029** | **–195** | **6,834** | **8,540** | **–139** | **8,402** |
| Interest income and similar credits | 50 | – | 50 | 30 | – | 30 |
| Interest expenses and similar charges | –463 | – | –463 | –487 | – | –487 |
| Other financial income and expenses | –177 | – | –177 | –59 | – | –59 |
| **Income after financial items** | **6,440** | **–195** | **6,245** | **8,023** | **–139** | **7,885** |
| Income taxes | –1,624 | 45 | –1,579 | –2,019 | 35 | –1,984 |
| **Income for the period** | **4,816** | **–150** | **4,666** | **6,004** | **–103** | **5,901** |
| * Attributable to: | | | | | | |
| Equity holders of the parent company | 4,730 | –150 | 4,580 | 5,916 | –103 | 5,813 |
| Minority interests | 85 | – | 85 | 88 | – | 88 |
| | **4,816** | **–150** | **4,666** | **6,004** | **–103** | **5,901** |
| Basic earnings per share, SEK | 2.33 | –0.08 | 2.25 | 2.91 | –0.05 | 2.86 |
| Diluted earnings per share, SEK | 2.33 | –0.08 | 2.25 | 2.91 | –0.05 | 2.86 |

The restatement of IFRS 15 has not impacted the content of Other Comprehensive Income, whereby no restated financial information is presented.

| Third quarter | | | Fourth quarter | | | Year 2017 | | |
|---|---|---|---|---|---|---|---|---|
| Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** | Previously reported 2017 | Restatement IFRS 15 | **After restatement** |
| **77,225** | **–826** | **76,400** | **91,749** | **–195** | **91,554** | **334,748** | **–2,010** | **332,738** |
| –58,978 | 739 | –58,239 | –70,751 | –34 | –70,785 | –254,581 | 1,361 | –253,220 |
| **18,247** | **–87** | **18,161** | **20,998** | **–229** | **20,769** | **80,167** | **–650** | **79,518** |
| –3,445 | – | –3,445 | –4,533 | – | –4,533 | –16,098 | – | –16,098 |
| –6,791 | – | –6,791 | –7,602 | – | –7,602 | –28,582 | – | –28,582 |
| –1,273 | – | –1,273 | –1,640 | – | –1,640 | –5,642 | – | –5,642 |
| –5 | – | –5 | –45 | – | –45 | –1,061 | – | –1,062 |
| 634 | – | 634 | 166 | – | 166 | 1,407 | – | 1,407 |
| 56 | – | 56 | –10 | – | –10 | 135 | – | 135 |
| **7,424** | **–87** | **7,337** | **7,334** | **–229** | **7,105** | **30,327** | **–650** | **29,678** |
| 44 | – | 44 | 39 | – | 39 | 164 | – | 164 |
| –417 | – | –417 | –484 | – | –484 | –1,852 | – | –1,852 |
| –17 | – | –17 | –132 | – | –132 | –385 | – | –385 |
| **7,034** | **–87** | **6,947** | **6,757** | **–229** | **6,528** | **28,254** | **–650** | **27,605** |
| –1,519 | 25 | –1,495 | –1,809 | 48 | –1,761 | –6,971 | 153 | –6,818 |
| **5,515** | **–62** | **5,453** | **4,948** | **–181** | **4,767** | **21,283** | **–497** | **20,786** |
| | | | | | | | | |
| 5,467 | –62 | 5,405 | 4,867 | –181 | 4,686 | 20,981 | –497 | 20,484 |
| 48 | – | 48 | 81 | – | 81 | 302 | – | 302 |
| **5,515** | **–62** | **5,453** | **4,948** | **–181** | **4,767** | **21,283** | **–497** | **20,786** |
| 2.69 | –0.03 | 2.66 | 2.40 | –0.09 | 2.31 | 10.33 | –0.25 | 10.08 |
| 2.69 | –0.03 | 2.66 | 2.39 | –0.09 | 2.30 | 10.32 | –0.25 | 10.07 |

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# CONSOLIDATED BALANCE SHEET

| SEK M | Volvo Group<br>Previously reported Jan 1, 2017 | Restatement IFRS 15 | **After restatement Jan 1, 2017** |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Intangible assets | 37,916 | – | 37,916 |
| *Tangible assets* | | | |
| Property, plant and equipment | 55,875 | – | 55,875 |
| Assets under operating leases | 34,693 | 3,997 | 38,690 |
| *Financial assets* | | | |
| Investments in Joint Ventures and associated companies | 11,643 | – | 11,643 |
| Other shares and participations | 776 | – | 776 |
| Non-current customer-financing receivables | 57,827 | – | 57,827 |
| Prepaid pensions | 79 | – | 79 |
| Non-current interest-bearing receivables | 1,258 | – | 1,258 |
| Other non-current receivables | 4,148 | 2,867 | 7,015 |
| Deferred tax assets | 14,399 | 195 | 14,594 |
| **Total non-current assets** | **218,615** | **7,059** | **225,674** |
| **Current assets** | | | |
| Inventories | 48,287 | – | 48,287 |
| *Current receivables* | | | |
| Customer-financing receivables | 52,994 | – | 52,994 |
| Tax assets | 1,359 | – | 1,359 |
| Interest-bearing receivables | 1,135 | – | 1,135 |
| Internal funding | – | – | – |
| Accounts receivable | 34,419 | –2,042 | 32,377 |
| Other receivables | 16,410 | 1,069 | 17,479 |
| Non interest-bearing assets held for sale | 525 | – | 525 |
| Interest-bearing assets held for sale | – | – | – |
| Marketable securities | 1,223 | – | 1,223 |
| Cash and cash equivalents | 23,949 | – | 23,949 |
| **Total current assets** | **180,301** | **–973** | **179,328** |
| **Total assets** | **398,916** | **6,086** | **405,002** |
| **Equity and liabilities** | | | |
| Equity attributable to the equity holders of the parent company | 96,061 | –712 | 95,349 |
| Minority interests | 1,703 | – | 1,703 |
| **Total equity** | **97,764** | **–712** | **97,052** |
| *Non-current provisions* | | | |
| Provisions for post-employment benefits | 14,669 | – | 14,669 |
| Provisions for deferred taxes | 5,270 | 1 | 5,271 |
| Other provisions | 9,804 | –721 | 9,083 |
| *Non-current liabilities* | | | |
| Bond loans | 60,653 | – | 60,653 |
| Other loans | 23,898 | – | 23,898 |
| Internal funding | – | – | – |
| Other liabilities | 20,322 | 6,230 | 26,552 |
| Current provisions | 11,333 | –256 | 11,077 |
| *Current liabilities* | | | |
| Loans | 56,497 | – | 56,497 |
| Internal funding | – | – | – |
| Non interest-bearing liabilities held for sale | 148 | – | 148 |
| Interest-bearing liabilities held for sale | – | – | – |
| Trade payables | 55,264 | – | 55,264 |
| Tax liabilities | 685 | – | 685 |
| Other liabilities | 42,608 | 1,544 | 44,153 |
| **Total equity and liabilities** | **398,916** | **6,086** | **405,002** |

# CONSOLIDATED BALANCE SHEET

| SEK M | Volvo Group Previously reported Mar 31, 2017 | Restatement IFRS 15 | **After restatement Mar 31, 2017** |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Intangible assets | 37,140 | – | 37,140 |
| *Tangible assets* | | | |
| Property, plant and equipment | 55,397 | – | 55,397 |
| Assets under operating leases | 34,720 | 3,973 | 38,693 |
| *Financial assets* | | | |
| Investments in Joint Ventures and associated companies | 11,943 | – | 11,943 |
| Other shares and participations | 817 | – | 817 |
| Non-current customer-financing receivables | 55,817 | – | 55,817 |
| Prepaid pensions | 89 | – | 89 |
| Non-current interest-bearing receivables | 990 | – | 990 |
| Other non-current receivables | 4,105 | 3,074 | 7,179 |
| Deferred tax assets | 14,539 | 240 | 14,779 |
| **Total non-current assets** | **215,558** | **7,287** | **222,844** |
| **Current assets** | | | |
| Inventories | 51,546 | – | 51,546 |
| *Current receivables* | | | |
| Customer-financing receivables | 50,915 | – | 50,915 |
| Tax assets | 1,450 | – | 1,450 |
| Interest-bearing receivables | 522 | – | 522 |
| Internal funding | – | – | – |
| Accounts receivable | 34,056 | –2,167 | 31,888 |
| Other receivables | 15,972 | 1,051 | 17,023 |
| Non interest-bearing assets held for sale | 5,972 | – | 5,972 |
| Interest-bearing assets held for sale | – | – | – |
| Marketable securities | 246 | – | 246 |
| Cash and cash equivalents | 32,042 | – | 32,042 |
| **Total current assets** | **192,720** | **–1,116** | **191,603** |
| **Total assets** | **408,277** | **6,170** | **414,447** |
| **Equity and liabilities** | | | |
| Equity attributable to the equity holders of the parent company | 101,397 | –863 | 100,535 |
| Minority interests | 1,774 | – | 1,774 |
| **Total equity** | **103,171** | **–863** | **102,308** |
| *Non-current provisions* | | | |
| Provisions for post-employment benefits | 13,744 | – | 13,744 |
| Provisions for deferred taxes | 5,444 | – | 5,445 |
| Other provisions | 9,324 | –758 | 8,566 |
| *Non-current liabilities* | | | |
| Bond loans | 56,134 | – | 56,134 |
| Other loans | 27,699 | – | 27,699 |
| Internal funding | – | – | – |
| Other liabilities | 20,638 | 6,151 | 26,788 |
| Current provisions | 11,286 | –246 | 11,041 |
| *Current liabilities* | | | |
| Loans | 57,828 | – | 57,828 |
| Internal funding | – | – | – |
| Non interest-bearing liabilities held for sale | 3,724 | – | 3,724 |
| Interest-bearing liabilities held for sale | 285 | – | 285 |
| Trade payables | 56,963 | – | 56,963 |
| Tax liabilities | 1,353 | – | 1,353 |
| Other liabilities | 40,685 | 1,886 | 42,571 |
| **Total equity and liabilities** | **408,277** | **6,170** | **414,447** |

# CONSOLIDATED BALANCE SHEET

| SEK M | Volvo Group<br>Previously reported Jun 30, 2017 | Restatement IFRS 15 | **After restatement Jun 30, 2017** |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Intangible assets | 35,882 | – | 35,882 |
| *Tangible assets* | | | |
| Property, plant and equipment | 53,299 | – | 53,299 |
| Assets under operating leases | 34,484 | 4,304 | 38,788 |
| *Financial assets* | | | |
| Investments in Joint Ventures and associated companies | 11,706 | – | 11,706 |
| Other shares and participations | 797 | – | 797 |
| Non-current customer-financing receivables | 55,487 | – | 55,487 |
| Prepaid pensions | 87 | – | 87 |
| Non-current interest-bearing receivables | 1,765 | – | 1,765 |
| Other non-current receivables | 3,995 | 3,345 | 7,340 |
| Deferred tax assets | 13,826 | 275 | 14,101 |
| **Total non-current assets** | **211,327** | **7,925** | **219,252** |
| **Current assets** | | | |
| Inventories | 51,369 | – | 51,369 |
| *Current receivables* | | | |
| Customer-financing receivables | 50,532 | – | 50,532 |
| Tax assets | 2,118 | – | 2,118 |
| Interest-bearing receivables | 1,101 | – | 1,101 |
| Internal funding | – | – | – |
| Accounts receivable | 34,453 | –2,046 | 32,407 |
| Other receivables | 14,902 | 698 | 15,599 |
| Non interest-bearing assets held for sale | 7,295 | – | 7,295 |
| Interest-bearing assets held for sale | 6 | – | 6 |
| Marketable securities | 193 | – | 193 |
| Cash and cash equivalents | 26,205 | – | 26,205 |
| **Total current assets** | **188,173** | **–1,348** | **186,825** |
| **Total assets** | **399,501** | **6,577** | **406,078** |
| **Equity and liabilities** | | | |
| Equity attributable to the equity holders of the parent company | 98,462 | –966 | 97,495 |
| Minority interests | 1,788 | – | 1,788 |
| **Total equity** | **100,250** | **–966** | **99,283** |
| *Non-current provisions* | | | |
| Provisions for post-employment benefits | 12,677 | – | 12,677 |
| Provisions for deferred taxes | 5,475 | 1 | 5,475 |
| Other provisions | 9,075 | –793 | 8,282 |
| *Non-current liabilities* | | | |
| Bond loans | 54,329 | – | 54,329 |
| Other loans | 28,333 | – | 28,333 |
| Internal funding | – | – | – |
| Other liabilities | 20,959 | 6,157 | 27,116 |
| Current provisions | 11,086 | –263 | 10,823 |
| *Current liabilities* | | | |
| Loans | 48,690 | – | 48,690 |
| Internal funding | – | – | – |
| Non interest-bearing liabilities held for sale | 4,554 | – | 4,554 |
| Interest-bearing liabilities held for sale | 301 | – | 301 |
| Trade payables | 61,370 | – | 61,370 |
| Tax liabilities | 2,854 | – | 2,854 |
| Other liabilities | 39,549 | 2,441 | 41,990 |
| **Total equity and liabilities** | **399,501** | **6,577** | **406,078** |

# CONSOLIDATED BALANCE SHEET

| | Volvo Group | | |
|---|---|---|---|
| SEK M | Previously reported Sep 30, 2017 | Restatement IFRS 15 | **After restatement Sep 30, 2017** |
| **Assets** | | | |
| **Non-current assets** | | | |
| Intangible assets | 35,195 | – | 35,195 |
| *Tangible assets* | | | |
| Property, plant and equipment | 51,955 | – | 51,955 |
| Assets under operating leases | 35,001 | 4,675 | 39,677 |
| *Financial assets* | | | |
| Investments in Joint Ventures and associated companies | 10,071 | – | 10,071 |
| Other shares and participations | 695 | – | 695 |
| Non-current customer-financing receivables | 54,590 | – | 54,590 |
| Prepaid pensions | 92 | – | 92 |
| Non-current interest-bearing receivables | 1,925 | – | 1,925 |
| Other non-current receivables | 3,976 | 3,545 | 7,521 |
| Deferred tax assets | 13,254 | 301 | 13,555 |
| **Total non-current assets** | **206,755** | **8,521** | **215,277** |
| **Current assets** | | | |
| Inventories | 50,753 | – | 50,753 |
| *Current receivables* | | | |
| Customer-financing receivables | 50,517 | – | 50,517 |
| Tax assets | 2,529 | – | 2,529 |
| Interest-bearing receivables | 638 | – | 638 |
| Internal funding | – | – | – |
| Accounts receivable | 33,868 | –2,160 | 31,708 |
| Other receivables | 13,814 | 627 | 14,441 |
| Non interest-bearing assets held for sale | 6,266 | – | 6,266 |
| Interest-bearing assets held for sale | 6 | – | 6 |
| Marketable securities | 164 | – | 164 |
| Cash and cash equivalents | 27,917 | – | 27,917 |
| **Total current assets** | **186,471** | **–1,533** | **184,938** |
| **Total assets** | **393,226** | **6,988** | **400,214** |
| **Equity and liabilities** | | | |
| Equity attributable to the equity holders of the parent company | 101,007 | –1,028 | 99,979 |
| Minority interests | 1,798 | – | 1,798 |
| **Total equity** | **102,805** | **–1,028** | **101,777** |
| *Non-current provisions* | | | |
| Provisions for post-employment benefits | 13,556 | – | 13,556 |
| Provisions for deferred taxes | 4,906 | 2 | 4,908 |
| Other provisions | 8,619 | –854 | 7,765 |
| *Non-current liabilities* | | | |
| Bond loans | 46,527 | – | 46,527 |
| Other loans | 24,175 | – | 24,175 |
| Internal funding | – | – | – |
| Other liabilities | 20,912 | 6,346 | 27,258 |
| Current provisions | 10,654 | –313 | 10,341 |
| *Current liabilities* | | | |
| Loans | 57,164 | – | 57,164 |
| Internal funding | – | – | – |
| Non interest-bearing liabilities held for sale | 4,180 | – | 4,180 |
| Interest-bearing liabilities held for sale | 287 | – | 287 |
| Trade payables | 56,531 | – | 56,531 |
| Tax liabilities | 3,747 | – | 3,747 |
| Other liabilities | 39,162 | 2,836 | 41,999 |
| **Total equity and liabilities** | **393,226** | **6,988** | **400,214** |

# CONSOLIDATED BALANCE SHEET

| SEK M | Volvo Group<br>Previously reported Dec 31, 2017 | Volvo Group<br>Restatement IFRS 15 | Volvo Group<br>**After IFRS 15 restatement Dec 31, 2017** | Volvo Group<br>Restatement IFRS 9 | Volvo Group<br>**After restatement Jan 1, 2018** |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| **Non-current assets** | | | | | |
| Intangible assets | 35,893 | – | 35,893 | – | 35,893 |
| *Tangible assets* | | | | | |
| Property, plant and equipment | 53,348 | – | 53,348 | – | 53,348 |
| Assets under operating leases | 37,166 | 4,424 | 41,590 | –77 | 41,513 |
| *Financial assets* | | | | | |
| Investments in Joint Ventures and associated companies | 10,525 | – | 10,525 | – | 10,525 |
| Other shares and participations | 699 | – | 699 | – | 699 |
| Non-current customer-financing receivables | 57,173 | – | 57,173 | –254 | 56,919 |
| Prepaid pensions | 252 | – | 252 | – | 252 |
| Non-current interest-bearing receivables | 2,335 | – | 2,335 | – | 2,335 |
| Other non-current receivables | 4,281 | 3,813 | 8,094 | – | 8,094 |
| Deferred tax assets | 11,782 | 111 | 11,893 | 129 | 12,022 |
| **Total non-current assets** | **213,455** | **8,348** | **221,803** | **–202** | **221,601** |
| **Current assets** | | | | | |
| Inventories | 52,701 | – | 52,701 | – | 52,701 |
| *Current receivables* | | | | | |
| Customer-financing receivables | 52,205 | – | 52,205 | –142 | 52,062 |
| Tax assets | 1,567 | – | 1,567 | – | 1,567 |
| Interest-bearing receivables | 1,166 | – | 1,166 | – | 1,166 |
| Internal funding | – | – | – | – | – |
| Accounts receivable | 40,774 | –2,585 | 38,189 | –26 | 38,163 |
| Other receivables | 14,305 | 753 | 15,058 | – | 15,058 |
| Non interest-bearing assets held for sale | 51 | – | 51 | – | 51 |
| Interest-bearing assets held for sale | – | – | – | – | – |
| Marketable securities | 178 | – | 178 | – | 178 |
| Cash and cash equivalents | 36,092 | – | 36,092 | – | 36,092 |
| **Total current assets** | **199,039** | **–1,832** | **197,207** | **–169** | **197,038** |
| **Total assets** | **412,494** | **6,516** | **419,010** | **–371** | **418,639** |
| **Equity and liabilities** | | | | | |
| Equity attributable to the equity holders of the parent company | 107,069 | –1,209 | 105,861 | –371 | 105,490 |
| Minority interests | 1,941 | – | 1,941 | – | 1,941 |
| **Total equity** | **109,011** | **–1,209** | **107,802** | **–371** | **107,431** |
| *Non-current provisions* | | | | | |
| Provisions for post-employment benefits | 14,476 | – | 14,476 | – | 14,476 |
| Provisions for deferred taxes | 5,353 | –237 | 5,116 | – | 5,116 |
| Other provisions | 9,318 | –835 | 8,484 | – | 8,484 |
| *Non-current liabilities* | | | | | |
| Bond loans | 48,962 | – | 48,962 | – | 48,962 |
| Other loans | 24,942 | – | 24,942 | – | 24,942 |
| Internal funding | – | – | – | – | – |
| Other liabilities | 22,309 | 6,421 | 28,730 | – | 28,730 |
| Current provisions | 10,806 | –391 | 10,416 | – | 10,416 |
| *Current liabilities* | | | | | |
| Loans | 53,771 | – | 53,771 | – | 53,771 |
| Internal funding | – | – | – | – | – |
| Non interest-bearing liabilities held for sale | 0 | – | – | – | 0 |
| Interest-bearing liabilities held for sale | – | – | – | – | – |
| Trade payables | 65,346 | – | 65,346 | – | 65,346 |
| Tax liabilities | 1,699 | – | 1,699 | – | 1,699 |
| Other liabilities | 46,501 | 2,766 | 49,267 | – | 49,267 |
| **Total equity and liabilities** | **412,494** | **6,516** | **419,010** | **–371** | **418,639** |

# CONSOLIDATED NET FINANCIAL POSITION

| SEK bn | Volvo Group Previously reported Dec 31, 2017 | Restatement IFRS 9 | **After restatement Jan 1, 2018** |
|---|---|---|---|
| *Non-current interest-bearing assets* | | | |
| Non-current customer-financing receivables | 57.2 | −0.3 | 56.9 |
| Non-current interest-bearing receivables | 2.3 | – | 2.3 |
| *Current interest-bearing assets* | | | |
| Customer-financing receivables | 52.2 | −0.1 | 52.1 |
| Interest-bearing receivables | 1.2 | – | 1.2 |
| Internal funding | – | – | – |
| Marketable securities | 0.2 | – | 0.2 |
| Cash and cash equivalents | 36.1 | – | 36.1 |
| **Total interest-bearing financial assets** | **149.1** | **−0.4** | **148.8** |
| *Non-current interest-bearing liabilities* | | | |
| Bond loans | −49.0 | – | −49.0 |
| Other loans | −24.9 | – | −24.9 |
| Internal funding | – | – | – |
| *Current interest-bearing liabilities* | | | |
| Loans | −53.8 | – | −53.8 |
| Internal funding | – | – | – |
| Interest-bearing liabilities held for sale | – | – | – |
| **Total interest-bearing financial liabilities** | **−127.7** | **–** | **−127.7** |
| **Net financial position excl. post-employment benefits** | **21.5** | **−0.4** | **21.1** |
| Provisions for post-employment benefits, net | −14.2 | – | −14.2 |
| **Net financial position incl. post-employment benefits** | **7.3** | **−0.4** | **6.9** |

# Parent Company AB Volvo

Corporate registration number 556012-5790.

Amounts in SEK M unless otherwise specified. Amounts within parentheses refer to the preceding year, 2016

**Board of Directors' report**

AB Volvo is the Parent Company of the Volvo Group and its operations comprise of the Group's head office with staff together with some corporate functions.

Income from investments in Group companies include dividends amounting to 7,442 (1,473) and transfer price adjustments and royalties amounting to an expense of 566 (331).

The carrying value of shares and participations in Group companies amounted to 69,244 (60,816), of which 68,122 (59,694) pertained to shares in wholly owned subsidiaries. The corresponding shareholders' equity in the subsidiaries (including equity in untaxed reserves but excluding minority interests) amounted to 115,998 (111,678).

Total investments at year end in joint ventures and associated companies, recognized in accordance with the equity method in the consolidated accounts, amounted to 8,890 (10,348). The portion of shareholders' equity in joint ventures and associated companies pertaining to AB Volvo amounted to 6,750 (8,487).

Financial net debt amounted to 33,413 (38,890).

AB Volvo's risk capital (shareholders' equity plus untaxed reserves) amounted to 61,535 (45,600) corresponding to 59% (48%) of total assets.

## INCOME STATEMENT

| SEK M | | 2017 | 2016 |
|---|---|---|---|
| **Net sales** | Note 2 | **491** | **625** |
| Cost of sales | Note 2 | −491 | −625 |
| **Gross income** | | **0** | **0** |
| Administrative expenses | Note 2, 3 | −1,708 | −1,401 |
| Other operating income and expenses | Note 4 | −22 | −44 |
| Income from investments in Group companies | Note 5 | 8,936 | 774 |
| Income from investments in joint ventures and associated companies | Note 6 | 585 | 27 |
| Income from other investments | Note 7 | −1 | 18 |
| **Operating income** | | **7,790** | **−626** |
| Interest income and similar credits | | 0 | 0 |
| Interest expenses and similar charges | Note 8 | −788 | −902 |
| Other financial income and expenses | Note 9 | −10 | 26 |
| **Income after financial items** | | **6,992** | **−1,502** |
| Allocations | Note 10 | 14,425 | 11,265 |
| Income taxes | Note 11 | −2,416 | −1,636 |
| **Income for the period** | | **19,001** | **8,127** |

## OTHER COMPREHENSIVE INCOME

| | | |
|---|---|---|
| **Income for the period** | **19,001** | **8,127** |
| **Other comprehensive income, net of income taxes** | **–** | **–** |
| **Total comprehensive income for the period** | **19,001** | **8,127** |

# BALANCE SHEET

| SEK M | | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Tangible assets | Note 12 | 8 | 11 |
| *Financial assets* | | | |
| Shares and participations in Group companies | Note 13 | 69,244 | 60,816 |
| Receivables from Group companies | | 19 | 48 |
| Investments in joint ventures and associated companies | Note 13 | 8,895 | 10,353 |
| Other shares and participations | Note 13 | 7 | 7 |
| Deferred tax assets | Note 11 | 195 | 168 |
| Other non-current receivables | | – | 0 |
| **Total non-current assets** | | **78,368** | **71,403** |
| **Current assets** | | | |
| *Current receivables* | | | |
| Receivables Group companies | | 25,826 | 23,332 |
| Tax assets | | 23 | 2 |
| Other receivables | Note 14 | 96 | 235 |
| **Total current assets** | | **25,945** | **23,569** |
| **Total assets** | | **104,313** | **94,972** |
| **Shareholders' equity and liabilities** | | | |
| Shareholders' equity | | | |
| *Restricted equity* | | | |
| Share capital | | 2,554 | 2,554 |
| Statutory reserve | | 7,337 | 7,337 |
| *Unrestricted equity* | | | |
| Non-restricted reserves | | 338 | 327 |
| Retained earnings | | 26,304 | 24,753 |
| Income for the period | | 19,001 | 8,127 |
| **Total shareholders' equity** | | **55,534** | **43,098** |
| **Untaxed reserves** | Note 15 | **6,001** | **2,502** |
| *Provisions* | | | |
| Provisions for post-employment benefits | Note 16 | 103 | 112 |
| Other provisions | Note 17 | - | 6 |
| **Total provisions** | | **103** | **118** |
| *Non-current liabilities* | Note 18 | | |
| Liabilities to Group companies | | 13,973 | 13,973 |
| Other liabilities | | 8 | 5 |
| **Total non-current liabilities** | | **13,981** | **13,978** |
| *Current liabilities* | | | |
| Trade payables | | 200 | 193 |
| Other liabilities to Group companies | | 27,459 | 34,504 |
| Tax liabilities | | 474 | 176 |
| Other liabilities | Note 19 | 561 | 403 |
| **Total current liabilities** | | **28,694** | **35,276** |
| **Total shareholders' equity and liabilities** | | **104,313** | **94,972** |

## CASH FLOW STATEMENT

| SEK M | | 2017 | 2016 |
|---|---|---|---|
| **Operating activities** | | | |
| Operating income | | 7,790 | –626 |
| Depreciation and amortization | | 1 | 10 |
| Other non-cash items | Note 21 | –2,338 | 460 |
| Total change in working capital whereof | | 66 | 447 |
| *Change in accounts receivable* | | *7* | *–179* |
| *Change in trade payables* | | *–46* | *–8* |
| *Other changes in working capital* | | *105* | *634* |
| Interest and similar items received | | 0 | 0 |
| Interest and similar items paid | | –786 | –910 |
| Other financial items | | –11 | 6 |
| Group contributions received | | 13,763 | 12,566 |
| Income taxes paid | | –2,046 | –1,517 |
| **Cash-flow from operating activities** | | **16,439** | **10,436** |
| **Investing activities** | | | |
| Investments in fixed assets | | 1 | –1 |
| Disposals of fixed assets | | 0 | 32 |
| Investments and divestments of shares in group companies, net | Note 21 | –6,368 | –418 |
| Investments and divestments of shares in non-group companies, net | Note 21 | 1,976 | 24 |
| **Cash-flow after net investments** | | **12,048** | **10,073** |
| **Financing activities** | | | |
| Change in loans, net | Note 21 | –5,466 | –4,018 |
| Dividends to AB Volvo shareholders | | –6,603 | –6,093 |
| Other | | 21 | 38 |
| **Change in liquid funds** | | **0** | **0** |
| **Liquid funds, beginning of year** | | **–** | **–** |
| **Liquid funds, end of year** | | **–** | **–** |

## CHANGES IN SHAREHOLDERS' EQUITY

| | Restricted equity | | Unrestricted equity | | | |
|---|---|---|---|---|---|---|
| SEK M | Share capital | Statutory reserve | Share premium reserve | Retained earnings | Total | Total shareholders' equity |
| **Balance at December 31, 2015** | **2,554** | **7,337** | **302** | **30,813** | **31,115** | **41,006** |
| Income for the period | – | – | – | 8,127 | 8,127 | 8,127 |
| *Other comprehensive income* | | | | | | |
| Other comprehensive income for the period | – | – | – | – | – | – |
| **Total income for the period** | **–** | **–** | **–** | **8,127** | **8,127** | **8,127** |
| *Transactions with shareholders* | | | | | | |
| Dividends to AB Volvo shareholders | – | – | – | –6,093 | –6,093 | –6,093 |
| Share based payments | – | – | 25 | 33 | 58 | 58 |
| Transactions with shareholders | – | – | 25 | –6,060 | –6,035 | –6,035 |
| **Balance at December 31, 2016** | **2,554** | **7,337** | **327** | **32,880** | **33,207** | **43,098** |
| Income for the period | – | – | – | 19,001 | 19,001 | 19,001 |
| *Other comprehensive income* | | | | | | |
| Other comprehensive income for the period | – | – | – | – | – | – |
| **Total income for the period** | – | – | – | **19,001** | **19,001** | **19,001** |
| *Transactions with shareholders* | | | | | | |
| Dividends to AB Volvo shareholders | – | – | – | –6,603 | –6,603 | –6,603 |
| Share based payments | – | – | 11 | 27 | 38 | 38 |
| Transactions with shareholders | – | – | 11 | –6,576 | –6,565 | –6,565 |
| **Balance at December 31, 2017** | **2,554** | **7,337** | **338** | **45,305** | **45,643** | **55,534** |

>> **Read more** in **Note 19** Equity and number of shares in the consolidated financial statements about the share capital of the Parent Company.

# Notes to financial statements

Amounts in SEK M unless otherwise specified. The amounts within parentheses refer to the preceding year, 2016.

## NOTE 1 ACCOUNTING POLICIES

The Parent Company has prepared its financial statements in accordance with the Swedish Annual Accounts Act (1995:1554) and RFR 2, Accounting for Legal entities. According to RFR 2, the Parent Company shall apply all the International Financial Reporting Standards endorsed by the EU as far as this is possible within the framework of the Swedish Annual Accounts Act.

The changes in RFR 2 applicable to the fiscal year beginning January 1, 2017, have had no material impact on the financial statements of the Parent Company.

The changes in RFR 2 applicable to the fiscal year beginning January 1, 2018 or later concerns IFRS 9 Financial instruments, IFRS 15 Revenue from contracts with customers and IFRS 16 Leases.

IFRS 9 Financial instruments is effective as from January 1, 2018. The exception in RFR 2 regarding financial contracts of guarantee in favour of subsidiaries and associated companies will still apply. The changes in IFRS 9 compared to IAS 39 Financial instruments relates to classification, measurement, impairment and hedge accounting. The implementation of IFRS 9 will have no effect in regards to classification, measurement and hedge accounting. The impact of the new standard mainly relates to the change of impairment model from an incurred loss model to an expected credit loss model for financial instruments. The major part of financial instruments in the Parent Company consists of internal financial assets within the Volvo Group and there is no expectation on credit losses for these assets. This is based on no historical credit losses and with no expectation on future losses since the credit risk is low. The implementation of IFRS 9 will not have any major impact on the Parent Company.

IFRS 15 Revenue from contracts with customers is effective as from January 1, 2018. RFR 2 includes no exception applicable to the Parent Company. The changes in IFRS 15 compared to IAS 11 Construction contracts, IAS 18 Revenue and the related interpretations IFRIC 13, 15, 18 and SIC-31, relates to a new framework for recognizing revenue with additional disclosure requirements. The framework establishes principles about the amount and timing for recognizing revenue considering variable amounts and the timing for transferring control. The implementation of IFRS15 will not have any major impact on revenue recognition for the Parent Company.

IFRS 16 Leases is effective as from January 1, 2019. RFR 2 will continue to include an exception allowing all lease contracts to be accounted for as operational lease contracts when the Parent Company is a lessee. The changes in IFRS 16 compared to IAS 17 Leases will not have any major impact on the Parent Company.

The accounting policies applied by the Volvo Group are described in the respective Notes in the consolidated financial statements. The main deviations between the accounting policies applied by the Volvo Group and the Parent Company are described below.

Shares and participations in Group companies and investments in joint ventures and associated companies are recognized at cost in the Parent Company and test for impairment is performed annually. In accordance with RFR 2, the Parent Company includes expenses related to acquisition of a business in the acquisition value. Dividend is recognized in the income statement. All shares and participations are related to business operations and profit or loss are recognized within operating income.

The Parent Company applies the exception in the application of IAS 39 which concerns accounting and measurement of financial contracts of guarantee in favour of subsidiaries and associated companies. The Parent Company recognizes the financial contracts of guarantee as contingent liabilities.

According to RFR 2, application of the regulations in IAS 19 regarding defined-benefit plans is not mandatory for legal entities. However, IAS 19 shall be applied for supplementary disclosures when applicable. RFR 2 refers to the Swedish law on safeguarding of pension commitments ("tryggandelagen") related to recognition of provisions for post-employment benefits in the balance sheet and of plan assets in pension foundations.

The Parent Company recognizes the difference between depreciation according to plan and tax depreciation as accumulated additional depreciation, included in untaxed reserves.

Reporting of group contributions is recognized in accordance with the alternative rule in RFR 2. Group contributions are reported as allocations.

## NOTE 2 INTRA-GROUP TRANSACTIONS

The Parent Company's net sales amounted to 491 (625), of which 452 (528) pertained to Group companies. Purchases from Group companies amounted to 588 (583).

## NOTE 3 ADMINISTRATIVE EXPENSES

**Depreciation**

Administrative expenses include depreciation of 1 (10) of which 1 (1) pertains to machinery and equipment, – (0) to buildings and – (8) to other intangible assets.

| Fees to the auditors | 2017 | 2016 |
|---|---|---|
| PricewaterhouseCoopers AB | | |
| – Audit fees | 23 | 23 |
| – Audit-related fees | 3 | 1 |
| – Other fees | 0 | – |
| **Total** | **26** | **24** |

» **Read more** in **Note 28** Fees to the Auditors in the consolidated financial statements for a description of the different categories of fees.

**Personnel**

Wages, salaries and other remunerations amounted to 483 (381), social costs to 156 (107) and pension costs to 116 (108). Pension cost of 6 (5) pertained to Board Members and the President. The Parent Company has outstanding pension obligations of 1 (0) to these individuals.

The number of employees at year end was 305 (309).

» **Read more in Note 27** Personnel in the consolidated financial statements about the average number of employees, wages, salaries and other remunerations including incentive program as well as Board members and senior executives by gender.

## NOTE 4 OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses include restructuring costs, donations and grants and Volvo profit sharing program costs by 5 (3).

## NOTE 5 INCOME FROM INVESTMENTS IN GROUP COMPANIES

| Income from investments in Group Companies | 2017 | 2016 |
|---|---|---|
| **Dividends received** | | |
| Volvo Construction Equipment N.V., The Netherlands | 5,940 | – |
| Volvo Financial Services AB, Sweden | 1,400 | – |
| Volvo Danmark A/S, Denmark | 65 | 69 |
| Volvo Norge AS, Norway | 37 | 65 |
| Volvo Holding Sverige AB, Sweden | – | 747 |
| Volvo Korea Holding AB, Sweden | – | 561 |
| Volvo Group UK Ltd., Great Britain | – | 31 |
| **Subtotal** | **7,442** | **1,473** |
| **Impairment of shares** | | |
| ZAO Volvo Vostok, Russia | –142 | – |
| UD Trucks Corporation, Japan | – | –417 |
| **Subtotal** | **–142** | **–417** |
| **Reversal impairment of shares** | | |
| Volvo Bussar AB, Sweden | 63 | – |
| VNA Holding Inc., USA | 410 | – |
| Volvo Group Venture Capital AB, Sweden | 8 | – |
| Volvo Group Mexico SA, Mexico | 11 | – |
| Volvo China Investment Co Ltd., China | 107 | – |
| Volvo Information Technology AB, Sweden | 103 | – |
| Sotrof AB, Sweden | 1,500 | – |
| Volvo Parts AB, Sweden | – | 50 |
| **Subtotal** | **2,202** | **50** |
| **Income from divestment of shares** | | |
| Part of Volvo Norge AS after fission | – | 0 |
| Adjustment of divestment Volvo Aero AB | – | –1 |
| **Subtotal** | **–** | **–1** |
| **Income from investments in Group Companies** | **9,502** | **1,105** |

Transfer price adjustments and royalties amount to an expense of 566 (331).

## NOTE 6 INCOME FROM INVESTMENTS IN JOINT VENTURES AND ASSOCIATED COMPANIES

Income from investments in joint ventures and associated companies include gain from divestment of Deutz AG of 524. Dividend has been recevied from Deutz AG of 20 (20), and from VE Commercial Vehicles, Ltd. of 45 (51). Impairment of participation in Blue Chip Jet HB has been made by 5.

In 2016 impairment of participation in Blue Chip Jet HB was made by 2 and in Blue Chip Jet II HB by 42.

## NOTE 7 INCOME FROM OTHER INVESTMENTS

Income from other investments 2017 include impairment of shares in Johanneberg Science Park AB and Lindholmen Science Park AB by 1 (1).

In 2016 gain from divestment of participation in Brf Falken was included by 19.

## NOTE 8 INTEREST EXPENSES

Interest expenses and similar charges totalling 788 (902) included interest of 787 (901) to subsidiaries.

## NOTE 9 OTHER FINANCIAL INCOME AND EXPENSES

Other financial income and expenses include exchange rate gains and losses, costs for credit rating and stock exchange listing cost.

## NOTE 10 ALLOCATIONS

Allocations include a net of group contributions of 17,924 (13,763), tax allocation reserve of –3,500 (–2,500) and reversal of additional depreciation of 1 (2).

## NOTE 11 INCOME TAXES

Income taxes were distributed as follow:

| | 2017 | 2016 |
|---|---|---|
| Current taxes relating to the period | –2,526 | –1,809 |
| Adjustment of current taxes for prior period | 83 | 162 |
| Deferred taxes | 27 | 11 |
| I/S **Total income taxes** | **–2,416** | **–1,636** |

Deferred taxes relate to estimated tax on the change in tax-loss carryforwards and temporary differences.

The table below discloses the principal reasons for the difference between the corporate income tax of 22% and the tax for the period:

| | 2017 | 2016 |
|---|---|---|
| Income before taxes | 21,417 | 9,763 |
| Income tax according to applicable tax rate | –4,712 | –2,148 |
| Capital gains/losses | 115 | 0 |
| Non-taxable dividends | 1,652 | 340 |
| Non-taxable revaluations of shareholdings | 452 | –412 |
| Other non-deductible expenses | 15 | 309 |
| Other non-taxable income | –20 | 109 |
| Adjustment of current taxes for prior period | 83 | 162 |
| Adjustment of deferred taxes for prior periods | 1 | 4 |
| Current tax on standardized method | –2 | – |
| **Income taxes for the period** | **–2,416** | **–1,636** |

| Specification of deferred tax assets | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Provisions for post-employment benefits | 195 | 166 |
| Provisions for restructuring measures | – | 2 |
| B/S **Deferred tax assets** | **195** | **168** |

## NOTE 12 INTANGIBLE AND TANGIBLE ASSETS

| Intangible assets, acquisition costs | Rights | Other intangible assets | Total intangible assets |
|---|---|---|---|
| **Opening balance 2016** | 52 | 116 | **168** |
| **Acquisition cost as of Dec 31, 2016** | **52** | **116** | **168** |
| **Acquisition cost as of Dec 31, 2017** | **52** | **116** | **168** |

| Intangible assets, accumulated amortization | Rights | Other intangible assets | Total intangible assets |
|---|---|---|---|
| **Opening balance 2016** | 52 | 108 | **160** |
| Amortization | – | 8 | **8** |
| **Accumulated amortization as of Dec 31, 2016** | **52** | **116** | **168** |
| **Accumulated amortization as of Dec 31, 2017** | **52** | **116** | **168** |
| B/S **Net value in balance sheet as of Dec 31, 2016**[1] | **–** | **–** | **–** |
| B/S **Net value in balance sheet as of Dec 31, 2017**[1] | **–** | **–** | **–** |

| Tangible assets, acquisition costs | Buildings | Land and improvements | Machinery and equipment | Construction in progress, including advance payments | Total tangible assets |
|---|---|---|---|---|---|
| **Opening balance 2016** | 21 | 11 | 47 | 0 | **79** |
| Capital Expenditures | – | – | – | 1 | **1** |
| Sales/scrapping | –21 | –11 | –25 | – | **–57** |
| **Acquisition cost as of Dec 31, 2016** | **–** | **–** | **22** | **1** | **23** |
| Sales/scrapping | – | – | –1 | –1 | **–2** |
| **Acquisition cost as of Dec 31, 2017** | **–** | **–** | **21** | **–** | **21** |

| Tangible assets, accumulated depreciation | Buildings | Land and improvements | Machinery and equipment | Construction in progress, including advance payments | Total tangible assets |
|---|---|---|---|---|---|
| **Opening balance 2016** | 4 | 0 | 34 | – | **38** |
| Depreciation | – | 0 | 1 | – | **1** |
| Sales/scrapping | –4 | 0 | –23 | – | **–27** |
| **Accumulated depreciation as of Dec 31, 2016** | **–** | **–** | **12** | **–** | **12** |
| Depreciation | – | – | 1 | – | **1** |
| **Accumulated depreciation as of Dec 31, 2017** | **–** | **–** | **13** | **–** | **13** |
| B/S **Net value in balance sheet as of Dec 31, 2016**[1] | **–** | **–** | **10** | **1** | **11** |
| B/S **Net value in balance sheet as of Dec 31, 2017**[1] | **–** | **–** | **8** | **–** | **8** |

1 Acquisition value, less accumulated depreciation, amortization and impairment.

## NOTE 13 INVESTMENTS IN SHARES AND PARTICIPATIONS

AB Volvo owns, directly or indirectly, 261 (260) legal entities. The legal structure is designed to effectively manage legal requirements, administration and taxes, as well as the operations conducted by the Group in each country it operates. Legal entities may have different characters and include different types of operations, such as production, development and sales. The character of a legal entity may change over time. Furthermore legal entities could include different type of the Group's operations and this could also change over time. In some countries there are legal restrictions which limit the Group's ability to transfer assets between the Group's legal entities. Read more in Note 18 Marketable securities and liquid funds in the consolidated financial statements for a description of restrictions related to cash and cash equivalents.

Volvo Group's operational structure gives a better overview of how the Volvo Group has chosen to organize its business. Read more about Volvo Group's operational structure in Note 6 Segment Reporting in the consolidated financial statements.

Changes in AB Volvo's holding of shares and participations are disclosed below:

| | Group companies | | Joint ventures and associated companies | | Non–Group companies | |
|---|---|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 |
| Opening balance as of January 1 | 60,816 | 60,766 | 10,353 | 10,397 | 7 | 13 |
| Acquisitions/New issue of shares | 5,725 | – | – | – | – | – |
| Divestments | – | – | –1,359 | – | – | –6 |
| Shareholder's contribution | 642 | 417 | – | – | 1 | 1 |
| Repayment of equity | – | – | –94 | – | – | – |
| Impairment of shares and participations | –142 | –417 | –5 | –44 | –1 | –1 |
| Reversal impairment of shares and participations | 2,203 | 50 | – | – | – | – |
| **B/S Balance sheet, December 31** | **69,244** | **60,816** | **8,895** | **10,353** | **7** | **7** |

| Holding of shares in Group companies | Registration number | Dec 31, 2017 Percentage holding[1] | Dec 31, 2017 Carrying value[2] | Dec 31, 2016 Carrying value[2] |
|---|---|---|---|---|
| Volvo Lastvagnar AB, Sweden | 556013-9700 | 100 | 8,711 | 8,711 |
| Volvo Holding Sverige AB, Sweden | 556539-9853 | 100 | 7,634 | 7,634 |
| UD Trucks Corporation, Japan | – | 100 | 8,928 | 8,928 |
| Volvo Bussar AB, Sweden | 556197-3826 | 100 | 1,980 | 1,917 |
| Volvo Construction Equipment AB, Sweden | 556021-9338 | 100 | 5,725 | – |
| Volvo Construction Equipment N.V., The Netherlands | – | 100 | 3,082 | 2,582 |
| AB Volvo Penta, Sweden | 556034-1330 | 100 | 438 | 438 |
| VNA Holding Inc., USA | – | 100 | 3,688 | 3,278 |
| Volvo Financial Services AB, Sweden | 556000-5406 | 100 | 1,945 | 1,945 |
| Volvo Treasury AB, Sweden | 556135-4449 | 100 | 13,044 | 13,044 |
| Sotrof AB, Sweden | 556519-4494 | 100 | 2,888 | 1,388 |
| Volvo Korea Holding AB, Sweden | 556531-8572 | 100 | 2,655 | 2,655 |
| Volvo China Investment Co Ltd., China | – | 100 | 1,203 | 1,096 |
| Volvo Automotive Finance (China) Ltd., China | – | 100 | 491 | 491 |
| Volvo Group UK Ltd., Great Britain[3] | – | 55 | 561 | 561 |
| Volvo Group Mexico SA, Mexico | – | 100 | 543 | 531 |
| Volvo Group Venture Capital AB, Sweden | 556542-4370 | 100 | 369 | 361 |
| Volvo Powertrain AB, Sweden | 556000-0753 | 100 | 898 | 898 |
| Volvo Information Technology AB, Sweden | 556103-2698 | 100 | 1,366 | 1,263 |
| Volvo Parts AB, Sweden | 556365-9746 | 100 | 200 | 200 |
| Volvo Group Insurance Försäkrings AB, Sweden | 516401-8037 | 100 | 182 | 182 |
| Volvo Business Services AB, Sweden | 556029-5197 | 100 | – | – |
| Volvo Danmark A/S, Denmark | – | 100 | 157 | 157 |
| VFS Servizi Financiari Spa, Italy[4] | – | 25 | 79 | 79 |
| Kommersiella Fordon Europa AB, Sweden | 556049-3388 | 100 | 1,890 | 1,890 |
| Volvo Norge AS, Norway | – | 100 | 43 | 43 |
| Volvo Malaysia Sdn Bhd., Malaysia | – | 100 | 48 | 48 |
| ZAO Volvo Vostok, Russia[5] | – | 75 | 34 | 34 |
| Volvo Italia Spa, Italy[6] | – | 65 | 447 | 447 |
| Volvo Logistics AB, Sweden | 556197-9732 | 100 | – | – |
| Alviva AB, Sweden | 556622-8820 | 100 | – | – |
| Volvo East Asia (Pte) Ltd., Singapore | – | 100 | – | – |
| Volvo Information Technology GB Ltd., Great Britain | – | 100 | 3 | 3 |
| VFS Latvia SIA, Latvia | – | 100 | 9 | 9 |
| VFS Int Romania Leasing Operational, Romania | – | 100 | 2 | 2 |
| Other holdings | – | – | 1 | 1 |
| **Total carrying value Group companies[7]** | | | **69,244** | **60,816** |

| Holding of shares in Joint Ventures, associated companies and non-Group companies | Registration number | Dec 31, 2017 Percentage holding[1] | Dec 31, 2017 Carrying value[2] | Dec 31, 2016 Carrying value[2] |
|---|---|---|---|---|
| Dongfeng Commercial Vehicles Co. Ltd., China | – | 45.0 | 7,197 | 7,197 |
| VE Commercial Vehicles Ltd., India[8] | – | 45.6 | 1,616 | 1,616 |
| Deutz AG, Germany | – | 0 | – | 1,359 |
| Blue Chip Jet HB, Sweden | 969639-1011 | 50.0 | – | 5 |
| Blue Chip Jet II HB, Sweden | 969717-2105 | 50.0 | 77 | 170 |
| Other investments | – | | 12 | 13 |
| **Total carrying value, joint ventures, associated companies and non-Group companies** | | | **8,902** | **10,360** |

**Shares and participations in Group companies**

During 2017 shares in Volvo Construction Equipment AB has been transferred from Volvo Construction Equipment N.V. in form of dividend by 5,725. Shareholder's contribution has been paid to Volvo Construction Equipment N.V. by 500 and to ZAO Volvo Vostok by 142. Impairment has been made in ZAO Volvo Vostok by 142. Reversal of impairment in Volvo Bussar AB has been made by 63, in VNA Holding Inc by 410, in Volvo Group Venture Capital by 8, in Volvo Group Mexico SA by 12, in Volvo China Investment Co Ltd. by 107, in Volvo Information Technology AB by 103 and in Sotrof AB by 1,500.

During 2016 shareholder's contribution was paid to UD Trucks Corporation, Japan by 417. Impairment of the holding was made with the same amount. Reversal of impairment in Volvo Parts AB was made by 50.

AB Volvo's holding in Group companies is presented in the adjoining table.

**Investments in associated companies and joint ventures**

Divestment of Deutz AG has reduced the carrying value by 1,359. Repayment of capital from Blue Chip Jet II HB has decreased the carrying value by 94. Impairment of participation in Blue Chip Jet HB has been made by 5.

During 2016 impairment of participation in Blue Chip Jet HB was made by 2 and in Blue Chip Jet II HB by 42.

**Shares and participations in non-Group companies**

Shareholders' contribution has been paid to Johanneberg Science Park AB and Lindholmen Sciende Park AB by 1 (1). Impairment of shares in Johanneberg Science Partk AB and Lindholmen Science Park AB has been made by 1 (1).

During 2016 divestment of participation in Brf Falken was made by 6.

1 The percentage holding refers to the Parent Company AB Volvo's holding.
2 Refers to AB Volvo's carrying value of its holding.
3 Total holding by Volvo Lastvagnar AB and AB Volvo is 100%.
4 Total holding by Volvo Italia Spa and AB Volvo is 100%.
5 Total holding by AB Volvo and Volvo Trucks Region Central Europe GmbH is 100%.
6 Total holding by Renault Trucks (SAS), Volvo Lastvagnar AB and AB Volvo is 100%.
7 AB Volvo's share of shareholders' equity in subsidiaries (including equity in untaxed reserves) was 115,998 (111,678).
8 In Volvo Group the company is reported as a joint venture, consolidated according to equity method.

## NOTE 14 OTHER RECEIVABLES

| | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Accounts receivable | 10 | 20 |
| Prepaid expenses and accrued income | 60 | 57 |
| Other receivables | 26 | 158 |
| B/S **Total other receivables** | **96** | **235** |

The valuation allowance for doubtful receivables amounted to – (1) at the end of the year. Fair value is not considered to differ from carrying value.

## NOTE 15 UNTAXED RESERVES

| | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Tax allocation reserve | 6,000 | 2,500 |
| Accumulated additional depreciation: | | |
| Machinery and equipment | 1 | 2 |
| B/S **Total untaxed reserves** | **6,001** | **2,502** |

## NOTE 16 PROVISIONS FOR POST-EMPLOYMENT BENEFITS

The Parent Company has two types of pension plans:

*Defined-contribution plans:* post-employment benefit plans where the Company makes regular payments to separate entities and has no legal or constructive obligation to pay further contributions. The expenses for defined contribution plans are recognized during the period when the employee provides service.

*Defined-benefit plans:* post-employment benefit plans where the Company's undertaking is to provide predetermined benefits that the employee will receive on or after retirement. These benefit plans are secured through balance-sheet provisions or pension-fund contributions. Furthermore, a credit insurance policy has been taken out for the value of the obligations. The main defined-benefit plan is the ITP2 plan which is based on final salary. The plan is semi-closed, meaning that only new employees born before 1979 have the possibility to choose the ITP2 solution. The ITP2 plan for the Company is funded in Volvo Pension Foundation. Pension obligations are calculated annually, on the balance sheet date, based on actuarial assumptions.

The defined-benefit obligations are calculated based on the actual salary levels at year-end and based on a discount rate of 3.84% (3.84) for the ITP2 plan and 0.7% (0.8) for other pension obligations. Assumptions for discount rates and mortality rates are determined annually by PRI Pensionsgaranti for ITP2 and Finansinspektionen for other pension obligations, respectively.

The Volvo Pension Foundation was formed in 1996 to secure obligations relating to retirement pensions in accordance with the ITP plan. Since its formation, net contributions of 250 have been made to the foundation by the Parent Company.

Provisions for post-employment benefits in the Parent Company's balance sheet correspond to the present value of obligations at year end, less value of plan assets.

| Obligations in defined-benefit plans | Funded | Unfunded | Total |
|---|---|---|---|
| **Obligations opening balance 2016** | 593 | 117 | 710 |
| Service costs | 15 | 10 | 25 |
| Interest costs | 23 | 1 | 24 |
| Pensions paid | –19 | –16 | –35 |
| **Obligations as of December 31, 2016** | **612** | **112** | **724** |
| Service costs | 16 | 6 | 22 |
| Interest costs | 24 | 1 | 25 |
| Pensions paid | –19 | –16 | –35 |
| **Obligations as of December 31, 2017** | **633** | **103** | **736** |

| Fair value of plan assets in funded plans | |
|---|---|
| **Plan assets opening balance 2016** | **692** |
| Actual return on plan assets | 55 |
| Contributions and compensation to/from the fund | – |
| **Plan assets as of December 31, 2016** | **747** |
| Actual return on plan assets | 53 |
| Contributions and compensation to/from the fund | – |
| **Plan assets as of December 31, 2017** | **800** |

| Provisions for post-employment benefits | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Obligations[1] | –736 | –724 |
| Fair value of plan assets | 800 | 747 |
| **Funded status** | **64** | **23** |
| Limitation on assets in accordance with RFR2 (when plan assets exceed corresponding obligations) | –167 | –135 |
| B/S **Net provisions for post-employment benefits[2]** | **–103** | **–112** |

1 The ITP2 obligations amount to –615 (–593).
2 ITP2 obligations, net, amount to 0 (0).

| Pension costs | 2017 | 2016 |
|---|---|---|
| Service costs | 22 | 25 |
| Interest costs[3] | 25 | 24 |
| Interest income[3] | –21 | –19 |
| **Pension costs for defined-benefit plans** | **26** | **30** |
| **Pension costs for defined-contribution plans** | **55** | **49** |
| Special payroll tax/yield tax[4] | 34 | 28 |
| Cost for credit insurance FPG | 1 | 1 |
| **Total costs for the period** | **116** | **108** |

3 Interest cost, net of 1 (1) is included in financial items.
4 Special payroll tax/yield tax are calculated according to Swedish Tax law and accrued for in current liabilities.

Volvo Group applies IAS 19 Employee Benefits in the consolidated financial statements. This implies differences, which may be significant, in the accounting of defined-benefit pension plans as well as in the accounting of plan assets invested in the Volvo Pension Foundation.

The accounting principles for defined-benefit plans differ from IAS19 mainly relating to:

- Pension liability calculated according to Swedish accounting principles does not take into account future salary increases.
- The discount rate used in the calculations is set by PRI Pensionsgaranti and Finansinspektionen, respectively.
- Changes in the discount rate, actual return on plan assets and other actuarial assumptions are recognized directly in the income statement and in the balance sheet.
- Deficit must be either immediately settled in cash or recognized as a liability in the balance sheet.
- Surplus cannot be recognized as an asset, but may in some cases be refunded to the Company to offset pension costs.

## NOTE 17 OTHER PROVISIONS

Other provisions include provisions for restructuring measures of – (6).

## NOTE 18 NON-CURRENT LIABILITIES

Non-current debt matures as follows:

| | |
|---|---|
| 2019–2023 | 13,977 |
| 2024 or later | 4 |
| B/S **Total non-current liabilities** | **13,981** |

## NOTE 19 OTHER LIABILITIES

| | Dec 31, 2017 | Dec 31, 2016 |
|---|---|---|
| Wages, salaries and withholding taxes | 320 | 183 |
| VAT liabilities | – | 5 |
| Accrued expenses and prepaid income | 237 | 212 |
| Other liabilities | 4 | 3 |
| B/S **Total other liabilities** | **561** | **403** |

No collateral is provided for current liabilities.

## NOTE 20 CONTINGENT LIABILITIES

Contingent liabilities as of December 31, 2017, amounted to 274,646 (298,384) of which 274,445 (298,363) pertained to Group companies.

Credit guarantees are included to an amount corresponding to the credit limits. Credit guarantees amounted to 260,355 (277,696). The total amount pertained to Group companies.

The utilized portion at year end amounted to 117,863 (133,041), of which 117,842 (133,020) pertained to Group companies.

## NOTE 21 CASH-FLOW

| Other non-cash items | 2017 | 2016 |
|---|---|---|
| Revaluation of shareholdings | -2,054 | 412 |
| Gains on sale of shares | –524 | –18 |
| Transfer price adjustments, net | 28 | –24 |
| Other changes | 212 | 90 |
| **Total Other items not affecting cash flow** | **–2,338** | **460** |

Further information is provided in Note 5 Income from investments in Group companies, Note 6 Income from investments in joint ventures and associated companies and Note 7 Income from other investments.

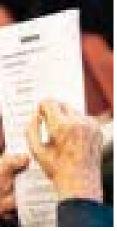
| Acquired and divested shares in Group companies, net | 2017 | 2016 |
|---|---|---|
| Acquisitions | –6,368 | –417 |
| Divestments | – | –1 |
| **Total cash flow from acquired and divested shares in Group companies, net** | **–6,368** | **–418** |

Acquisitions and divestments of participations in Group companies are shown in Note 13 Investments in shares and participations.

| Acquired and divested shares in non-Group companies, net | 2017 | 2016 |
|---|---|---|
| Acquisitions | –1 | –1 |
| Divestments | 1,977 | 25 |
| **Total cash flow from acquired and divested shares in non-Group companies, net** | **1,976** | **24** |

Acquisitions and divestments of participations in non-Group companies are presented in Note 13 Investments in shares and participations.

| Change in loans, net | Dec 31, 2016 | Cash flows | Other | Dec 31, 2017 |
|---|---|---|---|---|
| *Non-current liabilities to Group companies* | 13,973 | – | – | 13,973 |
| *Current liabilities to Group companies* | | | | |
| Liability in group account at Volvo Treasury AB | 24,806 | –5,466 | –3 | 19,337 |
| **Total** | | **–5,466** | | |





# Corporate governance report 2017

The Volvo Group appreciates the value of sound corporate governance as a fundamental base in achieving a trusting relation with shareholders and other key parties. The Swedish Corporate Governance Code, which is applied by the Volvo Group, aims at creating a sound balance of power between shareholders, the board of directors and the senior management. Sound corporate governance, characterized by high standards when it comes to transparency, reliability and ethical values, has always been a well-established guiding principle within the Volvo Group's operations.

## THE SWEDISH CORPORATE GOVERNANCE CODE

AB Volvo's shares are admitted to trading on the stock exchange Nasdaq Stockholm's main market. As a listed company, Volvo applies the Swedish Corporate Governance Code (the Code), which is available at www.corporategovernanceboard.se.

This Corporate Governance Report has been prepared in accordance with the Swedish Annual Accounts Act and the Code, and is separate from the Annual Report. The report has been reviewed by Volvo's auditors and includes a report from the auditors.

## CORPORATE GOVERNANCE MODEL

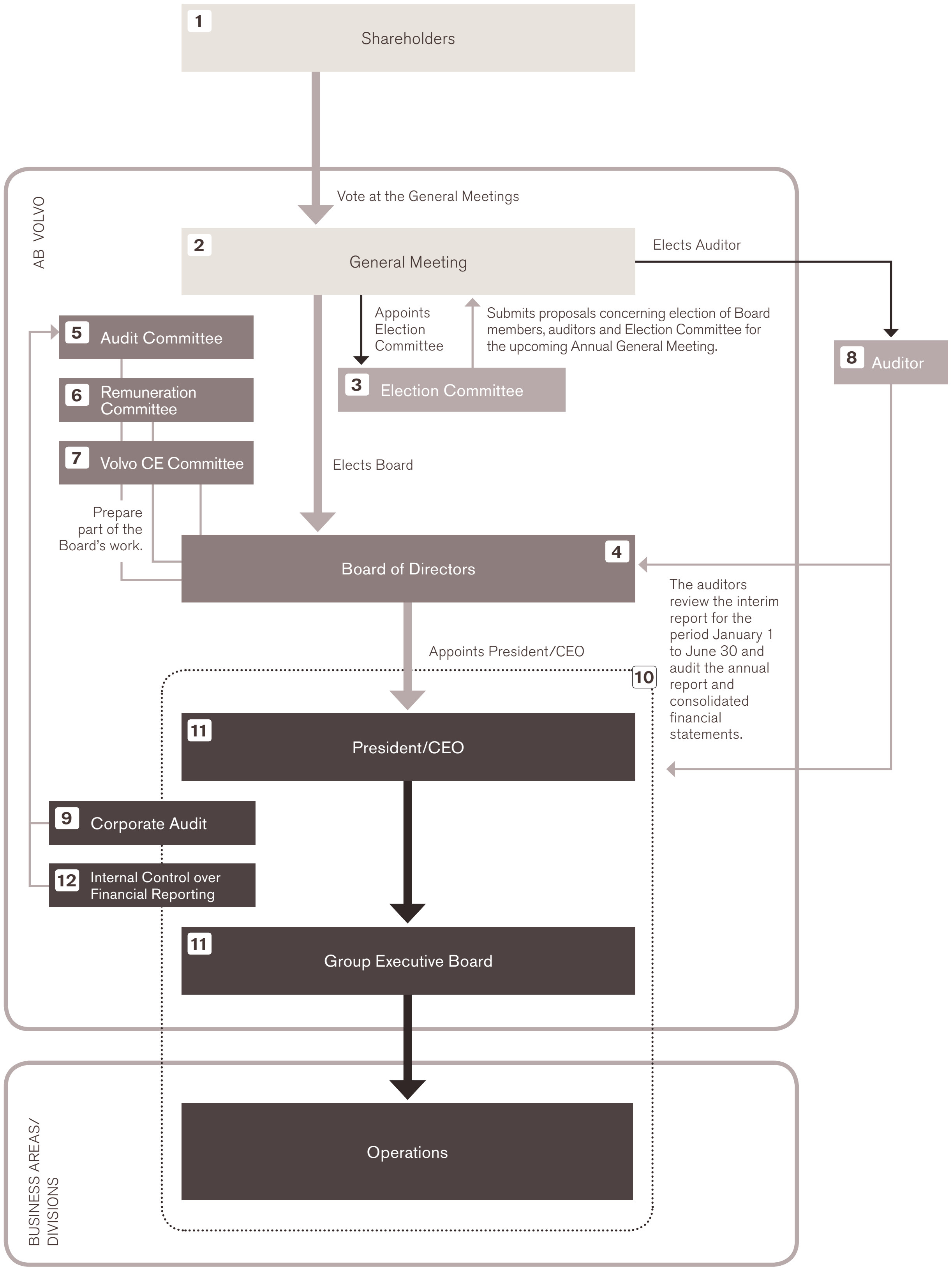
At the General Meetings of AB Volvo, which is the Parent Company of the Volvo Group, the shareholders exercise their voting rights with regard to for example the composition of the Board of Directors of AB Volvo and the election of auditors.

An Election Committee, appointed by the Annual General Meeting of AB Volvo, submits proposals to the upcoming Annual General Meeting concerning the election of Board members and Board Chairman as well as proposals for resolutions concerning remuneration of the Board. When applicable, the Election Committee also submits proposals for the election of external auditors and for resolutions concerning fees to the auditors.

The Board is ultimately responsible for Volvo's organization and the management of its operations.

In addition, the Board appoints the President and CEO of AB Volvo. The CEO is in charge of the daily management of the Group in accordance with the guidelines provided by the Board.

AB Volvo's Annual General Meeting 2017 was held on April 4 in Konserthuset, Göteborg, Sweden.


1 Shareholders
Vote at the General Meetings
AB VOLVO
2 General Meeting
Elects Auditor
Appoints Election Committee
Submits proposals concerning election of Board members, auditors and Election Committee for the upcoming Annual General Meeting.
8 Auditor
5 Audit Committee
6 Remuneration Committee
7 Volvo CE Committee
3 Election Committee
Elects Board
Prepare part of the Board's work.
Board of Directors 4
The auditors review the interim report for the period January 1 to June 30 and audit the annual report and consolidated financial statements.
Appoints President/CEO
10
11 President/CEO
9 Corporate Audit
12 Internal Control over Financial Reporting
11 Group Executive Board
BUSINESS AREAS/ DIVISIONS
Operations

## 1 SHARES AND SHAREHOLDERS

AB Volvo is a CSD company, which means that the share register is maintained by Euroclear Sweden AB. On December 31, 2017, Volvo had 240,521 shareholders according to the share register. The largest shareholder, in terms of votes on that date was AB Industrivärden, with 23.1 percent of the votes based on the number of shares. Cevian Capital held 15.9 percent of the votes, Norges Bank Investment Management held 5.4 percent of the votes and Svenska Handelsbanken together with SHB Pension Fund, SHB Employee Fund, SHB Pensionskassa and Oktogonen 5.1 percent of the votes, based on the number of shares outstanding[1].

Volvo has issued two classes of shares: series A and series B. At a General Meeting, series A shares carry one vote and series B shares one-tenth of a vote. The two share classes carry equal rights to a share in the assets and earnings of the company. According to a special share conversion clause in the Articles of Association, holders of series A shares are entitled to request that their series A shares be converted to series B shares. Implementation of such conversions would entail that the total number of votes in the company decreased.

For more information about the Volvo share and its shareholders, refer to the Board of Director's Report on pages 109–111 of the Annual Report.

[1] According to a press release on December 27, 2017, Cevian Capital and Zheijiang Geely Holding Group ("Geely") have entered into an agreement regarding Geely's acquisition of Cevian's shares in AB Volvo. Geely has not yet entered the shares when this Corporate Governance Report was prepared.

## 2 GENERAL MEETING

**General**

The General Meeting is Volvo's highest decision-making body. The Annual General Meeting is held within six months of the end of the fiscal year, normally in Göteborg.

In addition to what follows from applicable law regarding shareholders' right to participate at General Meetings, under Volvo's Articles of Association shareholders must give notice of their attendance (within the time stated in the convening notice) and notify the company of any intention to bring assistants.

A shareholder who wants the Meeting to consider a special matter must submit a request to the Board in sufficient time prior to the Meeting to the address provided on Volvo's website, www.volvogroup.com.

**Annual General Meeting 2018**

Volvo's Annual General Meeting for 2018 will be held on Thursday, April 5, 2018 in Konserthuset, Göteborg. For further information about the Annual General Meeting 2018, please refer to the fold-out at the end of the Annual and Sustainability Report and Volvo's website, www.volvogroup.com.


AB Volvo's Annual General Meeting 2017.

## 3 ELECTION COMMITTEE

### Duties

The Election Committee shall perform the tasks that are incumbent upon the Election Committee according to the Code. The main task is to prepare and present proposals to the Annual General Meeting on behalf of the shareholders for the election of Board members, the Chairman and Board remuneration and, when applicable, proposals for auditors and fees to the auditors.

In addition, the Election Committee, in accordance with prevailing instructions for Volvo's Election Committee, presents proposals for members of the Election Committee for the following year.

### Composition

In accordance with the instructions for Volvo's Election Committee adopted by the 2017 Annual General Meeting, the Annual General Meeting shall elect five members to serve on the Election Committee, of whom four shall represent the largest shareholders in the company, in terms of votes who have expressed their willingness to participate on the Election Committee. In addition, one of the members shall be the Chairman of the AB Volvo Board. Additionally, the Election Committee can offer other major shareholders to appoint one representative as a member of the Election Committee. If such an offer is made, it should be directed in turn to the largest shareholder in terms of votes not already represented on the Election Committee. The number of members on the Election Committee may however not exceed seven.

In accordance with its instructions, Volvo's Annual General Meeting 2017 resolved to appoint the following individuals as members of the Election Committee:

- Carl-Henric Svanberg, Chairman of the Board,
- Bengt Kjell, representing AB Industrivärden,
- Lars Förberg, representing Cevian Capital,
- Yngve Slyngstad, representing Norges Bank Investment Management, and
- Pär Boman, representing Svenska Handelsbanken, SHB Pension Fund, SHB Employee Fund, SHB Pensionskassa and Oktogonen.

The Election Committee appointed Bengt Kjell as Chairman of the Committee.

Due to Cevian Capital's divestment of its entire shareholding in AB Volvo, the Election Committee member Lars Förberg left the Election Committee in February 2018.

## 4 BOARD OF DIRECTORS

### Duties

The Board of Directors is ultimately responsible for Volvo's organization and management of the company's operations. The Board is responsible for the Group's long-term development and strategy, for regularly controlling and evaluating the Group's operations and for the other duties set forth in the Swedish Companies Act.

### Composition

During the period January 1, 2017 to April 4, 2017, AB Volvo's Board consisted of eleven members elected by the Annual General Meeting and three members and two deputy members appointed by employee organizations. According to the Articles of Association, the Board shall consist of not less than six and not more than twelve members elected by the General Meeting.

The Annual General Meeting 2017 re-elected Matti Alahuhta, Eckhard Cordes, James W. Griffith, Martin Lundstedt, Kathryn V. Marinello, Martina Merz, Hanne de Mora, Håkan Samuelsson, Helena Stjernholm, Carl-Henric Svanberg and Lars Westerberg as Board members and Carl-Henric Svanberg as Chairman of the Board. An account of each Board member's age, principal education, professional experience, assignments in the company, other significant assignments, their own and related parties' ownership of shares in Volvo as of March 6, 2018, and the year they were elected to the Volvo Board, is presented in the "Board of Directors" section on pages 196-197.

Prior to the 2017 Annual General Meeting, the Election Committee announced that it had applied the provisions of rule 4.1 of the Code as board diversity policy. The aim is that the Board as a collective should possess the required mix in terms of background and knowledge, whereby an even gender distribution is taken into particular account. The result of the Election Committee's application of the diversity policy is a Board that represents a mix of both professional experience and knowledge as well as geographical and cultural backgrounds. With the exception of the CEO, 40 percent of the Board members elected at the Annual General Meeting are women.

### Independence requirements

The Board of Directors of AB Volvo is subject to the independence requirements prescribed in the Code.

Prior to the 2017 Annual General Meeting, the Nomination Committee presented the following assessment of the independence of Board members elected at the 2017 Annual General Meeting.

Matti Alahuhta, James W. Griffith, Kathryn V. Marinello, Martina Merz, Hanne de Mora, Håkan Samuelsson, Carl-Henric Svanberg and Lars Westerberg were all considered independent of the company and company management, as well as the company's major shareholders.

Martin Lundstedt, as President of AB Volvo and CEO of the Volvo Group, was considered independent of the company's major shareholders but not of the company and company management.

Eckhard Cordes and Helena Stjernholm were considered independent of the company and company management.

Since Cevian Capital Partners, prior to the Annual General Meeting 2017, controlled more than 10 percent of the votes in the company, Eckhard Cordes, due to his capacity as partner in Cevian Capital Partners, was not considered independent in relation to one of the company's major shareholders.

Since AB Industrivärden, prior to the Annual General Meeting 2017, controlled more than 10 percent of the votes in the company, Helena

Stjernholm, due to her capacity as President and CEO of AB Industrivärden, was not considered independent in relation to one of the company's major shareholders.

**Work procedures**

Every year, the Board adopts work procedures for the Board's work.

The work procedures outline how the Board's duties should be distributed, including the specific role and duties of the Chairman, instructions for the division of duties between the Board and the President and for the reporting of financial information to the Board. The Board has also adopted specific instructions for the Board's committees, which are linked to the work procedures.

**The Board's work in 2017**

The Board's work is mainly performed within the framework of formal Board meetings and through meetings in the respective committees of the Board. In addition, regular contact is maintained between the Chairman of the Board and the CEO in order to discuss ongoing business and to ensure that the Board's decisions are executed.

In 2017, there were nine regular Board meetings, one extraordinary meeting and one statutory Board meeting. The attendance of Board members at these meetings is presented in the table on page 195.

In 2017, the Board continued to focus on measures to increase the Group's profitability and to strengthen the balance sheet. In August 2017, as part of this process and within the framework of its annual review, the Board decided to introduce new financial targets for the Volvo Group and in July, the Volvo Group sold its entire holding in the German listed engine manufacturer Deutz AG, with a capital gain of approximately SEK 400 M.

The Board also decided on an overall financial plan and investment framework for the Group's operations, and to regularly monitor the Group's earnings and financial position. In addition, the Board focused on risk-related issues such as overall risk management and ongoing legal disputes and investigations.

The Board remains continuously up-to-date on the status and development of the Group's operations by devoting considerable time to business reviews of the Group's various truck divisions and business areas. In 2017, through a newly established Volvo CE Committee, the Board focused specifically on monitoring and evaluating the Volvo CE operations, which also included a specific follow-up of the profitability improvement program launched in 2016.

The Board also paid particular attention to the Group's strategic focus on disruptive technology trends, such as digitalization, electrification and automation. As an additional element of the Board's strategic focus, the Board visited the Group's operations in China and Thailand in October 2017, which contributed to a greater understanding of the Group's operations and joint ventures in Asia.

Finally, the Board decided to cancel the process initiated by the company in November 2016 to divest the Governmental Sales business area, since none of the offers received were considered to reflect the value of the business.

**Evaluation of the Board's work**

In 2017, the Board performed its yearly evaluation of the Board's work. The purpose of the evaluation is to further develop the Board's efficiency and working procedures and to determine the main focus of the Board's coming work. In addition, the evaluation serves as a tool for determining the competence required by the Board and for analyzing the competence that already exists in the current Board. By that, the evaluation also serves as input for the Election Committee's work with proposing Board members.

As part of the yearly evaluation, Board members were asked to complete a questionnaire and assess various areas related to the Board's work from their own perspective. The areas evaluated for 2017 included the Board's composition, the management and focus of Board meetings, Board support and how the Board addresses issues related to strategy, potential risks and succession planning. The areas covered by the evaluation may differ from one year to another to reflect the development of the Board's work and the Volvo Group.

Separate evaluations were conducted of the Board as a collective, of the Chairman of the Board, the Audit Committee, Remuneration Committee and Volvo CE Committee. The results of the evaluations of the Board as a collective and of the Chairman were discussed by the Board. The results of the evaluations of the committees were, or will be, discussed by the relevant committee. In addition, the results of the evaluations of the Board as a collective and of the Chairman are shared with the Election Committee.

**Remuneration of Board Members**

The Annual General Meeting resolves on fees to be paid to the Board members elected by the Annual General Meeting. For information about Board remuneration, as adopted by the Annual General Meeting 2017, please refer to Note 27 in the Group's notes in the Annual Report.

| Remuneration of Board members, 2017 (from AGM on April 4, 2017) | SEK |
|---|---|
| Chairman of the Board | 3,400,000 |
| Board member | 1,000,000 |
| Chairman of the Audit Committee | 350,000 |
| Member of the Audit Committee | 160,000 |
| Chairman of the Remuneration Committee | 140,000 |
| Member of the Remuneration Committee | 105,000 |
| Chairman of the Volvo CE Committee | 175,000 |
| Member of the Volvo CE Committee | 150,000 |

**The Board's committees**

## 5 AUDIT COMMITTEE

*Duties*

The Board has an Audit Committee primarily for the purpose of supervising the accounting and financial reporting processes and the audit of the annual financial statements.

The Audit Committee's duties include preparing the Board's work to assure the quality of the Group's financial reporting by reviewing interim reports, Annual Report and the consolidated accounts. The Audit Committee also has the task of reviewing and overseeing the Group's legal and taxation matters as well as compliance with laws and regulations that may have a material impact on financial reporting. Furthermore, the Audit Committee has the task of reviewing and overseeing the impartiality and independence of the company's auditors. The Audit Committee is also responsible for evaluating both internal and external auditors' work and, when applicable, handling the tender process for audit services. In addition, it is the Audit Committee's task to preapprove what other services, beyond auditing, the company may procure from the auditors. The Audit Committee also adopts guidelines for transactions with companies and persons closely associated with Volvo. Finally, the Audit Committee evaluates the quality, relevance and effectiveness of the Group's system for internal control over financial reporting, as well as with respect to the internal audit and risk management, and discharge any other duties of an audit committee.

*Composition and work in 2017*

At the statutory Board meeting following the Annual General Meeting 2017, the following Board members were appointed members of the Audit Committee:

- Lars Westerberg
- Hanne de Mora
- Helena Stjernholm

Lars Westerberg was appointed Chairman of the Audit Committee.

The Audit Committee met with the external auditors without the presence of management on four occasions in 2017 in connection with Audit Committee meetings. The Audit Committee also met with the Head of Corporate Audit in connection with Audit Committee meetings.

The Audit Committee and the external auditors, among other tasks, discussed the external audit plan and the view of risk management. The Audit Committee held nine regular meetings during 2017. The attendance of Board members at the Committee meetings is presented in the table on page 195. The Audit Committee reports the outcome of its work to all members of the Board on a regular basis, and the minutes of the Audit Committee meetings are distributed to Board members.

In October 2017, the Board visited the Group's facilities in Thailand.

*Board of Directors (cont.)*

## 6 REMUNERATION COMMITTEE

*Duties*

The Board has a Remuneration Committee for the purpose of preparing and deciding on issues relating to the remuneration of senior executives in the Group. The duties of the Committee include making recommendations to the Board on the Board's decisions regarding terms of employment and remuneration of the CEO and Deputy CEO of AB Volvo, policies for the remuneration, including pensions and severance payments, of other members of the Group Executive Team and the policies for variable salary, share-based incentive programs, pensions and severance payment for other senior executives in the Group.

The Remuneration Committee shall monitor and evaluate ongoing programs and programs concluded during the year for the variable remuneration of senior executives, application of the guidelines for the remuneration of senior executives on which the Annual General Meeting shall decide, and the current remuneration structures and levels in the Group.

The Board shall, no later than three weeks prior to the Annual General Meeting, present the results of the Remuneration Committee's evaluation on the company's website.

*Composition and work in 2017*

At the statutory Board meeting following the Annual General Meeting 2017, the following Board members were appointed members of the Remuneration Committee:

- Carl-Henric Svanberg
- Matti Alahuhta
- James W. Griffith

Carl-Henric Svanberg was appointed Chairman of the Remuneration Committee.

The Code sets the requirement that members of the Remuneration Committee, with the exception of the Board Chairman if being a member of the Remuneration Committee, shall be independent of the company and company management. The Election Committee's assessment of independence prior to the Annual General Meeting 2017 is presented under "Independence requirements" on page 191.

The Remuneration Committee held four meetings in 2017. The attendance of Board members at Committee meetings is presented in the table on page 195. The Remuneration Committee reports the outcome of its work to all members of the Board on a regular basis.

## 7 VOLVO CE COMMITTEE

*Duties*

In connection with the Annual General Meeting 2017, the Board established a Volvo CE committee. The main duties of the Committee are to review and evaluate the development of the Volvo CE business and to monitor implementation of the performance improvement plan launched to increase the efficiency of Volvo CE.

*Composition and work in 2017*

At the statutory Board meeting following the Annual General Meeting 2017, the following Board members were appointed members of the Volvo CE Committee:

- Carl-Henric Svanberg
- Matti Alahuhta
- Eckhard Cordes
- James W. Griffith
- Helena Stjernholm
- Lars Ask
- Mari Larsson

Carl-Henric Svanberg was appointed Chairman of the Volvo CE committee.

The Volvo CE Committee held six meetings in 2017. The attendance of Board members at Committee meetings is presented in the table on page 195. The Volvo CE Committee reports the outcome of its work to all members of the Board on a regular basis.

**The Board's composition and attendance at meetings**
**January 1, 2017 – December 31, 2017**

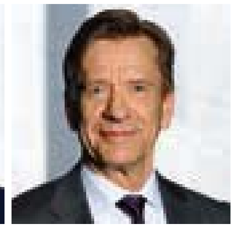
| Member | Board (11 incl. statutory) | Audit Committee (9) | Remuneration Committee (4) | Volvo CE Committee (6) |
|---|---|---|---|---|
| Carl-Henric Svanberg | 11 | | 4 | 6 |
| Martin Lundstedt | 11 | | | |
| Matti Alahuhta | 11 | | 4 | 6 |
| Eckhard Cordes | 10 | | | 5 |
| Hanne de Mora | 11 | 9 | | |
| James Griffith | 11 | | 4 | 6 |
| Kathryn Marinello | 10 | | | |
| Martina Merz | 11 | | | |
| Håkan Samuelsson | 10 | | | |
| Helena Stjernholm | 11 | 9 | | 6 |
| Lars Westerberg | 11 | 9 | | |
| Lars Ask, employee representative | 11 | | | 6 |
| Mats Henning, employee representative | 11 | | | |
| Camilla Johansson, employee representative | 11 | | | |
| Mari Larsson, employee representative | 11 | | | 6 |
| Mikael Sällström, employee representative | 11 | | | |
| **Total number of meetings** | **11** | **9** | **4** | **6** |

# Board of Directors

| BOARD MEMBERS ELECTED BY THE ANNUAL GENERAL MEETING |  |  |  |  |  |
|---|---|---|---|---|---|
| | **Carl-Henric Svanberg**<br>*Chairman of the Board, Chairman of the Remuneration Committee, Chairman of the Volvo CE Committee* | **Matti Alahuhta**<br>*Member of the Remuneration Committee, Member of the Volvo CE Committee* | **Eckhard Cordes**<br>*Member of the Volvo CE Committee* | **James W. Griffith**<br>*Member of the Remuneration Committee, Member of the Volvo CE Committee* | **Martin Lundstedt**<br>*President and CEO* |
| **Education** | MSc in Applied Physics, BSc Business Administration. | MSc, Dr Sc. Doctor of Science. | MBA and PhD, University of Hamburg. | BSc Industrial Engineering, MBA from Stanford University. | MSc. |
| **Born** | 1952 | 1952 | 1950 | 1954 | 1967 |
| **Member of the Volvo Board** | Chairman of the Volvo Board since April 4, 2012. | Since April 2, 2014. | Since April 1, 2015. | Since April 2, 2014. | Since April 6, 2016. |
| **Position and Board memberships** | Board Chairman: BP plc.<br>Chairman of the Academy: The Royal Swedish Academy of Engineering Sciencees (IVA). | Board Chairman: DevCo Partners Oy and Outotec Corporation.<br>Board member: Kone Corporation, ABB Ltd. | Partner in Cevian Capital and EMERAM Capital Partners.<br>Member of the Executive Committee of Eastern European Economic Relations of German Industry.<br>Board Chairman: Bilfinger SE. | Board member: Illinois Tool Works Inc. | President and CEO of AB Volvo.<br>Board Chairman: Partex Marking Systems AB and Permobil AB.<br>Board Member: ACEA Commercial Vehicle and Concentric AB.<br>Member of the Royal Swedish Academy of Engineering Sciences (IVA).<br>Advisory Member of the Swedish National Innovation Council. |
| **Principal work experience** | Has held various positions at Asea Brown Boveri (ABB) and Securitas AB, President and CEO of Assa Abloy AB, President and CEO of Telefonaktiebolaget LM Ericsson, member of the External Advisory Board of the Earth Institute at Columbia University and the Advisory Board of Harvard Kennedy School. | Has held several management positions in the Nokia Group – President of Nokia Telecommunications, President of Nokia Mobile Phones and Chief Strategy Officer of the Nokia Group, President of Kone Corporation between 2005–2014 and between 2006–2014 also CEO. | Started with Daimler Benz AG, where he has held several management positions, such as Head of the trucks and buses business, Head of Group Controlling, Corporate Development and M&A in AEG AG and CEO of Mercedes Car Group. Previously CEO of Metro AG, senior advisor at EQT and Board member of Air Berlin, SKF, Carl Zeiss and Rheinmetall AG. Since 2012 partner in Cevian Capital and EMERAM Capital Partners respectively. | Began his career at The Timken Company in 1984, where he has held several management positions, such as responsible for Timken's bearing business activities in Asia, the Pacific and Latin America and for the company's automotive business in North America. Until 2014 President and CEO at Timken Company. | President and CEO of Scania 2012–2015. Prior to that, various managerial positions at Scania since 1992. Co-chairman of the UN Secretary-General's High-Level Advisory Group on Sustainable Transport 2015–2016. |
| **Holdings in Volvo, own and related parties** | 700,000 Series B shares. | 64,100 Series B shares. | None. | 20,000 Series B shares. | 75,624 Series B shares. |

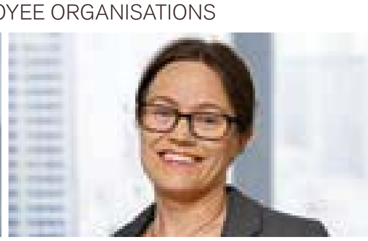
BOARD MEMBERS APPOINTED BY THE EMPLOYEE ORGANISATIONS

| |  |  |  |
|---|---|---|---|
| | **Lars Ask**<br>*Employee representative, ordinary member*<br>*Member of the Volvo CE Committee* | **Mats Henning**<br>*Employee representative, ordinary member* | **Mikael Sällström**<br>*Employee representative, ordinary member* |
| **Born** | 1959 | 1961 | 1959 |
| **Member of the Volvo Board** | Deputy member from June 16, 2009–2016. Ordinary member since April 6, 2016. | Since May 9, 2014. | Since September 7, 2009. |
| **Background within Volvo** | With Volvo since 1982. | With Volvo since 1982. | With Volvo 1980–1999 and since 2009. |
| **Holdings in Volvo, own and related parties** | 293 Series A shares, 250 Series B shares. | 293 Series A shares, 500 Series B Shares. | 293 Series A shares. |

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **Kathryn V. Marinello** | **Martina Merz** | **Hanne de Mora**<br>*Member of the Audit Committee* | **Håkan Samuelsson** | **Helena Stjernholm**<br>*Member of the Audit Committee, Member of the Volvo CE Committee* | **Lars Westerberg**<br>*Chairman of the Audit Committee* |
| BA from State University of New York at Albany, MBA from Hofstra University. | BS from University of Cooperative Education, Stuttgart. | BA in Economics from HEC in Lausanne, MBA from IESE in Barcelona. | MSc. | MSc Business Administration. | MSc Engineering, Bachelor Business Administration. |
| 1956 | 1963 | 1960 | 1951 | 1970 | 1948 |
| Since April 2, 2014. | Since April 1, 2015. | Since April 14, 2010. | Since April 6, 2016. | Since April 6, 2016. | Since April 4, 2007. |
| President and CEO Hertz Global Holdings. | Board Chairperson: SAF Holland SA.<br>Board Member: Deutsche Lufthansa AG (supervisory board) , NV Bekaert S.A and Imerys SA. | Board Chairperson: a-connect (group) ag.<br>Board Member: IMD Supervisory Board. | President and CEO of Volvo Car Group.<br>Board Member: Volvo Car AB, China-Euro Vehicle Technology AB (CEVT), Zenuity AB, Teknikarbetsgivarna i Sverige and Teknikföretagen (Engineering companies). | President and CEO of AB Industrivärden.<br>Board Member: AB Industrivärden, Sandvik AB and Telefonaktiebolaget LM Ericsson. | Board Member: SSAB AB, Sandvik AB and Stena AB. |
| Has held several management positions at Citibank, Chemical Bank New York (now JP Morgan Chase), First Bank Systems and First Data Corporation, Division President General Electric Financial Assurance Partnership Marketing and Division President General Electric Fleet Services, President and CEO of Ceridian Corporation and subsequently also Chairman, Board Chairman, President and CEO of Stream Global Services, Inc. Senior Advisor, Ares Management, LLC. Board Member of Nielsen and RealPage. | Until January 2015, CEO for Chassis Brakes International. Has, during almost 25 years held various management positions in Robert Bosch GmbH, most recently as Executive Vice President Sales and Marketing in the Chassis System Brakes division combined with responsibility for regions China and Brazil and previously CEO of the subsidiary Bosch Closure Systems, also member of the Board of Management of Brose Fahrzeugteile GmbH & Co. | Credit Analyst Den Norske Creditbank in Luxemburg 1984. Various positions within brand management and controlling within Procter & Gamble 1986–1989, Partner McKinsey & Company, Inc. 1989–2002, one of the founders and owners, also Board Chairperson of the global consulting firm and talent pool a-connect (group) ag since 2002. | Began his career in 1977 at Scania where he stayed for more than 20 years. He held leading positions within Scania's technical division before he joined the executive board in 1996. He brought his vast truck experience from Scania to MAN in 2000 when he became Chairman & CEO of MAN Nutzfahrzeuge AG. Chairman & CEO of MAN AG from 2005–2009. | Between 1998–2015, employed by the private equity firm IK Investment Partners (former Industri Kapital) where she held various positions. She was a Partner with responsibility for the Stockholm office. She was also a member of IK's Executive Committee. Prior to that she worked as a consultant for Bain & Company. | Has held various positions within ASEA 1972–1984. Served several executive positions at Esab AB 1984–1994 including CEO and President. CEO and President of Gränges AB 1994–1999. CEO and President of Autoliv Inc. 1999–2007 and Chairman of Autoliv Inc. 2007–2011. Previously Chairman of Husqvarna AB, Vattenfall AB and Ahlsell AB. |
| None. | 4,500 Series B shares. | 3,000 Series B shares. | 106,000 Series B shares. | 8,000 Series B shares. | 30,000 Series A shares, 168,000 Series B shares. |

DEPUTIES APPOINTED BY THE EMPLOYEE ORGANISATIONS

SECRETARY TO THE BOARD

| | | | |
|---|---|---|---|
|  |  | |  |
| **Camilla Johansson**<br>*Employee representative, deputy member* | **Mari Larsson**<br>*Employee representative, deputy member*<br>*Member of the Volvo CE Committee* | | **Sofia Frändberg**<br>*Secretary to the Board*<br>Master of Laws |
| 1966 | 1978 | | 1964 |
| Deputy member since April 6, 2016. | Deputy member since May 22, 2015. | | Secretary to the Board since April 1, 2013. |
| With Volvo since 1997. | With Volvo since 2004. | | Executive Vice President Group Legal & Compliance and General Counsel. |
| 643 Series A shares. | 605 Series A shares. | | 1,738 Series A shares, 50,774 Series B shares. |

## 8 EXTERNAL AUDITING

Volvo's auditors are elected by the Annual General Meeting. The auditors perform a review of the interim financial information and audit the annual financial statements and consolidated accounts. The auditors report the results of their audit of the annual financial statements and consolidated accounts and their review of the Corporate Governance Report in the Audit Report and in an opinion on the Corporate Governance Report, which they present to the Annual General Meeting.

The current auditor PricewaterhouseCoopers AB (PwC), was elected at the Annual General Meeting 2014 for a period of four years. Two partners of PwC, Peter Clemedtson and Johan Palmgren, are responsible for the audit of Volvo. Peter Clemedtson is Auditor-in-Charge.

In 2016 Volvo decided to start procurement of audit services to prepare for the election of external auditors at the 2018 Annual General Meeting.

For information about Volvo's remuneration of the auditors, refer to Note 28 "Fees to the auditors" in the Group's notes in the Annual Report.

## 9 CORPORATE AUDIT

Volvo's internal audit function, Corporate Audit, supports Volvo in enhancing and protecting organizational value by providing risk-based, independent and objective assurance, advice and insight. Corporate Audit helps the organization to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and to improve the effectiveness of risk management, control and governance processes.

Corporate Audit performs internal audits in selected focus areas, identified through an independent risk assessment process and approved by the Audit Committee. In addition, special assignments requested by management and the Audit Committee are performed. The audits cover, among other things, assessments on the adequacy and effectiveness of the organization's processes for controlling its activities and managing its risks and evaluation of compliance with policies and directives.

Corporate Audit also assists in investigations of suspected breaches of the Code of Conduct and of suspected fraudulent activities within the organization and coordinates and provides oversight of other control and monitoring functions.

The head of Corporate Audit reports directly to the CEO, the Group's General Counsel and the Board's Audit Committee.

For additional information on internal control over financial reporting, see pages 204–205.

## 10 GOVERNANCE PRINCIPLES AND ORGANIZATIONAL STRUCTURE

**Volvo's strategy**

The Volvo Group's mission is to "Drive prosperity through transport solutions". The Group's products and services are continuously developed to support sustainable societies and the well-being and safety of people. With this mission in mind, the Volvo Group strives to achieve its vision to be the most desirable and successful transport solution provider in the world.

The Volvo Group's aspirations are to have leading customer satisfaction for all of its brands in each segment; to be the most admired employer in the industry and to have industry leading profitability. The Group's values – Customer Success, Trust, Passion, Change and Performance – are the cornerstone of the Group's company culture. In 2017, the Volvo Group launched a new Code of Conduct that clearly defines expectations on the way the Group runs its business – not just in a few places, but wherever the Group operates. The Code of Conduct summarizes what the Volvo Group stands for and what Volvo expects from its employees. Seven strategic priorities set the direction for the Group. They describe the key fundamentals of the Volvo Group strategy such as customer focus, decentralization, empowerment and P&L responsibility for its brand organizations, continuous improvements as well as the importance of utilizing the Group strengths to increase synergies, profitability and to take leadership in key technologies.

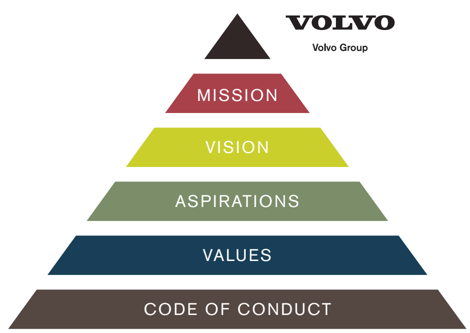
Based on the Group's strategic priorities, each Business Area defines it's own operational plans. The long-term plans, such as the Group's industrial and technology plans, are also crucial parts of the Group's strategic direction. The follow-up of the Volvo Group strategy is managed by the annual Group Strategy Cycle.

**Governance documents**

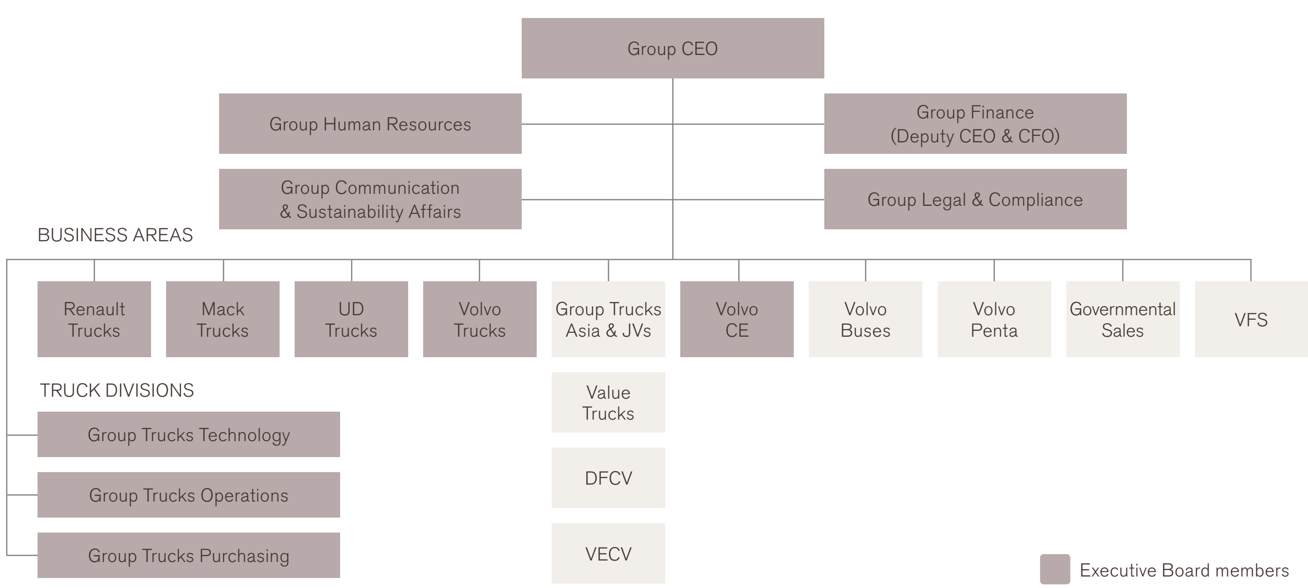
Another key component of the Group's governance is its policies and directives, such as the Code of Conduct and policies pertaining to investments, financial risks, accounting, financial control and internal audit, which contain Group-wide operating and financial rules for the operations, as well as responsibility and authority structures.

**Organizational structure**

The business of the Volvo Group is organized into ten Business Areas. Of these, five represent brand-specific Business Areas for trucks: Volvo Trucks, UD Trucks, Renault Trucks, Mack Trucks and Group Trucks Asia & JVs, each with profit and loss responsibility for their respective business. The other Business Areas are Volvo Construction Equipment, Volvo Buses, Volvo Penta, Governmental Sales and Volvo Financial Services (VFS).




VOLVO GROUP ORGANIZATION



*Governance principles and organizational structure (cont.)*

The Trucks Business is further organized into three divisions: Group Trucks Technology (GTT), Group Trucks Operations (GTO) and Group Trucks Purchasing (GTP). GTT is responsible for product development of engines, transmissions and trucks. GTO is responsible for the production of trucks and the Group's engines and transmissions, as well as for the Group's spare parts supply and logistics operation. GTP has overall responsibility for purchasing for the Group's trucks, engines and transmissions operations as well as for the Group's purchase of indirect products and services.

In addition, there are four Group Functions: Group Human Resources, Group Finance, Group Communication & Sustainability Affairs and Group Legal & Compliance, tasked with supporting to the CEO and the Group Executive Board with expertise within each Group Function area and with developing standards for the entire organization through policies, directives and guidelines. In addition, there are Group Functions that provide services and/or products for the entire Group, such as Group IT and Accounting & Company Control.

With this governance model, Volvo can utilize the synergies of having global organizations for manufacturing, product development and purchasing, while maintaining clear leadership and responsibility for each truck brand to make sure that customer needs are met. The aim of the governance model is that all Business Areas are driven according to the same distinct business principles, whereby each Business Area can follow and optimize its own earnings performance in the long and short term.

## 11 GROUP MANAGEMENT

The Group Executive Board comprises 13 members.

In addition to the CEO, the Group Executive Board comprises the Executive Vice Presidents of the three Group Truck Divisions, the Executive Vice Presidents of the five Business Areas Renault Trucks, Mack Trucks, UD Trucks, Volvo Trucks and Volvo Construction Equipment, and the Executive Vice Presidents of the four Group Functions. The head of Group Finance is, besides CFO, also deputy CEO. The members of the Group Executive Board report directly to the CEO.

The Presidents of the Business Areas Group Trucks Asia & JVs, Volvo Buses, Volvo Penta, Governmental Sales and VFS also report directly to the CEO and are part of an extended Group Management Team together with the members of the Group Executive Board.

The CEO is responsible for managing the day-to-day operations of the Volvo Group and is authorized to make decisions on matters that do not require Board approval. The CEO leads the operations of the Group mainly through the Group Executive Board and the extended Group Management Team.

The Product Board is where key decisions are made related to the Group's offering and technology portfolio. The Product Board focuses primarily on R&D projects in the Group's truck Business Areas and Group-wide projects of significant size.

The Quality Board is where quality-related matters are addressed in order to support fast decision-making and customer focus in this area.

At special meetings for Sales & Operations Planning (S&OP), decisions are made regarding a production plan aimed at optimizing the Volvo Group's overall profitability. The purpose of the meetings is to balance demand with supply chain capabilities, drive capacity management and provide directions for the Group's sales and operations activities.

All of the above bodies affect control and monitoring of the Group's financial development, strategies and targets, and make decisions regarding investments and other matters.

**Remuneration of the Group Executive Board**

Every year, AB Volvo's Annual General Meeting resolves on a policy for remuneration of the Group Executive Board, based on a proposal from the Board. For information about the remuneration policy adopted by the Annual General Meeting 2017, refer to Note 27 "Personnel" in the Group's notes in the Annual Report.

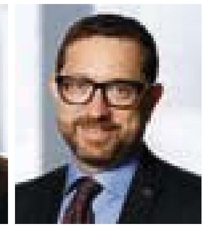
**Changes to the Group Executive Board**

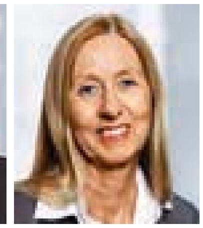
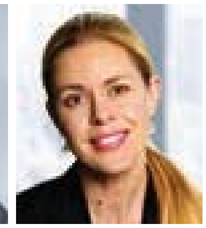
On January 1, 2018, Melker Jernberg joined the Group Executive Board and assumed the position as President of Volvo Construction Equipment. Melker Jernberg replaced Martin Weissburg, who will replace Dennis Slagle as President of Mack Trucks as per June 1, 2018.

On January 1, 2018, Kina Wileke joined the Group Executive Board and assumed the position as Executive Vice President Group Communications & Sustainability Affairs. Kina Wileke replaced Henry Sténson.

Martin Lundstedt, President and CEO, at the Annual General Meeting 2017.

# Group Executive Board

| | | | | | | |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| | **Martin Lundstedt** *President and CEO* | **Jan Gurander** *Deputy CEO and CFO* | **Claes Nilsson** *Executive Vice President Volvo Group and President Volvo Trucks* | **Bruno Blin** *Executive Vice President Volvo Group and President Renault Trucks* | **Dennis Slagle** *Executive Vice President Volvo Group and President Mack Trucks* | **Joachim Rosenberg** *Executive Vice President Volvo Group and Chairman of UD Trucks.* |
| **Education** | MSc. | MSc. | | MBA. | BS Accounting CPA. | MSc Industrial Engineering and Management, MSc Financial Economics, MSc Business and Economics. |
| **Born** | 1967 | 1961 | 1957 | 1963 | 1954 | 1970 |
| **Principal work experience** | President and CEO of Volvo and member of the Group Executive Board since October 2015. President and CEO of Scania 2012–2015. Prior to that, various managerial positions at Scania since 1992. Co-chairman of the UN Secretary-General's High-Level Advisory Group on Sustainable Transport 2015-2016. | CFO & Senior Vice President Finance Volvo Car Corporation 2011–2013. CFO MAN Diesel & Turbo SE 2010. CFO MAN Diesel SE 2008–2009. Group Vice President and CFO Scania AB 2001–2006. President of Business Unit Finance AB Volvo 1999–2001. Senior Vice President & Finance Director Scania AB 1998–1999. Member of the Group Executive Board since 2014. With Volvo 1999–2001 and since 2014. | President Volvo Trucks since 2016. Senior Vice President Volvo Group Trucks Sales Latin America 2015. Senior Vice President Volvo Group Trucks Sales, Europe North and Central 2013–2014. Senior Vice President Volvo Trucks 2011–2012. President Volvo Trucks, Europe Division 2007–2011 and International Division 2006–2007. Member of the Group Executive Board since 2016. With Volvo since 1982. | After having worked for several companies in the manufacturing, quality and purchasing areas, he joined Renault Trucks Purchasing in 1999. Has held several senior positions over the years until being appointed Senior Vice President of Volvo Group Purchasing. Has also served as Senior Vice President, Group Truck Sales South Europe January 2013–2016. Member of the Group Executive Board since March 2016. With Volvo since 1999. | Has held various executive level positions within Volvo Group Trucks Sales North America 2008–2016. President Volvo Construction Equipment North America 2000–2008. Member of the Group Executive Board since March 2016 and between 2008–2014. With Volvo since 2000. | Executive Vice President Group Trucks Sales 2015–2016. Executive Vice President Group Trucks Sales & Marketing APAC 2012–2014. President Volvo Group Asia Truck Operations 2007–2011. Vice President Volvo Group Alliance Office 2007. Vice President Volvo Powertrain 2005–2007. Consultant with McKinsey & Company 1996–2004. Member of the Group Executive Board since 2012. With Volvo since 2005. |
| **Board memberships** | Chairman of Partex Marking Systems AB and Permobil AB. Board Member of ACEA Commercial Vehicle and Concentric AB. Member of the Royal Swedish Academy of Engineering Sciences (IVA) and Advisory member of the Swedish National Innovation Council. | | | | Volvo Group representative for National Association of Manufacturers (NAM). | Volvo Group representative for Japan Automobile Manufacturers Association (JAMA). |
| **Holdings in Volvo, own and related parties** | 75,624 Series B shares. | 26,143 Series B shares. | 206 Series A shares, 21,488 Series B shares. | 7,863 Series B shares. | 85,047 Series B shares. | 87 Series A shares, 59,996 Series B shares. |

| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| **Melker Jernberg**<br>*Executive Vice President Volvo Group and President Volvo Construction Equipment* | **Lars Stenqvist**<br>*Executive Vice President Group Trucks Technology* | **Jan Ohlsson**<br>*Executive Vice President Group Trucks Operations* | **Andrea Fuder**<br>*Executive Vice President Volvo Group Trucks Purchasing* | **Sofia Frändberg**<br>*Executive Vice President Group Legal & Compliance and General Counsel* | **Kerstin Renard**<br>*Executive Vice President Group Human Resources* | **Kina Wileke**<br>*Executive Vice President Group Communication & Sustainability Affairs* |
| MSc Mechanical Engineering. | MSc Industrial Engineering. | MSc. | MSc and MBA. | Master of Laws. | BSc Sociology. | Degree in journalism, University of Gothenburg. |
| 1968 | 1967 | 1953 | 1967 | 1964 | 1961 | 1974 |
| CEO and President at Höganäs AB 2014–2017. Executive Vice President, Business Area EMEA at SSAB 2011–2014. Has held various positions at Scania AB since 1989, most recently as Senior Vice President Buses and Coaches at Scania AB 2007–2011. Member of the Group Executive Board since 2018. | Executive Vice President Group Trucks Technology and Volvo Group Chief Technology Officer since October 2016. Head of R&D and CTO at Volkswagen Truck & Bus 2015–2016. Senior Vice President Vehicle Definition R&D at Scania 2007–2015. Prior to that various senior positions at Scania since 1992. Member of the Group Executive Board since October 2016. With Volvo Group since October 2016. | Senior Vice President Powertrain Production Group Trucks Operations 2012–2016. 2001–2012 General Manager European Manufacturing Volvo Trucks. Member of the Group Executive Board since April 2016. With Volvo since 1979. | Has worked in Quality and Logistic and held various senior positions at Volkswagen's Purchasing organization since 1992. Head of Purchasing at Scania 2012–2016. Member of the Group Executive Board since 2017. With Volvo since 2017. | Responsible for Group Legal & Compliance and General Counsel of the Volvo Group since April 2013. Head of Corporate Legal at AB Volvo 1998–2013. Corporate Legal Counsel at AB Volvo 1994–1997. Member of the Group Executive Board since April 2013. With Volvo since 1994. | Senior Vice President Human Resources for the Volvo Group 2007–2011. Prior to that Senior Vice President Human Resources & Communication at Volvo Powertrain 2005–2006. Member of the Group Executive Board since 2012. With Volvo since 2005. | Responsible for Group Communications since 2018. With the Volvo Group since 2008, most recently as Senior Vice President Brand, Communication & Marketing Volvo Penta 2016–2017, Senior Vice President External Corporate Communication Volvo Group 2012–2016 and CEO Communication Volvo Group 2008–2012. Has held a number of positions in TV4 Group 1998–2008. Member of the Group Executive Board since 2018. |
| | | | | Secretary to the AB Volvo Board since April 2013. | Board Member of Teknikföretagen (Engineering companies). | Board Member of Handelsbanken Regionbanken Västra Sverige. |
| 2,000 Series B shares. | 1,768 Series B shares. | 32,154 Series B shares. | 1,600 Series A shares, 2,100 Series B shares. | 1,738 Series A shares, 50,774 Series B shares. | 405 Series A shares, 43,375 Series B shares. | 135 Series A shares, 5,651 Series B shares. |

## 12 INTERNAL CONTROL OVER FINANCIAL REPORTING

The Board is responsible for the internal controls according to the Swedish Companies Act and the Code. The purpose of this report is to provide shareholders and other interested parties with an understanding of how internal control is organized at Volvo with regard to financial reporting. The description has been designed in accordance with the Swedish Annual Accounts Act and is thus limited to internal control over financial reporting.

**Introduction**

Volvo has a function for internal control with the objective to provide support for management, allowing them to continuously provide solid internal controls relating to financial reporting. Work that is conducted through this function is primarily based to ensure compliance with directives and policies, and to create effective conditions for specific control activities in key processes related to financial reporting. The Audit Committee is continuously informed of the results of the work performed by the Internal Control function within Volvo with regard to risks, control activities and follow-up on the financial reporting.

Volvo also has an internal audit function, Corporate Audit, which among other things, independently monitors that companies in the Group follow the principles and rules that are stated in the Group's directives, policies and instructions for financial reporting. The head of the Corporate Audit function reports directly to the CEO, to the Group's General Counsel and the Board's Audit Committee.

**Control environment**

Fundamental to Volvo's control environment is the business culture that is established within the Group and in which managers and employees operate. Volvo works actively on communication and training regarding the company's basic values included in the Group's Code of Conduct, to ensure that good morals, ethics and integrity permeate the organization.

The foundation of the internal control process relating to the financial reporting is based on the Group's directives, policies and instructions, as well as the organization's responsibility and authority structure. The principles for Volvo's internal controls and directives and policies for the financial reporting are contained in the Volvo Group Management System, a group wide management system comprising, among other things, instructions, rules and principles.

**Risk assessment**

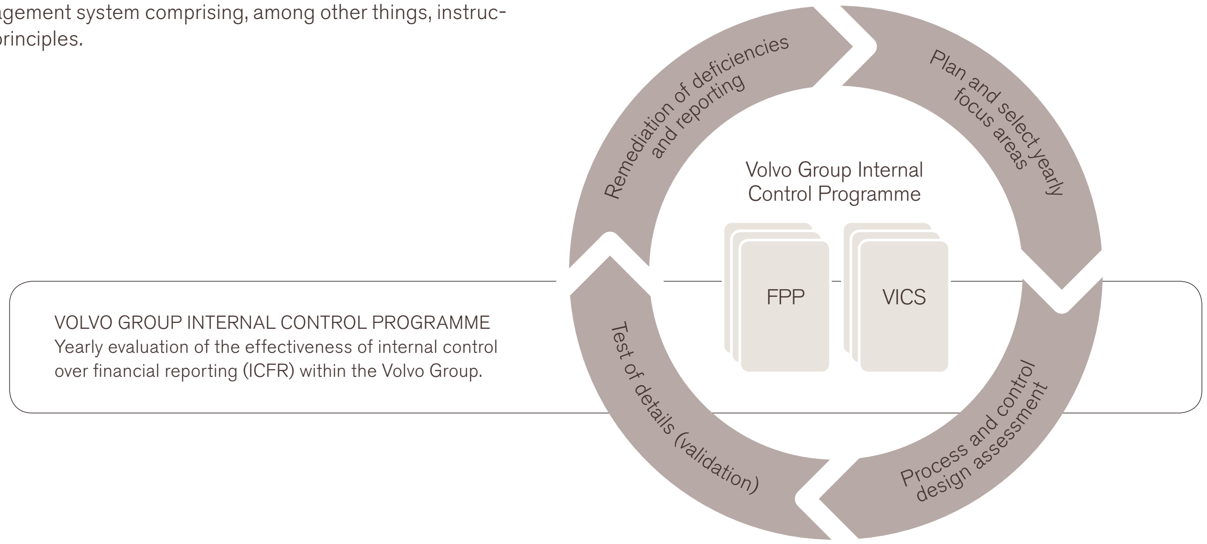
Risks relating to financial reporting are evaluated and monitored by the Board through the Audit Committee inter alia through identifying risks that could be considered as material, and through the mitigating control objectives. The risk assessment is based on a number of criteria, such as the complexity of the accounting principles, revaluation principles of assets or liabilities, complex and/or changing business circumstances, etc. The risks together with mitigating control objectives are collected in a framework for internal control over financial reporting, Volvo Internal Control Standard (VICS).

**Control activities**

In addition to the Board of Directors of AB Volvo and its Audit Committee, the management groups and other decision-making bodies in the Group constitute overall supervisory bodies. Business processes are designed to ensure that potential errors or deviations in the financial reporting are prevented, discovered and corrected by implementing control activities that correspond to the control objectives defined in the VICS framework. Control activities range from review of outcome results in management group meetings to specific reconciliation of accounts and analyses of the ongoing processes for financial reporting.

**Information and communication**

Policies and instructions relating to the financial reporting are updated and communicated on a regular basis from management to all affected employees. The Group's financial reporting function has direct operating responsibility for the daily financial reporting and works to ensure a uniform application of the Group's policies, principles and instructions for the financial reporting and to identify and communicate shortcomings and areas of improvement in the processes for financial reporting.



### Follow-up

Ongoing responsibility for follow-up rests with the Group's financial reporting function. In addition, the Corporate Audit and the Internal Control function conduct review and follow-up activities in accordance with what is described in the introduction of this report. More specifically, the Internal Control function runs and coordinates evaluation activities through the "Volvo Group Internal Control Programme," with the purpose of systematically evaluating the quality of the internal control over financial reporting on an annual basis. An annual evaluation plan is established and presented to the Audit Committee. This evaluation program comprises three main areas:

1. Group-wide controls: Self-assessment procedure carried out by management teams at business area, Group Function and company levels. The main areas evaluated are compliance with the Group's financial directives and policies and the Group's Code of Conduct.
2. Process controls at transaction level: Processes related to the financial reporting are evaluated by testing procedures/controls based on the framework for internal control over financial reporting, Volvo Internal Control Standards (VICS).
3. General IT controls: Processes for maintenance, development and access management of financial applications are evaluated by testing procedures and controls.

The results of the evaluation activities are reported to Group management and the Audit Committee. During 2017, the Internal Control function reported three times to the Audit Committee regarding the annual evaluation plan, status on outstanding issues and final assessment of the control environment.

Göteborg, March 6, 2018

AB Volvo (publ)
The Board of Directors

## AUDITOR'S REPORT ON THE CORPORATE GOVERNANCE REPORT

To the annual meeting of the shareholders of AB Volvo (publ), corporate identity number 556012-5790

### Engagement and responsibility

The Board of Directors is responsible for that the corporate governance statement on pages 188–205 has been prepared in accordance with the Annual Accounts Act.

### The scope of the audit

Our examination of the corporate governance statement is conducted in accordance with FAR's auditing standard RevU 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

### Opinions

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2–6 of the Annual Accounts Act and chapter 7 section 31 the second paragraph the same law are consistent with the other parts of the annual accounts and consolidated accounts and are in accordance with the Annual Accounts Act.

Göteborg, March 6, 2018

PricewaterhouseCoopers AB

Peter Clemedtson
Authorized Public Accountant
Lead Partner

Johan Palmgren
Authorized Public Accountant
Partner

# Proposed policy for remuneration to senior executives

**Proposal by the Board of Directors to the Annual General Meeting 2018**

This policy concerns the remuneration and other terms of employment for the members of the Volvo Group Executive Board ("Executives").

The remuneration and the other terms of employment of the Executives shall be competitive so that the Volvo Group can attract and retain competent Executives. The total remuneration to Executives consists of fixed salary, short-term and long-term incentives, pension and other benefits. Short-term and long-term incentives shall be linked to predetermined and measurable criteria relating to EBIT and cash flow targets for the Volvo Group, devised to promote the long-term value creation of the Volvo Group and strengthen the link between achieved performance targets and reward. The criteria for short-term and long-term incentives shall be determined by the Board annually.

Short-term incentive may, as regards the President & CEO, amount to a maximum of 100% of the fixed salary and, as regards other Executives, a maximum of 80% of the fixed salary.

Long-term incentive may, as regards the President & CEO, amount to a maximum of 100% of the fixed salary and, as regards other Executives, a maximum of 80% of the fixed salary. The long-term incentive program for the Group's top executives, including the Executives, is cash-based. Awards under the program, based on how well the performance targets are achieved, are disbursed in cash to the participants on the condition that they invest the net award in AB Volvo shares and that they retain the shares for at least three years. Any new share-based incentive program will, where applicable, be resolved by the General Meeting, but no such program is currently proposed.

For Executives resident in Sweden, the notice period upon termination by the company shall not exceed 12 months and the notice period upon termination by the Executive shall not exceed 6 months. In addition, in the event of termination by the company, the Executive may be entitled to a maximum of 12 months' severance pay.

Executives resident outside Sweden or resident in Sweden but having a material connection to or having been resident in a country other than Sweden may be offered notice periods for termination and severance payment that are competitive in the country where the Executives are or have been resident or to which the Executives have a material connection, preferably solutions comparable to the solutions applied to Executives resident in Sweden.

*Authority to decide on deviations from this policy*

The Board of Directors may deviate from this policy if there are special reasons to do so in an individual case.

*Additional information*

Executive compensation, which has been decided but which has not yet become due for payment by the time of the 2018 Annual General Meeting, falls within the scope of this policy. Additional information regarding remuneration is available in the Volvo Group Annual and Sustainability Report for 2017.

# Proposed disposition of unappropriated earnings

| AB Volvo | SEK |
|---|---|
| Retained earnings | 26,642,477,930.63 |
| Income for the period 2017 | 19,001,100,585.85 |
| **Total retained earnings** | **45,643,578,516.48** |

The Board of Directors proposes that the above sum be disposed of as follows:

| | SEK |
|---|---|
| To the shareholders, a dividend of SEK 4.25 per share | 8,635,875,003.25 |
| To be carried forward | 37,007,703,513.23 |
| **Total** | **45,643,578,516.48** |

The record date for determining who is entitled to receive dividends is proposed to be Monday April 9, 2018.

In view of the Board of Directors' proposal to the Annual General Meeting to be held April 5, 2018 to decide on the distribution of a dividend of SEK 4.25 per share, the Board hereby makes the following statement in accordance with Chapter 18, Section 4 of the Swedish Companies Act.

The Board of Directors concludes that the Company's restricted equity is fully covered after the proposed dividend. The Board further concludes that the proposed dividend is justifiable in view of the parameters set out in Chapter 17, Section 3, second and third paragraphs of the Swedish Companies Act. In connection herewith, the Board wishes to point out the following.

The proposed dividend reduces the Company's solvency from 53.2 per cent to 49.0 per cent and the Group's solvency from 26.4 per cent to 24.9 per cent, calculated as per year end 2017. The Board of Directors considers this solvency to be satisfactory with regard to the business in which the Group is active.

According to the Board of Directors' opinion, the proposed dividend will not affect the Company's or the Group's ability to fulfil their payment obligations and the Company and the Group are well prepared to handle both changes in the liquidity and unexpected events.

The Board of Directors is of the opinion that the Company and the Group have capacity to assume future business risks as well as to bear contingent losses. The proposed dividend is not expected to adversely affect the Company's and the Group's ability to make further commercially justified investments in accordance with the Board of Directors' plans.

In addition to what has been stated above, the Board of Directors has considered other known circumstances which may be of importance for the Company's and the Group's financial position. In doing so, no circumstance has appeared that does not justify the proposed dividend.

If the Annual General Meeting resolves in accordance with the Board of Directors' proposal, SEK 37,007,703,513.23 will remain of the Company's non-restricted equity, calculated as per year end 2017.

The Board of Directors has the view that the Company's and the Group's shareholders' equity will, after the proposed dividend, be sufficient in relation to the nature, scope and risks of the business.

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The Board of Directors and the President certify that the annual financial report has been prepared in accordance with generally accepted accounting principles and that the consolidated accounts have been prepared in accordance with the international set of accounting standards referred to in Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, and give a true and fair view of the position and profit or loss of the Company and the Group, and that the management report for the Company and for the Group gives a fair review of the development and performance of the business, position and profit or loss of the Company and the Group, and describes the principal risks and uncertainties that the Company and the companies in the Group face.

Göteborg, March 6, 2018

Carl-Henric Svanberg
Board Chairman

Matti Alahuhta
Board member

Eckhard Cordes
Board member

James W. Griffith
Board member

Martin Lundstedt
President, CEO and Board member

Kathryn V. Marinello
Board member

Martina Merz
Board member

Hanne de Mora
Board member

Håkan Samuelsson
Board member

Helena Stjernholm
Board member

Lars Westerberg
Board member

Lars Ask
Board member

Mats Henning
Board member

Mikael Sällström
Board member

Our audit report was issued on March 6, 2018

PricewaterhouseCoopers AB

Peter Clemedtson
Authorized Public Accountant
Lead Partner

Johan Palmgren
Authorized Public Accountant
Partner

# Audit report for AB Volvo (publ)

To the general meeting of the shareholders of AB Volvo (publ), corporate identity number 556012-5790

**Report on the annual accounts and consolidated accounts**

*Opinions*

We have audited the annual accounts and consolidated accounts of Aktiebolaget Volvo (publ) for the year 2017 with the exception of the Sustainability Report (Sustainability Index) on page 82. The annual accounts and consolidated accounts of the company are included on pages 82–187, 206–207 and 211–213 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2017 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2017 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. Our opinions does not cover the Sustainability Report on page 82.

The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

Our opinions in this report regarding the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company and group audit committee in accordance with the Auditors Ordinance (537/2014) Article 11.

*Basis for Opinions*

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This means that, based on our best knowledge and belief, no prohibited services referred to in the Auditors Ordinance (537/2014) Article 5.1 have been provided to the audited company or, as the case may be, its parent company or controlled companies within the European Union.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

*Our audit approach*

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the group, the accounting processes and controls, and the industry in which the group operates.

In our audit, we have focused on those entities that have the largest impact on the financial reporting with consideration taken to the group's different segments as well as each entity's different function such as manufacturing, sales, financial services.

For the Swedish entities the audit is performed by the group audit team and for the entities outside of Sweden the audit is performed by local audit teams primarily within the PwC network. The work of local audit teams is based on instructions from the group audit team who continuously monitor and evaluate the work of local audit teams.

As part of this year's audit procedures we from the group audit team have visited foreign subsidiaries of which some were in Brazil and USA.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

*Key audit matters*

Key audit matters of the audit are those matters that, in our professional judgement, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters.

| Key audit matter | How our audit addressed the Key audit matter |
|---|---|
| **EC antitrust settlement – risk for losses from private damages claims from customers and other third parties** | |
| *Refer to note 24 in the annual report.*<br>In January 2011, the Volvo Group and a number of other companies in the truck industry became part of an investigation by the European Commission regarding a possible violation of EU antitrust rules.<br>In July 2016, the Volvo Group reached a settlement with the European Commission in the investigation. Following the adoption of the European Commission's settlement decision, the Volvo Group has received and will be dealing with numerous private damages claims from customers and other third parties alleging that they suffered loss by reason of the conduct covered in the decision.<br>To assess this kind of legal disputes and possible future obligations is complicated and require involvement of experts within relevant areas to assist in the assessment of the financial application aspects of the matters.<br>The outcome of the private damages claims from customers and other third parties require judgement and is uncertain. At this stage it has not been possible for the company to make a reliable estimate of the amount of any liability that could arise from any such proceedings. | Management and the board of directors have been highly involved in the dealing with private damages claims. In our audit, we assess how the private damages claims are treated on management and board level, including reviewing supporting documentation.<br>We have in our audit taken part of several statements from the company's external legal advisors as well as requested and received legal letter from the company's external legal advisors about the claims. |
| **Credit loss risks in China** | |
| *Refer to note 8, 24 and 30 in the annual report.*<br>As a result of the downturn of the Chinese mining industry in prior years, many dealers and retail customers of Construction equipment in China have financial difficulties.<br>On-balance exposure mainly consists of exposure for accounts receivables, entrustment loans to dealers and used equipment that has been bought back while off-balance exposure consists of credit guarantees.<br>Management has taken several measures to manage the situation. A significant part of the credit guarantees still refers to credit guarantees related to dealers and retail customers of construction equipment in China. Credit guarantees are primarily related to the period before 2016 and are on the same level compared to 31 December 2016.<br>The assessment of risk for losses for assets and credit guarantees include judgement where the outcome can differ from the current assessment. | Our audit of credit loss risks in China is performed in several steps and include to understand and assess the process and models management use to limit the losses through mitigating activities.<br>We review the risk assessments made by management and the impairment ratio used for provisions and allowances. The review is made individually per dealer and the objective is to assess the provisions and allowances.<br>Our procedures include to evaluate the exposure through test of the gross amounts of accounts receivables, entrustment loans to dealers and credit guarantee exposure through testing a sample of supporting documentation. |
| **Revenue Recognition** | |
| *Refer to note 7 and 21 in the annual report.*<br>The recognized net sales pertain mainly to revenues from sales of goods and services. Revenue from the sale of goods is recognized when significant risks and rewards of ownership have been transferred to external parties, normally when the goods are delivered to the customer.<br>However, if the sale of goods is combined with a buy-back agreement or a residual value guarantee, the transaction is recognized as an operating lease transaction if significant risks in regard to the goods are retained in the group. Revenue is then recognized over the period of the residual value commitment.<br>If the residual value risk commitment is not significant the revenue is recognized at the time of sale and a provision is made to reflect the estimated residual value risk.<br>Due to the complexity in assessing the transfer of risk and rewards of ownership there is an inherent risk that revenue is recognized in the incorrect period. | As the group offer financing and different kinds of residual value guarantees in connection to the sales, the sales agreements must be assessed with respect to the timing of the revenue recognition.<br>The company has developed instructions and models for how to recognize revenue for these transactions with customers. We have assessed whether the accounting models are in line with IFRS.<br>Our audit approach has consisted of controls testing regarding managements process for identifying sales agreements that should be classified as operating leases.<br>We have also examined a sample of the sales agreements and evaluated the classification of the sales. For sales agreements classified as operating leases we have examined a selection of the transactions to see if revenue is recorded over the duration of the contract. |

*Other Information than the annual accounts and consolidated accounts*

This document also contains other information than the annual accounts and consolidated accounts and is found on pages 1–81, 214–221 and 224 as well as the Sustainability Report on page 82 and 222–223. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

*Responsibilities of the Board of Directors and the Managing Director*

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director's responsibilities and tasks in general, among other things oversee the company's financial reporting process.

*Auditor's responsibility*
Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

A further description of our responsibility for the audit of the annual accounts and consolidated accounts is available on Revisorsinspektionens website: www.revisorsinspektionen.se/revisornsansvar. This description is part of the auditor's report.

**Report on other legal and regulatory requirements**

*Opinions*
In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Aktiebolaget Volvo (publ) for the year 2017 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

*Basis for Opinions*
We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

*Responsibilities of the Board of Directors and the Managing Director*
The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfil the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

*Auditor's responsibility*
Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

A further description of our responsibility for the audit of the administration is available on Revisorsinspektionens website: www.revisorsinspektionen.se/revisornsansvar. This description is part of the auditor's report.

*Auditor's statement regarding the statutory Sustainability Report*
The Board of Directors is responsible for the Sustainability Report on page 82 and that the report is prepared in accordance with the Annual Accounts Act.

Our examination has been conducted in accordance with FAR's opinion RevR 12 Statement by an Auditor regarding the statutory Sustainability Report. This means that our examination of the Sustainability Report has a different emphasis and a significantly smaller extent than the focus and scope of an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden. We consider this examination to provide us with sufficient basis for our opinion.

A Sustainability Report has been prepared.

PricewaterhouseCoopers AB, Torsgatan 21, 113 97 Stockholm, was appointed audit firm for Aktiebolaget Volvo (publ) by the general meeting of shareholders on 2 April 2014 and has been the company's audit firm since 1998.

Göteborg, March 6, 2018

PricewaterhouseCoopers AB

| Peter Clemedtson<br>Authorized Public Accountant<br>Lead Partner | Johan Palmgren<br>Authorized Public Accountant<br>Partner |
|---|---|

# Alternative Performance Measures

The Volvo Group uses alternative performance measures in order to analyze trends and performance within the Group. The alternative performance measures are not defined by IFRS, unless otherwise is stated, whereby definitions and reconciliations of significant alternative performance measures are presented in the annual report. If the reconciliation is not directly reflected in the financial statements, a separate reconciliation is presented below.

**Basic earnings per share** (defined by IFRS)
Definition: Income for the period attributable to shareholders of the Parent Company divided by the weighted average number of shares outstanding during the period. For reconciliation see *Note 19 Equity and number of shares.*

**Cash flow**
Definition: The combined changes in the Group's liquid funds during the fiscal year. Changes in liquid funds are specified with reference to changes in the operating activities, changes on investments in equipment and fixed assets, which add up to the operating cash flow, as well as changes in loans and investments. For reconciliation see *Consolidated cash flow statement.*

**Diluted earnings per share** (defined by IFRS)
Definition: Diluted earnings per share is calculated as income for the period attributable to the Parent Company's shareholders divided by the average number of shares outstanding plus the average number of shares that would be issued as an effect of ongoing share-based incentive programs and employee stock option programs. For reconciliation see *Note 19 Equity and number of shares.*

**EBITDA and EBITDA margin**
Definition: EBITDA is the operating income before depreciation and amortization of tangible and intangible assets. The key figure EBITDA margin is calculated by adding back depreciation and amortization on the operating income, in relation to net sales.

| | Industrial Operations | |
|---|---|---|
| SEK M | 2017 | 2016 |
| Net sales | 323,809 | 291,459 |
| Operating income | 28,135 | 18,740 |
| Amortization product and software development | 2,807 | 2,826 |
| Amortization other intangible assets | 404 | 573 |
| Depreciation tangible assets | 9,385 | 9,234 |
| Total depreciation and amortization | 12,597 | 12,633 |
| **Operating income before depreciation and amortization (EBITDA)** | **40,732** | **31,373** |
| **EBITDA margin, %** | **12.6** | **10.8** |

**Equity ratio**
Definition: Shareholders' equity divided by total assets.

| | Industrial Operations | | Volvo Group | |
|---|---|---|---|---|
| SEK M | 2017 | 2016 | 2017 | 2016 |
| Shareholders' equity | 97,790 | 86,579 | 109,011 | 97,764 |
| Total assets | 301,165 | 280,093 | 412,494 | 398,916 |
| **Equity ratio, %** | **32.5** | **30.9** | **26.4** | **24.5** |

**Gross margin**
Definition: Gross income divided by net sales.

| | Industrial Operations | | Volvo Group | |
|---|---|---|---|---|
| SEK M | 2017 | 2016 | 2017 | 2016 |
| Net sales | 323,809 | 291,459 | 334,748 | 301,914 |
| Gross income | 75,428 | 65,662 | 80,167 | 70,312 |
| **Gross margin, %** | **23.3** | **22.5** | **23.9** | **23.3** |

**Interest coverage**
Definition: Operating income plus interest income and similar credits divided by interest expense and similar charges.

| | Industrial Operations | |
|---|---|---|
| SEK M | 2017 | 2016 |
| Operating income | 28,135 | 18,740 |
| Interest income and similar credits | 164 | 240 |
| Operating income and interest income and similar credits | 28,299 | 18,980 |
| Interest expenses and similar charges | –1,852 | –1,847 |
| **Interest coverage, times** | **15.3** | **10.3** |

### Net financial position

Definition: Cash and cash equivalents, marketable securities and interest-bearing short- and long-term receivables reduced by short- and long-term interest-bearing liabilities and provisions for post-employment benefits. For reconciliation see table *Net financial position*, which is presented after the Balance sheet for the Group.

### Operating income, operating margin, adjusted operating income and adjusted operating margin

Definition operating income: Operating income is profit excluding interest and tax, also known as EBIT (Earnings before interest and tax) and is a measure of profit from the ordinary business operations. For reconciliation see the Income statement for the Group.

Definition operating margin: Operating income divided by net sales.

Definition adjusted operating income: Adjusted operating income is profit excluding interest and tax as well as significant expenses or income of a one-time character.

Definition adjusted operating margin: Adjusted operating income divided by net sales.

| SEK M<br>**2017** | Quarter | Trucks | Construction Equipment | Buses | Volvo Penta | Group functions & Other incl. elim | Industrial operations | Financial Services | Elimi-nations | Volvo Group |
|---|---|---|---|---|---|---|---|---|---|---|
| **Net sales** | | **216,480** | **66,497** | **26,078** | **11,119** | **3,635** | **323,809** | **11,812** | **–873** | **334,748** |
| **Operating income** | | **20,383** | **7,917** | **928** | **1,439** | **–2,532** | **28,135** | **2,192** | **–** | **30,327** |
| Capital gain on sale of shares in Deutz AG | 3 | – | – | – | – | –400 | –400 | – | – | –400 |
| | Year | – | – | – | – | –400 | –400 | – | – | –400 |
| **Adjusted operating income** | | **20,383** | **7,917** | **928** | **1,439** | **–2,932** | **27,735** | **2,192** | **–** | **29,928** |
| **Operating margin, %** | | **9.4** | **11.9** | **3.6** | **12.9** | **–** | **8.7** | **–** | **–** | **9.1** |
| **Adjusted operating margin, %** | | **9.4** | **11.9** | **3.6** | **12.9** | **–** | **8.6** | **–** | **–** | **8.9** |

| SEK M<br>**2016** | Quarter | Trucks | Construction Equipment | Buses | Volvo Penta | Group functions & Other incl. elim | Industrial operations | Financial Services | Elimi-nations | Volvo Group |
|---|---|---|---|---|---|---|---|---|---|---|
| **Net sales** | | **200,650** | **50,731** | **25,386** | **9,893** | **4,799** | **291,459** | **11,242** | **–787** | **301,914** |
| **Operating income** | | **15,020** | **2,246** | **911** | **1,269** | **–707** | **18,740** | **2,086** | **–** | **20,826** |
| Sale of external IT business | 1 | – | – | – | – | –885 | –885 | – | – | –885 |
| EU competition investigation | 2 | 2,334 | – | – | – | – | 2,334 | – | – | 2,334 |
| EU competition investigation | 3 | 190 | – | – | – | – | 190 | – | – | 190 |
| Gain from divestment of real estate in Gothenburg | 4 | –71 | – | –41 | – | –1,258 | –1,371 | – | – | –1,371 |
| | Year | 2,453 | – | –41 | – | –2,143 | 268 | – | – | 268 |
| **Adjusted operating income** | | **17,472** | **2,246** | **870** | **1,269** | **–2,850** | **19,008** | **2,086** | **–** | **21,094** |
| **Operating margin, %** | | **7.5** | **4.4** | **3.6** | **12.8** | **–** | **6.4** | **–** | **–** | **6.9** |
| **Adjusted operating margin, %** | | **8.7** | **4.4** | **3.4** | **12.8** | **–** | **6.5** | **–** | **–** | **7.0** |

### Penetration rate

Definition: Share of unit sales financed by Financial Services in relation to total number units sold by the Volvo Group in markets where financial services are offered.

| | Financial Services | |
|---|---|---|
| Number of units | 2017 | 2016 |
| Number of financed units | 51,919 | 49,809 |
| Number of units sold where financial services are offered | 205,717 | 194,820 |
| **Penetration rate, %** | **25** | **26** |

### Return on operating capital

Definition: Operating income divided by weighted average operating capital.

| | Industrial Operations | |
|---|---|---|
| SEK M | 2017 | 2016 |
| Operating income | 28,135 | 18,740 |
| Weighted average operating capital | 86,496 | 87,142 |
| **Return on operating capital, 12 months rolling, %** | **32.5** | **21.5** |

### Return on shareholders' equity

Definition: Income for the period divided by weighted average shareholders' equity.

| | Volvo Group | |
|---|---|---|
| SEK M | 2017 | 2016 |
| Income for the period | 21,283 | 13,222 |
| Weighted average shareholders' equity | 102,403 | 88,679 |
| **Return on shareholders' equity, 12 months rolling, %** | **20.8** | **14.9** |

### Sales growth adjusted for currency and acquired and divested operations

Definition: Sales growth adjusted for currency and acquired and divested operations.

| | Industrial Operations | | Volvo Group | |
|---|---|---|---|---|
| SEK M | 2017 | 2016 | 2017 | 2016 |
| Net sales | 323,809 | 291,459 | 334,748 | 301,914 |
| Increase/decrease of net sales for the year | 32,350 | –12,123 | 32,834 | –10,601 |
| Currency rates | 1,044 | 1,533 | 1,044 | 1,533 |
| Acquired and divested units | –2,026 | 92 | –2,133 | 244 |
| Adjusted Increase/decrease of net sales for the year | 31,368 | –10,498 | 31,745 | –8,824 |
| **Sales growth adjusted for currency and acquired and divested units, %** | **10.8** | **–3.5** | **10.5** | **–2.8** |

### Self-financing ratio

Definition: Cash flow from operating activities divided by net investments in tangible assets, intangible assets and leasing vehicles as defined in the *Consolidated cash flow statement.*

| | Industrial operations | | Volvo Group | |
|---|---|---|---|---|
| SEK M | 2017 | 2016 | 2017 | 2016 |
| Operating cash flow | 35,775 | 9,934 | 37,599 | 17,559 |
| Investment in fixed assets and leasing vehicles, net | 7,403 | 6,403 | 13,843 | 11,308 |
| **Self-financing ratio, %** | **483** | **155** | **272** | **155** |

# Eleven-year Summary

The reporting in the eleven-year summary is based on IFRS. Respective year is presented in accordance with the Generally Accepted Accounting Practice (GAAP) for that year. Earlier years are not restated when new accounting standards are applied.

**Consolidated income statement**

| SEK M | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Net sales** | **334,748** | **301,914** | **312,515** | **282,948** | **272,622** | **303,647** | **310,367** | **264,749** | **218,361** | **303,667** | **285,405** |
| Cost of sales | –254,581 | –231,602 | –240,653 | –220,012 | –212,504 | –235,085 | –235,104 | –201,797 | –186,167 | –237,578 | –219,600 |
| **Gross income** | **80,167** | **70,312** | **71,862** | **62,937** | **60,118** | **68,562** | **75,263** | **62,952** | **32,194** | **66,089** | **65,805** |
| Research and development expenses | –16,098 | –14,631 | –15,368 | –16,656 | –15,124 | –14,794 | –13,276 | –12,970 | –13,193 | –14,348 | –11,059 |
| Selling expenses | –28,582 | –26,867 | –27,694 | –27,448 | –28,506 | –28,248 | –26,001 | –24,149 | –25,334 | –27,129 | –26,068 |
| Administrative expenses | –5,642 | –5,121 | –5,769 | –5,408 | –5,862 | –5,669 | –7,132 | –5,666 | –5,863 | –6,940 | –7,133 |
| Other operating income and expenses | –1,061 | –3,135 | –4,179 | –7,697 | –3,554 | –2,160 | –1,649 | –2,023 | –4,798 | –1,915 | 163 |
| Income from investments in joint ventures and associated companies | 1,407 | 156 | –143 | 46 | 96 | –23 | –81 | –86 | –14 | 25 | 430 |
| Income from other invest-ments | 135 | 112 | 4,609 | 50 | –30 | –47 | –225 | –58 | –6 | 69 | 93 |
| **Operating income** | **30,327** | **20,826** | **23,318** | **5,824** | **7,138** | **17,622** | **26,899** | **18,000** | **–17,013** | **15,851** | **22,231** |
| Interest income and similar credits | 164 | 240 | 257 | 328 | 381 | 510 | 608 | 442 | 390 | 1,171 | 952 |
| Interest expenses and similar charges | –1,852 | –1,847 | –2,366 | –1,994 | –2,810 | –2,476 | –2,875 | –3,142 | –3,559 | –1,935 | –1,122 |
| Other financial income and expenses | –385 | 11 | –792 | 931 | 11 | –301 | 297 | 213 | –392 | –1,077 | –504 |
| **Income after financial items** | **28,254** | **19,230** | **20,418** | **5,089** | **4,721** | **15,355** | **24,929** | **15,514** | **–20,573** | **14,010** | **21,557** |
| Income taxes | –6,971 | –6,008 | –5,320 | –2,854 | –919 | –4,097 | –6,814 | –4,302 | 5,889 | –3,994 | –6,529 |
| **Income for the period** | **21,283** | **13,223** | **15,099** | **2,235** | **3,802** | **11,258** | **18,115** | **11,212** | **–14,685** | **10,016** | **15,028** |
| Attributable to: | | | | | | | | | | | |
| Equity holders of the Parent Company | 20,981 | 13,147 | 15,058 | 2,099 | 3,583 | 11,039 | 17,751 | 10,866 | –14,718 | 9,942 | 14,932 |
| Minority interest | 302 | 75 | 41 | 136 | 219 | 219 | 364 | 346 | 33 | 74 | 96 |
| | **21,283** | **13,223** | **15,099** | **2,235** | **3,802** | **11,258** | **18,115** | **11,212** | **–14,685** | **10,016** | **15,028** |

**Consolidated income statement Industrial Operations**

| SEK M | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Net sales** | **323,809** | **291,459** | **303,582** | **275,999** | **265,420** | **296,031** | **303,589** | **257,375** | **208,487** | **294,932** | **276,795** |
| Cost of sales | –248,382 | –225,797 | –236,311 | –217,251 | –209,307 | –231,216 | –233,097 | –197,480 | –179,578 | –232,247 | –214,160 |
| **Gross income** | **75,428** | **65,662** | **67,271** | **58,748** | **56,113** | **64,815** | **70,492** | **59,895** | **28,909** | **62,685** | **62,635** |
| Research and development expenses | –16,098 | –14,631 | –15,368 | –16,656 | –15,124 | –14,794 | –13,276 | –12,970 | –13,193 | –14,348 | –11,059 |
| Selling expenses | –26,495 | –24,946 | –25,857 | –25,778 | –26,904 | –26,582 | –25,181 | –22,649 | –23,752 | –25,597 | –24,671 |
| Administrative expenses | –5,602 | –5,081 | –5,728 | –5,367 | –5,824 | –5,639 | –4,753 | –5,640 | –5,838 | –6,921 | –7,092 |
| Other operating income and expenses | –640 | –2,531 | –3,473 | –6,931 | –2,710 | –1,600 | –1,045 | –659 | –2,432 | –1,457 | 249 |
| Income/loss from investments in joint ventures and associated companies | 1,407 | 156 | –143 | 46 | 96 | –23 | –82 | –86 | –15 | 23 | 428 |
| Income from other investments | 135 | 112 | 4,610 | 49 | –31 | –46 | –225 | –57 | –13 | 69 | 93 |
| **Operating income** | **28,135** | **18,740** | **21,312** | **4,111** | **5,616** | **16,130** | **25,930** | **17,834** | **–16,333** | **14,454** | **20,583** |

| Consolidated balance sheets SEK M | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Intangible assets | 35,893 | 37,916 | 36,416 | 37,115 | 36,588 | 40,373 | 39,507 | 40,714 | 41,628 | 43,958 | 36,508 |
| Property, plant and equipment | 53,348 | 55,875 | 53,618 | 55,181 | 52,233 | 55,004 | 54,540 | 54,242 | 55,280 | 57,270 | 47,210 |
| Assets under operating leases | 37,166 | 34,693 | 32,531 | 31,218 | 25,672 | 29,022 | 23,922 | 19,647 | 20,388 | 25,429 | 22,502 |
| Shares and participations | 11,225 | 12,420 | 12,050 | 9,839 | 6,327 | 2,890 | 1,874 | 2,098 | 2,044 | 1,953 | 2,219 |
| Inventories | 52,701 | 48,287 | 44,390 | 45,533 | 41,153 | 40,409 | 44,599 | 39,837 | 37,727 | 55,045 | 43,645 |
| Customer-financing receivables | 109,378 | 110,821 | 102,583 | 99,166 | 83,861 | 80,989 | 78,699 | 72,688 | 81,977 | 98,489 | 78,847 |
| Interest-bearing receivables | 3,501 | 2,393 | 2,938 | 2,555 | 1,389 | 5,635 | 3,638 | 2,757 | 3,044 | 5,101 | 4,530 |
| Other receivables | 72,961 | 70,814 | 61,932 | 68,448 | 59,943 | 55,531 | 59,877 | 53,154 | 50,575 | 61,560 | 55,152 |
| Non-interest-bearing assets held for sale | 51 | 525 | 3,314 | 288 | 8,104 | – | 9,348 | 136 | 1,692 | – | – |
| Cash and cash equivalents | 36,270 | 25,172 | 24,393 | 33,554 | 29,559 | 28,889 | 37,241 | 32,733 | 37,910 | 23,614 | 31,034 |
| **Assets** | **412,494** | **398,916** | **374,165** | **382,896** | **344,829** | **338,742** | **353,244** | **318,007** | **332,265** | **372,419** | **321,647** |
| Shareholders' equity[1] | 109,011 | 97,764 | 85,610 | 80,048 | 77,365 | 86,914 | 85,681 | 74,121 | 67,034 | 84,640 | 82,781 |
| Provision for post-employment benefits | 14,476 | 14,669 | 13,673 | 16,683 | 12,322 | 6,697 | 6,665 | 7,510 | 8,051 | 11,705 | 9,774 |
| Other provisions | 25,477 | 26,408 | 27,207 | 28,010 | 19,900 | 21,787 | 20,815 | 18,992 | 19,485 | 29,076 | 27,084 |
| Interest-bearing liabilities | 127,676 | 141,048 | 132,607 | 147,985 | 135,001 | 131,842 | 130,479 | 123,695 | 156,852 | 145,727 | 108,318 |
| Liabilities associated with assets held for sale | – | 148 | 573 | 130 | 350 | – | 4,716 | 135 | 272 | – | – |
| Other liabilities | 135,854 | 118,879 | 114,495 | 110,042 | 99,891 | 91,502 | 104,888 | 93,554 | 80,571 | 101,271 | 93,690 |
| **Shareholders' equity and liabilities** | **412,494** | **398,916** | **374,165** | **382,896** | **344,829** | **338,742** | **353,244** | **318,007** | **332,265** | **372,419** | **321,647** |
| [1]of which minority interests | 1,941 | 1,703 | 1,801 | 1,723 | 1,333 | 1,266 | 1,100 | 1,011 | 629 | 630 | 579 |
| Assets pledged | 12,791 | 10,592 | 9,428 | 7,680 | 5,078 | 4,099 | 1,832 | 3,339 | 958 | 1,380 | 1,556 |
| Contingent liabilities | 15,242 | 16,056 | 15,580 | 15,940 | 17,290 | 17,763 | 17,154 | 11,003 | 9,607 | 9,427 | 8,153 |

| Consolidated balance sheets, Industrial Operations SEK M | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Intangible assets | 35,716 | 37,768 | 36,314 | 37,010 | 36,479 | 40,267 | 39,385 | 40,613 | 41,532 | 43,909 | 36,441 |
| Property, plant and equipment | 53,308 | 55,812 | 53,554 | 55,087 | 52,146 | 54,899 | 54,446 | 54,169 | 55,208 | 57,185 | 47,132 |
| Assets under operating leases | 24,051 | 22,752 | 20,616 | 19,484 | 17,013 | 21,263 | 16,749 | 13,217 | 13,539 | 16,967 | 13,850 |
| Shares and participations | 11,215 | 12,409 | 12,042 | 9,825 | 6,321 | 2,884 | 1,871 | 2,080 | 2,025 | 1,935 | 2,189 |
| Inventories | 52,231 | 48,080 | 44,194 | 45,364 | 40,964 | 40,057 | 43,828 | 38,956 | 35,765 | 54,084 | 43,264 |
| Customer-financing receivables | 1,358 | 1,698 | 11 | 1,828 | 1,406 | 1,397 | 1,702 | 1,428 | 1,367 | 975 | 1,233 |
| Interest-bearing receivables | 4,966 | 4,415 | 3,738 | 2,777 | 2,195 | 11,011 | 6,734 | 11,153 | 8,010 | 6,056 | 13,701 |
| Other receivables | 85,822 | 75,759 | 68,223 | 70,413 | 60,679 | 54,324 | 59,062 | 52,358 | 49,008 | 60,586 | 55,970 |
| Non-current assets held for sale | 51 | 525 | 3,314 | 288 | 8,104 | – | 9,348 | 136 | 1,692 | – | – |
| Cash and cash equivalents | 32,447 | 20,875 | 21,210 | 31,105 | 28,230 | 27,146 | 35,951 | 31,491 | 37,404 | 22,575 | 30,026 |
| **Assets** | **301,165** | **280,093** | **263,216** | **273,181** | **253,537** | **253,248** | **269,076** | **245,602** | **245,550** | **264,272** | **243,806** |
| Shareholders' equity | 97,790 | 86,579 | 75,151 | 70,105 | 68,467 | 78,321 | 76,682 | 66,101 | 58,485 | 75,046 | 75,129 |
| Provision for post-employment benefits | 14,391 | 14,608 | 13,621 | 16,580 | 12,249 | 6,663 | 6,635 | 7,478 | 8,021 | 11,677 | 9,746 |
| Other provisions | 22,680 | 22,545 | 23,936 | 25,054 | 17,575 | 19,653 | 19,101 | 17,240 | 17,456 | 27,015 | 25,372 |
| Interest-bearing liabilities | 27,001 | 33,944 | 32,562 | 48,180 | 52,491 | 54,472 | 55,394 | 59,857 | 78,890 | 46,749 | 38,286 |
| Liabilities associated with assets held for sale | – | 148 | 573 | 130 | 350 | – | 4,716 | 135 | 272 | – | – |
| Other liabilities | 139,303 | 122,269 | 117,374 | 113,131 | 102,405 | 94,139 | 106,548 | 94,791 | 82,426 | 103,785 | 95,273 |
| **Shareholders' equity and liabilities** | **301,165** | **280,093** | **263,216** | **273,181** | **253,537** | **253,248** | **269,076** | **245,602** | **245,550** | **264,272** | **243,806** |

| Consolidated cash flow statements SEK bn | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating income | 30.3 | 20.8 | 23.3 | 5.8 | 7.1 | 17.6 | 26.9 | 18.0 | –17.0 | 15.9 | 22.2 |
| Depreciation and amortization | 16.9 | 16.7 | 16.8 | 15.9 | 17.4 | 14.7 | 13.9 | 13.8 | 15.2 | 13.5 | 12.5 |
| Other non-cash items | 1.4 | –0.4 | –0.5 | 6.1 | 2.4 | 1.4 | 1.3 | 1.6 | 4.4 | –0.2 | –0.5 |
| Change in working capital | –4.7 | –13.9 | –9.0 | –14.1 | –10.8 | –21.9 | –15.1 | 4.8 | 16.9 | –23.3 | –9.9 |
| Financial items and income tax | –6.3 | –5.7 | –4.6 | –5.0 | –5.1 | –8.0 | –7.3 | –5.5 | –4.6 | –5.2 | –5.9 |
| **Cash flow from operating activities** | **37.6** | **17.5** | **25.9** | **8.7** | **11.0** | **3.8** | **19.7** | **32.7** | **14.9** | **0.7** | **18.4** |
| Investments in fixed assets | –7.7 | –9.5 | –8.8 | –8.6 | –12.2 | –14.6 | –12.6 | –10.4 | –10.5 | –12.7 | –10.1 |
| Investments in leasing assets | –11.5 | –10.8 | –10.5 | –10.1 | –8.2 | –10.0 | –7.4 | –4.8 | –4.2 | –5.4 | –4.8 |
| Disposals of fixed assets and leasing assets | 5.4 | 9.0 | 6.0 | 5.0 | 3.4 | 3.1 | 3.3 | 3.1 | 3.8 | 2.9 | 2.9 |
| Investments and divestments of shares, net | 2.2 | 0.2 | –2.0 | 0.1 | 0.0 | –1.2 | –0.1 | –0.1 | 0.0 | 0.0 | 0.4 |
| Acquired and divested operations, net | 0.9 | 1.4 | 0.4 | 7.4 | 0.9 | 3.4 | –1.6 | 0.6 | 0.2 | –1.3 | –15.0 |
| Interest-bearing receivables including marketable securities | 1.6 | 2.5 | 3.6 | –4.8 | 0.5 | 3.7 | 2.6 | 6.8 | –8.9 | 10.9 | 3.6 |
| **Cash flow after net investments** | **28.5** | **10.4** | **14.5** | **–2.3** | **–4.6** | **–11.8** | **3.9** | **27.9** | **–4.7** | **–4.9** | **–4.6** |
| Change in loans, net | –9.0 | –2.2 | –13.2 | 6.7 | 13.0 | 14.1 | 8.7 | –25.7 | 12.6 | 18.2 | 28.7 |
| Repurchase of own shares | – | – | – | – | – | – | – | – | 0.0 | – | – |
| Dividend to AB Volvo's shareholders | –6.6 | –6.1 | –6.1 | –6.1 | –6.1 | –6.1 | –5.1 | 0.0 | –4.1 | –11.1 | –20.3 |
| Dividend to minority shareholder's | 0.0 | –0.2 | 0.0 | 0.0 | –0.2 | 0.0 | 0.0 | –0.1 | – | – | – |
| Other | 0.0 | 0.0 | 0.0 | –0.1 | 0.1 | 0.0 | 0.0 | 0.0 | –0.1 | 0.0 | 0.0 |
| **Change in cash and cash equivalents excluding translation differences** | **12.8** | **1.9** | **–4.8** | **–1.8** | **2.2** | **–3.8** | **7.5** | **2.1** | **3.7** | **2.2** | **3.8** |
| Translation differences on cash and cash equivalents | –0.7 | 1.0 | –0.4 | 1.1 | –0.5 | –0.8 | –0.1 | –0.4 | –0.2 | 1.0 | 0.0 |
| **Change in cash and cash equivalents** | **12.1** | **2.9** | **–5.2** | **–0.7** | **1.7** | **–4.6** | **7.4** | **1.7** | **3.5** | **3.2** | **3.8** |

| Operating cash flow Industrial Operations SEK bn | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating income | 28.1 | 18.7 | 21.3 | 4.1 | 5.6 | 16.1 | 26.0 | 17.8 | –16.3 | 14.5 | 20.6 |
| Depreciation and amortization | 12.6 | 12.6 | 12.6 | 12.7 | 14.5 | 12.0 | 11.4 | 11.4 | 12.4 | 11.8 | 10.3 |
| Other non-cash items | 0.9 | –1.1 | –1.1 | 5.3 | 1.5 | 0.8 | 0.6 | 0.1 | 2.3 | –0.7 | –0.4 |
| Change in working capital | –0.2 | –14.7 | –1.9 | –3.3 | –2.0 | –9.2 | –4.2 | 4.6 | 4.7 | –10.9 | –0.1 |
| Financial items and income taxes | –5.6 | –5.6 | –4.0 | –4.5 | –4.9 | –7.3 | –6.9 | –5.1 | –4.7 | –5.0 | –6.0 |
| **Cash flow from operating activities** | **35.8** | **9.9** | **26.7** | **14.3** | **14.7** | **12.4** | **26.9** | **28.8** | **–1.6** | **9.7** | **24.4** |
| Investments in fixed assets | –7.7 | –9.4 | –8.8 | –8.6 | –12.2 | –14.6 | –12.6 | –10.3 | –10.3 | –12.6 | –10.1 |
| Investments in leasing assets | –0.1 | –0.1 | –0.3 | –0.5 | –1.5 | –3.6 | –1.4 | –0.3 | –0.2 | –0.4 | –0.2 |
| Disposals of fixed assets and leasing assets | 0.4 | 3.2 | 0.7 | 1.1 | 0.5 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 1.1 |
| **Operating cash flow** | **28.4** | **3.5** | **18.3** | **6.4** | **1.5** | **–4.9** | **14.1** | **19.0** | **–11.4** | **–2.7** | **15.2** |

| Exports from Sweden SEK M | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Volvo Group, total | 107,958 | 91,962 | 86,731 | 78,174 | 88,560 | 84,314 | 91,065 | 72,688 | 41,829 | 96,571 | 88,606 |

| Key ratios | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross margin, %[1] | 23.3 | 22.5 | 22.2 | 21.3 | 21.1 | 21.9 | 23.7 | 23.3 | 13.9 | 21.3 | 22.6 |
| Research and development expenses as percentage of net sales[1] | 5.0 | 5.0 | 5.1 | 6.0 | 5.7 | 5.0 | 4.4 | 5.0 | 6.3 | 4.9 | 4.0 |
| Selling expenses as percentage of net sales[1] | 8.2 | 8.6 | 8.5 | 9.3 | 10.1 | 9.0 | 8.0 | 8.8 | 11.4 | 8.7 | 8.9 |
| Administration expenses as percentage of net sales[1] | 1.7 | 1.7 | 1.9 | 1.9 | 2.2 | 1.9 | 2.3 | 2.2 | 2.8 | 2.3 | 2.6 |
| Return on shareholders' equity, % | 20.8 | 14.9 | 18.4 | 2.8 | 5.0 | 12.9 | 23.1 | 16.0 | −19.7 | 12.1 | 18.1 |
| Interest coverage, times[1] | 15.3 | 10.3 | 9.1 | 2.2 | 2.1 | 6.7 | 9.6 | 5.9 | −4.7 | 8.8 | 20.7 |
| Self-financing ratio, % | 272 | 155 | 194 | 64 | 84 | 18 | 118 | 270 | 137 | 5 | 153 |
| Self-financing ratio Industrial Operations, % | 483 | 155 | 316 | 180 | 112 | 72 | 210 | 294 | −16 | 78 | 265 |
| Net Financial position excl. post-employment benefits SEK M[1] | 26,339 | −1,151 | 349 | −9,924 | −19,828 | −19,023 | −14,974 | −18,849 | −35,506 | −20,549 | 3,321 |
| Net financial position excl. post-employment benefits as percentage of shareholders' equity[1] | 26.9 | −1.3 | 0.5 | −14.2 | −29.0 | −24.3 | −19.5 | −28.5 | −60.7 | −27.4 | 4.4 |
| Net Financial position incl. post-employment benefits SEK M[1] | 12,200 | −15,679 | −13,237 | −26,378 | −32,066 | −22,978 | −19,346 | −24,691 | −41,489 | −29,795 | −4,305 |
| Net financial position incl. post-employment benefits as percentage of shareholders' equity[1] | 12.5 | −18.1 | −17.6 | −37.6 | −46.8 | −29.3 | −25.2 | −37.4 | −70.9 | −39.7 | −5.7 |
| Shareholders' equity as percentage of total assets | 26.4 | 24.5 | 22.9 | 20.9 | 22.4 | 25.7 | 24.3 | 23.3 | 20.2 | 22.7 | 25.7 |
| Shareholders' equity as percentage of total assets, Industrial Operations | 32.5 | 30.9 | 28.6 | 25.7 | 27.0 | 30.9 | 28.5 | 26.9 | 23.8 | 28.4 | 30.8 |
| Shareholders' equity excluding minority interest as percentage of total assets | 26.0 | 24.1 | 22.4 | 20.5 | 22.0 | 25.2 | 23.9 | 23.0 | 20.0 | 22.6 | 25.6 |

1 Pertains to the Industrial Operations.

VOLVO SHARE STATISTICS

| Data per share (adjusted for issues and splits)[1] | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Basic earnings, SEK[1] | 10.33 | 6.47 | 7.42 | 1.03 | 1.77 | 5.44 | 8.75 | 5.36 | –7.26 | 4.90 | 7.37 |
| Cash dividend, SEK | 4.25[8] | 3.25 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.50 | 0 | 2.00 | 5.50 |
| Share price at year end (B share), SEK | 152.70 | 106.40 | 79.10 | 84.70 | 84.45 | 88.80 | 75.30 | 118.50 | 61.45 | 42.90 | 108.50 |
| Dividend yield (B share), %[2] | 2.8 | 3.1 | 3.8 | 3.5 | 3.6 | 3.4 | 4.0 | 2.1 | – | 4.7 | 5.1 |
| Effective return (B share), %[3] | 48 | 39 | –3 | 4 | –2 | 22 | –34 | 97 | 43 | –59 | 25.7 |
| Price/earnings ratio (B share)[4] | 14.8 | 16.4 | 10.7 | 82.2 | 47.7 | 16.3 | 8.6 | 22.1 | neg | 8.8 | 14.7 |
| EBIT multiple[5] | 9.9 | 11.7 | 7.7 | 26.3 | 19.6 | 9.0 | 5.1 | 12.0 | neg | 3.6 | 9.7 |
| Payout ratio, %[6] | 41 | 50 | 40 | 291 | 169 | 55 | 34 | 47 | – | 41 | 75 |
| Shareholders' equity, SEK[7] | 54 | 47 | 41 | 39 | 38 | 43 | 42 | 36 | 33 | 41 | 41 |
| Return on shareholders' equity, % | 20.8 | 14.9 | 18.4 | 2.8 | 5.0 | 12.9 | 23.1 | 16.0 | neg | 12.1 | 18.1 |

1 Basic earnings per share is calculated as income for the period divided by average number of shares outstanding.
2 Proposed dividend in SEK per share divided by share price at year end.
3 Share price at year end, including proposed dividend during the year, divided by share price at beginning of the year.
4 Share price at year end divided by basic earnings per share.
5 Market value at year end less net financial position and minority interests divided by operating income.
6 Cash dividend divided by basic earnings per share.
7 Shareholders' equity for shareholders in AB Volvo divided by number of shares outstanding at year end.
8 Proposed by the Board of Directors.

| Other share data | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of shareholders at year end | 240,521 | 237,654 | 234,989 | 237,871 | 246,265 | 242,482 | 251,715 | 240,043 | 233,311 | 220,192 | 197,519 |
| Number of Series A shares outstanding at year end, million | 459 | 472 | 485 | 492 | 499 | 526 | 643 | 657 | 657 | 657 | 657 |
| Number of Series B shares outstanding at year end, million | 1,573 | 1,560 | 1,546 | 1,537 | 1,530 | 1,502 | 1,385 | 1,371 | 1,371 | 1,371 | 1,369 |
| Average number of shares outstanding, million | 2,032 | 2,031 | 2,030 | 2,028 | 2,028 | 2,028 | 2,027 | 2,027 | 2,027 | 2,027 | 2,025 |
| Number of Series A shares traded in Stockholm during the year, million | 46.7 | 67.2 | 51.7 | 86.3 | 53.0 | 45.4 | 130.5 | 203.2 | 147.0 | 308.0 | 172.3 |
| Number of Series B shares traded in Stockholm during the year, million | 1,341.3 | 1,667.9 | 2,052.1 | 2,068.7 | 1,878.5 | 2,081.2 | 2,944.1 | 2,272.4 | 2,713.9 | 3,130.0 | 2,712.4 |

| The largest shareholders in AB Volvo, December 31, 2017[1] | Number of shares | % of total votes | Share capital, % |
|---|---|---|---|
| Industrivärden | 142,471,882 | 23.1 | 7.0 |
| Cevian Capital | 177,477,650 | 15.9 | 8.7 |
| Norges Bank Investment Management | 55,002,091 | 5.4 | 2.7 |
| SHB | 31,327,820 | 5.1 | 1.5 |
| Alecta (pension funds) | 88,381,010 | 4.8 | 4.3 |
| AMF Insurance & Funds | 56,303,192 | 3.0 | 2.8 |
| AFA Insurance | 13,849,990 | 2.0 | 0.7 |
| Swedbank Robur Funds | 90,837,110 | 1.9 | 4.5 |
| AP4 Fund | 22,990,163 | 1.9 | 1.1 |
| SHB Funds incl. XACT | 33,592,433 | 1.1 | 1.7 |
| **Total** | **712,233,341** | **64.2** | **35.0** |

1 Based on the number of outstanding shares.

| Distribution of shares, December 31, 2017[1] | Number of shareholders | % of total votes[1] | Share of capital, %[1] |
|---|---|---|---|
| 1–1,000 shares | 191,676 | 2.8 | 2.5 |
| 1,001–10,000 shares | 44,247 | 5.5 | 5.8 |
| 10,001–100,000 shares | 3,722 | 3.3 | 4.5 |
| 100,001– | 876 | 88.4 | 87.2 |
| **Total** | **240,521** | **100.0** | **100.0** |

1 Based on all registered shares.

AB Volvo held 4.5% of the Company's shares on December 31, 2017.

BUSINESS AREA STATISTICS

**Net sales**[1]

| SEK M | | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Trucks** | Europe | 99,642 | 91,468 | 83,767 | 72,757 | 73,640 | 76,365 | 83,451 | 69,606 | 65,874 | 109,914 | 108,651 |
| | North America | 52,405 | 51,849 | 73,017 | 53,696 | 40,314 | 42,650 | 37,042 | 26,901 | 21,563 | 26,588 | 27,255 |
| | South America | 12,789 | 10,613 | 11,624 | 19,669 | 23,318 | 21,172 | 26,847 | 21,680 | 12,490 | 14,680 | 11,483 |
| | Asia | 36,998 | 33,464 | 31,589 | 29,264 | 26,740 | 36,531 | 37,840 | 35,231 | 26,943 | 37,515 | 26,593 |
| | Africa and Oceania | 14,646 | 13,256 | 13,982 | 15,518 | 14,462 | 15,565 | 13,741 | 13,887 | 12,069 | 14,538 | 13,910 |
| | **Total** | **216,480** | **200,650** | **213,978** | **190,904** | **178,474** | **192,283** | **198,920** | **167,305** | **138,940** | **203,235** | **187,892** |
| **Construction Equipment** | Europe | 22,977 | 19,739 | 17,732 | 17,215 | 16,356 | 16,518 | 17,765 | 16,138 | 12,987 | 25,192 | 25,294 |
| | North America | 12,234 | 10,724 | 11,843 | 10,784 | 8,319 | 12,027 | 7,829 | 6,267 | 5,475 | 10,159 | 11,170 |
| | South America | 1,760 | 1,414 | 2,207 | 3,234 | 3,314 | 3,788 | 4,163 | 4,130 | 2,578 | 2,913 | 2,155 |
| | Asia | 25,058 | 15,765 | 16,424 | 18,458 | 21,911 | 27,033 | 29,999 | 24,352 | 12,957 | 13,738 | 12,179 |
| | Africa and Oceania | 4,468 | 3,088 | 2,802 | 3,164 | 3,539 | 4,192 | 3,745 | 2,923 | 1,661 | 4,077 | 2,835 |
| | **Total** | **66,497** | **50,731** | **51,008** | **52,855** | **53,437** | **63,558** | **63,500** | **53,810** | **35,658** | **56,079** | **53,633** |
| **Buses** | Europe | 7,753 | 7,861 | 7,284 | 6,139 | 5,429 | 6,200 | 6,631 | 6,242 | 7,707 | 7,321 | 7,767 |
| | North America | 12,512 | 11,345 | 10,635 | 6,721 | 5,929 | 6,675 | 7,532 | 7,200 | 5,673 | 5,355 | 4,630 |
| | South America | 1,148 | 1,363 | 1,425 | 2,559 | 1,836 | 2,794 | 2,715 | 1,737 | 1,235 | 1,571 | 1,623 |
| | Asia | 3,135 | 3,067 | 2,557 | 1,892 | 2,055 | 2,853 | 2,953 | 3,299 | 2,749 | 2,094 | 1,802 |
| | Africa and Oceania | 1,530 | 1,749 | 1,678 | 1,334 | 1,457 | 1,774 | 1,992 | 2,038 | 1,101 | 971 | 786 |
| | **Total** | **26,078** | **25,386** | **23,580** | **18,645** | **16,707** | **20,295** | **21,823** | **20,516** | **18,465** | **17,312** | **16,608** |
| **Volvo Penta** | Europe | 5,727 | 4,973 | 4,462 | 3,779 | 3,714 | 3,620 | 4,274 | 4,507 | 4,390 | 6,554 | 6,798 |
| | North America | 2,456 | 2,191 | 2,161 | 1,584 | 1,491 | 1,486 | 1,379 | 1,500 | 1,100 | 1,947 | 2,674 |
| | South America | 289 | 291 | 365 | 386 | 297 | 306 | 335 | 335 | 284 | 364 | 274 |
| | Asia | 2,082 | 1,891 | 1,855 | 1,615 | 1,692 | 1,867 | 2,130 | 2,008 | 2,054 | 2,082 | 1,624 |
| | Africa and Oceania | 566 | 546 | 562 | 425 | 356 | 352 | 341 | 366 | 331 | 486 | 349 |
| | **Total** | **11,119** | **9,893** | **9,406** | **7,790** | **7,550** | **7,631** | **8,458** | **8,716** | **8,159** | **11,433** | **11,719** |
| **Volvo Aero** | Europe | – | – | – | – | – | 2,404 | 2,893 | 3,768 | 3,942 | 3,497 | 3,462 |
| | North America | – | – | – | – | – | 2,657 | 3,300 | 3,599 | 3,508 | 3,534 | 3,723 |
| | South America | – | – | – | – | – | 0 | 7 | 27 | 34 | 58 | 127 |
| | Asia | – | – | – | – | – | 109 | 104 | 233 | 205 | 234 | 234 |
| | Africa and Oceania | – | – | – | – | – | 49 | 52 | 81 | 114 | 125 | 100 |
| | **Total** | **–** | **–** | **–** | **–** | **–** | **5,219** | **6,356** | **7,708** | **7,803** | **7,448** | **7,646** |
| | Other and eliminations | 3,635 | 4,799 | 5,610 | 5,806 | 9,252 | 7,044 | 4,532 | −680 | −538 | −575 | −703 |
| **Net sales Industrial Operations** | | **323,809** | **291,459** | **303,582** | **275,999** | **265,420** | **296,031** | **303,589** | **257,375** | **208,487** | **294,932** | **276,795** |
| **Financial Services** | Europe | 5,431 | 5,116 | 5,278 | 5,120 | 4,686 | 4,703 | 4,663 | 4,733 | 7,127 | 7,099 | 4,484 |
| | North America | 4,234 | 4,202 | 4,033 | 2,999 | 2,900 | 2,833 | 2,326 | 2,605 | 3,004 | 369 | 2,467 |
| | South America | 1,368 | 1,235 | 1,116 | 1,122 | 1,009 | 1,195 | 1,131 | 1,156 | 1,070 | 791 | 620 |
| | Asia | 543 | 476 | 548 | 638 | 707 | 795 | 571 | 435 | 435 | 158 | 87 |
| | Africa and Oceania | 235 | 213 | 224 | 232 | 237 | 257 | 192 | 101 | 75 | 68 | 47 |
| | **Total** | **11,812** | **11,242** | **11,199** | **10,111** | **9,539** | **9,783** | **8,883** | **9,031** | **11,711** | **8,485** | **7,705** |
| | Eliminations | −873 | −787 | −2,265 | −3,162 | −2,336 | −2,167 | −2,104 | −1,658 | −1,836 | 250 | 905 |
| **Volvo Group total** | | **334,748** | **301,914** | **312,515** | **282,948** | **272,622** | **303,647** | **310,367** | **264,749** | **218,361** | **303,667** | **285,405** |

1 Volvo Aero was divested in October 1, 2012.

| **Operating income[1]** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SEK M | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Trucks | 20,383 | 15,020 | 19,517 | 4,157 | 6,145 | 10,216 | 18,227 | 10,112 | –10,805 | 12,167 | 15,193 |
| Construction Equipment | 7,917 | 2,246 | 2,044 | 652 | 2,592 | 5,773 | 6,812 | 6,180 | –4,005 | 1,808 | 4,218 |
| Buses | 928 | 911 | 860 | 92 | –190 | 51 | 1,114 | 780 | –350 | –76 | 231 |
| Volvo Penta | 1,439 | 1,269 | 1,086 | 724 | 626 | 541 | 825 | 578 | –230 | 928 | 1,173 |
| Volvo Aero | – | – | – | – | – | 767 | 360 | 286 | 50 | 359 | 529 |
| Financial Services | 2,192 | 2,086 | 2,006 | 1,712 | 1,522 | 1,492 | 969 | 167 | –680 | 1,397 | 1,649 |
| Other | –2,532 | –707 | –2,195 | –1,514 | –3,557 | –1,217 | –1,408 | –102 | –994 | –731 | –762 |
| **Operating income/loss Volvo Group** | **30,327** | **20,826** | **23,318** | **5,824** | **7,138** | **17,622** | **26,899** | **18,000** | **–17,013** | **15,851** | **22,231** |

1 Between 2007 and 2011, the benefits from the synergies created in the business units are transferred back to the various business areas. Operating income in 2014 included expected credit losses of 660. See section for Alternative Performance Measures regarding adjusted items.

| **Operating margin** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| % | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Trucks | 9.4 | 7.5 | 9.1 | 2.2 | 3.4 | 5.3 | 9.2 | 6.0 | –7.8 | 6.0 | 8.1 |
| Construction Equipment | 11.9 | 4.4 | 4.0 | 1.2 | 4.9 | 9.1 | 10.7 | 11.5 | –11.2 | 3.2 | 7.9 |
| Buses | 3.6 | 3.6 | 3.6 | 0.5 | –1.1 | 0.3 | 5.1 | 3.8 | –1.9 | –0.4 | 1.4 |
| Volvo Penta | 12.9 | 12.8 | 11.5 | 9.3 | 8.3 | 7.1 | 9.8 | 6.6 | –2.8 | 8.1 | 10.0 |
| Volvo Aero | – | – | – | – | – | 14.7 | 5.7 | 3.7 | 0.6 | 4.8 | 6.9 |
| **Volvo Group Industrial Operations** | **8.7** | **6.4** | **7.0** | **1.5** | **2.1** | **5.4** | **8.5** | **6.9** | **–7.8** | **5.2** | **7.8** |
| Financial Services | 18.6 | 18.6 | 17.9 | 16.9 | 16.0 | 15.3 | 10.9 | 1.8 | –5.8 | 16.5 | 21.4 |
| **Volvo Group** | **9.1** | **6.9** | **7.5** | **2.1** | **2.6** | **5.8** | **8.7** | **6.8** | **–7.8** | **5.2** | **7.8** |

| **Number of employees at year-end** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number[1, 2, 3] | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Trucks | 55,026 | 52,154 | 54,668 | 58,067 | 58,542 | 61,256 | 62,315 | 57,796 | 56,505 | 64,280 | 64,390 |
| Construction Equipment | 12,788 | 13,397 | 13,889 | 14,901 | 14,663 | 14,788 | 18,422 | 16,648 | 16,126 | 19,810 | 19,710 |
| Buses | 7,943 | 7,353 | 7,270 | 6,900 | 6,648 | 7,514 | 8,529 | 8,685 | 9,541 | 8,930 | 9,290 |
| Volvo Penta | 1,622 | 1,530 | 1,470 | 1,422 | 1,412 | 1,361 | 2,549 | 2,353 | 2,928 | 2,940 | 3,000 |
| Volvo Aero | – | – | – | – | – | – | 3,179 | 3,120 | 3,278 | 3,510 | 3,550 |
| Financial Services | 1,363 | 1,328 | 1,340 | 1,339 | 1,355 | 1,362 | 1,323 | 1,235 | 1,234 | 1,290 | 1,150 |
| Other | 8,362 | 8,277 | 9,827 | 10,193 | 12,913 | 12,436 | 1,845 | 572 | 596 | 620 | 610 |
| **Volvo Group, total** | **87,104** | **84,039** | **88,464** | **92,822** | **95,533** | **98,717** | **98,162** | **90,409** | **90,208** | **101,380** | **101,700** |

1 Between 2007 and 2011, employees in business units are allocated to the business areas.
2 As of 2009, only regular employees are shown, for previous years also temporary employees were included.
3 As of 2012, employees in business units are not allocated to the business areas.

| **Environmental performance of Volvo production plants, Industrial operations** | | | | |
|---|---|---|---|---|
| Absolute values related to net sales | 2017 | 2016 | 2015 | 2014 |
| Energy consumption (GWh; MWh/SEK M) | 2,068; 6.4 | 2,076; 7.1 | 2,077; 6.8 | 2,168; 7.9 |
| Direct $CO_2$ emissions, scope 1 (1,000 tons; tons/SEK M)[3] | 207; 0.6 | 211; 0.7 | 220; 0.7 | 231; 0.8 |
| Indirect $CO_2$ emissions, scope 2 (1,000 tons; tons/SEK M)[3] | 192; 0.6 | 196; 0.7 | 192; 0.6 | 218; 0.8 |
| Water consumption (1,000 $m^3$; $m^3$/SEK M) | 4,817; 14.9 | 4,430; 15.2 | 4,919; 16.2 | 4,982; 18.1 |
| $NO_x$ emissions (tons; kilos/SEK M) | 301; 0.9 | 333; 1.1 | 344; 1.3 | 332; 1.2 |
| Solvent emissions (tons; kilos/SEK M) | 1,681; 5.2 | 1,792; 6.1 | 1,885; 6.2 | 2,472; 9.0 |
| Sulphur dioxide emissions (tons; kilos/SEK M) | 13.3; 0.04 | 12,9; 0.04 | 32.1; 0.1 | 37.9; 0.1 |
| Hazardous waste (tons; kg/SEK M) | 31,941; 98.6 | 27,649; 94.9 | 27,824; 91.6 | 24,944; 90.4 |
| Net sales, SEK bn | 323.8 | 291.5 | 303.6 | 276.0 |

1 Restated according to new accounting rules.
2 Excluding UD Trucks and Ingersoll Rand Road Development.
3 From 2012 revised system boundaries and emission factors.

## Employees

| Number[1] | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sweden | 19,965 | 19,235 | 20,412 | 21,384 | 22,588 | 23,052 | 24,663 | 23,073 | 22,763 | 28,190 | 28,660 |
| Europe, excluding Sweden | 27,596 | 26,955 | 27,662 | 29,449 | 29,746 | 30,382 | 30,458 | 29,239 | 29,793 | 32,940 | 32,780 |
| North America | 15,882 | 14,245 | 15,534 | 15,217 | 16,397 | 16,569 | 15,427 | 12,844 | 12,640 | 14,200 | 15,750 |
| South America | 4,774 | 4,762 | 5,380 | 6,353 | 6,275 | 5,977 | 5,234 | 4,322 | 4,257 | 4,380 | 4,640 |
| Asia | 16,526 | 16,469 | 17,046 | 17,793 | 17,953 | 20,222 | 19,924 | 18,535 | 18,416 | 19,090 | 17,150 |
| Africa and Oceania | 2,361 | 2,373 | 2,430 | 2,626 | 2,574 | 2,515 | 2,456 | 2,396 | 2,339 | 2,580 | 2,720 |
| **Volvo Group total** | **87,104** | **84,039** | **88,464** | **92,822** | **95,533** | **98,717** | **98,162** | **90,409** | **90,208** | **101,380** | **101,700** |

1 As of 2009, only regular employees are shown, for previous years also temporary employees were included.

## Delivered units

| Number | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Heavy-duty trucks (>16 tons) | 171,963 | 158,025 | 176,589 | 173,650 | 170,307 | 172,798 | 179,779 | 123,522 | 82,675 | 179,962 | 172,322 |
| Medium-duty trucks (7–16 tons) | 14,331 | 15,691 | 14,749 | 15,114 | 16,779 | 32,935 | 34,631 | 30,657 | 21,653 | 30,817 | 27,933 |
| Light trucks (<7 tons) | 16,108 | 16,708 | 16,137 | 14,360 | 13,188 | 18,284 | 23,982 | 25,811 | 23,354 | 40,372 | 36,101 |
| **Total trucks** | **202,402** | **190,424** | **207,475** | **203,124** | **200,274** | **224,017** | **238,391** | **179,989** | **127,681** | **251,151** | **236,356** |

| Number | | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Trucks** | Europe | 105,432 | 97,909 | 86,448 | 72,458 | 82,088 | 84,355 | 95,113 | 65,503 | 49,145 | 121,847 | 128,070 |
| | North America | 37,941 | 39,193 | 64,507 | 57,714 | 44,755 | 47,806 | 42,613 | 24,282 | 17,574 | 30,146 | 33,280 |
| | South America | 11,073 | 9,442 | 11,069 | 23,741 | 29,137 | 23,443 | 29,274 | 21,483 | 12,587 | 18,092 | 15,264 |
| | Asia | 35,476 | 31,502 | 31,979 | 32,399 | 28,692 | 51,514 | 56,165 | 53,833 | 34,800 | 60,725 | 39,916 |
| | Africa and Oceania | 12,480 | 12,378 | 13,472 | 16,812 | 15,602 | 16,899 | 15,226 | 14,888 | 13,575 | 20,341 | 19,826 |
| | **Total** | **202,402** | **190,424** | **207,475** | **203,124** | **200,274** | **224,017** | **238,391** | **179,989** | **127,681** | **251,151** | **236,356** |
| **Buses** | Europe | 2,645 | 2,676 | 2,431 | 2,221 | 2,146 | 2,491 | 2,695 | 2,395 | 3,164 | 3,313 | 3,748 |
| | North America | 2,973 | 2,659 | 2,398 | 1,590 | 1,752 | 1,826 | 3,014 | 2,092 | 1,539 | 1,884 | 1,547 |
| | South America | 784 | 1,149 | 1,415 | 2,985 | 2,434 | 2,560 | 2,620 | 1,174 | 690 | 995 | 1,318 |
| | Asia | 2,186 | 1,849 | 1,656 | 1,242 | 1,822 | 2,945 | 3,417 | 3,477 | 3,839 | 3,033 | 2,757 |
| | Africa and Oceania | 805 | 1,220 | 925 | 721 | 756 | 856 | 1,040 | 1,091 | 625 | 712 | 546 |
| | **Total** | **9,393** | **9,553** | **8,825** | **8,759** | **8,910** | **10,678** | **12,786** | **10,229** | **9,857** | **9,937** | **9,916** |

| 2013 | 2012[1] | 2011 | 2010 | 2009 | 2008 | 2007[2] |
|---|---|---|---|---|---|---|
| 2,320; 8.7 | 2,483; 8.5 | 2,471; 8.1 | 2,315; 9.0 | 1,888; 9.1 | 2,530; 8.6 | 2,426; 9.6 |
| 255; 1.0 | 273; 0.9 | 255; 0.8 | 279; 1.1 | 213; 1.0 | 291; 1.0 | 242; 1.0 |
| 243; 0.9 | 260; 0.9 | | | | | |
| 5,815; 21.9 | 7,372; 25.2 | 7,970; 26.2 | 7,519; 29.2 | 6,637; 31.8 | 8,205; 27.8 | 7,067; 27.9 |
| 347; 1.3 | 413; 1.4 | 474; 1.6 | 719; 2.8 | 322; 1.5 | 800; 2.7 | 542; 2.1 |
| 2,221; 8.4 | 2,358; 8.1 | 2,554; 8.4 | 2,294; 8.9 | 1,435; 6.9 | 1,945; 6.6 | 1,979; 7.8 |
| 23.4; 0.1 | 26; 0.1 | 34; 0.1 | 33; 0.1 | 38; 0.2 | 64; 0.2 | 58; 0.2 |
| 28,395; 107.0 | 32,547; 111.4 | 25,943; 85.5 | 22,730; 88 | 17,558; 84 | 27,675; 94 | 27,120; 107 |
| 265.4 | 292.2 | 303.6 | 257.4 | 208.5 | 294.9 | 253.2 |

REPORTING SCOPE AND BOUNDARIES

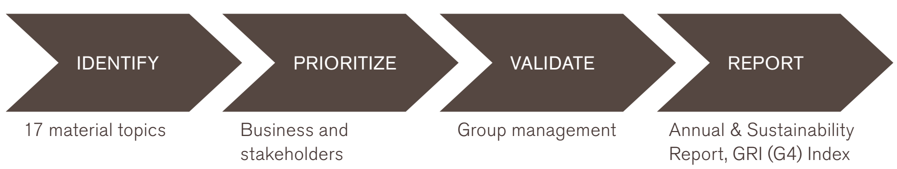
# Material issues

Our materiality approach describes the relevant economic, social and environmental aspects we address and report on. We consider their impact on the business and importance to stakeholders' decisions.

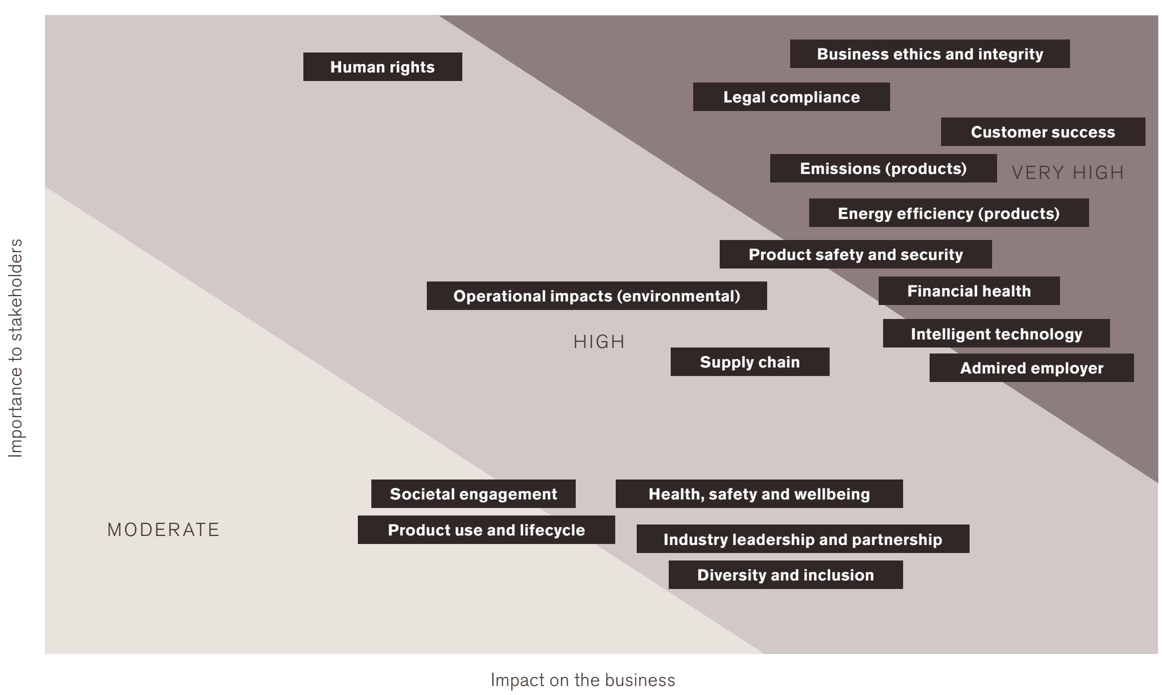
The key stakeholder groups are customers, employees and investors as well as society, suppliers and other business partners. We identified the most important factors for their engagement with the Volvo Group using feedback from recent stakeholder dialogue to qualify the quantitative data gathered previously from stakeholders across key groups, segments and geographies. Combining internal and external analysis, we were able to prioritize 17 topics. In 2016, Group Management approved that the material topics accurately reflect the organization's material sustainability issues and validated nine priority areas to be reported with added detail in this report. For 2017 members from the Group Management decided there are no significant changes compared to 2016.

For further information about the materiality process, including stakeholder engagement and definitions of all topics, please refer to the GRI (G4) Index, available at volvogroup.com. ■

OUR MATERIALITY PROCESS




OUR MATERIAL ISSUES



DEFINITIONS OF KEY ASPECTS (ALPHABETICAL ORDER)

ADMIRED EMPLOYER – leading and embracing change. Attracting people with a strong business instinct and developing a skilled and agile workforce with the optimal knowledge and competencies at all levels. Trusting and empowering colleagues to use their intuition and make the right decisions.

BUSINESS ETHICS AND INTEGRITY – creating, leading and maintaining a responsible culture built on the business ethics, human rights, social and environmental principles set out in our Code of Conduct, including principles on anti-corruption, taxation and political involvement.

LEGAL COMPLIANCE – working to ensure compliance with all applicable laws, regulations, directives, international standards and widely recognized initiatives. Continuous development of our corporate governance, policies and practices to ensure adherence.

CUSTOMER SUCCESS – engaging with customers to truly understand their business challenges, needs and ambitions. Creating value for customers, by delivering transport solutions that increase profitability through lower running costs and higher revenues.

EMISSIONS (PRODUCTS) – developing cleaner transport solutions designed to reduce consumption of fossil fuels and lower emissions of carbon dioxide ($CO_2$), nitrogen oxide ($NO_x$), particulate matters and noise.

ENERGY EFFICIENCY (PRODUCTS) – developing innovative product and service solutions designed to reduce energy consumption, operational costs and environmental impacts.

FINANCIAL HEALTH – managing economic and financial risks and developing resilience to market volatility. Reinforce and regain market share, grow by meeting customer needs in specific segments and secure industry leading profitability. Generating and distributing economic value to various stakeholders.

INTELLIGENT TECHNOLOGY – – investing in pioneering research and development for innovative technology, transport and service solutions. Investing in connectivity, automation, safety, data protection and security. Adapting products and services to reduce congestion and improve the economic, social and environmental dimensions of mobility, distribution and infrastructure.

PRODUCT SAFETY AND SECURITY – researching and developing product, technology and training solutions designed to enhance driver and operator safety, traffic and site safety, and goods' security.

For the reporting scope and boundary for non-financial data, please see the GRI (G4) Index at www.volvogroup.com.

## ANNUAL GENERAL MEETING, APRIL 5, 2018

The Annual General Meeting of AB Volvo will be held in Göteborg in Konserthuset, Götaplatsen, Thursday, April 5, 2018.

**Notice**
Those who wish to participate must be recorded as shareholders in the share register maintained by Euroclear Sweden AB on March 28, 2018 and give notice of intention to attend the meeting no later than March 28, 2018:

- by telephone, +46 8 402 90 76, notice of intention to attend the meeting could be given by telephone no later than 4.00 p.m. on March 28, 2018
- by mail addressed to AB Volvo (publ), "AGM", c/o Euroclear Sweden, P.O. Box 191, SE-101 23 Stockholm, Sweden
- on AB Volvo's website www.volvogroup.com

When giving notice, shareholders should state their:
- name
- personal registration number (corporate registration number)
- address and telephone number
- name and personal number of the proxy, if any
- number of any accompanying assistant(s) (maximum two)

To be entitled to participate in the annual general meeting, shareholders having their shares registered in the name of a nominee must request the nominee to enter the shareholder into the share register. Such registration, which can be temporary, must have been effected by March 28, 2018 and should therefore be requested well in advance of March 28, 2018.

## VOLVO'S ELECTION COMMITTEE

The following persons are members of Volvo's Election Committee:

| | |
|---|---|
| Bengt Kjell | Chairman of the Election Committee, AB Industrivärden |
| Pär Boman | Svenska Handelsbanken, SHB Pension Fund, SHB Pensionskassa, SHB Employee Fund and Oktogonen |
| Yngve Slyngstad | Norges Bank Investment Management |
| Carl-Henric Svanberg | Chairman of the AB Volvo Board |

Among other duties, the Election Committee is responsible for submitting to the Annual General Meeting proposals for candidates to serve as members of the Board of Directors and Chairman of the Board and proposal for auditors if applicable. The Committee also proposes the amount of the fees to be paid to the holders of these positions.

## PRELIMINARY PUBLICATION DATES

| | |
|---|---|
| Annual General Meeting 2018 | April 5, 2018 |
| Report on the first quarter 2018 | April 24, 2018 |
| Report on the second quarter 2018 | July 19, 2018 |
| Report on the third quarter 2018 | October 19, 2018 |

The reports are available on www.volvogroup.com on date of publication and are also sent electronically to shareholders who have advised Volvo that they wish to receive financial information.

Historical and current time series reflecting the Volvo Group's market information are published regularly on www.volvogroup.com

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The Volvo Group is one of the world's leading manufacturers of trucks, buses, construction equipment and marine and industrial engines. The Group also provides complete solutions for financing and service. The Volvo Group, which employs about 100,000 people, has production facilities in 18 countries and sells its products in more than 190 markets. In 2017 the Volvo Group's sales amounted to about SEK 335 billion. Volvo shares are listed on Nasdaq Stockholm.

VOLVO

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AB Volvo, Investor Relations and Group Accounting