Shaping the future of transportation

November 5, 2020
Strengthening the resilience over the cycle

Volvo Group
Adjusting operating income and margin

Net cash position, Industrial Operations (excl. pensions and lease liabilities)
Achieving industry-leading performance

Trucks, Buses & Engines
Adjusted operating margin: Volvo vs Peers

Construction equipment
Adjusted operating margin: Volvo vs Peers

Volvo Group Capital Markets Day, 2020
3 2020-11-05

Volvo estimate
We continue to review performance and take action
Delivering on our financial ambitions

- Gradual and consistent earnings improvement
- Reduced volatility in earnings and cash flow
- Discipline in capital allocation/investments
- Continuous investments in new business models by innovation and new technologies
Global mega trends

- Growing global population
- Decarbonization and air quality
- Rapid urbanization
- Growing e-commerce
- New technologies
- New societal demands
Our strategy continues to serve us and our customers well.
Performance culture
FIT FOR THE FUTURE

- Profit and loss responsibility
- Empowerment
- Regionalized value-chains
- Simplicity and speed
- Continuous improvement
The Volvo Group journey continues

1999 – 2011
ACQUISITION-DRIVEN GROWTH

2012 – 2015
CLOSING THE GAP

2016 – 2018
IMPROVED PERFORMANCE

2019 →
PERFORM AND TRANSFORM
# 7 revised strategic priorities

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<th>Description</th>
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<td>1</td>
<td><strong>Transform the Volvo Group</strong> to become a leading end-to-end integrator as well as offering easy to integrate products and services through strong brands.</td>
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<td>2</td>
<td><strong>Grow the service business</strong> and target selected industry verticals offering a portfolio of tailor-made solutions.</td>
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<td>3</td>
<td><strong>Secure a desirable sustainable product and service portfolio</strong> with the right quality, leveraging new and well-known technologies, CAST, partnerships and digital innovation - accelerating electromobility solutions.</td>
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<td>4</td>
<td><strong>Grow in Asia and the US</strong>: In Asia through JVs, alliances and by strengthening the Volvo Group footprint in China. In the US by significantly improving the Group’s market position.</td>
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<td>5</td>
<td><strong>Develop robust profitability</strong> throughout the decentralized regional value chains by leveraging global scale, digitalization, a purpose-fit footprint and continuous improvement using Volvo Production System.</td>
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<td>6</td>
<td><strong>Selectively capture, accelerate and scale-up new businesses</strong> and develop competencies and capabilities needed.</td>
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<td>7</td>
<td><strong>Reinforce value-based leadership and ways of working</strong> where all colleagues are empowered to take action and are accountable for the results.</td>
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Long-term ambition:

100%
Safe
Fossil free
More productive
Executing on our CO₂ reduction ambitions

-18% CO₂ reduction per shipped volume in our own transport system since 2013

-35% CO₂ reduction in our own manufacturing operations since 2013
Ghent plant – CO₂ free vehicle production in 2007
Sustainability at the heart of everything we do

- **Mission**: Driving prosperity through transport and infrastructure solutions
- **Vision**: Be the most desired and successful transport and infrastructure solution provider in the world
- **Aspirations**: Have leading customer satisfaction for all brands in their segments
- **Values**: Customer success, Trust, Passion
- **Code of Conduct**: Respect one another, business fairly and lawfully, separate personal interests from business activities, safeguard company information and assets, communicate transparently and responsibly
- **Science-based targets**
- **Green Finance Framework**
- **TCFD reporting**
- **Paris agreement commitment**
Setting a clear direction

- >50% of revenues from services and solutions by 2030
- >35% electric vehicles by 2030
- Leading by example with the world’s most sustainable in-house logistics system by 2025
- Implementation of 100 transport and infrastructure solutions for our customers by 2025
100% fossil free Volvo Group vehicles from 2040

Volvo Group Capital Markets Day, 2020

2020

0%

2020 - 2050

Share of new trucks

100%

2020

2030

2040

2050

COMBUSTION ENGINE

ELECTRIC

Carbon fuel

Carbon neutral

ROLLING FLEET
Fast-paced introduction

Demanding long-haul
Regional-haul
Heavy construction
Drayage-haul
Urban construction
Waste and recycling
Distribution
City buses
Energy services

Addressing a broad spectrum of customer segments
THE GLOBAL ELECTRIC LINEUP

Volvo FE Electric  Volvo FM Electric  Volvo FH Electric  Volvo VNR Electric  Volvo FMX Electric  Volvo FL Electric
Gradual roll-out of electric ecosystems
Customer requirements

- Safety
- Productivity
- Sustainability
Winning formula:
Group technology platform and continued segment leadership
Unlocking customer value with connectivity
A new business model
Value sharing by maximizing capacity
Safe  Fossil free  Productive

AUTONOMOUS
ELECTRIFIED
CONNECTED
Our business model – Transport as a Service

- Machines
- Cloud
- Operations
- Virtual Driver
- Infrastructure
- Service & Maintenance
- A TARA SOLUTION
- Volvo Payment Solutions
Go-to-market focusing on three strategic customer segments:

- **Quarry & Aggregates**
  - Electric confined
  - First commercial solution

- **Ports & Logistics centers**
  - First commercial solution

- **Hub-to-Hub Highway**
  - First commercial solution
The Great Shift to electrification

- Segment by segment
- Market by market
- Region by region
100% fossil free Volvo Group vehicles from 2040

- BATTERY ELECTRIC
- FUEL CELL ELECTRIC
- Combustion engine
- LNG

- BioLNG
- Carbon neutral hydrogen
- Carbon neutral electricity
- Bio fuels, hydrogen
- ICE share?
- FC share?
Modular architecture approach
CAST – a modular R&D approach

Combustion engine

Battery electric

Fuel cell electric
JOINING FORCES FOR HYDROGEN-POWERED CO\textsubscript{2}-NEUTRAL TRANSPORTATION

Technology leadership

Economy of scale

Society push

Infrastructure roll-out
Fast-paced introduction

Demanding long-haul
Regional-haul
Heavy construction
Drayage-haul
Urban construction
Waste and recycling
Distribution
City buses
Energy services

FCEV
BEV
BEV
BEV
BEV
BEV
BEV
BEV
Hybrid
BEV

2022 Electric production roll-out
2025 Electric production roll-out
Volume ramp-up according to demand

- Total
- Distribution
- Waste
- Regional
- Long Haul
- Construction
Leading the transformation towards fossil free transports

DISTRIBUTION France

CONSTRUCTION US

MINING Indonesia

LONG-HAULAGE Europe
The transformation will accelerate now!

Great opportunity in Nordic food retail – distribution example

- Transport cost ~6% of total costs
- CO\(_2\) from transports is around 30%
- Electric solution today ~10-15% higher in TCO
  (Total cost increases: 6\%_{\text{transport cost}} \times 15\%_{\text{TCO}} = 1\%)

Total cost increase +1% Transport CO\(_2\) -100%
End customer choice will be simple

Diesel carried milk
1.00 EUR

Electric carried milk
1.01 EUR

Transport CO₂ -100%
Shift in mix for transport cost

NORDIC FOOD RETAIL – DISTRIBUTION EXAMPLE

Diesel

Logistics cost
Food retailer

Battery electric

- Vehicle
- Fuel or electricity
- Driver + admin + others

- Repair and maintenance
- Transporter profit

- Financing and insurance
- Battery
Volvo Group has the assets to create the most competitive solution for the customer.
Volvo Group has the assets to create the most competitive solution for the customer

**VEHICLE**
- Application excellence
- Tailor-made for productivity and uptime
- Modular product system - CAST
- Ramp-up of volumes with scale
- Used equipment and recycling

**BATTERY SYSTEMS**
- Application optimization for range, life-length and weight
- Connected solutions
- Established partnerships
- Charging solutions
- Second life and recycling

**REPAIR & MAINTENANCE**
- Service network density 24/7
- Service and uptime contracts
- Connected solutions
- Trained and experienced staff

**FINANCING & INSURANCE**
- Volvo Financial Services
- Existing business models
- Infrastructure
- Customer knowledge

**EQUIPMENT-as-a-SERVICE**
- Uptime
- Safe
- Productive
- CO₂ free
- Piece of mind
Step change in our life-cycle revenues

Life-cycle revenue per unit increases with >50%
Opportunity of a century!

GROWTH

- Step change in market share
- Higher life cycle revenue per unit
  - >1.5x for electric vehicles
  - > 5x for autonomous solutions
- >35% electric vehicle sales by 2030
- Underlying transport demand

RESILIENCE

- EV gives step change in service contract penetration and duration
- >50% of Group sales from service by 2030

Leading the way to a fossil free society by 2050
Opportunity of a century!

Stronger growth and resilience