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Strategic approach
Creating opportunities and building trust

Highlights in 2011

- New vision – to become the world leader in sustainable transport solutions
- Volvo Group restructures its truck business and launches new organization
- Volvo Group has grown into one of the world’s largest manufacturers of trucks

As a provider of commercial transport solutions, the Volvo Group’s products and services play an important part in our everyday lives – they are drivers for economic growth, and enable people and societies to fulfil their basic needs. As a Group, we are driven by the conviction that it is possible to run a financially sustainable business, while also creating long-term value for our stakeholders.

Taking social, economic and environmental responsibility is not only about managing risks, it also creates business opportunities and builds trust. It is an effective way to contribute to the development and welfare of society and ultimately to fulfilling our vision – to become the world leader in sustainable transport solutions.

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CEO comment

Our journey towards sustainable transport solutions

The Volvo Group has a new vision – to become the world leader in sustainable transport solutions. By integrating sustainability into our vision we demonstrate our commitment to contribute to sustainable development within our field of expertise.

I believe it will also strengthen the Volvo Group by increasing efficiency, gaining market shares and better prepare us for capturing opportunities brought about by global challenges such as urbanization.

I am convinced that the keyword for transport development is and must be sustainability.

What do I mean when talking about sustainable transport solutions? To start with, it is crucial to reduce the negative impact on the environment. However, we must broaden the scope and look at it also from the economic and social point of view.

I envision a transport system that enables high productivity with energy-efficient solutions which are safe and secure for people and goods.

We embarked on our journey towards sustainable transport solutions many years ago. This has resulted in solutions such as environmentally-enhanced products that can operate on renewable fuels, energy efficient solutions such as hybrid technology and systems like Bus Rapid Transit that facilitate efficient public transports.

But we are not there yet. A lot is still to be done.

To meet society’s need for sustainable transports, cooperation is essential. We are at our very best when we work closely with our business partners, first of all with our customers. It is in the dialogue with our customers we can really understand what drives their business and how we can capture the opportunities to build our common success.

Our products and services are important parts of the transport system and in order to develop the most efficient solutions we will continue to engage in partnerships to generate pioneering knowledge, pool innovation capabilities and develop new solutions adapted to different market conditions.

In 2001, we signed the United Nations Global Compact. Since then, these values have served as a foundation for our commitment and are manifested in our Code of Conduct that guides how we do business. This report describes our commitment, work and progress made in implementing the ten principles into our business.

We have the skills, resources and global reach to shape the future of transport.

Olof Persson,
President and CEO,
Volvo Group
Towards sustainable transport solutions
Shaping the future of transport

“The Volvo Group’s vision is to become the world leader in sustainable transport solutions by:
• creating value for customers in selected segments
• pioneering products and services for the transport and infrastructure industries
• driving quality, safety and environmental care
• working with energy, passion and respect for the individual”

Vehicles for growth and development
Efficient transport is crucial for societal and economic development and a key component in modern society. Our products and services play a vital role in everyday life. Our trucks, buses, engines, construction equipment and aircraft components are involved in many of the functions on which most of us rely on every day. We work to continuously improve the transportation of goods and people.

We have a long history of developing pioneering products and services for the transport and infrastructure industries. In addition, we are convinced that our products and services will also play an important part in the sustainable society. Our future success depends on continuing to develop pioneering products and services and converting them into financially viable products and services.

We develop tomorrow’s transport solutions today.

Part of the problem – and the solution
While our products and services are closely linked to growth and societal development, they also contribute to climate change, emissions, congestion and traffic related accidents. Transportation is essential but need to be made sustainable.

As one of the world’s leading manufacturers of transport and infrastructure solutions we have a responsibility and opportunity to address the challenges. Over the years, the Volvo Group has faced challenges that were seemingly impossible to solve. However, as a result of hard work and decisiveness, we now have a history filled with examples of innovative products and services that solved many of the challenges we faced.

Some achievements to date:
• Since the early 1990s, emissions of nitrogen oxides and particulate matters from a Volvo truck have been cut by more than 90%
• The fuel consumption and the CO₂ emissions in a Volvo truck has been cut by 40% since 1975
• In 2006, the Volvo Group was the first manufacturer to present commercially viable hybrid trucks and buses, which enable highly energy efficient transports
• In 2007, the Volvo Group presented seven trucks that can all be operated on different renewable fuels
• In 2007, the Volvo Group became the world’s first vehicle manufacturer to achieve a CO₂ neutral assembly plant
• Since 2004, the Volvo Group has decreased energy consumption in own production processes by 46% per produced unit
• R&D by the Volvo Group has resulted in many innovative safety solutions, such as driver alert support, adaptive cruise control and front under run protection system

We take an active role in shaping future transport solutions.

Working together with other actors in society
Our involvement goes beyond our products. We take an active role in shaping the transport systems of tomorrow. Transport solutions are based on several interdependent components. Our products and services are important components of the transport system and they must fit into the existing infrastructure. The system thereby sets the framework for our products. If transports are to continue to be a driving force for socio-economic development and generate profitability for our customers, the transport system needs to be improved and made more efficient. We cooperate and partner with other actors in order to develop infrastructure for renewable fuels and efficient transport systems.

As one of the world’s leading manufacturers of transport and infrastructure solutions, we develop tomorrow’s solutions today.
Sustainable transport solutions

The Volvo Group defines sustainable transport solutions as solutions that “improve the short- and long-term economic and environmental performance while also taking social impact into consideration”. This can be done by providing:

1. The right product or service in order to contribute to high productivity in the transport system

   By promoting the most resource efficient product available today, like hybrids, we deliver reduced environmental impact and lower operation costs for our customers. This is one important path on the transformation towards sustainable transport systems.

2. Energy efficient transport solutions

   We strive to provide products that enable more transport using fewer resources. It is in the use phase of our products that most achievements can be made to increase efficiency. We therefore focus on reducing the environmental impact of products in use by developing:
   • energy-efficient drivelines
   • hybrid drivelines
   • vehicles that can be operated on alternative and renewable fuel

   Attitudes and behavior are also important factors for sustainable transports. We therefore offer services and solutions that help our customers use our products in the most efficient way possible.

3. Safe and secure transport solutions

   As transports increase, traffic safety becomes increasingly important. We focus our research and development on active and passive safety solutions.

   There is an increased demand for security equipment that protects the driver, vehicle and goods. Modern technology enables protection in an efficient manner.

Our vision

“The Volvo Group’s vision is to become the world leader in sustainable transport solutions by:
• creating value for customers in selected segments
• pioneering products and services for the transport and infrastructure industries
• driving quality, safety and environmental care
• working with energy, passion and respect for the individual”

Volvo Group wanted position 2020

• We are among the most profitable in our industry
• We are our customers’ closest business partners
• We have captured profitable growth opportunities
• We are proven innovators of energy-efficient transport and infrastructure solutions
• We are a global team of high performing people
Our CSR approach
Turning values into value

The Volvo Group is convinced that there is no contradiction between running a financially viable business while contributing to sustainable development. We strive to assume economic, environmental and social responsibility for our operations, products and services. We believe that this approach is essential to being perceived as an attractive business partner and to building lasting relations with customers, employees, suppliers and other stakeholders.

Code of Conduct – the backbone of our CSR approach
The Code of Conduct is the Group’s policy for Corporate Social Responsibility. The Code expresses the principles for conducting business in an appropriate, responsible and transparent manner. It is the minimum level of behavior and is mandatory for all Group companies.

CSR – the road to sustainability
The overall objective of CSR is to contribute to sustainable development within the scope of our business operation and context. To the Volvo Group this means taking the global lead towards sustainable transport solutions, to initiate discussions and raise the issues on the agenda of other stakeholders.

Responsibility is part of our culture.

Principles
The Volvo Group’s commitment to CSR and sustainable development rests upon the following principles:
• Strong and visible leadership in this area
• Accountability and responsibility within our sphere of influence
• CSR and sustainability are integral parts of our business, strategy and processes
• Performance is measured and followed up
• Resource efficiency
• Transparency; reporting shall be conducted transparently based on the international standard Global Reporting Initiative (GRI)
• To engage stakeholders and take their expectations into account
• Work proactively and focus on potential risks
• Partnerships and cooperation.
Creating shared value

“CSR allows us to contribute to sustainable development within our sphere of expertise and influence”, Jan-Eric Sundgren, Executive Vice President Environmental and Public Affairs.

“Our world faces urgent global challenges, such as climate change, depletion of natural resources and uneven distribution of wealth. The complexity, size and scale of these challenges require cooperation among states, regions and different sectors of society. CSR offers a set of values on which to build a more cohesive society and take an active part in the transition to a more sustainable society. International business, including Volvo Group, has an important role to play in addressing these challenges.

Not only mitigating risk but going forward
A strategic approach towards CSR is increasingly important. Not only because it is expected from a large company like the Volvo Group but also for our future competitiveness.
CSR strengthens our brand, enables access to new markets and supports good stakeholder relationships.
CSR also increases our attractiveness as an employer; for present and future employees. For young people today it is crucial that companies take on not only business but also societal challenges and find solutions.

The CSR strategy will help us walk the talk
The Volvo Group has a new vision, wanted position and organization. Together with trends and global challenges, there was also a growing internal demand for a coherent and well defined CSR strategy. In 2011, we therefore started the work to develop a new CSR strategy for the Volvo Group.
The aim has been to base the CSR strategy on our business model, operating context and ambitions. We believe this approach is important to ensure that CSR goes beyond a risk management tool and really adds value to the business and contributes to our future business success.

Guiding day to day work
Since 2011, we have worked on developing a set of policies, directives and tools. For a large company such as ours it is necessary to formalize expectations and our own commitment in written documents in order to ensure a coherent approach and implementation. Once completed, we will start focusing on implementing the requirements into our processes.

Creating win-win situations
With our new CSR strategy we are moving from the more traditionally CSR perspectives to the concept of ‘creating shared value’. In essence, shared value is about creating win-win situations for society, Volvo Group or other stakeholders.
Let me take one example; more than 50% of the global population lives in cities. Cities place specific requirements on efficient transport of goods and people. By applying our knowledge, skills and experience and interacting with city authorities we can shape the transportation systems of tomorrow. This cooperation will benefit the cities, the people living there as well as our business.

CSR in a global context
The concept of CSR differs in different parts of the world. Being a global company with presence on approximately 190 markets requires us to have a common base of values to ensure the same standard of behavior wherever we operate.
Our Code of Conduct is the backbone of our CSR commitment and guides our behavior in order to build and maintain our reputation as a responsible company. I believe a responsible company is more likely to be a trusted partner which is essential for our long-term success.

In essence, being a trusted company is about taking responsibility for what we produce, how we produce it and how we act.

We are one part of a long and complex value chain. Our customers and investors place requirements on us, just like we do on our suppliers. Today, trustworthiness is more important than ever.
By being a responsible business partner, we build long-term trust with employees, customers and other prioritized stakeholders. This will lead to an environment where the Volvo Group can grow its business and contribute to further societal development.
The Volvo Group’s vision is to become the world leader in sustainable transport solutions. Our CSR strategy will help us reach that vision.”

Jan-Eric Sundgren
Executive Vice President Environmental and Public Affairs
From risk to value
Responsible business is good business

Managing risks is an important component of our overall CSR strategy. However, CSR is also increasingly important for the Volvo Group’s competitiveness by building brand, reducing cost, helping to capture new business opportunities and strengthening stakeholder relationships.

Managing risks
As a global company we must understand the political, social and economic trends that might impact the role and reputation of the Volvo Group in order to make the right strategic decisions. A company that is attuned to stakeholders’ expectations, concerns and priorities can react faster to potential risks and opportunities.

Creating value
Transport is a driving force for socio-economic development. Our pioneering products and services generate profitability for customers in the transport and infrastructure industries.

We believe that responsible business brings long-term success.

Profit is essential for our long-term business survival and a prerequisite for sustaining our operations, investing in new technology and a further expansion of the business.

A strategic approach to CSR entails opportunities to grow our business and reducing costs. Our CSR commitment is based on our vision, business strategies and ambitions.

Creating shared value
Transport contribute to growth and development. We develop pioneering products and services based on our customers’ needs and we intend to give our shareholders a favorable return on their investment.

We also strive to serve society by utilizing our unique skills, expertise and resources to develop solutions that address the challenges of sustainable transport. This is what we mean by creating shared value.
Economic growth
The interest in and demand for environmentally-enhanced products have increased. The Volvo Group is well positioned to capture the growth opportunities related to this development. This is done by:
• Developing new products that enable our customers to choose more sustainable products and services
• Expanding the product and service offer linked to the existing business, such as support, to ensure that the products are used in the most environmentally-efficient and safest way, through measures such as driver training, traffic safety and transport academy
• Accessing new markets
• Creating the future market for sustainable transport solutions.

Resource efficiency
Resource efficiency is a matter of economic and strategic importance. As one of the world’s largest manufacturers of heavy commercial vehicles, the Volvo Group has consistently worked to reduce the environmental impact of our products. We have always strived for our operations and products to have the least possible negative environmental impact. But it also makes economic sense to use available resources in the most efficient way, it makes us more competitive.
By improving the management of resources such as energy, material and water, we also reduce costs.
Taking responsibility for what we produce, how we produce it and how our products perform in the hands of our customers is essential for building lasting relations with customers, employees, suppliers and other stakeholders. This is at the core of our CSR commitment. We believe that this approach is essential for building lasting relations with customers and how we act is at the core of our CSR commitment. We believe that responsibility for what we produce, how we produce it, and how our products perform in the hands of our customers is essential for building lasting relations with customers, employees, suppliers and other stakeholders. This is at the core of our CSR commitment. We believe that this approach is essential for building lasting relations with customers and how we act is at the core of our CSR commitment.

Operations

The Volvo Group’s operations – in practice

Value chain

Product development

We work to deliver the environmental impact of our products and develop energy efficient solutions that our customers can use to reduce their environmental impact. We also work to ensure that the environmental impact of our products is reduced during their lifecycle. We strive to integrate the principles of CSR into daily operations.

Sales and marketing

We believe that success in business depends on building and maintaining the trust of our customers. Our products and services are developed in close cooperation with our customers. Customer satisfaction depends not only on the quality and performance of our products, but also on how they are treated and how service is delivered.

Products in use

By considering end of life in the design phase of our products, 85% of the truck is recyclable. Our newly-built trucks are made of as much as one third recycled material.

Sourcing process

We aim to source responsibly. Responsible sourcing is about deploying the same requirements when it comes to environmental standards, business ethics and social performance as we place on own operations.

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Global drivers
To predict and shape the future

In 2012, the Volvo Group celebrates 85 years. In 1927, the first series-produced Volvo car rolled off the production line at the Gothenburg plant and in 1928 the first truck was produced. For 85 years, Volvo has developed pioneering products and services, and been a driving force for socio-economic development.

Much has happened since 1927. The Volvo Group has evolved from a small local industry to one of the world’s largest manufacturers of trucks, buses and construction equipment with approximately 100,000 employees, production facilities in 20 countries and sales in more than 190 countries.

It is crucial to keep pace in a rapidly changing world. Today, it is more important than ever to understand our operating environment, how it impacts the Volvo Group and, above all, to act on these changes to meet future transport needs. In this section, we will define some of the more significant challenges and the actions being undertaken by the Volvo Group to meet these challenges.

1. Population growth, urbanization and megacities

The world’s population is constantly increasing. By 2050, it is expected to exceed nine billion. Since 2008, more than half the world’s population live in cities and in fifty years, that figure is expected to be two-thirds. The most intensive pace of urbanization is taking place in Africa and Asia. In addition, the number of megacities and megaregions with populations exceeding ten million is growing rapidly. Approximately 20% of the world’s population is expected to live in cities with populations in excess of two million inhabitants by 2015.

This trend is leading to an increased need for transportation. People, as well as large quantities of goods, are transported daily within as well as to and from cities. Cities, particularly major cities, have specific requirements for town and traffic planning. Furthermore, congestion and noise pollution need to be addressed through vehicles specially adapted for urban environments.

The Volvo Group’s approach
We are working on parallel approaches to improve transport solutions for the world’s cities to enable more goods and people to be transported without increasing congestion and emissions.

Transport systems such as Bus Rapid Transit (BRT) need to be further developed to reduce congestion.

The Volvo Group is involved in telematic solutions for more flexible public transports and efficient goods distribution, which will lead to more efficient planning of transport routes, greater traffic security and better planning of maintenance work.

2. Climate change, oil resources and alternative fuels

Climate change is one of the most complex and difficult questions of our time. Fossil fuel is the single largest source of greenhouse-gas emissions, which are considered responsible for climate change. Oil has long been considered a reliable source of energy, but today, oil use is a highly contested issue. This is primarily attributable to the environmental problems associated with oil, but also because future access to oil is uncertain due to dwindling oil reserves and instability in oil-producing regions.

It is no longer a question of whether we have to convert to a fossil-free society; it is now a question of how this will be achieved and at what pace it will be performed. Major efforts have been made to develop the use of renewable-energy sources. However, the development of renewable fuels differs widely in different regions depending on the...
natural resources available, which, in turn, entails a challenge in the form of developing vehicles adapted for various types of fuel. The move towards the large-scale use of renewable fuel is also dependent on political decisions to create the necessary infrastructure.

The Volvo Group’s approach:
We strive to meet these challenges by improving the energy efficiency, improving logistic systems and carbon dioxide neutrality. Electromobility is one solution to decrease carbon dioxide emission and increase energy efficiency. The shift towards well-to-wheel efficient renewable fuels will also decrease the carbon dioxide emissions, but the shift towards large-scale use of renewable fuels depends on policy decisions by governments to establish the infrastructure required.

3. Shortage of natural resources and raw material
Population growth, a rapidly growing middle class and greater purchasing power leads to increasing numbers of people consuming in line with western consumption patterns. Mankind is utilizing an increasing amount of land and resources. More efficient use of resources is required and the recovery of a greater proportion of material is becoming increasingly important to secure access to materials.

The Volvo Group’s approach:
We strive to decrease the use of material and other resources in our products and therefore we take the life-cycle perspective into account in product development. Today approximately 30% of a truck is produced from recycled material. New materials based on nanostructured compounds or alloys could create light-weight materials without losing the mechanical strength and thus create opportunities to reduce the weight of vehicles.

4. Safety and security
Traffic safety is becoming even more important as transportation increases. There has also been an increase in awareness and the demand for safe products and safety guidelines at construction and operation sites. The subject is a high priority for governments and institutions worldwide.

In the future, focus on security is also likely to continue to increase because of military conflicts, crime, terrorism and natural disasters, which will impact the safety of drivers, vehicles and goods.

The Volvo Group’s approach:
We are working together with authorities and academia to find new safety features and raise awareness of safety issues both on a local and global level.

5. Skilled employees
For many years, interest has waned for education and careers in the fields of mathematics, natural sciences and engineering in industrialized countries. However, the need for competent employees with these types of specialist skills will increase as products and services become increasingly sophisticated.

The Volvo Group’s approach:
We work to promote and stimulate the interest in science and technology by reaching out to young people and supporting educations in the mathematics, natural sciences and engineering field.

Did you know?

Approximately 20% of the world’s population is expected to live in cities with populations in excess of two million inhabitants by 2015.
Future development
Developing tomorrow’s transport solutions today

Growing populations and further urbanization put increasing demands on sustainable and efficient urban transport solutions. The solutions must address traffic safety and reduce congestion and emissions. We are actively participating in the development of future transport solutions.

Future transport solutions
Efficient transport systems are crucial to economic and societal development. We actively participate in discussing and promoting future transport development and policy-making in various worldwide forums.

The future transport infrastructure for both goods and public transports have to be more efficient in terms of, for example, increased utilization; which is a priority for the Volvo Group.

Three examples of how the Volvo Group is contributing to future transport solutions are Bus Rapid Transit (BRT), Green Corridors and the development of Intelligent Transport Systems (ITS).

Growing populations and increased urbanization increase demands on sustainable and efficient urban transport solutions.

Leading in BRT – efficient bus concept for growing cities
Public transport plays a decisive role in solving congestion and air pollution in major cities and it also contributes to quality of life for people residing in urban areas. BRT is a highly efficient public transport concept designed to meet growing transport demands in cities around the world. The key elements of BRT are:

- High-capacity buses
- Exclusive bus and/or freight transport lanes
- Off-board ticketing
- Level boarding
- Priority at intersections
- Traffic control
- Passenger information

BRT is a solution offered by Volvo Buses that was specifically developed for Latin America. Volvo Buses was a partner in the first BRT system in the world in Curitiba, Brazil in the late 1970s.

We have supplied more buses for BRT systems than any other supplier. Cities in which we work on BRT systems include:

- Bogotá in Colombia
- Mexico City in Mexico
- Gothenburg in Sweden
- York in Great Britain.

How much public transport does USD 1 billion buy?

10 kilometers of subway
50 kilometers of tramway
250 kilometers of Bus Rapid Transit
Intelligent Transport Systems contribute to efficiency

Intelligent Transport Systems (ITS) is a concept that will ultimately contribute to the more efficient use of infrastructure and transport solutions. ITS is an area experiencing rapid growth. The combination of new technology with advanced IT and communication technology offers major opportunities to reduce congestion and environmental impact and to increase safety by offering real-time traffic information, remote monitoring, and communication between transport vehicles and the infrastructure.

Green Corridors for efficient transportation

The aim of Green Corridors is to enhance the efficiency and safety of highways through specially adapted transport stretches for heavy duty traffic, while also reducing the environmental impact. This is done by concentrating goods traffic to efficient highways, sea routes and railways that complement one another.

Did you know?

Volvo Buses was a partner in the first BRT system in the world in Curitiba, Brazil in the late 1970s.
Stakeholders
Stakeholder dialogue advances and develops our business

The views and opinions of the Volvo Group’s stakeholders are invaluable. Systematic dialogue with stakeholders allows us to develop our business in general and our sustainability issues in particular. We aim to be open and provide relevant information in a timely manner. Engaging with stakeholders is one way of building trust and gaining licence to operate and most important to gain deeper understanding of expectations on the Volvo Group.

Reporting – a platform for dialogue
This CSR and Sustainability Report represents an important platform for stakeholder dialogue. To identify and prioritize the issues we address in this report we maintain an ongoing dialogue with the functions responsible for CSR issues and for stakeholder relationships. The dialogue enables us to better understand external expectations on the Volvo Group and also ensures that our sustainability strategies are aligned with business objectives to reduce risk and capture business opportunities.

Issues in focus:
• Creating value
• Our roadmap towards sustainable transport solutions
• Our role as an employer
• Responsible sourcing.

One of the principles in our Code of Conduct states that “Volvo Group encourages an ongoing dialogue with stakeholders”. This exchange is best presented through some of our major commitments. Below are a few examples from our stakeholder map.

Customers
Products, services and solutions are developed in close cooperation with customers, for the purpose of helping them improve their own productivity and profitability.

We have long-term relationships with most of our customers. Customer satisfaction depends not only on the quality and performance of our products, but also on how customers are treated and how service is delivered.

Some examples of how we communicate with our customers include:
• Interaction in daily operations
• Dialogue forums such as customer focus groups in the product development phase
• Customer surveys that provide important feedback
• Dialogue via social media
• Customer satisfaction surveys
• Follow up on customer satisfaction and brand perception.

The Volvo Group follows up on the respective companies’ and brands’ customer satisfaction position and brand image perception in relevant industries and markets. Customer Satisfaction and Brand Image Tracking is measured by established industry surveys.

Employees and trade unions
The Volvo Group has formalized forums for employee dialogue and development, such as personal development plans. We believe that open dialogue contributes to personal development as well as more committed employees.

The Volvo Group uses several channels for communication among employees such as:
• Intranet
• In-house magazines
• Team meetings
• Films and webcasts.

All employees can ask questions directly to the Group’s CEO via the Intranet. For top-down communication we often practice cascading to employees through managers. Internally we communicate in many different languages. A survey among all employees, focusing on measuring employee commitment and satisfaction is normally conducted on an annual basis.

The Volvo Group maintains close relationships with a number of labor unions both in formal and informal forums.
Suppliers
The Volvo Group works closely with our suppliers. We value long-term relationships and the transfer of knowledge and understanding of each other’s processes, procedures and values.

Forums for formal communication are:
• Our web-based supplier portal
• Training sessions
• Dedicated supplier days
• Contracts.

Capital market
We communicate regularly with shareholders, other investors and financial analysts.

The Investor Relations department holds regular meetings for investors and issues a number of publications:
• Annual reports
• Interim reports
• Press releases.

A capital market day is held at least once a year.

Decision makers
The Volvo Group communicates with politicians, authorities and institutions on an ongoing basis. This interaction includes responses to requests for comments on proposed legislation and activities. We also exchange information on the implications of legislation, incentives, etc., in order to support and enhance our business.

Most of the issues related to the regulation of our products is dealt with within industry organizations in which the Volvo Group is a member.

Non-Governmental Organizations
The Volvo Group has well-developed relations with NGOs. We have approximately 100 different cooperation projects with NGOs around the world.

Universities and research institutes
The Volvo Group sells technically sophisticated products and services. Cooperation with universities and academia is vital for creating synergies at the forefront of science. We are involved in a comprehensive series of cooperative ventures with research bodies and academic institutions to advance the technologies needed for future product development. One example is the Volvo Group initiative Academic Partner Program.

Our involvement with universities is also important for creating relationships with students and potential employees and thus for securing access to future competence.

Education/schools
The Volvo Group supports secondary and upper secondary schools in many locations around the world. We hold a continual dialogue on educational issues at local, national and international levels.

Welcome to contact us!
The views and opinions of our stakeholders are invaluable. For contact information, please see page 105.
About the Volvo Group

The Volvo Group is one of the world’s leading manufacturers of trucks, buses, construction equipment, drive systems for marine and industrial applications and aerospace components. The Volvo Group also provides complete solutions for financing and service. The Group has about 100,000 employees, production facilities in 20 countries and sells its products in more than 190 markets.

Global strength
Since the streamlining towards commercial vehicles began more than ten years ago, the Volvo Group has grown into one of the world’s largest manufacturers of heavy-duty trucks, buses and construction equipment and is now also a leading manufacturer of heavy-duty diesel engines, marine and industrial engines as well as engine components for the aerospace industry.

We have about 100,000 permanent employees and 20,000 temporary and consultants, and in total 65 production facilities in 20 countries. Most of our employees are based in the following countries:

• Sweden  
• France  
• Japan  
• USA  
• China  
• Brazil  
• South Korea.

The Volvo Group is a publicly traded company with its headquarters in Gothenburg, Sweden. The Volvo share is listed on the NASDAQ OMX Nordic stock exchange in Stockholm.

Strong brands
By selling products under different brands, the Group can address many different customer and market segments in mature and growth markets.

New organization
As of 2012, the Volvo Group has implemented a new organization which better utilizes the global potential of the Group’s brands and products. For example, the sales and marketing of all of the truck companies will be organized into three regional organizational units, directly under the CEO.

Share of Group’s net sales

Volvo Group net sales, SEK bn

Share of Group’s net sales by geography

Strong positions
• One of the world’s largest manufacturers of trucks  
• No. 3 in construction equipment  
• One of the world’s largest manufacturers of heavy-duty diesel engines  
• Strong positions also in the other business areas  
• Strong global market presence
Brands
Important assets for the group

By selling products with different brands, the Volvo Group can penetrate many different customer and market segments in mature markets as well as growth markets. Volvo Group does business under several leading and respected brands. Each brand in the portfolio is focused on different industry and market segments. Several brands are available globally, while some are focused on specific regions of the world.

**Volvo**
The Volvo brand, which has been built up over decades, enjoys a solid position worldwide. It is one of the world’s best known and respected brands within trucks, buses and construction equipment. It is associated with the Group’s core values – quality, safety and environmental care.

**Renault Trucks**
Renault Trucks is one of the largest European manufacturers of commercial vehicles, with its origins in the Renault automobile company that was founded in 1898, and in Berliet, founded in 1895. To worldwide customers Renault Trucks are renowned for its innovative and caring approach to efficiency and economy.

**UD Trucks**
UD Trucks was established in 1935 and is one of the world’s leading manufacturers of trucks and buses. UD Trucks markets light, medium and heavy-duty trucks, buses and bus chassis, engines and vehicle components.

**Mack**
For more than a century Mack has been one of the largest manufacturers of heavy-duty trucks in North America, and focused on commercial vehicles from the start. Today, Mack is one of the strongest heavy-duty truck brands in the North American market.

**Eicher**
Eicher is one of the largest players in the Indian commercial vehicle market and the obvious choice in the value and mass market segments for customers with high demands on profitability, flexibility and driver effectiveness.

**Volvo Penta**
Volvo Penta is one of the strongest and most global brand names in the engine industry. In addition to quality, safety and environment, Volvo Penta is associated with innovative and performance-oriented products. Penta has been a registered brand name for more than 100 years.

**Volvo Aero**
Volvo Aero is a world-leading brand and develops, manufactures and services components for aircraft engines and gas turbines. Volvo Aero has been committed to long-term relationships since 1930.

**SDLG**
SDLG is a leading brand in the Chinese construction machinery industry, especially for wheel loaders. The SDLG brand is sold primarily in China and other emerging markets.

**Prevost**
With more than 10,000 vehicles on North American roads, Prevost is a leading North American manufacturer of premium touring coaches and bus shells for high-end motorhomes and specialty conversions.

**Nova Bus**
Nova Bus is a leading North American provider of sustainable transit solutions, including environmentally-friendly buses, high-capacity vehicles and integrated intelligent transportation systems.
Net sales development since 2000, SEK bn (Map)
Governance

Efficient governance with clear responsibilities

Highlights in 2011

Olof Persson assumed the position of Group President and CEO

Carl-Henrik Svanberg proposed as new chairman of AB Volvo

New CSR and Sustainability committee

New Competition Law Compliance Program launched

9,023 employees received training on the Code of Conduct

10,107 employees were trained in anti-corruption

Code of Conduct
The backbone of our CSR commitment.
See page 25.

Governance structure
Governance of CSR and sustainability issues within the Volvo Group.
See page 22.

Sound governance is a platform for building a trusting relationship with shareholders and other Volvo Group stakeholders. With a new governance structure in place, we will achieve a faster decision-making process and clear responsibilities throughout the organization.

The Code of Conduct is our mandatory, group-wide policy for appropriate business behavior and responsibility towards our stakeholders. Our commitment to CSR and sustainability is reflected and implemented in policies, decisions and actions. We firmly believe that sound business practices are profitable in the long run as they help establish our reputation as a reliable business partner.

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Governance

CSR organization

During 2011 a new organization was developed which came into effect on January 1, 2012. The new organization also impacts the governance of CSR and sustainability issues. More effective governance, faster decision making and clearer responsibility and accountability are some of the desired results.

Organization and responsibility

Members of the Volvo Group Board of Directors have good knowledge and understanding of CSR and sustainability issues. The Board of Directors regularly evaluates our performance, and considers relevant topics such as human rights, environmental matters and corruption in its annual risk analysis.

The Volvo Group’s Code of Conduct is approved by the Board of Directors, who also has formal ownership of the Code.

The Volvo Group’s CEO, Olof Persson, is responsible for our vision – to become the world leader in transport solutions. In the Group Executive Team, Jan-Eric Sundgren, Executive Vice President, is responsible for CSR issues.

The responsibility for overseeing the implementation, follow up and development of CSR and sustainability work is delegated to the Volvo Group’s CSR Director, Malin Ripa.

Responsibility for CSR performance and compliance with the Code of Conduct follows the ordinary line of business responsibility.

Governance body for CSR issues

CSR issues are handled by the Core Value and Public Affairs Council, which is chaired by Jan-Eric Sundgren, Executive Vice President Environmental and Public Affairs and member of the Group’s Executive Management Team. The chairman in the council is responsible for making decisions and following up the implementation of decisions throughout the organization.

The purpose of this governing body is to establish strategies and directions and to follow up on performance. This council also supports and advances the Volvo Group’s business in areas related to its core values, CSR, public affairs and relevant emerging issues.

New committee coordinates CSR issues

A CSR and Sustainability Committee has been established in accordance with the new structure. The CSR and Sustainability Committee coordinates the work as well as prepares decisions for the Core Value and Public Affairs Council, which is tasked with supporting and developing the Volvo Group’s work with CSR and sustainability.

The CSR and Sustainability Committee is chaired by the CSR Director for the Volvo Group. The committee’s members comprise CSR and sustainability managers from the product companies within the Group, global process owners of relevant processes as well as representatives for corporate functions such as Human Resources and Corporate Strategy.

Coordination of supply chain CSR

The Volvo Group Purchasing CSR Supply Chain network develops and coordinates the CSR work in the sourcing process. All companies within the Volvo Group that have purchasing organizations are represented. The network reports to the CSR and Sustainability Committee as well as to a decision-making forum within the purchasing organization.

Monitoring and follow-up

The Volvo Group’s Corporate Audit Department monitors compliance with the Code of Conduct through audits and assessments.

The Volvo Group has a management control system for self-evaluation of how well critical policies such as the Code of Conduct have been implemented and enforced.
An annual survey is conducted to measure the level of implementation. Most of the managers in the Volvo Group state they have taken appropriate measures within their organization to promote our values and appropriate business behavior, and have held discussions with their teams on the risk of fraud and infringements of the Code of Conduct.

**Follow-up on employee commitment**

The annual Volvo Group Attitude Survey (VGAS) measures employee engagement which is critical for achieving strategic objectives and for business success. Questions on CSR, business ethics, environmental issues etc. are included and measured in the survey.

Findings from the survey are discussed in working groups, involving managers and employees. Feedback discussions result in an action plan with activities addressing areas for improvement throughout the year.

**Measuring performance**

The Volvo Group has several group-wide processes and management systems covering areas such as quality, internal control, environmental care and occupational health and safety.

There are specific KPIs to monitor and follow up on the effectiveness of processes which are reported on and followed up regularly in the Core Value and Public Affairs Council.

Environmental care, health and safety controls are integrated into the Volvo Group Production System (VPS). VPS is a toolbox containing methods to increase internal efficiency and minimize losses. Competence development is also an important part of VPS. Significant efforts are dedicated to developing employees to meet future technical areas of competence.

Performance is measured by collecting environmental, human resource and financial data. The collection process is verified by a third party.

We monitor our suppliers’ work through the quality assurance and self-assessment forms, which are part of our requirements on suppliers.

At the end of 2011, almost 99% of the employees in the industrial system worked in accordance with the quality management system ISO 9001 and in accordance with the environmental management systems ISO 14001.

At the end of 2011, almost 99% of the employees in the industrial system worked in accordance with the quality management system ISO 9001 and in accordance with the environmental management systems ISO 14001. These systems are certified by a third party auditor. In some of our operations we also have certified management systems for occupational health and safety, OHSAS 18001.
Corporate governance
Sound corporate governance is fundamental to gain trust

We recognize the value of sound corporate governance as a basis for achieving trust in the relationship with shareholders and other key parties. The Volvo Group applies the Swedish Code of Corporate Governance, which aims at promoting positive development of corporate governance in Swedish listed companies.

Corporate governance, characterized by high standards as regards transparency, reliability and ethics, has always been a well-established guiding principle within the operations of the Volvo Group. It is regarded as a fundamental basis for economic profitability and relationships based on trust. This strengthens our brand both internally and externally.

A number of corporate bodies carry out the governance and control of the Volvo Group. At the Annual General Meeting, shareholders exercise their voting rights with regard to, for example, the composition of the Board of Directors of AB Volvo and the election of external auditors. Shareholders are entitled to raise questions at the Annual General Meeting by sending written questions to the Chairman of the Board of Directors ahead of the event.

At the request of any shareholder and, when considered appropriate by the Board of Directors, the Board and President provides information at the Annual General Meeting in respect of any circumstances that may affect the assessment of a matter on the agenda, and any circumstances that may affect the assessment of the company’s or a subsidiary’s financial position and as regards the company’s relationship to other Group companies.

Board responsibilities
The Board is responsible for the Group’s long-term development and strategy as well as controlling and evaluating the company’s operations.

The Board appoints the President of AB Volvo, who is also the Chief Executive Officer (CEO) of the Volvo Group. The duties of the Board are partly exercised through its Audit Committee and its Remuneration Committee.

The Volvo Group Corporate Governance Model

[Diagram of the Volvo Group Corporate Governance Model]

Shareholders
Annual General Meeting
Election Committee
Remuneration Committee
Board
Auditors
President
Group Executive Committee

Sound corporate governance has always been a well-established guiding principle within the operations of the Volvo Group.
Code of Conduct
Guiding principles for our behavior

The Code of Conduct outlines the Volvo Group’s principles for conducting business in an appropriate, responsible and transparent manner. The Code of Conduct is mandatory and describes what can be expected from the Volvo Group and its employees. As a global company, our behavior in one part of the world affects our reputation in another, it is therefore important to have a common standard of behavior.

Sound business ethics act as a guiding principle
Responsible business practices have always been a guiding principle for the Volvo Group. We enjoy an invaluable reputation for corporate trustworthiness all over the world. This is a result of consistency when it comes to doing business with integrity and complying with laws and regulations. Volvo Group believes that success in business depends on building and maintaining the trust of customers, shareholders, employees, governments and the general public.

Policy documents in the Volvo Group
The Code of Conduct outlines the Volvo Group’s principles and minimum standard for conducting business in an appropriate, responsible and transparent manner. It establishes the principles we apply in relation to employees, business partners and other stakeholders. It was introduced in 2003, and is based on the United Nations’ Global Compact initiative. The policy applies to all employees within the Volvo Group and the members of the Board of Directors.

In addition to the Code of Conduct we have several other policies related to CSR issues, such as:

- Environmental Policy
- Anti-Corruption Compliance Policy
- Workplace Safety, Health and Wellbeing Policy.

The scope of the Volvo Group’s Code of Conduct
The Code of Conduct addresses issues including:

- Responsible business practices
- Environmental care
- Human rights
- Workplace practices.

We prefer to work with business partners who share our values. We therefore encourage our business partners to adopt the principles or apply standards of business conduct consistent with the principles in our Code of Conduct, e.g. support the respect for human rights, report on environmental performance, and provide a safe and healthy work environment for their employees.

Managers are responsible
The Volvo Group’s managers are responsible for communicating and demonstrating the content and spirit of the Code.

Training
A web-based training, based on the principles in our Code of Conduct, of ethical dilemmas is available to support managers. This training helps our employees and managers to reflect on their own attitudes and behavior in different situations. The training provides immediate feedback.

The training is also available as a workshop with open discussions. The training is available in twelve languages, including French, Chinese, Korean, Russian and Japanese.

The first version of the Code of Conduct training was launched in 2005. All employees were asked to undergo the training. In 2010 an updated version was launched and since then all white-collar employees shall take the training every third year. In 2011, 9,023 employees took part in the training.

Our web-based training helps our employees and managers to reflect on their own attitudes and behavior in different situations.
**The Whistleblower procedure**

The Volvo Group has a Whistleblower procedure that states that all employees within the Volvo Group are expected and encouraged to report suspected infringements of the law and internal policies to their immediate superior. In the event that a reported incident is not taken seriously, or if an employee does not feel comfortable reporting the matter to his or her superior, the employee can report the matter to the Head of Corporate Audit in accordance with the Whistleblower procedure.

Reports in accordance with the procedure may be submitted anonymously, to the extent permitted by law. In accordance with our Code of Conduct, we will not tolerate retaliation against a person for making good-faith complaints of improper behaviour.

**All incidents are investigated**

Suspected irregularities always lead to investigation. The consequences or sanctions relate to the gravity of the action. It may vary from a warning to demotion, dismissal and/or filing a police report.

**Incidents reported in 2011**

In total, 30 cases were reported in 2011 under the Whistleblower procedure. 16 of these were dismissed following investigation, as there were no grounds for the allegation. In 12 cases we found grounds for the allegations and proceeded with appropriate actions. Two of these cases are still under investigation.

Two cases were dealt with as potential corruption cases in 2011. These were investigated and reported to the Audit Committee. One case is still under investigation.

**Reviewing the Code of Conduct**

As a result of the group-wide CSR strategy project we initiated in 2011, the Code of Conduct is currently under review to ensure that it remains relevant and aligned with our business model. The content is based on our stakeholders’ expectations and internationally recognized recommendations such as the United Nations’ Global Compact and the OECD Guidelines for Multinational Enterprises.

The international standard for social responsibility, ISO 26000, and the European Union’s strategy for CSR serves as inspiration in the process of revising the Code of Conduct.
A neutral party
Neutral in relation to political parties or candidates

The Volvo Group is present in more than 190 markets, with different political, economic, cultural, religious and social systems and traditions. The Volvo Group is firmly convinced that it is generally positive to be in a market and participate in the debate and thus contribute to a positive development. Trade contributes to economic growth, prosperity and development.

Political involvement
It is stated in the Code of Conduct that the Volvo Group is a neutral party in relation to political parties and candidates. The Code also states that “neither the names nor the assets of the Volvo Group companies shall be used to promote the interest of political parties or candidates.” This means that we give neither financial nor in-kind contributions to political parties or related institutions.

Our neutrality does not interfere with building relations with authorities and other officials. The Public Affairs Department of the Volvo Group works to establish relationships with politicians, authorities and institutions by establishing and maintaining relations and creating trust. The objective is to provide the Volvo Group with early indications and input in respect of legislation, development and trends in society, as a basis for strategic decisions.

No defense material to countries on sanction list
The Volvo Group monitors the socio-political development and events that may result in domestic upheaval or international conflicts. However, we do not have the ability to make our own analysis on conflicts between countries. We therefore rely on official sources and comply with intergovernmental policy decisions, such as United Nations’ sanctions, in the case of blockades and trade measures.

The Volvo Group sold defense material, as defined in the Swedish Military Equipment Ordinance (1992:1303) section A, amounting to 0.41% (0.46) of net sales in 2011. The Volvo Group complies with governing legislation and with regard to the sale of defense material we apply for permits to the relevant public authority in each country in which business is conducted.

Contribute to reducing corruption
In some parts of the world corruption may be seen as an accepted part of doing business. It is therefore a challenging task to conduct business in the same way in all our markets.

Our overall aim is to contribute to reducing corruption and promoting sound competition.

Private and Group’s interests should not conflict
Employees and members of the Volvo Group Board of Directors must conduct their private and other external activities and financial interests in a manner that does not conflict, or appear to conflict, with the interests of the Group.

Did you know?
The Volvo Group is present on more than 190 markets.
Risk management
Risk management forms part of our strategy process

Successful risk management relies on strategic long-term planning combined with internal and external communication. The Volvo Group manages risks centrally through a risk procedure within the strategy process. Risks can be regulatory, physical or related to other aspects such as trends and public opinion.

Risk assessment at a corporate and company level
Risk management and assessment are conducted both at the corporate level and for each company in the Group. Risks are analyzed and ranked based on likelihood of occurrence and potential consequences. We work to reduce the likelihood of risk-related events occurring. When that is not possible, we strive to minimize the consequences.

Risk assessments are reported to the Volvo Group’s Board of Directors and serve as input for the business plan process and serve as a base for an audit plan.

There are three main categories of risks relevant to the Volvo Group:
• External-related risks – including economic cycles, competition and regulation.
• Financial risks – including currency fluctuations, share evaluations, credit risks and similar risks.
• Operational risks – related to the introduction of new products, suppliers, third-party complaints etc.

In this report we elaborate on some of the external-related risks and operational risks that relate to the topics of this report.

Annual internal audits
The Corporate Audit function consists of approximately 35 internal auditors globally. They perform audits and special assignments requested by management in accordance with the annual audit plan. They issue periodic reports to the Audit Committee and management. Audits aim to improve the effectiveness of risk management, control, and governance processes.

Operational risks
Safety risks
The Volvo Group has policies, routines and guidelines designed to help us secure safe workplaces in all our operating locations. The Volvo Group has a process for handling issues related to workplace safety such as fire protection, emergency evacuation and so forth.

Providing a workplace free from physical hazards is essential for ensuring the safety of our employees, their families, customers and visitors as well as of suppliers.

Volvo Blue Risk assessment is a key tool used during site inspections. This assessment is reviewed and supported by the Corporate Security Function and serves as an input to the insurance program.

Managers are responsible for keeping all workplaces free from potential risks and for ensuring that corrective action is promptly carried out whenever a risk is identified.

Environmental risks
Forthcoming regulations on environmental issues related to our production sites are dealt with by the Environmental Committee.

All sites have been audited by the Environmental Manager for the Volvo Group in order to identify potential risks. Furthermore, all production sites in the Volvo Group have an environmental manager who is responsible for working preventively to mitigate the consequences of an accident if it were to occur.
All production plants must fulfill the Group’s requirements concerning for example:
• Use of chemicals
• Energy use
• Emissions to air and ground
• Waste management
• Organization of environmental work
• Work on continuous improvements
• Noise.

No major accidents occurred in 2011. Some 99% of employees work in certified systems in accordance with ISO 14001:2004. This means that risks are managed systematically and preventively.

Possible acquisitions are evaluated
When assessing possible mergers and acquisitions of companies and real estate, the audits cover environmental and social factors in addition to financial and legal aspects.

This information provides the basis for action plans, if these are needed to ensure that the companies acquired can meet the Volvo Group’s minimum requirements.

No operations in protected areas
The Volvo Group has no facilities in areas listed as sensitive or protected with regard to biodiversity. However, the material used in the Volvo Group’s products could have an indirect impact on biodiversity when extracting raw material.

Polluted land
An annual inventory is made of polluted land on our properties. Remedial operations were not conducted at any plant in 2011 and no spillages, major incidents or legal complaints were reported in 2011.

The Volvo Group has no facilities in areas listed as sensitive or protected with regard to biodiversity.

External risks
Economic cycles
The nature of the commercial vehicles business is cyclical. Investments in infrastructure, major industrial projects, mining and housing projects all impact the Group’s operations as its products are central to these sectors. The cyclical demand for the Volvo Group’s products and services makes the financial results of the operations dependent on the Group’s ability to react to changes in demand, in particular to its ability to adapt production levels and production and operating expenses.

Extensive government regulation
A prerequisite for our presence in a global market is that our products meet increasingly stringent international, national and sometimes also regional environmental legislation.

Today, we are working on meeting the future Euro VI standard that will come into effect on January 1, 2014 in Europe. We continuously monitor the development of legislation, currently focusing on the upcoming Carbon Dioxide Emission/Fuel Consumption legislation in China, USA, EU and Japan.

Fossil fuel and peak oil
Two important issues to address are the role of carbon dioxide emissions and the approach of peak oil, which can influence the fuel prices.

More than 95% of the energy consumption used in the transport sector today is crude oil-based, hence there is significant potential for developing commercially viable alternatives. Reducing dependency on fossil fuels such as oil, coal and natural gas by increasing the use of renewable fuels makes both business and environmental sense. Developing alternatives that are fuel-efficient and which can be operated using renewable fuels is therefore a priority and a valuable business opportunity for the Volvo Group.

Need for engineering expertise
As our products are getting more sophisticated more experts are needed. At the same time the interest for mathematics, science and technology in western countries decline.

A crucial factor for the implementation of the Group’s vision and wanted position is input from employees, their skills and commitment. A related risk is our need for expertise and competent engineers to continue the development of environmentally-enhanced products. We meet this challenge by offering employees attractive work conditions and opportunities for development.

Reducing dependency on fossil fuels such as oil, coal and natural gas by increasing the use of renewable fuels makes both business and environmental sense.

Did you know?
The Corporate Audit function consists of approximately 35 internal auditors globally.
Anti-corruption
Conducting business with integrity

Corruption has dire global consequences, trapping millions in poverty and misery, while breeding social, economic and political unrest. Corruption is both a cause of poverty, and a barrier to overcoming it. The Volvo Group does not accept corruption in any part of its business. This basic rule strengthens our brand and helps us contribute to fair market competition – allowing the best products and brands to prosper.

Sound business practices are economically profitable
Not accepting corruption in any part of our business may sound simple. However, being a global company that operates in more than 190 different countries with many cultures and norms means that it is a demanding challenge.

From a short-term perspective, following our principles could have an adverse impact on some business opportunities. But in the long term, sound business practices are economically profitable since we make business more efficient and establish our reputation as a reliable and trustworthy partner conducting business with integrity.

Code of Conduct: a guide for anti-corruption
Our work with anti-corruption is guided by the following principles contained in our Code of Conduct, which applies to all employees and the Board of Directors:

- Regarding legal compliance: “In every country in which we operate, the Volvo Group shall abide by the laws and regulations of that country. In situations where the law does not give guidance, the Group applies its own corporate values and standards. In cases of conflict between mandatory law and principles contained in this code, the law shall prevail.”

- Regarding relationships with business partners: “The Volvo Group shall not offer customers, potential customers, governments, agencies of governments, or any representatives of such entities, any rewards or benefits in violation of either applicable law or reasonable and generally accepted business practice.”

The Volvo Group shall also take reasonable steps to prevent its business partners from taking part in practices that violate the principles in the Code of Conduct.

Anti-Corruption Compliance Policy and Program
The Volvo Group has an Anti-Corruption Compliance Policy that has been adopted by the Audit Committee. In addition to the policy we have steering documents and a handbook that in combination with the policy constitutes our Anti-Corruption Compliance Program.

The Anti-Corruption Compliance Program consists of a number of actions aimed at preventing the Volvo Group or any of its business partners from participating in corrupt activities. The program fundamentally consists of three parts:

- Preventing corruption
- Detecting corruption
- Responding to corruption.

Corruption is defined as “directly or indirectly offer, promise, accept or solicit anything of value or an advantage as an inducement for an action which is illegal or a breach of trust in the conduct of the Volvo Group’s business”.

Oversight and reporting of anti-corruption
The Audit Committee, a function of the Volvo Group Board of Directors, has issued the Anti-Corruption Compliance Policy and monitors compliance.

The Chief Compliance Officer is responsible for overseeing the implementation of the program, leading and participating in training and audits and leading investigations into alleged non-compliance. The Chief Compliance Officer
reports to the Audit Committee on current incidents and investigations three times a year.

In addition, annual reports are submitted to the Audit Committee on activities in the Anti-Corruption Program. Regular reports are also made to Group management.

Each business area has also appointed persons who are responsible for anti-corruption issues.

**Contribute to reducing corruption**

In some parts of the world, corruption may be seen as an accepted part of doing business. It is therefore a challenging task to conduct business in the same way in all our markets.

Our overall aim is to contribute to reducing corruption and promoting healthy competition in the world. We therefore need to communicate our views on how to run a business in a correct and fair way.

It is essential that our employees in all parts of the world understand the purpose of the policies and how to interpret them in everyday business.

**Employees are trained online and on-site**

All white-collar employees participate in e-learning relating to the Code of Conduct and anti-corruption every three years. On-site training for selected groups is conducted every year.

It is crucial to communicate both the advantages of doing business in the right way as well as the potential consequences of non-compliance. Personal meetings and discussions are important for creating awareness. In the past year and in years to come thousands of employees have received and will receive on-site training through the Chief Compliance Officer or other members of the compliance network. In 2011, 9,023 employees received training on the Code of Conduct and 10,107 employees were trained in anti-corruption. Training on the Competition Law Compliance Program will begin to take place in 2012.
Fair competition
Promoting healthy competition

In 2011, the Volvo Group launched the Competition Law Compliance Program. The program includes a number of actions aiming at preventing the Volvo Group from taking part in activities that are contrary to competition law.

The new policy states how to behave in relation to competitors, distributors, customers and suppliers, both as an employee and as a company. All employees that are in contact with the Volvo Group’s competitors are expected to be familiar with the policy.

To increase awareness among employees about the policy, all white-collar employees are expected to participate in an e-learning course on the subject, and targeted training will be conducted for more than 10,000 employees in sales and marketing, research and development and product development.

The new policy applies to all employees. The Chief Compliance Officer is responsible for the program, including related training, audits and follow-up.

New Competition Law Compliance Program
In 2011, the Volvo Group launched the Competition Law Compliance Program. The program includes a number of actions aiming at preventing the Volvo Group from participating in activities that are contrary to competition law.

The purpose is to provide our employees with an overall understanding of what is accepted and what is not – and ultimately to promoting healthy competition in the markets where the Group is present.
Economic responsibility
Vehicles that create sustainable value

Highlights in 2011

The Volvo Group reached its highest net sales, operating income and operating margin

Net sales rose by 17% to SEK 310.4 billion

The Volvo Group qualified for inclusion in the Dow Jones Sustainability World Index

New financial targets launched

The Volvo Group’s products and services are in many ways enablers of modern society and contribute to sustainable development and growth around the world. As a company, we need to ensure that our business is economically responsible and sound; only then can we continue to create value for customers and thereby value for our shareholders.

Successful business
Case: Viktor Andersson, SEB Wealth Management.
See page 38.

Value creation
Contributing to sustainable development and generating long-term value. See page 34.

The content of this report includes:

Value creation .................................................................34
Case: CSR – an integral part of a successful business strategy .................................................................38
Suppliers ............................................................................39
Supplier requirements ......................................................40
Evaluating performance ....................................................41
Investments for the future ................................................43
Case: Sustainable investments ........................................45
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Value creation
Creating sustainable value

Our products and services create important opportunities for the growth of societies. The Volvo Group believes that we are better prepared to contribute to sustainable development and generate long-term value if we consider social and environmental challenges and opportunities and actively engage in dialogue with our stakeholders. This is imperative to the success of the Volvo Group.

Strong earnings
• Highest net sales, operating income and operating margin thus far
• Net sales rose by 17% to SEK 310.4 billion (264.7)
• Operating income rose to SEK 26.9 billion (18.0)
• Operating margin improved to 8.7% (6.8)
• Strong operating cash-flow in the Industrial Operations of SEK 14.1 billion (19.0)
• Net debt in the Industrial Operations reduced to 25.2% of shareholders’ equity
• Proposed dividend of SEK 3.00 per share

Contributing to growth and development
Transport and infrastructure are vital drivers for economic growth and social development and enable societies to fulfil basic needs. The Volvo Group’s products and services are in many ways enablers of modern society. They contribute to socio-economic growth by acting as the bridge between businesses and their markets, goods and clients, or by simply providing the logistics for people to get to work, home, school, hospital or travel.

Most of our customers run commercial transport-related business. They have specific demands and expectations on our products and services. It is therefore important for the Volvo Group to develop its products and services in close cooperation with customers, with the aim of improving our customers’ productivity.

We aim at providing the right products and services in order to achieve high productivity in the transport system. We help cities setting up efficient bus systems to meet high demands on efficiency and environmental performance. Our trucks transport goods. Our engines ensure that the operations of large industries and at airports or electricity supplies at shopping malls or in hospitals have efficient power back-up systems.

A broader approach to creating value
The Volvo Group strives to create value for a wide group of stakeholders such as customers, shareholders, investors, suppliers and employees. A company’s role in society is no longer viewed as merely providing financial value to the shareholders. Today, a company is largely judged by the value it brings to society. The Volvo Group creates value for the society by:
• Delivering products and services in the most efficient way based on our customers’ expectations
• Creating job opportunities for employees and for our business partners
• Contributing to technological developments
• Investments in e.g. new technology, infrastructure and employee competence
• Spreading good practices in the field of environmental care and social issues.

Sustainable business opportunities
With the customer in focus, the Volvo Group is committed to investing in and developing pioneering solutions that will contribute to the sustainable development of the transport and infrastructure sector. This is reflected in the Volvo Group’s new vision – to become the world leader in sustainable transport solutions.

Our ability to meet customers’ and society’s growing demand for more efficient technologies, alternative fuel engines and smarter logistics will determine our future business success. Our customers are showing a steadily increasing interest in environmentally-enhanced products.
Being in the forefront, we believe this will give us a competitive advantage and contribute to create the market for sustainable transport solutions.

Fuel accounts for approximately one third of the costs for typical customers in Europe, and any measure that can reduce their fuel consumption will help to improve profitability while reducing environmental impact.

With the customer in focus, the Volvo Group is committed to investing in and developing pioneering solutions that will contribute to the sustainable development of the transport and infrastructure sector.

The Volvo Group is firmly convinced that by addressing societal challenges and needs, we can seize business opportunities and create value for stakeholders beyond the traditional groups, such as shareholders and customers. We believe that our efforts will strengthen the perception of the Volvo Group as a trustworthy business partner. Transport is not only a key component of modern society and a precondition for welfare and growth, but also contributes to climate change. We realize that we are part of the problem as well as part of the solution.

Taking economic responsibility

Today’s global market encompasses many challenges that affect the financial performance of the Volvo Group. The recovery that started in the Group’s mature markets in 2010 continued during 2011, with some tendencies towards a weakening in Europe at end of the year. In the emerging economies, the demand for Volvo Group’s products and services continued to be strong.

Long-term demand for transport capacity is closely linked to GDP development. The investments in infrastructure are also closely linked to economic growth which has a direct impact on the demand for construction equipment. In the short term the demand is affected by fuel price, introduction of new emission regulations, interest rates and so forth. The financial turbulence and uncertain global financial outlook accentuates the need for well-managed and sustainable businesses that contribute to stability but maintain the flexibility to adapt to new situations. Taking measures to adapt to any new situation is critical while taking into account the impact they may have on internal and external stakeholders.

Our economic responsibility is to continue to create sustainable value, which means that taking measures to adapt to any new situation is critical.

Profitable growth – a prerequisite for value creation

Profitability is a receipt for success. By being profitable, the Volvo Group generates value for a broad group of stakeholders, including our owners, employees, suppliers and the societies in which we operate.

In 2011, the Board of Directors decided on new financial targets for the Volvo Group. The new targets are set to enable the growth and profitability of Volvo Group’s various operations to be measured and benchmarked annually against relevant competitors. Profitable growth is a prerequisite for maintaining competitiveness and for securing investments in the research and development of new products and services. It is also a prerequisite for investing in activities and areas that contribute further to sustainable development.

EU studies estimate that the multiplier effect of one direct employee in the automotive sector ensures at least five more job opportunities at suppliers and related sectors and in retail. The industry is also the largest private investor in research and development in the EU and thereby a driver of innovation and economic growth. Profitable growth also facilitates social initiative efforts beyond ordinary business operations.

Corporate taxes to profitable emerging markets

Profitable emerging markets in South America and Asia will gain most of the corporate tax that was paid by the Volvo Group in 2011. In total SEK 5.2 billion were paid in tax.

<table>
<thead>
<tr>
<th>Key ratio table</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales Volvo Group, SEK M</td>
<td>310,367</td>
<td>264,749</td>
</tr>
<tr>
<td>Operating income Volvo Group, SEK M</td>
<td>26,899</td>
<td>18,000</td>
</tr>
<tr>
<td>- Operating income Industrial Operations, SEK M</td>
<td>25,957</td>
<td>17,834</td>
</tr>
<tr>
<td>- Operating income Customer Finance, SEK M</td>
<td>942</td>
<td>167</td>
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<tr>
<td>Operating margin Volvo Group, %</td>
<td>8.75</td>
<td>6.8</td>
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<td>Income after financial items, SEK M</td>
<td>24,929</td>
<td>15,514</td>
</tr>
<tr>
<td>Income for the period, SEK M</td>
<td>18,115</td>
<td>11,212</td>
</tr>
<tr>
<td>Diluted earnings per share, SEK</td>
<td>8.75</td>
<td>5.36</td>
</tr>
<tr>
<td>Dividend per share, SEK</td>
<td>3.00¹</td>
<td>2.50</td>
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<tr>
<td>Return on shareholder’s equity, %</td>
<td>23.1</td>
<td>16.0</td>
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</table>

¹ According to the Board’s proposal.
Market overview
In the long term, the demand for transport capacity and for trucks is closely linked to the growth of GDP. Trends in the demand for our products are therefore indicators of the state of the economy.

Did you know?
EU studies estimate that the multiplier effect of one direct employee in the automotive sector ensures at least five more job opportunities at suppliers and related sectors and in retail.

Net sales, SEK bn

<table>
<thead>
<tr>
<th>Year</th>
<th>Net sales, SEK bn</th>
</tr>
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<tbody>
<tr>
<td>07</td>
<td>285</td>
</tr>
<tr>
<td>08</td>
<td>304</td>
</tr>
<tr>
<td>09</td>
<td>218</td>
</tr>
<tr>
<td>10</td>
<td>265</td>
</tr>
<tr>
<td>11</td>
<td>310</td>
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</tbody>
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Economic growth in the U.S., Europe and Brazil
Annual GDP-growth, %

<table>
<thead>
<tr>
<th>Year</th>
<th>Economic growth, %</th>
</tr>
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<tbody>
<tr>
<td>07</td>
<td>6.1 (0.3)</td>
</tr>
<tr>
<td>08</td>
<td>5.2 (0.3)</td>
</tr>
<tr>
<td>09</td>
<td>3.1 (4.1)</td>
</tr>
<tr>
<td>10</td>
<td>1.9 (1.6)</td>
</tr>
<tr>
<td>11</td>
<td>1.7 (1.7)</td>
</tr>
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</table>

Economic growth in Asia, %
Annual GDP-growth, %

<table>
<thead>
<tr>
<th>Year</th>
<th>Economic growth, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>07</td>
<td>14.2</td>
</tr>
<tr>
<td>08</td>
<td>9.6</td>
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<tr>
<td>09</td>
<td>9.2</td>
</tr>
<tr>
<td>10</td>
<td>10.4</td>
</tr>
<tr>
<td>11</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Source: Consensus Economics

* China, Hong Kong, South Korea, Taiwan, Indonesia, Malaysia, Singapore, Thailand, Philippines, Vietnam, Australia, New Zealand, India, Japan, Sri Lanka
Market development

**Market development, heavy-duty trucks, Europe**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<tbody>
<tr>
<td>Sales</td>
<td>328</td>
<td>319</td>
<td>165</td>
<td>179</td>
<td>242</td>
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</table>

**Market development, construction equipment, Europe**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<tbody>
<tr>
<td>Sales</td>
<td>217</td>
<td>173</td>
<td>76</td>
<td>94</td>
<td>124</td>
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</tbody>
</table>

**Market development, heavy-duty trucks, North America**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<tr>
<td>Sales</td>
<td>208</td>
<td>185</td>
<td>118</td>
<td>142</td>
<td>216</td>
</tr>
</tbody>
</table>

**Market development, construction equipment, North America**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<tr>
<td>Sales</td>
<td>173</td>
<td>137</td>
<td>68</td>
<td>82</td>
<td>112</td>
</tr>
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</table>

**Market development, heavy-duty trucks, South America**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
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<tr>
<td>Sales</td>
<td>91</td>
<td>117</td>
<td>86</td>
<td>139</td>
<td>148</td>
</tr>
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</table>

**Market development, construction equipment, South America**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<tbody>
<tr>
<td>Sales</td>
<td>25</td>
<td>33</td>
<td>21</td>
<td>35</td>
<td>42</td>
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</tbody>
</table>

**Market development, heavy-duty trucks, Japan**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<td>Sales</td>
<td>43</td>
<td>35</td>
<td>19</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

**Market development, construction equipment, China**
Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
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<tbody>
<tr>
<td>Sales</td>
<td>203</td>
<td>251</td>
<td>230</td>
<td>371</td>
<td>399</td>
</tr>
</tbody>
</table>
CSR – an integral part of a successful business strategy

Representing the largest investors in Sweden, Viktor Andersson has met with a large number of companies on sustainability matters and has seen their CSR work develop over the years.

“Our focus on sustainability was initially mainly customer-driven. They approached us at an early stage and asked us to broaden our investment perspectives. We embraced it since we could see the added value.

Our standpoint is that CSR should be integrated in any successful business strategy. It is all about resource efficiency and well-managed companies. Mitigating risks and capitalizing on business opportunities will make you a future winner.

Studies show a clear connection between a strong CSR engagement and profitability. However, well-managed companies are normally profitable, so sometimes it’s a bit of a chicken-and-egg situation.

Influencing the companies
Being one of the largest investors in the Nordic region gives us a certain opportunity to exert influence. Companies do listen to us. There are of course limits to what we ask companies to do. It is not about completely changing the business strategy but rather advising on the priorities, and including certain aspects that might have been left out.

Most companies find this support valuable, especially since we can apply best practice from one industry to another.

We also meet regularly with companies to discuss how to improve the business from a sustainability perspective.

Through a collaborative approach, we hope to improve the way the company is managed.

Communication is key to success
Not all our clients are interested, but there is a positive momentum for CSR. While in many institutions, sustainability is becoming increasingly important, there are great differences among retail customers. For companies, there is still in some cases a certain resistance towards CSR work, mostly where the added value is not communicated internally. We also see that interest varies between industries.

Viktor Andersson, Co-Head ESG Analysis, SEB Wealth Management

In general, companies are getting much better at CSR, but many still have shortcomings in communicating why they do certain things and the added value of them. This is very important, not the least when communicating with investors.

Looking forward
In the future, sustainability will gain even more interest from investors.

CSR matters have gained more acknowledgement over time. In the crisis of the early 2000s, some companies completely dismantled their CSR functions. During the 2008 downturn, this was not the case. The credit crisis seems to have opened people’s eyes to the fact that the traditional financial focus approach is no longer sufficient.

We foresee that the future CSR focus will be on establishing sustainable value creation rather than avoiding 'bad' activities and industries, which has been much of the focus until now.”
Suppliers
Creating long-term relationships

Responsible sourcing is about promoting responsible behavior, managing risk and building long-term relationships with suppliers to improve social, environmental and business ethics in the supply chain. The Volvo Group strives to ensure that unethical values are not built into its products and services.

Responsibility built-in
Responsible sourcing is about deploying the same requirements on our suppliers when it comes to environmental standards, business ethics and social performance as we place on our own operations. Ensuring high standards in the supply chain is important to the Volvo Group and our stakeholders to ensure that unethical values are not built into our products and services. Responsible supply chain management enables us to meet growing customer expectations, reduce risk of incidents that may damage the Volvo Group brand or interrupt the supply flow.

Since 1996, the Volvo Group has gradually increased its requirements on suppliers regarding environmental issues, business ethics and social responsibility aspects. The requirements are based on the principles contained in our Code of Conduct and international norms of behavior such as the United Nations’ Global Compact.

Development in close cooperation
We build close and long-term relationships with our suppliers, based on an understanding of each other’s processes and product requirements, as well as the exchange of knowledge. Joint development sometimes acts as an incentive for a supplier to choose to work with us.

As a rule of thumb, our aim is that sales to the Volvo Group should account for less than 30% of a supplier’s turnover. This decreases a supplier’s vulnerability.

Sourcing and risk assessments
We generally source close to our production sites to ensure efficient flow into the production. This means that most of our suppliers are located in Europe and North America. At the same time, our expansion in Asia has led to that most of our new suppliers are located in Asia. The Volvo Group has approximately 6,000 suppliers on the automotive side, i.e. components that are embedded in our products.

Some 8% of these suppliers are located in countries assessed as “high risk”. The risk assessments are based on analyses conducted by internationally recognized institutions and include such factors as human rights, labor standards and corruption.

Did you know?
The Volvo Group started imposing demands on suppliers’ environmental performance in 1996. CSR requirements were introduced in 2006, and later updated in 2009.
Supplier requirements
CSR requirements for suppliers

Since 1996 the Volvo Group has gradually increased its requirements on suppliers regarding environmental issues, business ethics and social responsibility aspects.

Supplier requirements and assessment
The steering document on Corporate Social Responsibility for the supply chain includes a self-assessment tool and specific requirements. The CSR assessment is an opportunity to present the supplier with an overview of how well the supplier complies with the Volvo Group’s requirements. The assessment poses approximately 40 questions on issues such as:

- Social performance
- Work environment and conditions
- Workforce rights including freedom of association and non-discrimination
- Child and forced labor
- Environmental care
- Business ethics.

Requirements in many cases include stopping parameters, minimum standards of performance and a requirement for an action plan if the supplier does not achieve these critical aspects.

In addition, other specific CSR-requirements are e.g.;
- Comply with the laws and regulations of the countries of operation
- Suppliers are responsible for deploying the requirements on their suppliers
- Maintain an open dialogue with the Volvo Group companies concerning achievements, trends and possibilities for improvements in the area of CSR
- Systematize compliance with the Volvo Group’s Code of Conduct
- Appoint a senior executive who is responsible for compliance with the United Nations’ Global Compact initiative or equal international charter

Environmental requirements
The environmental requirements have been communicated in a separate document since they were formulated in 1996. The requirements entail in many cases third-party certified environmental management systems (ISO 14001) and compliance with the Volvo Group’s standpoint on hazardous substances and continuous improvement.

During 2011, we reviewed and up-dated our environmental requirements due to the European Union’s new legislation on chemicals, REACH.

As a result of our CSR strategy project, the processes and requirements will be reviewed during 2012.

Internal implementation
Each purchasing organization within the Group is represented in the Purchasing CSR Supply Chain Network. The representatives are responsible for implementing the procedures and following up the application of the requirements in their organization.

In order to support implementation, purchasers have been provided with information and training material, including e-learning on general CSR issues.

Focused audits were conducted in 2011 on certain purchasing organizations to assess the implementation of the requirements into the sourcing process. The findings will be used to further improve the responsible sourcing program and process.
Evaluating performance

We continuously evaluate supplier performance in relation to our requirements. To ensure that our processes are robust, a third-party auditor and representatives from the Volvo Group visited suppliers in 2010 to verify that the assessment process yields the expected result. Focused audits were conducted in 2011 for certain purchasing organizations to follow up the implementation of the requirements. These findings are used to enhance guidelines on assessment, development of the process and training materials.

Organization and responsibilities

All relevant instructions, including requirements and information about the evaluation process and the Volvo Group’s Code of Conduct are available at the Supplier Portal website. Each company in the Volvo Group is responsible for requiring that the suppliers fill in the self-assessment as well as for ensuring that there is a contact person to maintain an ongoing dialogue with the supplier.

We have developed guidelines and checklists to help rate performance consistently across the Group. Purchasing organizations in the Volvo Group are organized in a Purchasing CSR Supply Chain Network. This network coordinates and monitors CSR requirements and improves CSR processes, communication and education. The network is coordinated by a purchasing representative who reports to the Global Purchasing Council and the Volvo Group CSR and Sustainability Committee.

Evaluating our suppliers’ CSR performance

The CSR requirements are integrated into the sourcing process in each company within the Group to enable us to track, evaluate and communicate the CSR performance of our suppliers. The Volvo Group’s suppliers can be divided into two groups:

- suppliers of automotive products (direct material used in our hard products such as trucks, buses and construction equipment)
- suppliers of non-automotive products (indirect material).

In the centralized purchasing, more than 39,000 suppliers delivered products and services to the Volvo Group in 2011. Approximately 6,000 are suppliers of direct material. We have opted for a self-assessment approach as opposed to conducting large numbers of site audits.

Existing suppliers

Suppliers are asked to fill in a self-assessment form covering CSR requirements to evaluate CSR performance. If the suppliers do not fulfil our requirements, the issue must be advocated addressed which in many cases includes a remedy plan.

Potential suppliers

Potential suppliers are evaluated by a quality engineer using the Group’s Supplier Evaluation Model, which includes environmental and CSR requirements. Since 2009, most of the new suppliers must be approved by the Global Sourcing Committee.

Results from the assessments conducted in 2011

Automotive product purchasing

Some 63% of our purchasing spend derives from suppliers that completed the self-assessment during 2010 and 2011. 73% of the suppliers that completed the assessment passed. Almost exclusively, the main reason for not passing the requirements is due to a lack of adequate systems at the supplier to pass on the requirements to their suppliers. 83% of the suppliers from countries considered to be high risk from a CSR perspective completed the self-assessment.
When examining expenditure in terms of suppliers of direct materials, more than 85% derived from suppliers that are certified in accordance with ISO 14001:2004 or equivalent.

Non-automotive purchasing
Non-automotive products include any products or services that are not directly used in our automotive products. This includes everything from cleaning services to office furniture, travels, education or training, communication services and merchandise and so forth.

Because of the large number of suppliers in this category, we have focused on suppliers in high- and medium-risk countries according to the Volvo Group’s risk model. During 2011, approximately 2,000 requests for suppliers to fill in the self-assessment were sent out. More than 1,100 suppliers completed the assessment of which 64% passed.

Premium suppliers
As a way of encouraging and highlighting suppliers’ compliance with the Volvo Group’s requirements, we instituted an award for ‘premium suppliers’ in 2006. This award should be regarded as a seal of quality and requires compliance with all aspects of the CSR requirements.

Defining risk
As an important tool for purchasing departments, we have developed a risk-methodology for identifying suppliers located in risky countries from a CSR perspective. The country risk assessment is based on human rights, labour standard ratings and the incidence of corruption. The aggregated scores produce a risk classification; high, medium or low risk.

For non-automotive products, we also take into account the risk level of each product or service segment. For instance, merchandise, personal safety equipment, temporary labor, construction and waste management are associated with high risks.

In 2012, we will continue to focus on assessing suppliers in identified high- and medium-risk countries from a CSR perspective and to work with the non-approved suppliers to ensure that our requirements are met.

Did you know?
More than 39,000 suppliers delivered products and services to the Volvo Group in 2011.
Investments for the future
Staying ahead in a competitive environment

The Volvo Group invests significant resources into research and development to find more efficient technologies and sustainable transport solutions that ensure viability and competitiveness. It is equally important to invest in organizational efficiency – to ensure that we are able to secure the means needed to stay ahead.

Investments in research and development
To remain competitive in the market, we need to continue offering products and services developed with a focus on our customers’ demands, including environmentally-enhanced products. It is crucial to our success that our employees possess the right skills and competencies and for us to continue to invest in research and development (R&D).

We are constantly working on improving product performance. Our R&D is long-term, focusing on breakthrough technologies and seeking to reduce the environmental impact of our products and to develop sustainable transport solutions. Our investments in R&D have remained relatively high over the last economic cycles.

In 2011, investments amounted to SEK 13.3 billion, compared with SEK 13 billion in 2010.

A large part of our R&D investments are related to reducing engine emissions and lowering fuel consumption. Most of our R&D is conducted in Sweden, France, the US and Japan.

In 2011, governmental grants amounting to SEK 783 M (472) were received of which SEK 775 M (413) was reported in the income statement. Tax credits are included at SEK 545 (204) M, related to product development in France and the US.

The grants were mainly from the European Commission and the Swedish Government.

Some R&D investments in specific projects are done by Volvo Group’s venture capital company Volvo Technology Transfer (VTT). VTT creates value by developing and supporting new businesses of relevance to the Volvo Group. Since 1997, VTT has made investments in various fields including environmental technologies and sustainable businesses.

Our R&D is long-term, focusing on pioneering technologies and seeking to reduce the environmental impact of our products and to develop sustainable transport solutions.

Investments in production facilities
During 2011, investments in property, plant and equipment amounted to SEK 8.5 (7.1) billion. Major investments related to new product programs, development costs and adapting production facilities.

Focus on internal efficiency
To continue to be successful we not only need to invest in product development and research, we also need to ensure that the Volvo Group organization is empowered and able to work as efficiently as possible. Our focus is on reducing production costs and costs related to sales and administration, as well as making product development and other processes more efficient to increase profitability. We continuously work on increasing the efficiency of our production system to increase productivity. Furthermore, a resource-efficiency approach is well integrated in our culture and is an important priority ahead.

Product development and growth
Moving forward, our strategy focuses mainly on organic growth rather than acquisitions. At this point, we have achieved critical volumes in most markets and in most product segments. We will devote development resources to the design of cost-effective products based on shared architecture and technology. We are intensifying our product development activities to be able to launch cutting edge products in the coming years.
Developing skills
In addition, we are committed to investing in internal efficiency and productivity in all parts of the Group to improve profitability. Continued work on our strategic focus areas – skills, leadership, workplace safety, health and wellbeing and company culture – will help us attract and retain employees to meet future challenges.

Our products, services and transport solutions are developed in close cooperation with our customers with the aim of improving their productivity and profitability.

Customers in focus
Our products, services and transport solutions are developed in close cooperation with our customers. We believe that the reliability, endurance, driving performance, high fuel efficiency and high environmental performance of our products really do improve our customers’ productivity and profitability.

We aim to be number one in customer satisfaction and our customers’ closest business partner. All companies in the Group measure customer satisfaction.

We have different approaches for customer feedback across the Group. Each product company has a database system for handling complaints, orders, customer services, quality requests, dealer quality requests and so forth. The information contained in this system is used in our product development process. Our truck customers can contact our Action 24 service to receive support or to ask questions, such as where the closest workshop is located.

We also conduct a Global Brand Tracking Survey to measure customers’ perception of the Group’s brand. This is based on interviews with decision-makers in selected key markets, including customers and non-customers.

More than 99% of the employees in the Volvo Group work in operations certified by a third-party auditor in accordance with the quality management system ISO 9001:2008. We recognize the importance of a strong dealer network to provide our customers with the best availability and service and we have made significant investments in these aspects over the years.

When dealing with our large customers we are noticing an increase in questions on our CSR performance.

Did you know?
More than 99% of employees in the Volvo Group work in operations certified by a third-party auditor in accordance with the quality management system ISO 9001:2008.
Sustainable investments
Investing in tomorrow’s technologies

Johan Carlsson is President of Volvo Technology Transfer, VTT, one of the transport industry’s most successful corporate venture capital companies. Since 1997, VTT has made successful investments in various fields including environmental technologies and sustainable business.

"Founded in 1997, VTT is an investment company owned by the Volvo Group. VTT invests in businesses on the leading edge of the transport industry. Each investment should have a positive return in itself while also contributing to the growth and competitiveness of the Volvo Group.

All investments are based on Volvo Group future strategies and each investment aims at driving and increasing the robustness of our strategies. To fulfill our vision of becoming the world leader in sustainable transport solutions, investments are made to pioneer new products and services. Typically, the investments are related to long and medium-term business and technology needs.

A decade ago, our investments were highly related to fuel efficiency, e.g. in fuel-cells and batteries. Even then we could see that such technologies would have significant impact on vehicle’s fuel-consumption. Today, focus is still on improving transportation efficiency by, for example, connecting the vehicles in global or local transportation systems and increasing service to customers. We continuously search for the best companies to cooperate with and invest in.

Focusing on environmentally enhanced technology
Each VTT investment should contribute to the Volvo Group delivering sustainable transport solutions to customers. This can include investing in new hybrid solutions, urban transportation systems and new products requested by our customers.

A recent example includes our investments in the cleaning of natural gas from landfills. Cleangas is a carbon neutral fuel, thus contributing to reduced environmental impact from transports. This is a typical example of a ‘Clean Tech investment’.

Develop, acquire or make it a supplier
Until now, we have mainly invested in ‘start ups’, that is, companies in the phase of testing a product. We will leave these very early ones for more mature business stages; ‘scale-ups’, which, having built products and tested them, are now looking for a partner to grow the business faster as well as companies running a mature business looking for new markets. We can choose to develop a company, acquire it or make it a supplier.

When assessing a possible investment, we not only look at the company’s isolated potential, but also the potential associated with the Volvo Group. To find these companies, we cooperate with an extensive global network of entrepreneurs, universities and other investors.

As investors we are dedicated to helping the company succeed. We do not engage in short term investments or ‘quick fixes,’ or in investments which may harm the environment or other assets.

In our experience, the best businesses have sustainability embedded in their business model.

For the company, the added value is money, competence and capability. They come to market faster, and they come into contact with companies and businesses.

We invest in high-potential/high-risk companies. We make thorough risk assessments and due diligence, looking into all aspects of the business including balance sheets and history, to determine whether it is a sound business. A prerequisite is that we can foresee that the company will grow fast, be attractive for deeper partnership, and that the parties mutually will make good business and be more profitable thanks to this partnership."
Executive remuneration
Remuneration policy supporting long-term growth

Remuneration schemes in the Volvo Group are designed to attract and retain qualified managers and at the same time promote sustainable growth and value creation. At the Annual General Meeting, shareholders decide on a policy on remuneration to senior executives.

The Remuneration Committee, which is a committee within the Board of Directors, prepares and the Board of Directors decides on terms of employment and remuneration for the CEO and remuneration principles for other members of Group management. Furthermore, the Remuneration Committee shall approve proposals for the remuneration of other members of Group management in accordance with the principles established by the Board of Directors.

Group management and a number of other senior executives receive variable remuneration in addition to fixed salaries. Variable remuneration is in most cases based on the fulfilment of certain improvement targets or financial targets.

Before each Annual General Meeting, the Board of Directors evaluates whether a share or share-price related incentive program should be proposed to the Annual General Meeting. The Annual General Meeting decides upon such programs.

Share-based incentive program
In 2011, The Annual General Meeting adopted the Board of Directors’ motion concerning a long-term share-based incentive program, comprising the years 2011–2013, for a maximum of 300 senior executives in the Volvo Group. In order to participate, the executives must invest a proportion of their salary in Volvo shares and retain these shares and continue to be employed by the Volvo Group for at least three years after the investment has been made.

Financial year 2011
The Annual General Meeting decides on principles for remuneration and other employment terms for members of Group management. The Annual General Meeting also decides on the remuneration to be paid to the members of the Board of Directors.

The remuneration principles adopted by the Annual General Meeting held on April 6, 2011, can be summarized as follows: remuneration and other employment terms for the Group management shall be competitive to ensure that the Volvo Group can attract and retain skilled executives. The fixed salary shall be competitive and shall reflect the individual’s area of responsibility and performance.
Environmental responsibility
Reducing environmental impact

Highlights in 2011

- 400 hybrid buses sold (2011)
- Volvo Environment Prize Foundation awarded John Schellnhuber the 2011 prize for his outstanding leadership in the development of Earth System science (2011)
- Volvo Trucks started selling the Volvo FE Hybrid to customers in selected European markets (2011)
- The Renault Midlum is the world’s largest all electric-powered truck to be tested by a logistics company in an urban environment (2011)
- Volvo Construction Equipment and Volvo Bus joined the WWF Climate Savers program (2011)
- Since May 2011, Volvo Penta’s engine plant in Vara, in Sweden, has been powered without using any fossil fuel and is considered to be carbon dioxide-neutral (2011)

Product impact
Reducing fuel consumption through technology, attitudes and behavior. See page 60.

Environmental data
On www.volvogroup.com/responsibility, you can find our Environmental data report from the Volvo Group’s production facilities.

The Volvo Group’s vision is to become the world leader in sustainable transport solutions.

As one of the Volvo Group’s core values, environmental care is at the heart of our business. By continuously introducing safer and more efficient products and pioneering solutions, the Volvo Group reduces the environmental impact of the use of our products.

We take the environmental impact at all stages of the product lifecycle into account – from the first sketches on the drawing board, throughout its service life until it is recycled. At the same time, energy-efficient products and solutions mean significant savings for our customers.

We also strive to improve efficiency and minimize the negative impact from our own production. The long-term ambition for our production is to become carbon dioxide neutral.

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Environmental priorities
Environmental responsibility is one part of sustainable transports

Efficient transport solutions is crucial to societal and economic development. At the same time, transportation has a negative impact on the environment in the form of emissions that contribute to climate change. The Volvo Group early recognized that we have a responsibility to reduce the negative environmental impact of our products as well as from production – a responsibility of highest importance to us.

Environmental care is a core value
“Environmental care” is one of the Volvo Group’s core values. In 1972, during the United Nations Conference on the Human Environment in Stockholm, Sweden, we launched our first environmental position on mobility and the environment. Since then we have continuously communicated and trained employees and management on environmental responsibility issues. Today, environmental issues are an integral part of our vision, business strategy and daily work.

Climate change is one of the greatest challenges faced by mankind. We believe that carbon dioxide neutral transport is not a utopian dream. Our long-term ambition is to make all our production plants carbon dioxide neutral.

A holistic approach to environmental responsibility
The Volvo Group’s Environmental Policy is the foundation of our environmental work and includes four strategies:

- **Holistic approach** – the environmental impact of products shall be assessed from a lifecycle perspective – from concept to disassembly
- **Continual improvement** – environmental programs must be integrated and monitored in all operations
- **Technological development** – environmental requirements are to be met through active research and development
- **Efficient resource utilization** – the entire lifecycle of products and processes must be taken into account to ensure optimum resource utilization.

Strategic challenge
The Volvo Group’s environmental agenda identifies the most important environmental issues, prioritizing the projects that provide the most business value over a three-year period. The process ensures that the agenda is focusing on the most relevant issues. The current areas included are:

- **Energy efficiency** – high efficiency in products and production
- **Climate change** – high fuel efficiency in products and low emissions for all transport work
- **Climate change** – our long-term ambition is to make all production sites carbon dioxide neutral
- **Renewable fuels** – solutions for alternatively fuelled power trains and products
- **Communication** – communicating environmental features to the market and society.

Anti-greenwash
In 2011, the Volvo Group developed a directive on how to communicate about environmentally-enhanced products such as hybrid solutions and vehicles that can operate on renewable fuels. The purpose is to ensure that our communication about the environmental performance of our products is true and not misleading our customers and other stakeholders.
Climate challenge
Transport industry faced with the challenge of climate change

Transportation is closely linked to the every day needs of many people, and it also plays an important role in the development of welfare and growth. Climate change is one of the most complex and challenging issues of our time. The Volvo Group is committed to developing solutions that enhance mobility while reducing impact on the environment. We are convinced that our future products will remain an important part of a sustainable society.

The challenge – reducing emissions of greenhouse gases
The European Union's target for the transport sector is a reduction of greenhouse gases of 20% by 2030, based on 2008 levels, and at least 60% by 2050, with 1990 as the baseline. In urban transports, the target is to achieve essentially carbon dioxide-neutral city logistics in major urban centers by 2030.

The European Union has stated that new technologies for vehicles, through new engines, material and design, and traffic management as well as cleaner energy use through new fuels and drivelines is necessary to decrease the impact of transport. These are all areas prioritized by the Volvo Group, and major resources are dedicated to them.

Road transport emissions
Climate change is very much a global issue and requires global action. According to the Intergovernmental Panel of Climate Change (IPCC), greenhouse gases must decrease by 50–80% between 2000 and 2050.

Research shows that transport is responsible for approximately 13% of the total greenhouse gas emissions caused by humans. Goods transports on roads account for about 4% globally.

Preparing for forthcoming carbon dioxide regulation
The Volvo Group’s research and development takes into account the cost of, access to and availability of fuel, as well as legislation in the environmental area. Continued problems with air pollution and climate change entail more stringent legislation. We focus our research and development on the development of energy-efficient engines, hybrid drivelines, electrified vehicles and vehicles that can be operated on renewable fuels. The Volvo Group also participates in different partnerships for the development of efficient transport systems.

At the Volvo Group, we are closely monitoring and participating in the development of forthcoming carbon dioxide-related regulation for heavy duty vehicles. Fuel consumption has already been regulated in China, and Japan will follow in 2015. The US will introduce a greenhouse gas-emission regulation in 2014, and a corresponding fuel consumption regulation 2016. We are also monitoring and participating in the EU debate regarding greenhouse gas/fuel consumption certification of heavy-duty vehicles.

Addressing climate change – part of the Volvo Group strategy
The Volvo Group recognizes climate change and is committed to reducing the climate impact of transports. Our most important contribution is to develop solutions that increase fuel efficiency and to introduce vehicles that use renewable fuel. We also strive to minimize the impact of our own production processes. In addition, we are engaged in research and demonstration activities related to the efficiency of the transport system as such.

These aspects are integrated into our environmental agenda and form part of our prioritized areas. As a Group,
we are striving to minimize the climate impact of our activities by focusing on:

- The reduction of energy consumption and departure from energy from fossil fuels in production processes
- Developing alternative drivelines and vehicles operating on renewable fuels
- Decreasing carbon dioxide emissions from our internal transports.

Cooperating with actors in society

We believe in the ability and willingness of people to find solutions to environmental problems. We therefore make efforts to increase awareness of environmental issues related to the transport industry. We work together with authorities in different countries on subsidies and grants for the development of environmentally enhanced products, and for incentives for our customers to enable the transition to more sustainable transport solutions.

Many countries have been given the incentive to encourage the development towards a low-carbon society. Access to new funding for specific measures in developing countries can provide an important opportunity for the Volvo Group. We can contribute to new projects with transport solutions and low-carbon technology.

Public-private partnerships

Climate partnership with WWF

In 2010, the Volvo Group became the world’s first manufacturer in the automotive industry to join the World Wildlife Fund for Nature’s (WWF) Climate Savers Program.

In 2011, it was agreed that Volvo Construction Equipment and Volvo Bus Cooperation should join the Climate Savers program. Volvo Group’s joint-venture company, SDLG, which manufactures construction equipment in China, became the first Chinese company to join the Climate Savers Program. The partnership was launched during a ceremony in February 2012 in China.

Volvo Group’s joint-venture company, SDLG, became the first Chinese company to join the Climate Savers Program.

Being a partner in Climate Savers Program, we have agreed to even more ambitious emission targets for greenhouse gases. The objective is to reduce the total amount of carbon dioxide emitted by trucks, construction equipment and buses manufactured in the Group through 2014 by more than 30 million tons, compared with vehicles manufactured in 2008. 30 million tons is the equivalent of the total carbon dioxide emitted by Sweden in a seven month period.

The results will be monitored by independent technical experts.

Sustainable Urban Transports

The Volvo Group is participating in different initiatives on efficient transport solutions. One project is called Sustainable Urban Transports (SUT), which aims to define how transport in city centers will function in the future. The project has been funded by VINNOVA (the Swedish Governmental Agency for Innovation Systems).

Partnership for carbon dioxide neutral transportation

The KNEG (Climate Neutral Freight Transportation) network gathers a large number of Swedish companies, researchers, organizations and public authorities. The goal is to reduce the climate impact of goods transport on Swedish roads.

The objective of each participating company is to cut in half the emissions from a typical Swedish long-haul transport operation by 2020 compared with 2005. Volvo Trucks and Volvo Logistics will:

- Improve fuel efficiency of Volvo Trucks with at least 1% annually
- Retain the lead in the introduction of hybrid technology for heavy-duty trucks
- Actively promote a shift to alternative fuel and take a leading role in the development of vehicles adapted to run on alternative fuels
- Work to promote transport solutions that contribute to increased transport efficiency and reduced emissions of carbon dioxide
- Encourage drivers to undergo fuel-efficient driving training
- Be the leading transport buyer in promoting alternative fuels
- Actively work for better infrastructure and longer vehicles, and promote an increase of the maximum vehicle length in Europe to 25.25 meters
- Always include sea and rail when considering new transport flows
- Increase the trucks filling rate every year and constantly improve the efficiency of logistic systems
- Cooperate with other buyers of logistic services for increased efficiency and better balance.

ETT project

The ETT project is one part of KNEG. ETT is a concept for energy-efficient transport solutions based on a module system for timber transport. Volvo participate in the project and a vehicle was built under the direction of Volvo.

By using longer trucks (30 m) additional timber can be loaded. Evaluation of the project took place after 28 months. By that time the trucks had been running 640,000 km with approximately 130,000 m³ freight. By using longer trucks and operating on renewable fuels, the carbon dioxide emission decreased by 225 tons and resulted in 45% less transports.

Did you know?

According to the Intergovernmental Panel of Climate Change (IPCC), greenhouse gases must decrease by 50–80% between 2000 and 2050.
Product development
Systematic approach towards sustainable solutions

The Volvo Group works to reduce the environmental impact of our products and develops more efficient solutions for our customers, thus creating value and at the same time contributing to a sustainable society. Innovative solutions and breakthrough vehicle technology is the result of a systematic approach to environmentally-enhanced product development.

Environmental impact assessment for a truck in long-haul operation

Leading research and development
Research and development (R&D) at the Volvo Group relies on multidisciplines. By coordinating R&D initiatives, as well as general processes and tools, substantial economies of scale are achieved. About 50% of the Volvo Group’s R&D is conducted in Sweden, with the remainder distributed between locations in France, US, Brazil and Japan.

We are involved in a comprehensive series of cooperative ventures with authorities, research bodies and academic institutions to advance the technologies needed for future product development.

Development process including environment and safety
The Volvo Group’s product development is affected by changes in society, legislation and the needs of customers as well as new technology.

We are a driving force in the industry within the areas of environment and energy efficiency. Lower fuel consumption provides dual benefits – less impact on the environment and lower costs for customers. We have three parallel approaches for environmentally-enhanced product development:

- Attain high fuel efficiency and low emissions throughout the life cycle
- Develop alternatives that complement the diesel engine, such as hybrid drivelines that offer potential energy storage
- Identify and develop engine and vehicle technology for renewable fuels.

Approximately 90% of the environmental impact results from the use of the products. Consequently, our main focus is on reducing the environmental impact of products in use.

LCA broadens the perspective and provides insights
Each new product from the Volvo Group should have less environmental impact than the product it replaces. We use Life Cycle Analysis (LCA) to map a product’s environmental impact in order to make informed decisions in the development process.

Findings from analyses indicate that approximately 90% of the environmental impact results from the use of the products. We therefore focus on reducing the environmental impact of products in use.

Environmental Product Declaration
For many of our products we give customers an Environmental Product Declaration (EPD), based on the results from the LCA. The purpose is to help customers better understand the environmental impact of the product, and help them to make more informed choices when choosing vehicles. The EPD is divided into three sections:

- ‘Production’ provides information about energy consumption, emissions and waste during the production of our products
- ‘Use’ presents fuel consumption, emissions and spare parts utilization during the use phase of our products
- ‘End of Life’ deals with the scrapping and recycling of our products
All new Volvo trucks customers in Europe have access to detailed lifecycle analysis of their vehicles’ environmental footprint. The analysis covers five sections: materials and production, fuel, exhaust emissions, maintenance and end-of-life treatment.

Volvo Truck is unique in offering customers this information. The information helps customers verify their performance in relation to their own environmental targets.

The estimated fuel-saving potential for a standard truck will be 15% in 2020 compared with fuel consumption in 2005. This can be achieved by further improving the driveline, design, weight and tires.

Increasing fuel efficiency further

The most significant share of a vehicle’s environmental impact occurs during the use phase, and this is largely attributed to fuel consumption and the use of crude oil and fuel production.

The estimated fuel-saving potential for a standard truck will be 15% in 2020 compared with fuel consumption in 2005. This can be achieved by further improving the driveline, design, weight and tires.

New technology can be used to achieve more significant savings. For instance, the use of a hybrid driveline may improve fuel savings by up to 37% for certain city bus operations.

We support the global harmonization of emission regulations when these are competitively- and technology-neutral. The Volvo Group is working to meet the future Euro VI legislation, which will come into effect on January 1, 2014, in the EU. NOX and PM will be reduced by 97% from the level in the early 1990s for the coming Euro VI, thereby reaching very low levels.

### Emission regulations

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<tr>
<th>Emission regulations</th>
<th>Reduction in PM</th>
<th>Reduction in NOX</th>
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<tbody>
<tr>
<td>Euro IV – reference Euro III</td>
<td>80%</td>
<td>30%</td>
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<tr>
<td>Euro V – reference Euro III</td>
<td>80%</td>
<td>60%</td>
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<tr>
<td>EPA 2007 – reference EPA 2002</td>
<td>40%</td>
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<td>EPA 2010 – reference EPA 2002</td>
<td>80%</td>
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### Pioneering innovations

#### Diesel engine

The diesel engine represents the focus of the Volvo Group as it is currently the most efficient energy converter for commercial vehicles. Volvo Trucks and Mack Trucks were the first manufacturers to have their engines certified by the U.S. Environmental Protection Agency and the California Air Resources Board as meeting EPA 2010 emissions regulation, which is currently the most stringent standard in the world.

The vehicles that meet the demanding requirements of EPA 2010 are equipped with both:

- Exhaust Gas Recirculation (EGR)
- Selective Catalytic Reduction (SCR).

EGR lowers the amount of oxygen in the combustion chamber, which reduces combustion peak temperature and in doing so lowers the formation of NOX. With SCR technology, diesel exhaust fluid, a water solution of urea, is injected into the exhaust stream to convert NOX into harmless nitrogen and water vapor. It is necessary to use both techniques to achieve low emissions as well as high fuel efficiency in vehicles.

This unique technology has proven fuel savings of up to 5% compared with the previous engine model.

### Exhaust emissions

The environmental impact of exhaust emissions, PM (Particulate Matter) and NOX (Nitrogen Oxides), is significant as regards the product’s impact on local air quality over its life cycle.

Authorities around the world are imposing increasingly stringent requirements on emissions of NOX and PM from road transport. The latest emission regulation in the EU is Euro V, which was introduced in October 2009.

The most recent regulation in the US, EPA 2010, became effective in 2010. The Volvo Group’s products sold on these markets comply with, or exceed, current product regulations. There is also an emission regulation for off-road products which affects Volvo Construction Equipment’s products as well as some of Volvo Penta’s products.

Volvo Construction Equipment was one of the first to offer products compliant with the Tier 4 Interim emission regulation in the US and Stage IIIB in Europe. Particulate matters are reduced by 90% in these new products.
Inboard Performance System (IPS)

Volvo Penta’s Inboard Performance System (IPS) is a propulsion system for high-performance boats. Forward-facing propellers have proven superior in terms of performance, driveability and not least – fuel consumption. By working in undistributed water, the propulsion efficiency is far greater than on conventional inboard systems. The fact that the propeller thrust is aimed horizontally means that all power drives the boat forward, a feature also utilized in the Volvo Penta Aquamatic sterndrive. Fuel consumption can be cut by up to 30% at cruising speed compared with conventional technologies. The IPS also enables the use of flat-surface hulls, which means that the boats can be designed for minimum resistance. The unique technology also makes the boat quieter while also improving performance and maneuvering characteristics.

Lightweight design

Volvo Aero’s unique technologies are becoming increasingly important due to the focus on fuel economy and environmental issues in the aerospace industry. Lightweight structures have a major impact on fuel consumption and thus also on aircraft emissions. Lightweight structures, simulation and patented manufacturing methods cut development lead times, while simultaneously making engines quieter and reducing weight.

Lighter and more fuel-efficient bus

In 2011, Volvo Buses launched a new low-floor bus, the Volvo 7900. The new bus is lighter than its predecessor Volvo 7700, which is made of steel. With the body structure and roof made of aluminum, the weight has been significantly reduced by 550 kg resulting in lower fuel consumption. Another environmental benefit is that aluminum can be recycled by 90%.

Reducing the impact of hazardous substances

In 2009, the Global Automotive Declarable Substance List (GADSL) was introduced as a basic requirement for the reduction of hazardous substances in product components. The GADSL list includes substances designated as prohibited and/or declarable within the industry and was originally drawn up in collaboration between global automotive manufacturers and subcontractors. Substances present in parts and components are controlled through a system called Substrack, under which Volvo Group suppliers can report the material composition through the International Material Data System (IMDS). Using the Substrack system, the Volvo Group can work more efficiently to reduce the impact of hazardous substances and materials and obtain better control over the contents of our products. The use of material data systems also allows the Volvo Group to secure compliance with global material and chemical regulations. The European REACH regulation includes special control measures for substances in articles. For more information on the work with REACH in the Volvo Group see “Production performance”.

Recycling of vehicles

The Volvo Group’s products are largely recyclable, since by weight they consist of almost 85% metal, mostly iron, steel and aluminum. The additional materials are mainly plastic, rubber and material from electronics components.

Despite the large recyclability of the products, virgin material is needed to ensure the quality and solidity of our products.

The total weight of a truck, such as a Volvo FH tractor, is approximately 7,000 kg, of which approximately one third is made of recycled material.

Disassembly stations are available where trucks and buses can be disassembled for recycling and where reusable product parts can be harvested.

Remanufacturing spare parts

Remanufactured spare parts are offered as an alternative to new ones to prolong product life and save resources and costs for our customers. Before a part is remanufactured, it undergoes a stringent quality control process to ensure that our remanufactured parts meet the strictest tolerances.

Did you know?

The fuel consumption for a Volvo truck has been reduced by 40% since 1975, while regulated emissions of nitrogen oxides (NOx) and particulate matter (PM) have been reduced by some 90%.
Fuel saving potential
Looking at the whole picture

Creating sustainable transport solutions requires taking the full spectrum of the transport sector, such as the infrastructure, fuel producers, drivers and the vehicle, into account. This means that joint efforts with different actors in society are needed.

When examining the possibilities of further improvements to the driveline, design, weight and tires, the estimated fuel saving possibilities for a standard truck is 15% in 2020 compared with the fuel consumption in 2005. The other possible fuel savings presented in this illustration would be additions to that figure. Using a hybrid driveline can further improve the fuel savings.

1 l diesel = 2.6 kg CO₂

25.25 meters -15%
With a vehicle length of 25.25 meters instead of the current 18 meters in the EU, three truck-trailer sets can be replaced by two. The legislation on the EU level permits longer vehicles, but the legislation is not yet implemented in all national laws.

Low weight -5%
Thanks to a weight-optimized design, each vehicle can carry higher loads.

Tires -5%
Low rolling resistance tires can affect the fuel consumption by 5%.

Design -5%
Improving the cab design can reduce air resistance and contribute to a fuel saving by 5 to 10%.

Fuel efficient driving -5%
The concept of fuel-efficient driving enables the driver to lower the fuel consumption by 5% to 10%.

Side spoilers -5%
Adding side spoilers can contribute to reducing air resistance.

Efficient engines -3%
When Volvo Truck Euro V engine was introduced in the beginning of 2009, the fuel saving potential was 3% compared to the previous engine generation.
Global product development process
Product development in six stages

There are six stages to our product development cycle. Each stage has different environmental, quality and safety objectives that need to be met before proceeding to the next stage.

1. The scope of the project is defined by balancing project targets, development requirements and alternative solutions.
2. The concept is chosen through a process of market research, environmental impact assessments, and the business case.
3. The applied research phase, which includes the technical feasibility study.
4. The development phase includes building, verifying, validating and ratifying the product solution. Market, aftermarket, manufacturing and assembly solutions need to be refined by conducting feasibility studies.
5. The industrialization and commercialization phase where the industrial system has to be installed, prepared and verified to enable production.
6. The launch of the product and the aftermarket products.
Electromobility
Continued progress in hybrid technology

Hybrid technology is one of the most promising and competitive technologies for commercial vehicles. The Volvo Group is a leading player in hybrid technology for heavy-duty vehicles, with a unique solution that offers considerable fuel savings while reducing carbon dioxide emissions.

The solution can be used for different Volvo Group products and applications, thus reducing production costs and facilitating large-scale manufacturing. We have been demonstrating vehicles based on our hybrid solution, including:

• city buses
• refuse collection trucks and distribution trucks
• wheel loaders.

World leader in hybrid buses
In recent years, the bus industry has moved towards more efficient transport solutions with lower energy consumption and a reduction of regulated emissions.

Serial production of the Volvo Hybrid city bus and the Volvo Hybrid double-decker started in 2010. Significant fuel savings of up to 37% make this bus a commercially viable option compared with many other hybrid technologies.

The technology functions equally well when there is greater distance between bus stops, not just in highly congested traffic situations. The diesel engine does not start until the bus reaches 15–20 km/hour, which ensures a quiet and exhaust-free environment at bus stops. In addition, passenger capacity has increased compared with the standard diesel bus.

In 2011, Volvo Buses received its largest hybrid bus order to date, when the city of Curitiba in Brazil ordered 60 buses. A total of approximately 400 hybrid city buses have been sold to customers.

Next step in electrification
Volvo Buses has also taken the next step in electrification by commencing the development of a plug-in hybrid bus, based essentially on the same technology.

The plug-in hybrid, however, has a new type of battery and charging equipment that will make it possible to charge the battery via the electricity network. Simulations have
This document is a PDF-version of the Volvo Group’s CSR and Sustainability Report 2011. The complete report is available on www.volvogroup.com/responsibility.

showed a potential in decreasing energy consumption by up to 65% compared with today’s diesel buses. Field tests are expected to commence in 2012.

Commercial hybrid trucks
In 2011, Volvo Trucks commenced sales of heavy hybrid trucks, under the name Volvo FE Hybrid, to customers in selected European markets. The hybrid trucks permit fuel savings of up to 30%.

Joint company for new energy driveline systems
In China there is a huge interest for alternative drivelines and fuels. During World Expo in Shanghai 2010, Sunwin Bus delivered new energy-efficient buses including a number of electric buses.

In 2011, Volvo Buses and the Chinese company SAIC Motors agreed to form a new joint-venture company for the development of driveline systems for electric and hybrid drive. The company will conduct research and development, assemble new driveline systems and complete vehicle matching, prototype manufacturing and test new energy driveline systems. The new company will be based in Shanghai, China, and operated by Sunwin Bus.

Serial production of Renault’s hybrid
During the year, Renault Trucks delivered its first Renault Premium Hybrys-Tech truck assembled in serial production to important logistics companies. In 2007, Renault Trucks introduced the Hybris, an innovative urban concept vehicle powered by parallel hybrid technology (i.e. an internal combustion engine and an electric motor drive the wheels in different distribution configurations). The technology has the potential to cut fuel consumption and reduce CO₂ emissions from the truck by up to 30%.

Renault Maxity Electric: a fully electric truck
Renault Trucks has developed a fully electric truck offering, in partnership with electric commercial vehicle manufacturer PVI. This vehicle emits no particulate matters, nitrogen oxides or carbon dioxides when operating on electricity. It emits very low noise levels. Renault Maxity Electric can therefore be operated at night and in restricted low-emission zones.

After successful tests under actual operating conditions, Renault Trucks made its Renault Maxity Electric available for long-term rental on the French market. A dozen of units are being operated since. In 2011, Swedavia, Sweden’s largest airport operator, also tried the Maxity Electric, using it to collect small, recyclable items of waste at the Gothenburg Landvetter Airport. The vehicle was also tested by Renova, a company specialized in waste collection, processing and recycling.

World’s largest electric truck tests for Carrefour
The fully electric Renault Midlum, a larger truck than Renault Maxity, was developed in close technological collaboration between Renault Trucks, PVI and IFP Energies Nouvelles. The truck is to be tested by logistics company STEF-TFE in 2012 supplying fresh products to Carrefour Group store chains in the Lyon metropolitan area.

The 16 ton vehicle is the largest electric-powered truck to be put on the road for delivering food products in an urban environment. This distribution truck can carry 5.5 tons of goods, has an operating range of 100 km and can be fully recharged in only eight hours. This truck does not emit any PM, NOₓ or CO₂ and noise levels are low during operations using electric-power.

Low noise emissions
Noise is a growing problem in urban areas. Vehicles equipped with hybrid technology are almost silent when operating on the electric engine.

There are different regulations around the world for noise for the transport sector. The EU and South Korea have among the strictest noise level regulations: 80 decibels for heavy-duty vehicles. Other countries are gradually approaching the same level. The Volvo Group’s products meet these regulations.

Noise emission requirements for heavy-duty vehicles

Did you know?
In 2011, Volvo Buses received its largest hybrid bus order to date, when the city of Curitiba in Brazil ordered 60 buses.
Carbon dioxide-neutral transports
Focus on renewable fuels

Carbon dioxide-neutral vehicles are powered by fuel produced from renewable raw materials such as biomass. Vehicles that operate on renewable fuels do not add extra carbon dioxide to the atmosphere. The Volvo Group is actively exploring and developing technologies that operate on renewable or alternative fuels.

Need for reduced dependency on fossil fuel
Burning fossil fuels contributes to raising the levels of greenhouse gases in the atmosphere. The supply of easily accessible and cheap crude oil is diminishing, which will lead to higher fuel prices. More than 95% of the energy resources used in the transport sector today are oil-based, hence a significant potential for finding commercially viable alternatives.

Reducing dependency on fossil fuels such as oil, coal and natural gas by increasing the use of renewable fuels makes business and environmental sense.

Research on renewable fuels
The Volvo Group has conducted research on seven renewable fuels assessed from seven aspects and from a well-to-wheel perspective. All seven renewable fuels have the potential to reduce carbon dioxide emissions from transports.

Assessment of sustainability features of fuel categories

The results may vary for a particular fuel depending on the production process used.
It is crucial that these fuels can be produced using sustainable methods, for instance the production of raw material/biomass. The best solution in the short term is to mix renewable fuels that are currently available with today’s fossil fuels. Since we know that biomass will be a limited resource, it is very important to choose the most energy-efficient alternative from a well-to-wheel perspective.

Transit to renewable fuels requires collaboration

The diesel engine is one of the most efficient energy converters around. A major advantage of the diesel engine is that it can be adapted to run on a wide range of renewable fuels.

The transition to a low-carbon society requires collaboration. We have the technology and the know-how to develop carbon dioxide-neutral transports.

Already in 2007, we presented seven trucks, that can be operated on seven different renewable fuels. All of these can be driven without emitting any extra carbon dioxide emissions to the atmosphere.

The purpose of showcasing these vehicles was to create discussions with different actors in society. Cooperation between vehicle manufacturers, politicians, government agencies and fuel producers is necessary. For example, a functioning infrastructure for the production and distribution of new fuels needs to be developed to make this viable.

A major advantage of the diesel engine is that it can be adapted to run on a wide range of renewable fuels.

BioDME – one future alternative

The Volvo Group views DME (dimethyl ether) as one of the strong future alternatives to fossil fuel; it is energy-efficient and has a lower environmental impact.

DME is a gas that is easy to liquefy and transport. It also has a high cetane number, no sulfur and ultra-clean combustion properties. It has considerable potential for use as an automotive fuel when combined with renewable and low-carbon fuels.

DME can be derived from many sources, including renewable materials (biomass, waste and agricultural products) and fossil fuels (natural gas and coal). DME produced from biomass, known as BioDME, is highly energy-efficient, cost-competitive and emits low greenhouse gas emissions all the way from the source to the wheel.

Proceeding with collaboration on BioDME

The BioDME project is a joint venture to demonstrate the full technology chain involved in the production and distribution of DME from biomass to its use as vehicle fuel.

The project includes building a pilot facility, distribution and filling stations, fuel specification and project evaluation. The Volvo Group is coordinating the project and develops demonstration vehicles for field tests between 2010 and 2012. Two of the vehicles were handed over to customers for field tests in early 2011.

The field tests were made possible through a broad-based joint project involving such players as the EU, the Swedish Energy Agency, fuel companies and the transport industry. To show the potential of DME as an automotive fuel, in September 2011, a Volvo DME truck was displayed at an executive briefing organized by The International DME Association (IDA) in Brussels.

Use of Bio-DME instead of diesel will cut carbon dioxide emissions by 95%.

Continued progress combining methane and diesel

In 2011, Volvo Trucks launched the new Volvo FM Methane Diesel truck. The truck is powered by up to 75% gas and can considerably reduce CO2 emissions from heavy and long-distance transport operations. Volvo Trucks is the first manufacturer in Europe to start selling gas-powered trucks for long-haul operations.

The Volvo FM Methane Diesel will initially be sold in Europe. First up will be the Netherlands, Great Britain and Sweden, where the infrastructure and distribution for gas is established. Sales in other parts of the world will follow, as well as sales on additional European markets.

Volvo Trucks is the first manufacturer to have an efficient diesel engine fuelled by a mixture of methane gas and diesel. A diesel engine is 30–40% more efficient than many gas-operated engines on the market. Up to 75% of the diesel can be substituted by methane and if operated on biogas and biodiesel, CO2 emissions can be cut by up to 70% in the long term compared with traditional diesel operation.

The benefit of methane diesel technology is that methane fuel is already available as a fuel for vehicles.

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Did you know?

Volvo Trucks is the first manufacturer in Europe to start selling gas-powered trucks for long-haul operations.
Product impact
Solutions to support the most efficient use

Approximately 90% of the total environmental impact of the Volvo Group’s trucks is generated during use, mainly through fuel consumption. This impact can be reduced by developing more energy-efficient products. However, the behavior of drivers is also key to further decreasing fuel consumption. We actively contribute to reducing fuel consumption through technological solutions and awareness raising activities to influence attitudes and behavior.

Eco Driving targeting attitudes
Human behavior is an important factor in achieving sustainable transports. Eco Driving is a way of driving that helps reduce the vehicle’s fuel consumption, emissions and causes less wear and tear on the vehicle. This reduces costs and environmental impact. In addition to this, the risk of accidents is also reduced through the better planning of routes.

A number of Volvo Group companies worldwide offer driver training to improve vehicle knowledge while addressing safety issues and the reduction of fuel consumption. On average, drivers can save 5 to 10% in fuel consumption after participating in a course on fuel-efficient driving.

Volvo Truck Fuelwatch yields an immediate return on investment
The Volvo Group offers solutions that help customers use products in the most efficient way possible. Fuelwatch is a concept for various fuel-saving products and fuel management techniques for Volvo Truck’s customers. They include Fuel Management Service, product maintenance, upgrading of engines and transmissions and the Dynafleet system.

The data on vehicle and driver performance derived from these products helps customers to reduce costs and is vital for developing driver training. Research shows that fuel savings of between 5 and 15% are possible. The return on the investment is estimated to be less than one year, while the environmental impact is reduced.

Fuel-efficient offer from Renault Trucks
Renault Trucks offers the Renault Premium Optifuel package aimed at improving fuel efficiency. It consists of a driveline combined with aerodynamics and accessories, vehicle management software and ecodrive training. The fuel reduction is at least 6% compared with a standard truck. In 2011, a complementary solution called Optiroll was launched, which further decreases fuel consumption.

Lower operating costs with telematics
In 2011, Volvo Buses launched new solutions for reducing fuel consumption based on telematics. The new technology makes it easier to monitor fuel consumption and when the vehicle needs service.

Commute Greener!
Commute Greener! is a mobile-based application that calculates and keeps track of carbon dioxide emissions. The application easily transforms a cell phone into a tool to measure carbon dioxide emissions generated during everyday commuting, including travelling by bus, car, train, bicycle or other means of transport.

The Commute Greener! application has been developed by Volvo IT as an open innovation to welcome many partners. External target groups are corporations, cities, organizations and individuals. In addition to the application itself, Commute Greener! provides an engaging community website where
commuters can challenge each other to reduce their individual carbon dioxide footprint.

Mexico City receives certificate of achievement
Mexico City uses Commute Greener! for government employees with the objective of certifying results as part of their Environmental Management System, which encompasses 200,000 employees.

Five large organizations in the Mexico City administration were the first to use Commute Greener! in Mexico. In April, 2011, authorities in Mexico City earned the first certificate of achievement given in the Americas.

Mexico City obtained very encouraging results with dedicated groups showing CO₂ reductions of up to 40%. On a yearly basis, the CO₂ reductions could reach 75,000 tons for the defined segments.

Ride Share redefines car-pooling
A new function called Ride Share was added to the Commute Greener! service in 2011. Ride Share helps connect individuals who travel the same routes. The service not only includes car journeys, but also the best bus service for a certain route, and it can even help find someone to cycle to work with.

Did you know?
An average driver can save 5–10% in fuel consumption after participating in a course on fuel-efficient driving.
Production performance
Systematic approach to improving environmental performance

The Volvo Group was one of the first companies in the world to have an environmental management system certified according to ISO 14001 and today 99% of our production is certified in accordance with ISO 14001. We carefully monitor and manage our production processes to continuously increase the efficiency and performance in all of our facilities.

The Volvo Group has 65 production facilities in 20 countries, covering a wide range of production processes. Regardless of size and location, all of our production units must comply with our minimum requirements for environmental performance and an improvement program. The requirements include monitoring of energy consumption, waste levels and emissions to air and water, as well as specifying maximum emission levels to air and water.

In 2011, net sales rose by 17%, which has affected our emissions, energy consumption and use of resources.

Energy saving targets

Since 1995, the Volvo Group has worked systematically to improve energy efficiency. Since 2004, the Volvo Group has put an extra strong focus on energy reduction in its own processes. Energy consumption has since decreased by 46% per unit produced. Energy efficiency initiatives, such as controlled lighting and ventilation, turning off equipment from idle running and replacing old machinery have contributed to the result. We are proud of the results and continue to pursue energy savings.

The energy saving challenges for 2010–2012 are:

- To reduce idling losses, i.e. energy use outside production, by 50%
- An additional energy reduction of 15% per produced unit in 2012 compared with 2008
- Continue the work with investigating the possibility of making the Group’s facilities carbon neutral

Most of our focus has been on our production sites, although we are striving to include most parts of the value chain in our work. One example is Volvo Trucks, where we are working with our dealers to make the workshops more energy-efficient and increase the use of renewable energy.

Towards carbon dioxide neutral production

Our long-term ambition is to make our production carbon-neutral. Emissions of carbon dioxide decreased from 279,000 tons to 255,000 tons in 2011.

NRV is the first U.S. manufacturing facility to achieve ISO 50001 standards

Volvo Trucks’ New River Valley (NRV) assembly plant in Dublin, Virginia, is the first U.S. facility to be certified to the ISO 50001 standards. This achievement has been done under a pilot program supported by the U.S. Department of Energy (DOE). ISO 50001:2011 is a voluntary international standard on energy management system which outlines the framework for energy management.

Since 2004 we have reduced energy consumption by 46% per unit produced.
Increased focus on water management
Since 2010, water management is included in the strategic process that precedes the review of Group targets in our business plans, a process where companies are challenged to formulate ambitious goals.

Tough follow-up on waste
In an effort to further improve material efficiency and the responsible use of resources and also encourage a more active follow-up of waste related to specific raw materials, business areas were asked to set up indicators to follow up on key material usage in 2009.

Water is usually classified as either hazardous or non-hazardous, although definitions vary from country to country and change over time. Although our total amount of waste has decreased over time, changes in definitions have resulted in the amount of waste classified as hazardous increasing in recent years. The total amount of hazardous waste in 2011 was 25,943 tons, compared to 22,730 tons in 2010.
### Environmental performance in production, Industrial operations

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<tbody>
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<td>Energy consumption, GWh</td>
<td>2,471</td>
<td>2,315</td>
<td>1,888</td>
<td>2,530</td>
<td>2,426</td>
<td>2,612</td>
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<td>9.6</td>
<td>10.5</td>
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<td>14.3</td>
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<td>CO₂ emissions, 1,000 tons</td>
<td>255</td>
<td>279</td>
<td>213</td>
<td>291</td>
<td>242</td>
<td>282</td>
<td>292</td>
<td>293</td>
<td>298</td>
<td>307</td>
<td>316</td>
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<td>CO₂ emissions, tons/SEK M</td>
<td>0.8</td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.7</td>
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<td>Water consumption, 1,000 m³</td>
<td>7,970</td>
<td>7,519</td>
<td>6,637</td>
<td>8,205</td>
<td>7,067</td>
<td>7,596</td>
<td>7,419</td>
<td>8,495</td>
<td>8,687</td>
<td>9,202</td>
<td>9,187</td>
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<tr>
<td>Water consumption, m³/SEK M</td>
<td>26.2</td>
<td>29.2</td>
<td>31.8</td>
<td>27.8</td>
<td>27.9</td>
<td>30.6</td>
<td>32.1</td>
<td>42.2</td>
<td>49.1</td>
<td>52.0</td>
<td>50.9</td>
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<tr>
<td>NOₓ emissions, tons</td>
<td>474</td>
<td>719</td>
<td>322</td>
<td>800</td>
<td>542</td>
<td>606</td>
<td>672</td>
<td>645</td>
<td>570</td>
<td>726</td>
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<td>NOₓ emissions, kilos/SEK M</td>
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<td>2.8</td>
<td>1.5</td>
<td>2.7</td>
<td>2.1</td>
<td>2.4</td>
<td>2.9</td>
<td>3.2</td>
<td>3.3</td>
<td>4.1</td>
<td>4.0</td>
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<td>Solvent emissions, tons</td>
<td>2,554</td>
<td>2,294</td>
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<td>1,945</td>
<td>1,979</td>
<td>2,048</td>
<td>1,960</td>
<td>2,085</td>
<td>1,965</td>
<td>1,896</td>
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<td>Solvent emissions, kilos/SEK M</td>
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<td>8.9</td>
<td>6.9</td>
<td>6.6</td>
<td>7.8</td>
<td>8.3</td>
<td>8.5</td>
<td>10.3</td>
<td>11.2</td>
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<td>10.1</td>
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<td>Sulphur dioxide emissions, tons</td>
<td>34</td>
<td>33</td>
<td>38</td>
<td>64</td>
<td>58</td>
<td>69</td>
<td>209</td>
<td>184</td>
<td>200</td>
<td>173</td>
<td>308</td>
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<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
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<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
<td>1.7</td>
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<tr>
<td>Hazardous waste, tons</td>
<td>25,943</td>
<td>22,730</td>
<td>17,558</td>
<td>27,675</td>
<td>27,120</td>
<td>26,987</td>
<td>23,590</td>
<td>24,675</td>
<td>21,613</td>
<td>20,531</td>
<td>20,306</td>
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<td>Hazardous waste, kg/SEK M</td>
<td>85.5</td>
<td>88.0</td>
<td>84.0</td>
<td>94.0</td>
<td>107.0</td>
<td>108.8</td>
<td>102.0</td>
<td>122.1</td>
<td>124.0</td>
<td>116.0</td>
<td>112.0</td>
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<td>Net sales, SEK bn</td>
<td>303.6</td>
<td>257.4</td>
<td>208.5</td>
<td>294.9</td>
<td>253.2</td>
<td>248.1</td>
<td>231.2</td>
<td>202.1</td>
<td>174.8</td>
<td>177.1</td>
<td>180.6</td>
</tr>
</tbody>
</table>

1 Excluding UD Trucks and Ingersoll Rand Road Development.

### Noise

Noise levels from most of the Volvo Group’s plants are in general very low. Our target is to ensure that the external noise level, from our operations, measured at the nearest residential property does not exceed 60 dB(A).

### Environmental management systems

The implementation of environmental management systems improves the quality of our environmental programs and helps to assure the quality of data reported. 99% of the total workforce at the Volvo Group’s production plants were working in accordance with the certified environmental management system ISO 14001 by end of 2011. This means that the management system has been audited by a third party.

Currently, 63 of our 65 production sites have been awarded an ISO 14001 certification. The SDLG site in China, and the Volvo Construction Equipment site in Tultitlan, Mexico, have not yet been certified, although the Mexico site has a similar system, approved by governmental authorities. The work of implementing environmental management systems covers the Volvo Group’s processes, including product development, purchasing, sales and aftermarket and service.

Currently, 63 of our 65 production sites have been awarded an ISO 14001 certification.

### Audits ensure consistent processes and data collection

The Volvo Group has conducted internal environmental audits since 1980 to ensure adherence to the environmental policy. Environmental data is collected annually from production sites since 1990. Environmental audits help to monitor the environmental activities and examine the data. The audit program follows a set plan, although priority is given to auditing newly acquired operations or where the continuous improvement in environmental performance has become stagnant.

### Data collection and coverage

The Volvo Group had 65 (65) majority-owned production plants around the world at the end of 2011, each of which was included in the data reporting.

The Volvo Group has reported detailed environmental data since 1991. The data reporting is based on the global environmental standard for production plants that was introduced by Group management in 2000. This standard specifies minimum requirements and focuses on a number of key areas, including:

- Use of chemicals
- Energy consumption
- Water consumption
- Emissions to air and water
- Waste
- Noise.

The full Volvo Group Environmental Data Report includes about 40 indicators, and will be available at www.volvogroup.com from mid April, 2012.

### Environmental risk management

The consideration of environmental risk represents a component of the Volvo Group’s enterprise risk process. When assessing potential acquisitions of companies and real estate, audits consider environmental and social factors in addition to financial and legal aspects. The information provides the basis for action plans, if required.
All production plants must fulfill the minimum environmental requirements and submit to audits conducted by the Volvo Group’s Environmental manager and auditor, in order to minimize risk.

**Environmental permits**

All of the production plants in Sweden have the required environmental permits. 17 facilities in Sweden require permits that cover waste, noise and emissions to land, air and water. No permits had to be renewed in 2011. An annual inventory is made of polluted land on our properties. No remedial operations had to be done at real estate property in 2011. No spillages were reported in 2011.

**Remediation programs**

Audits may reveal a need for remedial work at contaminated properties used for former or current operations. Through an ongoing program of remedial measures, contamination discovered in refurbishment or rebuilding projects are dealt with immediately. Installations that pose the greatest risk of causing soil and groundwater contamination, such as underground storage tanks and underground piping systems, have been targeted for rebuilding work under an internal directive focusing on such installations.

**Did you know?**

Since May, 2011, Volvo Penta’s engine plant in Vara, in Sweden, has been powered without using any fossil fuels and is thus considered to be carbon dioxide neutral.
Transports and logistics
Leading logistics solutions

Volvo Logistics provides the entire Volvo Group and other customers with logistics solutions. All vehicles and transport services are insourced. Volvo Logistics also brings valuable knowledge and experience into Volvo Group’s product development process. To minimize environmental impact, we focus on smart logistics, reduced emissions, renewable fuels, energy efficiency and knowledge-enhancement.

Carbon footprint reduced by 22%
Between 2006 and 2010, emissions of carbon dioxide from the rail, road and short sea land-based transportation of goods to and from the Volvo Group’s plants in Europe, was reduced by 22%. A number of measures have been taken to decrease carbon dioxide emissions from transports.

Environmental surveys and audits of suppliers
Volvo Logistics requires suppliers of road transport solutions to demonstrate their preparedness with regard to engine emission requirements, fuel-efficient driver training and continuous improvements. These requirements are followed up by an annual Supplier Survey and random sample audits.

The data from the 2010 survey shows that 98% of the engines used in truck fleets in Europe are compliant with the Euro III or subsequent emission requirements — an improvement of 4 percentage points compared with the previous year. Some 42% of the trucks are compliant with Euro V and 20% were compliant with Euro IV.

In 2010, 75% of the major transport suppliers globally were certified in accordance with the environmental standard ISO 14001. Social and ethical requirements are included in supplier requirements specifications, in accordance with the Group’s requirements. Data for 2011 will be presented during the second quarter of 2012.

Calculating the environmental impact of transports
Volvo Logistics plans the logistics for material flows from suppliers to the Volvo Group’s plants and the transport of new vehicles from the plants to the dealers.

The EnvCalc tool is used to calculate emissions to air for new or changed transport routes or for choice of carriers. The calculation is based on the volume of goods, distance and mode of transport. The result is presented to the customer as Environmental Load Units (ELU) or broken down into the amounts of carbon dioxide, nitrogen oxide, sulphur oxide and particle matter emissions.

Volvo Logistics also offers customers a Logistics Emission Report for a specified transport scope, such as all inbound and outbound transports for a specific plant over one year.

Logistic Emission Reports were supplied to seven of the Volvo Construction Equipment plants in Europe, and to three Volvo Parts warehouses in 2011. These reports include a one-year compilation of all emissions from the inbound transports, as well as an analysis and recommendations of changes to reduce the emissions from the transports.

Volvo Packaging System
The Volvo Group uses a returnable packaging system to transport goods from suppliers to our plants, as well as for use within the plants. This packaging can be stacked, taking up minimal space when freighted and in turn minimizing environmental impact. The system comprises over 100 types of packaging in different materials such as wood, plastics, cardboard and metal.

Volvo Logistics has terminals around the world for collecting and cleaning packaging materials, which are reused until they no longer meet quality standards. All packaging is ultimately scrapped, with most parts being recycled into new materials or energy. Recycling is conducted by Volvo Logistics and through an outsourced operation.

Environmental impact is a vital aspect in the product development of new packaging. Volvo Logistics is using a Life Cycle Assessment tool to compare the environmental impact of different packaging materials.
Clean shipping and intermodal transports
A significant portion of our transports, measured in tonkilometers, are done by sea. Since 2010, all of our contracted sea carriers have been required to report the environmental impact of each of their vessels. The driving force of the Clean Shipping Project is a network of 30 of the largest export and import companies in Sweden, Germany and the Netherlands of which the Volvo Group is one.

The main objective of this project is to catalyze a process towards effectively functioning techniques for clean shipping and to place stringent but reasonable health and environmental demands on ship transport.

We clearly communicate environmental requirements for shipping operators in respect of chemicals, water, fuel and waste control, carbon dioxide, nitrogen oxides, sulfur oxides and particle matter, which have been formulated in a clean shipping index.

Longer trucks
The Volvo Group is in favor of flexible truck combinations based on present vehicles modules where longer combinations are a possibility to increase transport efficiency. The maximum length for truck and trailer is 25.25 meters in Sweden, and 18.75 meters for the rest of Europe. Increasing the truck length in Europe would mean that two trucks could carry what is currently transported by three trucks. This would benefit the environment and reduce congestion on European highways.

Volvo Logistics uses the longest truck available in Sweden aimed at reducing carbon dioxide emissions. A 32 meter long vehicle shuttles between our terminal in Arendal, Gothenburg and the Port of Gothenburg. This means that two 40-foot-long containers can be transported instead of one, a reduction of 20 grams of carbon dioxide per tonkilometer.

Did you know?
Between 2006 and 2010, emissions of carbon dioxide from the rail, road and short sea transportation of goods to and from the Volvo Group’s plants in Europe, was reduced by 22%.
Social responsibility
Contributing to a sustainable society

Highlights in 2011

- New Volvo Group Diversity and inclusion policy
- Launch of a Learning strategy and new global development programs for leaders
- New Volvo Group Recruitment policy
- 92% of the Volvo Group’s employees responded to the Volvo Group Attitude Survey

As a global provider of commercial transport solutions we strive to promote traffic safety and minimize injuries in the event of accidents. We also focus initiatives on being an attractive and responsible employer and building relations with the local society.

Engaged and motivated employees, who are willing to take part in Volvo Group’s development, are crucial to our future success. Investing in our employees is critical to remain competitive and sustainable, and it ultimately leads to increased customer satisfaction. We consider diversity a catalyst for innovation.

Respect for the individual represents an important component of the Volvo Group’s culture. We therefore support and protect human rights within our sphere of influence.

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A CSR pioneer
Case: Solange Fusco, Corporate Communications Manager, Volvo do Brasil. See page 86.

Towards zero accidents
Creating safer roads for everyone – traffic safety is our guiding star.
See page 69.
Towards zero accidents
Traffic safety as a guiding star since 1927

Road accidents are one of the world’s major public health problems. According to the World Health Organization, more than 1.2 million people are killed and 50 million are injured in traffic every year. Road traffic accidents are the most common cause of death among young people in many parts of the world. We are dedicated to using our expertise to create safer vehicles and traffic environment for everyone – traffic safety is our guiding star.

Dedicated action can improve traffic safety
Safety has been a guiding star for the Volvo Group since 1927. We are committed to continuing to develop safer trucks and buses. This ambition applies equally to construction equipment, marine engines and all other products from the Volvo Group. We cooperate with authorities, organizations and individuals that share our dedication to safety. Together we can make a real difference.

We are convinced that traffic accidents can be dramatically reduced. In the EU, for instance, the number of fatalities in traffic has declined by approximately by 50% since 1990 and safer vehicles have been a major contributing factor.

Vision: Zero accidents with the Volvo Group’s products
Our ultimate goal is zero accidents with the Volvo Group’s products. While we cannot guarantee that a bus or truck from the Volvo Group will never be in an accident, we are developing systems that prevent accidents from happening in the first place and reducing the consequences if an accident does occur.

One of the most common causes of traffic accidents is drivers not paying attention. Finding ways of reducing the risk of accidents caused by driver fatigue or inattention can have a large impact. Driver Alert Support is a mechanism that monitors and analyzes a truck driver’s lane-keeping behavior and kicks in when the driver shows signs of being tired.

The Volvo Group Internal Safety award
The Volvo Group Product and Traffic Safety Committee instituted an Internal Safety award in 2010 to further strengthen the focus on safety as a core value and to strive to maintain our position as the world leader in safety.

The aim is to encourage and motivate the companies to be creative in the area of product and traffic safety, to stimulate research and development in new safety features, to promote safety communication and to emphasize the importance of continuously working on improving safety.

The Brazilian Transform program was awarded the prize in 2010, for its 20 years of efforts in preventing accidents involving truck drivers. In 2011, a group of Japanese and Swedish specialists working with crash testing received the award.

Traffic Accident Research Team
If an accident occurs, our products are built to reduce the consequences. Volvo Truck’s Traffic Accident Research Team has investigated accidents on-site for 40 years, building up a unique bank of knowledge and experience from more than 1,500 accidents.

These experiences combined with our own research and test programs have given us solid insight into the causes of accidents and injuries — and what can be done to prevent them.

Preparing for a Decade of Action for Road Safety
The Volvo Group strongly supports the decision of the United Nations General Assembly to proclaim 2011–2020 a Decade of Action for Road Safety, which aims to save five million lives over a ten-year period. We believe that traffic safety needs to be prioritized on the international agenda.
In Europe, we strongly support ambitious targets for reducing road deaths and serious injuries by 2020. We advocate a goal of reducing road deaths by at least 50% between 2010 and 2020.

The Volvo Group is active in the development of an international Road Traffic Safety Management System (ISO 39001). This is a voluntary tool, complementary to legislation, and can be used by all organizations that directly or indirectly use roads. The ultimate goal is the elimination of deaths and serious injuries in the road transport system.

Stimulating debate and discussion to change attitudes
The human factor is decisive in more than 90% of traffic accidents. Tired or distracted drivers or those under the influence of alcohol represent a major part of the problem. Speed and not using seat belts are significant factors. The most advanced safety technology cannot fully compensate for shortcomings in drivers’ attitudes and behavior.

We cooperate with different stakeholders on safety-awareness issues like alertness, use of safety belts, alcohol and speed.

One example is driver training. In India, for instance, at least two customer drivers are trained for every Volvo truck sold. Drivers need to pass a test to qualify for the training program. More than 23,000 Indian drivers have been trained to date. Training segments include Sense of Responsibility, Fuel Efficient Driving and Traffic Safety.

The Volvo Research and Educational Foundations are financing a competence center on Road Safety & Urban Transport Planning in New Delhi. This center explores a wide range of transportation issues, from increased safety for pedestrians to traffic planning and policy-making.

Volvo do Brasil founded the Volvo Traffic Safety Program in Brazil in 1987 to reduce the number of road accidents. The program has involved thousands of people and is based on conferences, symposiums, seminars, training for professional drivers and interaction with schools, cities and communities.

The Safe & Sober campaign aims to reduce the number of deaths and injuries in Europe that are caused by drunk driving. One third of the 40,000 fatal road accidents in Europe every year are directly linked to alcohol.

Continued support for Safe & Sober
The Safe & Sober campaign is run by the independent, non-profit European Transport Safety Council (ETSC) with active support from Volvo Trucks. The campaign focuses primarily on politicians, opinion leaders, safety organizations and the transport industry.

The aim is to reduce the number of deaths and injuries in Europe that are caused by drunk driving. One third of the 40,000 fatal road accidents in Europe every year are directly linked to alcohol.

A series of debates known as the “Safe & Sober Talks” were held in selected member states throughout Europe in 2010. As part of the campaign, the Volvo Group and ETSC also aim to identify and support good practices and carry out training programs and information activities.

Making machines intelligent
The Volvo Group is a leading actor in the development of intelligent heavy-duty vehicles. The welfare of human beings is paramount in everything we do. The human perspective is in focus also when we develop solutions based on modern communication and information technology.

We have worked hard to develop vehicles that can “see” — for example, by detecting lane markers and obstacles. The next step is to make the vehicles “talk”. Many accidents could be prevented if vehicles on the road could communicate with each other and with infrastructure.

Intelligent Cooperative Systems increase the quality and reliability of the information available to drivers about the immediate surroundings. Road operators benefit from cooperative systems by receiving information about the vehicles, their position and road conditions. This will lead to a safer and more efficient use of our roads.

Intelligent Cooperative Systems have already been implemented in some of our research trucks.

Tomorrow’s technology in Volvo trucks today
Cooperative systems are still mainly at the research and demonstration stage. We believe that we will ultimately see full-scale systems in some parts of the world. This technology will open up new ways of travelling, such as vehicles that can drive themselves in long road trains on motorways.

Driving in a close formation convoy would improve traffic flow and journey times, offering greater comfort to drivers, reducing accidents and improving fuel consumption, and hence lowering carbon dioxide emissions.

The EU-financed SARTRE project conducted the first demonstration of its technology at the Volvo Proving Ground outside Gothenburg, Sweden in early 2011. The test conducted included a lead truck from Volvo Trucks and a single following car. While the technology is well under way, there is still much to do in order to gain public acceptance and produce the necessary legislation.

Promoting new technology with EuroTra Safety and Innovation Award
Volvo Trucks together with the European Transport Training Association (EuroTra) awarded the Safety and Innovation Award to Shell Chemicals and Bertocco. The companies had jointly developed a system that can simply and effectively help to reduce the risk of truck roll-over accidents.

Volvo Trucks wants to encourage good ideas that may help to improve traffic safety.

Did you know?
Volvo Truck’s Traffic Accident Research Team has investigated accidents on-site for 40 years, building up a unique database of knowledge and experience from more than 1,500 accidents.
Employees

Being an employer of choice

We aim to be an attractive and responsible employer of choice for both current and future employees. We will not succeed in pursuing the Volvo Group’s vision without engaged and motivated employees willing to take an active role in the Group’s development and future. Therefore, investing in employees’ development, health and wellbeing is a strategic choice for the Volvo Group.

Priorities for the Volvo Group as an employer of choice

Investing in our employees is a fundamental part of staying competitive, sustainable and profitable. We recognize that our employees represent an important factor in our success. We work in a variety of areas such as competence development, talent planning, health and wellbeing, work environment and leadership training, and actively seek feedback and the opinions of our employees. Our strategic focus areas include:

- Strategic competences
- Diversity and inclusive leadership
- Organizational agility

Our ambition is to offer interesting opportunities and a unique company culture that help us attract and retain the best people.

An attractive employer

The Volvo Group had 98,162 employees and 19,675 temporary employees and consultants at the end of 2011. This can be compared with 90,409 employees and 14,851 temporary employees and consultants at the end of 2010. We are very proud to be among the leaders in international benchmarking as both an attractive employer and a respected company.

Top employer award in Brazil

For the second time, Volvo do Brasil was rated as the best employer in Brazil. The survey was conducted by the Veja S/A and Exame magazines, covering 504 companies in different sectors. The survey ranks the best 150 employers in Brazil. Volvo do Brasil has 3,900 employees and headquarters in Curitiba. In the 2011 survey, Volvo do Brasil obtained excellent results in all categories covered by the survey.

Best company in the IT-consultant industry in Sweden

Again, Volvo IT reached a top score in the IT consultant category in “Karriärbarometer” (Career Barometer), a Swedish survey that is conducted by the company Universum, on an annual basis. In the list of companies in the Data/IT industry, the highest ranked IT consulting company was Volvo IT at number eight. The survey canvassed more than 9,000 so called young professionals, a group comprising people aged 40 and under, who have been working for between one and eight years.

From satisfied employees to engaged employees

The Volvo Group has conducted an annual employee survey, the Volvo Group Attitude Survey (VGAS), every year since 1999 with the exception of 2010. In 2011, a modernized version of VGAS was launched. A new feature is the introduction of an Employee Engagement Index (EEI) in addition to the Employee Satisfaction Index (ESI), which was previously measured.

The business outcomes of employee engagement is well proven and include increased customer satisfaction, operational excellence and profitable growth. Moreover, engagement contributes to enhancing individual and team perform-
Employee engagement and thus the organization’s capacity to change, learn and grow.

In the 2011 year’s VGAS, an overall employee engagement of 76% was reached for the Volvo Group. This can be compared with the global norm of 68%. The result in VGAS is benchmarked against an international database with data gathered from over 14 million employees, representing over 80 countries.

The VGAS reveals that the Volvo Group’s general strengths are the employees’ pride in manufacturing products of high quality and that they clearly understand their role and the business objectives.

Challenges are to improve the speed with which decisions are made and the implementation of changes and decisions. One of the desired effects of the Volvo Group’s reorganization in 2011 is precisely to increase the speed of implementation of decisions and a new vision was adopted in October 2011.

The response frequency in 2011 year’s VGAS was 92%.

The Volvo Group’s definition of employee engagement
Employee engagement is the extent to which employees are committed and enabled to go the extra mile for the long-term success of the organization and themselves.

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<thead>
<tr>
<th>Social responsibility, key figures</th>
<th>2011</th>
<th>2010</th>
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<tbody>
<tr>
<td>Number of employees at year-end</td>
<td>98,162</td>
<td>90,409</td>
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<tr>
<td>Share of women, %</td>
<td>17</td>
<td>16</td>
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<tr>
<td>Share of women, Board Members, %</td>
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<td>12</td>
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<tr>
<td>Share of women, Presidents and other senior executives, %</td>
<td>17</td>
<td>15</td>
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</tbody>
</table>

Geographic distribution of employees

- Sweden: 25%
- Europe, excl. Sweden: 31%
- North America: 16%
- South America: 5%
- Asia: 20%
- Other countries: 3%
It’s all about engagement

“An engaged employee brings body, soul and mind to work. We want to enable our employees to walk the extra mile – for themselves and for the company”, says Kerstin Renard. Head of Volvo Group Corporate Human Resources.

We strive to become a global team of high-performing people. This means that we develop, measure and reward top performance and high engagement. It also means that we try to take advantage of being global, and to deliver higher effectiveness through global cooperation and mobility.

In 2011, the Volvo Group Attitude Survey (VGAS), the yearly survey in which all Group employees are invited to take part, was updated, now focusing on an employee engagement index, instead of the former satisfaction index.

The VGAS takes place once a year, but it is a year-long process. Managers are responsible for analyzing the results of their team and, together with the team, establish and follow-through on action plans to further improve employee engagement.

Employee engagement is high on the agenda in many companies these days. However, what makes Volvo Group unique is that we clearly state that we want not only the company to be successful, but also the individuals.

The right conditions to succeed
Engaged employees are an essential foundation when we build the high performing organization we need for the future.

The business outcomes of this engagement are well proven and include increased customer satisfaction, operational excellence and profitable growth.

Moreover, engagement contributes to enhancing individual and team performance and thus the organization’s capacity to change, learn and grow.

If we can enable all employees to walk the extra mile, it will make an enormous difference in the total delivery!

However, engaged employees need to be given the right conditions in order to succeed, and that is the responsibility of the leaders. It is about motivation and having the right prerequisites!

To be able to contribute to the success, all in the Group also need good knowledge of the overall strategy and the objectives of our team, as well as clear individual targets including plans for competence development.

Day-to-day development
As a Volvo Group employee, you have a broad offer of competence development activities to choose from. It goes from e-learning and coaching to instructor-led programs. However, we regard your day-to-day work as the most important competence development.

This is where you develop your skills, learn from others and get feedback on your achievements. Important components include coaching and mentoring.

You can also work globally, either as an expatriate or on a short-term assignment or in global projects. We offer a global work environment with the opportunity to interact with and learn from colleagues from all over the world. Another way of developing your competence is to move from one business or function to another. Internal mobility also means that we as a company can make the best use of our collective expertise.

Every Volvo Group employee should feel that their competence and personality is taken advantage of in the best possible way.
The Volvo Way
Investing in our unique corporate culture

We are convinced that a cohesive culture based on Group-wide shared values strengthens our brands and makes the Volvo Group a more attractive employer and business partner.

Culture provides a competitive advantage
A cohesive culture provides a competitive advantage. Our unique corporate culture and shared values demonstrate what is important to us as a Group. The Volvo Way defines the Volvo Group companies and what makes working here special.

The Volvo Way is the fundamental Volvo Group policy that defines our culture and reflects our shared values. It shows what we stand for and what we aspire to be in the future.

The values and principles contained in The Volvo Way guide our daily efforts to effectively realize our business strategies. The purpose is to set a standard of excellence in building a high commitment and high performance organization.

The Volvo Way addresses business critical issues such as putting customers first, enhancing the alignment of cultures with the business strategy, creating people alignment and developing global leadership qualities. The core principle is about enabling people.

We need to be lean. We need empowered employees. We need to be accountable, aligned, agile, and able to execute decisions. We need to add customer value and drive change.

Living The Volvo Way
Every manager within the Volvo Group is responsible for informing their team and discussing how the values and principles should affect the team’s daily work.

One of the tools used for measuring the implementation of The Volvo Way is the annual employee survey (VGAS). The Volvo Group’s result is benchmarked against an international database with data gathered from over 14 million employees, representing over 80 countries.

Overall employee engagement in the Volvo Group reached 76% in 2011, comparing well with the global norm at 68%. 80% of all employees state that they understand the business direction and goals. The global norm is 71%.

The Volvo Way stories capture employee experiences from around the world concerning The Volvo Way’s values and behaviors in their daily work. The stories are unscripted, unedited and uncut. These inspiring and thought-provoking stories are used by different working groups and teams to trigger reflection and dialogue. These conversations about our values and principles are supporting the cultural transformation of a growing organization.
The Volvo Way

“Our culture is how we work together with energy, passion and respect for the individual. It is about involvement, open dialogue and feedback. It is about diversity, teamwork and leadership. It is how we build trust, focus on customers and drive change”, says Charlie Nordblom, Senior Vice President Strategic Internal Communication.

Our culture embodies individual responsibility and accountability for results. This means a clear orientation towards common goals and solutions, and a strong determination to grow, develop and improve. It is how we conduct our business around the world.

Customer in focus
“The Volvo Way supports the strategy for delivering added value to demanding customers in selected segments. In this customer centric culture, there is a strong focus on responsiveness, agility and the ability to execute with speed”, says Charlie Nordblom.

Developing the new version of The Volvo Way took almost two years. This in-depth process included active dialogues and interviews with more than 600 managers and employees globally. At the end each member of the senior executive management team were interviewed for their perspectives and insights.

Employee alignment
The Volvo Way addresses business critical issues such as putting customers first, enhancing the alignment of cultures with the business strategy and developing global leadership qualities. The Volvo Way is about enabling people.

“To be involved and empowered in setting the direction means that we take individual responsibility and ownership for decisions. This employee engagement results in a strong sense of commitment to meet agreed objectives and goals. All of us feel accountable for driving change and building the future. Only engaged employees can deliver excellence. Building a high commitment and high performance organization requires constant attention and support by senior management. The business outcome is a more resilient organization where individuals can change, transform, learn and grow,” says Charlie Nordblom.
Diversity
Diversity enhances innovation

At the Volvo Group we consider diversity to be a catalyst for innovation and a source of competitiveness and profitability. By expanding our knowledge base, skills and understanding, we become more responsive to customer needs and strengthen our market position. We are continuously working on improving our ability to measure and follow up the results. In 2011, Group companies assigned Diversity champions with the responsibility to follow up results and develop action plans depending on the results.

Diversity enhances innovation
We work actively to promote gender balance in all parts of the company and aggregate data on different levels to measure and follow up. Our performance is based upon the skills, values and ethics of our employees. To create the dynamics required to succeed at a global level we need to recruit and retain a broad spectrum of employees with different backgrounds, experiences and perspectives.

Actively promoting diversity
Diversity and inclusion have long been prioritized within the Volvo Group, and are promoted in our Code of Conduct. Discrimination – with regard to gender, race, religion, age, sexual orientation, nationality, political opinion, union affiliation, disabilities and social or ethnic origin – is not tolerated.

Zero tolerance for discrimination, harassment and bullying is also emphasized in our Diversity and Inclusion Policy that was launched in 2011. In addition the policy states that all Volvo Group employees and managers should promote an inclusive work climate.

Research has shown that the negative effects from being in minority disappear in balanced groups, meaning groups with a gender ratio of 35–65%. Our long-term goal is to have a balanced distribution of women and men among our employees. Working actively with diversity also nurtures a healthy company culture, thus helping to attract the most competent people. An inclusive work climate enables all employees to contribute to their fullest potential irrespective of gender, nationality, ethnic origin, sexual orientation or age.

Tools are provided to identify and address exclusionary behavior and for managers to learn how to be role models.

Indicators to measure and follow up
While we consider diversity to be a global competitive force, we also believe it must be handled at the local level due to the fact that what constitutes diversity differs depending on geographical locations and that challenges involved differ as well. The diversity goals may therefore differ from one country to another. At the Volvo Group level two key performance indicators are used to measure diversity: the Balanced team indicator and the Inclusiveness index.

The Balanced team indicator is a quantitative measure for diversity including nationality, gender, age and experience from different Volvo Group companies.

The Inclusiveness index is designed to follow up qualitative aspects, meaning how inclusive employees experience their work place to be.

Results in 2011
The results of the indicators, as well as improvement work and action plans are followed up in different decision forums. In 2011, the results were similar to 2010 and thus we did not reach our improvement targets on a Group level. However, individual companies improved their results significantly. We are working on improving next year’s Group performance. Primarily, there is room for increasing the number of women.

The results from the 2011 year’s Volvo Group Attitude Survey, the annual employee survey, show that 76% of the employees believe diversity in a workforce creates a competitive advantage, compared to 68% in 2007. The result shows an increased awareness and positive attitude towards diversity.
Diversity and Inclusive Leadership

In 2011, the Volvo Group continued to conduct Diversity and Inclusive Leadership (DIL) training courses for managers. The DIL training program is interactive and focuses on the importance of inclusion, in order to leverage the benefits inherent in diversity. The training is run by in-house trainers, meaning Volvo Group employees who completed a certification process. In 2011, the Volvo Group certified facilitators in Sweden, China, Japan, India, Germany and France and at the end of 2011 there were 85 certified facilitators worldwide within the Group.

Affirmative recruitment processes

Working with diversity means working with attitudes, which requires different approaches in different cultural contexts. Several initiatives on the local and global level address diversity in the Volvo Group.

We work actively to balance diversity in leadership positions and in other employee categories. Traditionally, it has been a challenge for the automotive industry to attract women. One way of overcoming this challenge is to focus on diversity at the recruitment stage.

We require at least one woman and one man on each recruitment panel. The new recruitment policy supports diversity by stating that all white-collar positions should be openly posted for at least ten business days. This transparency hinders recruiting via exclusive networks.

Recent years’ gender equality initiatives have resulted in a relatively greater proportion of women among newly hired employees. The effects of the financial crisis made it difficult to retain the increased percentage of women employees and managers, since many of the employees who had to leave the Group were new recruits, a relatively large percentage of women. Despite this, the Volvo Group has managed to keep the numbers quite stable.

The number of women in the Group Executive Team increased from 6 to 20% in the new Volvo Group organization.

The percentage of female employees in 2011 was 17% compared to 16% in 2010.

Women on the Board

The Volvo Group’s Board of Directors consists of 11 members elected by the Annual General Meeting. Currently two women serve on the board. Ying Yeh has been a member of the Volvo Board since 2006, and Hanne de Mora was elected in 2010. The Group’s General Counsel, Eva Persson, is the Board’s secretary.

The Volvo Group has a long-term ambition to increase the number of women on boards and executive teams, while also striving to take into account other important parameters in terms of diversity, such as educational background, professional experience and nationality.

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The Volvo Group has several networks that address different aspects of diversity and inclusion.

Volvo GLOW is an executive network for women in key positions in the Volvo Group. Its purpose is to develop global leadership and promote cross-cultural and cross-functional networking. Volvo GLOW thus addresses several diversity dimensions such as gender, nationality and functions/company origin.

The Walk the Talk network consists of male managers who have previously taken part in the Walk the Talk program, advanced gender awareness training for male executives. The purpose is to actively work to increase the number of female managers within the Volvo Group, to disseminate knowledge and help shape values and attitudes.

Females at their Best, a new women’s professional network was launched in Asia in 2011.

Yet another diversity network is Volvo Eagle, a global network for gay and lesbian employees. The purpose of Volvo Eagle is to support its members and act as a stakeholder group helping the Volvo Group to create a lesbian, gay, bisexual and transsexual inclusive culture.

Enhancing intercultural business skills

GlobeSmart is an interactive web-based tool helping employees develop the multicultural skills we need to work effectively and conduct business with people from other countries. It is available to all employees.

GlobeSmart provides information from about 30 different countries and helps employees to familiarize themselves with local customs and traditions. The tool has a number of interactive features to help employees assess their own cultural preferences and interaction style and to compare these with people from other countries.

Did you know?

76% of the Volvo Group’s employees believe diversity in a workforce creates a competitive advantage, compared to 68% in 2007. The result shows an increased awareness and positive attitude towards diversity.
Health and safety
Promoting health, safety and wellbeing

Healthy, energetic employees are better equipped for life and work. The Volvo Group applies a holistic approach to health and wellbeing and strives to integrate health aspects in all corporate policies. We are committed to developing safe and health-promoting workplaces that increase employee wellbeing and productivity, reduce costs and contribute to an attractive workplace. The objective is to make employees of the Volvo Group among the healthiest in the world.

Global policy for health, workplace safety and wellbeing
The policy provides guidance on how to ensure a safe and healthy workplace and encourage employees to voice concern about risks that need to be addressed.

In 2011 the implementation continued and self-assessments were launched in order to support the implementation process, raise awareness and to ensure a common approach for follow-up.

Award inspires good health
The internal Volvo Group Workplace safety, health and wellbeing award was founded in 2006 with the aim of promoting good examples and inspire others within the Group to continuously develop workplace safety, health and wellbeing issues.

In 2011, Renault Trucks’ Stress prevention program in France was presented with the award. The stress management program includes assessments of stress levels among both groups and individuals and action plans to prevent and avoid negative stress. The commendation from the Prize committee: “Avoiding negative stress is of strategic importance if people are to make the most of their resources, in an effort to develop personally and professionally. The Award is granted to Renault Trucks as a tribute to many years of dedicated work within this important area, and the experiences gained will be available to share within the Volvo Group globally.”

Systematic approach to health and safety
A safe workplace creates the foundation for productive and efficient work. In accordance with the principles of our Code of Conduct, all employees have the right to a safe and healthy working environment. The conditions required for a safe and healthy work environment shall be made available to all employees in the Volvo Group. We seek to provide all employees with access to information and support to reduce or eradicate health risks associated with work, lifestyle or emotional stress.

However, the Volvo Group strives not only to eradicate risks and develop a safety culture – but also to establish and develop health promotion as a core component of the company culture. Health coaches – employees who allocate part of their time to support and stimulate their colleagues to adopt healthy behaviors – are one example of this. In Sweden, the number has increased from about 50 to approximately 90 health coaches. All health coaches are offered basic training, and an annual update.

Managers at all levels share the responsibility of guaranteeing the high level of safety expected by employees, suppliers and visitors. Managers are responsible for safety precautions.

Workplace safety is also subject to national requirements and regulations; hence the adaption of policies, guidelines and training material to national laws and regulations.

The Volvo Group’s global health and wellbeing work include for example medical examinations, rehabilitation support, ergonomics, different health promotion programs and activities and various employee assistance programs such as support to quit smoking. In some instances such programs and activities also include the family of the employee depending on the social security system in the country.
Management systems
The Volvo Production System provides tools including occupational risk assessment, indicators to measure safety and health, and methodology for ergonomic workplace assessment.

In 2011, the Environmental Data System was extended to include occupational health and safety issues. The tool will, initially, be used to report workplace safety data such as numbers of work-related accidents (a reactive measure) and near misses (a proactive measure). This data will then be transformed to key performance indicators (KPIs), to be followed per site and per country, as a means to keep track of the development and with the aim of reducing risks and accidents to an absolute minimum.

Three of our plants in the US have earned certification in accordance with OHSAS 18001. OHSAS 18001 (Occupational Health and Safety Assessment Scheme) is an international standard for processes that control and improve company workplace safety and health performance.

Reporting and remedial action
Employees are responsible for reporting all accidents and incidents to enable the investigation and identification of root causes so that immediate corrective action can be taken. Depending on the conditions, a detailed analysis of the incident may conclude that more long-term measures would be more effective. In 2011, one fatality was reported from one of our production plants in India.

Data relating to absence due to illness is collected on a country level, based on national legislation. Because of differences in definitions and national requirements when it comes to reporting, this information is currently not aggregated on a Group level.
Labor relations
Dialogue and cooperation with unions

The Volvo Group recognizes everyone’s right to freedom of association, and maintains a close relationship with a number of unions that represent our employees. Cooperation with unions complies with the national laws and regulations in each country as stated in our Code of Conduct.

Freedom of association and collective bargaining
Cooperation with unions complies with national laws and regulations in each country. Collective bargaining agreements are used in many places, including the ten countries where we have our largest operations.

In several of the countries in which we operate, our industry has a long tradition of union cooperation. We estimate that approximately 70% of our employees around the world are covered by collective bargaining agreements. We consult trade unions according to local requirements regarding organizational changes.

Board representation
There are three employee representatives on the AB Volvo Board of Directors and two deputies are appointed by the labor organizations.

Did you know?
The Volvo European Workers Council was formed in Europe in 1996 as a forum for employer-employee dialogue. The forum meets once a year and the chairman is the CEO of the Volvo Group.

The global Workers Council meeting was held in Sweden in May 2011 and CSR issues topped the agenda, in particular responsible supply chain management. Volvo Group’s global process owner presented the company’s approach and the importance of managing the supply chain in this aspect. The previous global Workers Council was held in China.
Development and opportunities
Building a platform for future success

The Volvo Group offers interesting career opportunities and career paths across our business and wants to attract and retain the best people. We invest in development and training and strive for each individual to have both business-related and competence development targets. Our leaders shall inspire colleagues to perform at a higher level.

Career opportunities
Working in the Volvo Group means working in an international environment with committed employees from all over the world. It is important that each employee knows how to contribute to business success.

The Volvo Group is known for its innovative solutions. Our capacity for innovation is dependent on the effective sharing of knowledge and experience within our organization. The ability to enhance and develop employees’ capacity and competencies is one of our success factors.

The most effective development comes from different forms of work assignments, such as international projects. We encourage motivated employees to move between roles and companies within the Volvo Group. In 2011, a program was launched for global mobility, aimed at making mobility between countries, functions and companies a productive and enriching experience for employees, their families and the Volvo Group.

As stated in our Code of Conduct all employees shall have equal opportunities based on competence, experience and performance regardless of gender, race, religion, age, disability, sexual orientation, nationality, political opinion, union affiliation, social background or ethnic origin.

In 2011 a program was launched for global mobility, aimed at making mobility between countries, functions and companies a productive and enriching experience for employees, their families and the Volvo Group.

Individual competence development
The personal business plan process provides support for translating corporate strategic objectives into individual objectives and contribution. The purpose is to facilitate dialogue between individuals and their managers and to ensure that employees clearly understand their role in the team and what is expected of them.

The personal business plan has business-related and competence development targets. Personal business plans are reviewed annually and provide essential feedback for both short- and long-term career paths, as well as individual competence development. All white-collar employees have personal business plans that are followed-up at the company and at Group level. Our goal is for all industrial workers to also have a personal business plan.

At the end of 2011, the business plan process for blue-collars had been implemented throughout the Group except for in a few locations.

Securing and enhancing competences is crucial to being competitive and attractive as an employer and business. We regularly map our strategic competences, and annually aggregate findings on a Group level to identify the most important competencies for future needs. We thus offer a wide variety of training programs at all levels for employees, in specific professional areas and to promote personal growth. The activities range from traditional and e-based training to individual coaching and mentoring.

Talent Review
The Volvo Group Talent Review is the Group’s established management process to systematically and in a transparent way identify, assess and develop talent throughout the company. The process covers leaders and key positions at all levels, aimed at ensuring a sufficient supply of talent and skills, based on our Leadership Pipeline model.
The talent review meetings start from a unit level, meaning a market company, a plant, a site or a function and moves up level by level in the organization. All managers in a management team participate and the Volvo Group Executive management team conclude and review top key talents and the succession planning.

Developing talents
Every manager is responsible for assessing and developing talent in the organization. The Leadership Pipeline provides us with a structured approach to developing and preparing our present leaders as well as our potential leaders for future roles.

The Volvo Group Leadership Pipeline has been set up jointly with research institutes. It is based on successful decision styles, has been validated by global research and is also designed to support the Volvo Group’s culture and values as well as our strategic objectives.

The Project Manager Pipeline
In 2011, the Project Manager (PM) Pipeline was launched to establish a career path for project managers at all levels. The PM Pipeline will help ensure that all future Project Managers are equipped with the necessary skills and to secure project management skills. The program is based on specific Volvo Group tools, processes and methodologies; which leverages international best practices and standards. The purpose is to drive Project Manager development in a way that offers Volvo Group project managers a standard set of competencies and assessments, training and a forum to share best practices and experiences.

Specialist Recognition Program
The aim of the Specialist Recognition Program is to give visibility and to offer career perspectives to engineers with extensive experience and expertise in their field. The appointed strategic specialists will develop their field of expertise to support Volvo Group strategies and to transform discoveries into increased business value for and throughout the Volvo Group.

All specialists are appointed for three years. The appointed specialists will advance knowledge progress and development of the field in order to secure the implementation of cutting-edge technology. The specialist has a lead role as internal and external technology consultant, counter part and mentor. Networking, both internally and externally, is a basic tool for the specialist to retrieve and drive forward progress and development. The specialist can also be made available for lectures, seminars and training courses in his/her field of expertise.

Volvo Group International Graduate Program
In 2011, the Volvo Group International Graduate Program recommenced after a break during the recession. Nearly 3,000 university graduates applied to the 12-month training programme that started in September 2011. The 27 selected trainees come from China, the USA, Brazil, India, Japan, Poland, Singapore, South Korea, Sweden and the UK.

Inspiring leadership
Our leaders must be team players who can enhance both individual and team performance, as well as provide motivation. Managers at all levels need strong leadership and communication qualities. The Volvo Group has a number of training programs to support managers at different phases of leadership.

In 2011, the Leader Development project delivered four global leader development programs, one per level in the Leadership pipeline. These are now being implemented in the Volvo Group.

In 2011, the Volvo Group also introduced a learning strategy which emphasizes that most learning take place while working. Accordingly, a number of “manager guides” have been created, to support managers for example regarding mentoring.

The self-managed learning method is also a tool supporting employees and managers in their development.

Compensation and benefits
We aim to be a competitive and attractive employer. Pay, and benefits, are important drivers, as are career opportunities, personal development, culture and values, leadership, company performance and reputation. Equal pay for work of equal value is the guiding principle. Individual salaries are based on position, the market and the employee’s performance, and comply with the salary practice in each country.

In addition to fixed salaries and variable remuneration, other customary benefits are usually offered such as pension solutions, health plans, company cars or car allowances, recreation facilities, insurance and so forth. The programs are country-specific and comply with local practices. The purpose of the benefits programs is to:

• Offer total remuneration packages relevant to the specific country and employee category
• Offer basic protection through insurance arrangements for areas such as sickness benefit and pensions
• Promote areas such as diversity, health and well-being
Human rights
We support and protect human rights

Respect for the individual represents an important component of the Volvo Group culture. Our position on human rights is reflected in our Code of Conduct and aligned with our commitment to the ten principles of the United Nations' Global Compact initiative.

Human rights in our operations
In every country of operation, we respect national legislation. In situations where the law does not give guidance, the Group applies its own standard based on its core values and culture.

The Code of Conduct stipulates that: “Within our sphere of influence, the Volvo Group supports and respects the protection of internationally proclaimed human rights and ensures that it is not complicit in human rights abuses.”

Support for the United Nation's Declaration of Human Rights is also stated in our Code of Conduct and communicated to all employees. The human rights issue is included in the Code of Conduct training.

Human rights principles relevant to the Volvo Group’s operations include:
• Non-discrimination
• Non-tolerance for forced labor
• Non-tolerance of compulsory or child labor
• Freedom of association
• The right to collective bargaining
• The right of all employees to a healthy and safe work environment.

Supplier assessments and due diligence
As part of our efforts to uphold human rights in the supply chain, we follow up on our suppliers’ performance in the CSR supply-chain programme. Respect for human rights is one aspect in Volvo Group’s CSR country risk model.

“Within our sphere of influence, the Volvo Group supports and respects the protection of internationally proclaimed human rights and ensures that it is not complicit in human rights abuses.”
Volvo Group – a part of society
Building relations with actors in society

Companies are an important part of the society and dependent on good relations with the surrounding community for long-term business success. The Volvo Group believes it is important to contribute to the communities in which we operate and to be a responsible partner. In return, the Volvo Group gets the opportunity to enter into a dialogue with people and groups with diverse views, experiences and expertise, and to learn from them.

Moving society forward
We work together with customers, authorities, local decision makers, non-governmental organizations (NGOs), universities, and other partners to contribute to society based on our skills and knowledge. The goal is to contribute positively within our field of expertise to the development of society and build relationships with actors in society. It also provides opportunities for employee engagement and adds an extra dimension to work, builds pride and increases satisfaction.

Unique assets for creating value
The Volvo Group has a unique set of skills, knowledge and resources. By sharing our knowledge and contributing to technological development, we can contribute to a positive development. The aim is to create a win-win situation for society and the Volvo Group by matching communities’ needs with business objectives by using our unique assets. To create societal and business value we engage in projects based on our specific skills, knowledge and resources related to our core business and operating context. All projects are guided by our core values – quality, safety and environmental care. As a rule of thumb the Volvo Group shall only engage in projects that will yield a higher social impact than if someone else were to conduct the project. For example, the Volvo Group has deep knowledge and experience of working with traffic safety or minimizing its environmental impact. In order to secure skilled competence for the future, projects might also focus on education in the MST field (mathematics, science and technology).

Knowledge and understanding of the markets’ needs and conditions are essential to planning and executing successful community outreach projects.

Global approach to local needs
The Volvo Group operates in countries with different social, political, economic and cultural systems and conditions. While many of the challenges of sustainable development and CSR are similar across the world, priorities and stakeholders’ expectations may differ from region to region. Knowledge and understanding of the markets’ needs and conditions are essential to planning and executing successful community projects. Due to the Group’s geographical spread and decentralized structure, the Volvo Group considers the local market organizations to be the most suited for identifying, selecting and developing community outreach projects based on the local circumstances, expectations or to fulfill market specific requirements.
Pioneering social responsibility in Brazil

“Volvo has been in Brazil for 34 years and was a CSR pioneer in the automotive industry. The Volvo Group has pioneered in the way it relates to employees as well as to society, which have received direct benefits from several social-environmental programs undertaken by the company”, says Solange Fusco, Corporate Communications Manager, Volvo do Brasil.

“When Volvo first set up in Brazil in the late 1970s, a number of innovative concepts were established. We were the first company in Brazil to have a plant level committee that effectively represented the interests of employees, the first to offer a private pension plan and to establish self-managed teams in the manufacturing areas.

Our employees are a priority and we assume responsibility by offering adequate compensation, a good working environment and suitable benefits policies on health, meals and education for example.

Our brand is a promise
We believe that our brand is a promise to our customers, our employees and our community. A company keeping safety as a core value and manufacturing vehicles considered as the safest in the world, could not ignore the fact that Brazil has one of the world’s highest traffic accident and death rates in the world.

In the late 1980s, Volvo launched the successful Volvo Traffic Safety Program (VTSP) as a way of contributing to society in the quest for solutions for Brazilian traffic. VTSP has become the country’s longest running action in the citizenship of traffic, mobilizing governments, traffic agencies, businesses, schools and universities in addition to society in general and media.

In addition, Volvo do Brasil maintains a number of other programs related to society, including supporting children in need, income generation for families living near Volvo Group facilities, educational programs for young people, training on environmental issues, training for truck drivers and so on.

Aligning community outreach to our core business and values
All activities related to community outreach have a strategic approach. Social and environmental programs must not only make an effective contribution to society, but also add value to the Group business. For this reason, the actions undertaken by Volvo do Brasil show a strong connection to the brand’s core values. We do not support any initiative which is not fully in tune with these values.

In 2010, Volvo do Brasil was awarded the Volvo Group Internal Safety Award for the TransForm program. This program is targeted at the development of safe behaviors in traffic for professional drivers. It has a strong social appeal given the current high rates of deaths and accidents on the roads. It is also important for our customers’ businesses since reducing the risk for accidents means reducing possible economic losses.

This is a good example of linking corporate social-environmental responsibility to the business. Interest has been keen for this program and we have been able to share our experiences with other Volvo companies, outside Brazil.

Engagement building pride
Volvo is recognized as a socially respected company, a reason for the staff to be proud.

No doubt, the company’s social engagement drives pride and engagement among our employees, as attested by the latest Volvo Group Attitude Survey. Twice, Volvo do Brasil has been appointed the best employer of the country. We believe that our achievements in CSR and practices adopted play a part in this, reflecting the pride of our internal community.”
Contributions to society

The Volvo Group is present in more than 190 markets. In many countries, the Group is an important part of society. As a company and as individuals, we engage with society in different ways. We have gathered a sample of projects supported and activities carried out during the year.

Examples of projects and activities in 2011:

• After the devastating earthquake and the resulting tsunami in Japan, UD Trucks, among other measures, arranged aid shipments of food and other necessities for the affected sections of the workforce, and arranged evacuation sites on the plant area for its employees and their relatives. UD Trucks/the Volvo Group also offered the Japanese Government assistance in the form of equipment, mainly trucks, and funds in a total amount of approximately JPY 100 million. The Group’s employees worldwide supported the victims of the Japanese earthquake. Money and necessities were collected and sent to Japan. The Group also arranged a global collection for the Red Cross to which employees could donate money and the company matched the total amount collected with an equally large donation.

• Renault Trucks donated a minibus to help disabled children in Dakar, Senegal, get to school. The donation was made together with Michelin to the Solidarité Laique Association. In a country where disability is still a taboo subject, the minibus will provide transport to school for approximately 50 children.

• Renault Trucks donated 23 vehicles to a number of different technical colleges and apprentice training centers. Supplied as workshop teaching material, these trucks will give future truck maintenance technicians an opportunity to become familiar with the latest technical features, providing a highly practical complement to their training program. Over the past three years, more than 100 vehicles have been donated. This is part of Renault Trucks’ commitment to train young people and to establish a viable link between the world of work and vocational education.

• Volvo IT donated SEK 1 million to the charities of their employees’ choosing. The employees switched their Christmas gifts into donations for charity organizations.

• Renault Trucks employees in France continued to support The Enfant Bleu Association. The French association provides children and adults that are victims of abuse a refuge. The employees donated EUR 25,000. The funds were raised through internal events.
Strategic partnerships
Joining forces

The complexities in the challenges we are facing require collaboration of several sectors of society. The aim of developing strategic partnerships is to support the Volvo Group’s vision by creating platforms for developing pioneering knowledge, pool innovation capabilities and secure skilled competence for the future. A partnership should provide benefits for the society and add value to the business.

Academic Partner Program
The Academic Partner Program (APP) is a systematic approach for long-term cooperation with selected universities and research institutes in areas of special interest to the Volvo Group. The program aims to provide the Group with a holistic picture of important collaborative partners and to increase the Group’s visibility to students and researchers.

Our involvement with universities is also important for creating relationships with students and potential employees to secure access to future competence.

We have signed agreements with a selected number of eminent universities worldwide. In the future we also plan to reach out to students and to include supplementary training providers.

Education and training
The number of people in Europe graduating with degrees in mathematics, science and technology (MST) is declining, and this trend may have an effect on the future competitiveness of Europe. In order to secure qualified future recruitment the Volvo Group pays particular attention to MST education and promoting interest in this area.

In Sweden, in addition to small-scale partnerships, we are involved in extensive exchange programs and support schools in a number of locations where we have production facilities such as:

• Göteborgsregionens Tekniaka Gymnasium – The Volvo Group, Volvo Car Corporation and the City of Gothenburg jointly own and support this upper secondary school, which specializes in mathematics, science and technology.
• MATENA – the Volvo Group is a key stakeholder in MATENA – a program being developed to encourage and support effective collaboration between schools and businesses to increase interest in mathematics, science and technology education and careers.
• The Industrial High School – Volvo Aero Corporation and the Local Education Authority of Trollhättan have jointly developed the Industrial High School – a three-year upper secondary school education where Volvo Aero sponsors one-third of the theoretical and practical tuition. Students are educated to become operators with special skills for aviation and space vehicle production work.
Research on future urban transport

In early 2011, Anders Brännström assumed the position as Chairman of Volvo Research and Educational Foundations (VREF). One of his priorities is to disseminate the research results to a broader audience that have been generated by the foundations. A new research program was recently launched: coping with freight in future urban transport systems.

Urban transport is becoming one of the major headaches of political leaders on city, regional and even national levels. Very little research has been made up until now on the impacts of urban freight on the urban environment. Therefore we see this topic as a prioritized area to investigate further.

Some three billion people live in cities and within a couple of decades another two billion people are expected to move to cities. The urbanization goes hand in hand with industrialization and higher standard of living, which increases the value of time and thus the search for more efficient transport systems. VREF finances research and educational projects at universities all around the world. Universities all over the world can apply for funding for a five-year research program about freight in urban transport.

Approximately 25–30 MSEK is distributed to research programs annually.

FUT program contributes to sustainable city areas

VREF initiated the research program Future Urban Transport (FUT) some ten years ago. The program intends to develop strategies to support the development of sustainable transportation systems in large urban areas around the world.

Eight Centres of Excellence have been established through funding from VREF. The Centres are located in Australia, Chile, China, India, South Africa, UK and in the US. The Centres collaborate with local opinion leaders and decision makers in the regions.

In total some 200 man-year of research have been conducted so far.
Memberships and initiatives
Membership for cooperation

The Volvo Group puts a great deal of effort into being up-to-date in respect of trends in legislation and actively participating in society and as regards matters relevant to our industry. Knowledge of the surrounding world is essential to our ability to identify new business opportunities.

Industry forums
The Volvo Group participates in different trade organizations and forums such as:
• European Automobile Manufacturers’ Association (ACEA)
• Committee for European Construction Equipment (CECE)
• Engine Manufacturers Association (EMA) and Truck Manufacturers Association (TMA) in the US
• Japan Automobile Manufacturers Association (JAMA)

Memberships
• Chambers of Commerce and Industry
• European Round Table of Industrialists (ERT)
• Centre for European Policy Studies (CEPS)

Among the first signatories to the UN’s Global Compact
Volvo Group became one of the first companies to sign the United Nations’ Global Compact initiative in 2001. The Global Compact aims to align business practices with internationally accepted principles on human rights, labor practice, the environment and anti-corruption.

Did you know?
The Volvo Group became one of the first companies to sign the United Nations’ Global Compact initiative in 2001.
GRI table
Applying the GRI framework for reporting

Volvo Group applies the GRI (Global Reporting Initiative) framework for sustainability reporting. This voluntary framework sets out principles and indicators for measuring and reporting economic, environmental and social performance. The table below provides references to where the indicated GRI-information can be accessed in the CSR and Sustainability Report 2011. In some cases, reference is made to content in the Volvo Group Annual Report or the Corporate Governance Report for 2011. Volvo Group has chosen to self-declare the report to meet GRI Application Level B.

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- Report on all criteria listed for Level C plus: 1.2, 3.9, 3.13, 4.15, 4.16 - 4.17
- Management Approach Disclosures for each Indicator Category
- Report on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.
- Report fully on a minimum of any 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.
- Respond on each core and Sector Supplement** indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.

* Sector supplement in final version
** Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines
*** Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines
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Investor assessments
Attracting long-term shareholders

The investor community is increasingly adopting a long-term perspective and is considering environmental, social and governance (ESG) aspects when making investment decisions. We see that an increasing number of long-term investors prioritize companies that are aligned with trends and capture the opportunities in sustainability.

Dialogue with investors
The Volvo Group strives to facilitate investor assessments by giving current and potential shareholders a fair basis for evaluation by communicating transparently on our work to enhance environmental and social sustainability.

Approximately 40 actors on the capital market follow the Volvo Group’s CSR and sustainability performance and strategy. We engage in a continuous dialogue with investors. We believe that our CSR and Sustainability Report is the most appropriate and efficient channel for providing information about our practices, and we seek to cover the most frequently asked questions from investors in this report. We put great value in constructive dialogues on risks, opportunities and strategies related to CSR and sustainability.

Included in prestigious sustainability index
The Volvo Group has qualified for inclusion in the Dow Jones Sustainability World Index (DJSI World) as well as DJSI Euro Stoxx and Nordic. DJSI assesses the world’s 2,500 largest companies on the basis of economic, environmental and social criteria, focusing on long-term shareholder value.

The DJSI World includes approximately 300 of the highest ranked companies, one of which is the Volvo Group. The annual assessment includes areas such as corporate governance, risk management, brand, climate change management, sourcing and work environment. The Volvo Group received particularly high marks for its handling of:

- Environmental issues
- Work environment
- Corporate governance
- Compliance with Code of Conduct and anti-corruption policy.

Other sustainability indices
Sustainable Value Creation
The Volvo Group has gained top ranking in the survey on responsible business practices conducted by Sweden’s largest institutional investors. The survey studied the 100 largest corporations listed on the Nasdaq OMX Nordic Exchange in Sweden.

OMX GES Sustainability Index series
The Volvo Group is included in the OMX GES Sustainability Index series and the OMX GES Ethical Index series for the Nordic region. The OMX GES Sustainability indexes comprise the leading companies in the region in terms of sustainability. The analyses cover criteria for environmental, social and governance (ESG) issues, and are based on international guidelines for ESG issues.

Global Challenges Index
The Hannover Exchange and Oekom research AG introduced the Global Challenges Index, which includes Volvo. The index comprises 50 companies that ‘take active responsibility for future global development by making substantial, forward-looking contributions to meeting global challenges’.
The Folksam Index
In 2011, the Folksam Index for responsible business enterprises – drawn up by the Swedish insurance company Folk- sam – ranked the Volvo Group in second place out of 245 companies. The Volvo Group received seven out of seven stars for our environmental work. We received five out of seven stars for our work on human rights.

ECPI Indexes
The Volvo Group is included in both ECPI Global Carbon Equity and ECPI Ethical Index Global. The indexes are designed to select the 300 top capitalized companies in the global market that are eligible investments according to the ECPI Screening Methodology.

Carbon Equity Index is an investable index that selects the companies best equipped to tackle a world of rising carbon emissions and tougher climate legislation from carbon intensive sectors such as Utilities, Basic Materials, Industrial and Energy.

Did you know?
The DJSI World includes approximately 300 of the highest ranked companies, one of which is the Volvo Group.

Ownership by country

- Sweden, 60%
- Great Britain, 14%
- USA, 10%
- France, 7%
- Switzerland, 2%
- Luxembourg, 2%
- Others, 5%

1) Share of capital, registered shares.

Ownership categories

- Non-Swedish owners, 40%
- Private shareholders, 12%
- Pension funds and insurance companies, 10%
- Savings funds, 15%
- Others, 23%

1) Share of capital, registered shares.

The employees’ ownership of shares in Volvo through pension foundations is insignificant.
Global Compact
A decade as a signatory to the Global Compact

The Volvo Group was one of the first companies to become a signatory to the United Nations’ Global Compact when it was launched in 2001. We are committed to the principles of the initiative, and they are integrated into our Group policy and core governance document: the Volvo Group Code of Conduct.

Integrated principles
At the Volvo Group we consider the culture we nurture and the behavior we encourage to be aligned with the spirit of Global Compact. In 2003, we introduced the Volvo Group Code of Conduct based on the principles of the Global Compact. The ten principles in the areas of human rights, labor rights, environment and anti-corruption are reflected in our Code of Conduct, which governs our internal behavior and also our conduct in relations with others.

Communication on Progress
This report describes our work to advance the ten principles in our daily operations and in relations with our stakeholders. It contains detailed information on our achievements and results, and describes initiatives and activities across our Group, designed to help us progress towards sustainable transport solutions and as a responsible company.

This report constitutes our annual Communication on Progress, in accordance with our commitment to the United Nations Global Compact initiative.

The Global Compact
The Volvo Group is a signatory to the UN Global Compact.
About this report

The Volvo Group’s CSR and Sustainability Report 2011 describes how we address economic, environmental and social challenges and opportunities to contribute to sustainable development. Our aim is to present our work in a straightforward, transparent and informative way for a wide audience.

This report is a platform for internal and external dialogues with customers, suppliers, investors, employees, the general public and other stakeholders. We therefore welcome and value your feedback.

Annual sustainability reports available on website

Scope and boundary of the report
Unless otherwise stated, the CSR and Sustainability Report encompasses companies fully consolidated in the Volvo Group. Our financial performance and information regarding the Volvo Group’s Corporate Governance is available in the Annual Report 2011 and at www.volvogroup.com/investors.

The Volvo Group has published Environmental Reports since 1991. These reports initially covered environmental issues and were subsequently expanded to cover a wider perspective on sustainability, including considerations of ongoing trends and events that has occurred in the business world or are voiced through dialogue with stakeholders.

The process for defining the content, focus and target groups of the 2011 report included an internal workshop with key CSR representatives from the Volvo Group, which was conducted in October 2011.

Data collection
The main purpose of this report is to answer the most frequent questions we have received from our stakeholders and to make the information publicly available. This report is based on the voluntary framework provided by Global Reporting Initiative (GRI). The GRI Index on page 91 refers to where the information may be found.

This report was not audited by a third party. Although we acknowledge the value of an audit, we have opted to give priority to developing our in-house process in an effort to further improve our work.

Much of the data in this report is also presented in our Annual Report 2011. All information included in the Annual Report is assured by the external auditors PwC, and the process for collecting environmental data is audited by a third party and certified in accordance with ISO 14001.

The Volvo Group consists of many different companies offering a wide range of transport products and services. A substantial part of our CSR work is carried out independently. Many important data and performance indicators are measured and followed up at company level, and not aggregated at Group level.

Disclaimer
Any links to external or third party web sites in the Volvo Group CSR and Sustainability Report 2011 are included solely for the reader’s convenience. You make use of any links, and rely on the information contained on such external web sites at your own risk. The Volvo Group does not give any representation regarding, nor accepts any liability for the quality, safety, suitability or reliability of any external web sites or any of the content or materials contained therein.
Contact

Welcome to contact us if you have questions regarding this report or our CSR and sustainability work.

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