

























# Volvo Group



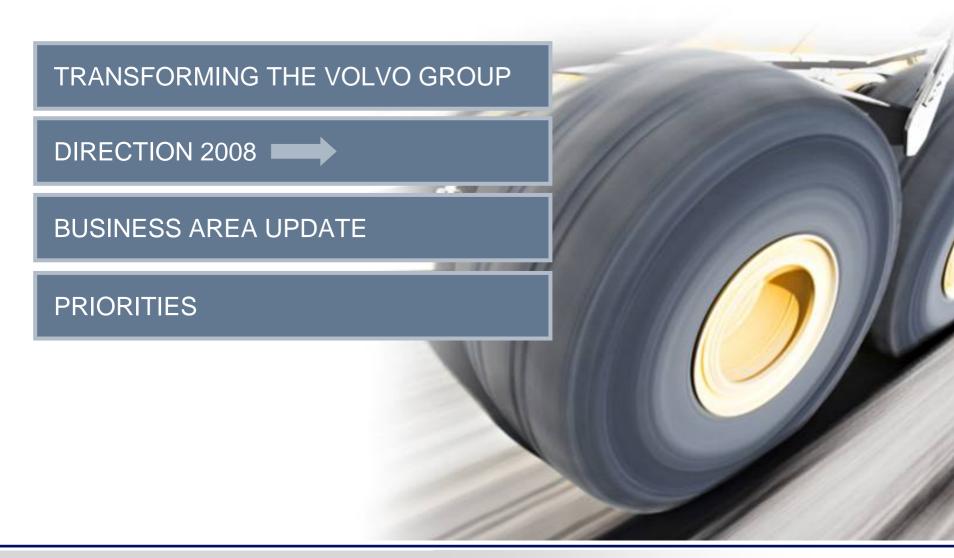




Leif Johansson President and CEO Volvo Group



# Agenda



### TRANSFORMING THE VOLVO GROUP

- **▶** 1998 2007
  - Exit cars and focus on commercial products
  - Build presence in developing economies
- ▶ 2007 Strong growth



# **Volvo Group Vision**

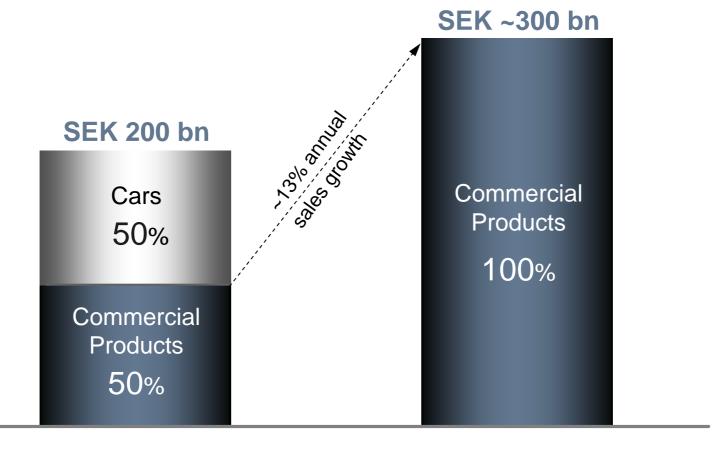
To be valued as the world's leading provider of commercial transport solutions

Wanted positions in each of our businesses:

- Number 1 in image and customer satisfaction
- Number 1 or 2 in size or superior growth rate
- Sustainable profitability above average



### **Exit Cars to build strong Commercial Product business**



1998

2008-Q1 12-months

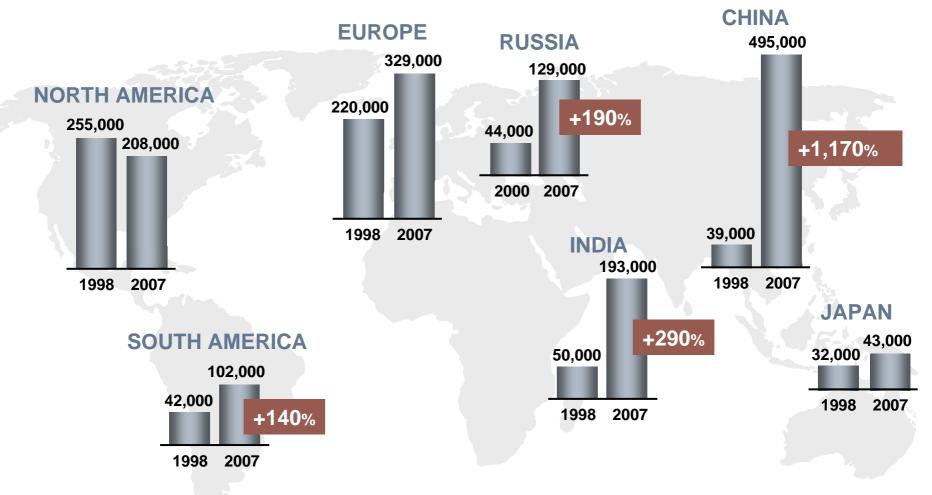
### TRANSFORMING THE VOLVO GROUP

- **▶** 1998 2007
  - Exit cars and focus on commercial products
  - Build presence in developing economies
- ▶ 2007 Strong growth



# Strong growth in developing economies

Heavy duty truck market 2007

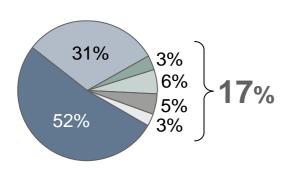




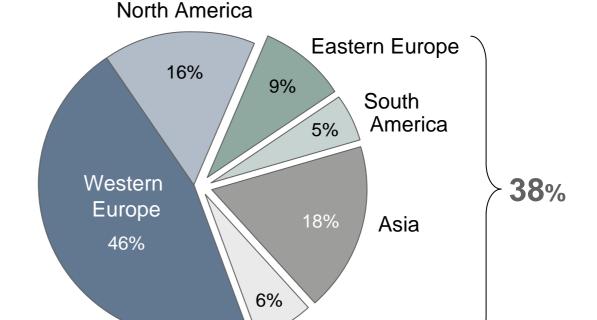
# Capturing growth in developing economies improves geographical balance







**SEK 100 bn** 



Other Markets

SEK ~300 bn

### TRANSFORMING THE VOLVO GROUP

- ► 1998 **-** 2007
  - Exit cars and focus on commercial products
  - Build presence in developing economies
- ► 2007 Strong growth



### Agenda at CMD 2007

Strong organic growth and acquisitions to get a foothold in Asia

#### **Organic growth**

**Greater Europe** +16% (EE +69%)

Soft offers Spare parts +8%

Workshop services +15%

 US'07 trucks launched Competitive products

Hybrids on their way to market

Program for 2008-2009 of SEK 6 bn Investing for growth

and productivity

#### **Growth through acquisitions**

Nissan Diesel Integration under way

Ingersoll Rand Integration under way

Leverage sales and profitability Lingong

Eicher Motors JV Entry into India and new truck segment

#### DIRECTION 2008

#### DRIVE ENERGY EFFICIENCY

- Products
- Production

#### DRIVE PRODUCTIVITY AND PROFITABILITY

- ▶ Volvo Production System
- Productivity enhancing investments
- Business Units



# Drivers of the next generation of powertrains

#### Customer

 Cost of ownership fuel efficiency

Nextgeneration powertrains

#### **Volvo Group**

 Profitable growth

#### **Society**

- Regulations
- CO<sub>2</sub> reduction
- Transportation

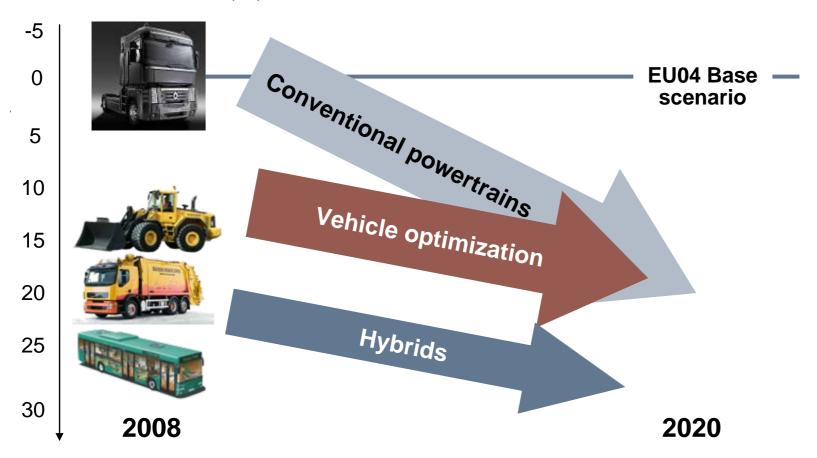
### Rising energy prices improves business case

- Fuel price drives technology development
- Quicker return on investment
- Quicker market entrance for all fuel saving technologies
  - Short haul, long haul, urban distribution, city buses, wheel loaders, etc.



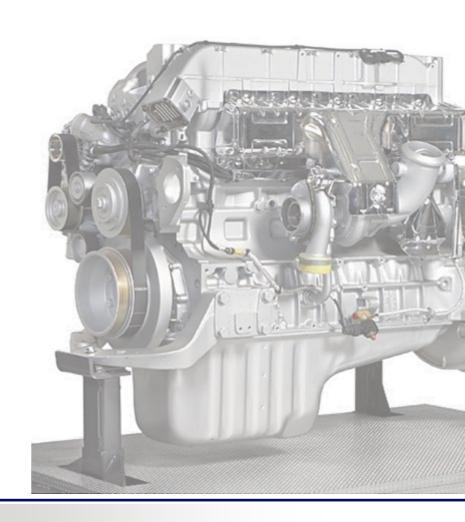
### Potential to reduce fuel consumption

#### Potential reduction (%)



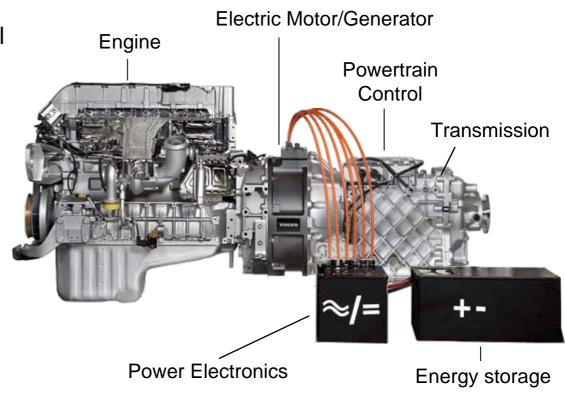
# Technology for a potential reduction of ~25% in fuel consumption

- Vehicle adaptation
- Reduce parasitic losses and friction
- Combustion development
- After treatment systems
- Waste heat recovery
- Hybrid technology
- Engine downsizing



### Volvo hybrid system the superior choice

- The parallel hybrid will fit a wide range of the Volvo Group vehicles
- Excellent performance
- Lower cost compared to all available hybrid systems
- Double electrical power and torque capacity as compared to available parallel hybrid systems
- True system optimization through full control



# One Group-wide technology generates economy of scale

### **SHARED HARDWARE**

Battery management unit

Control system



**Motors** 

**Electric** architecture, voltage levels

Energy storage

Cables and connectors



Inverter

DC/DC converter

- Commonality
- Short development times
- Volumes of key components

















# Entering industrialization phase on hybrids

- Diesel-electric hybrid technology platform established
- Medium duty to heavy duty applications
- Substantial fuel saving demonstrated
- Prospects discussed with customers
- 25 hybrid vehicles built 2008
- Serial production 2009



#### DIRECTION 2008

#### **DRIVE ENERGY EFFICIENCY**

- Products
- Production

#### DRIVE PRODUCTIVITY AND PROFITABILITY

- ▶ Volvo Production System
- Productivity enhancing investments
- Business Units



# Volvo Trucks' assembly plant in Ghent, Belgium – CO<sub>2</sub> neutral

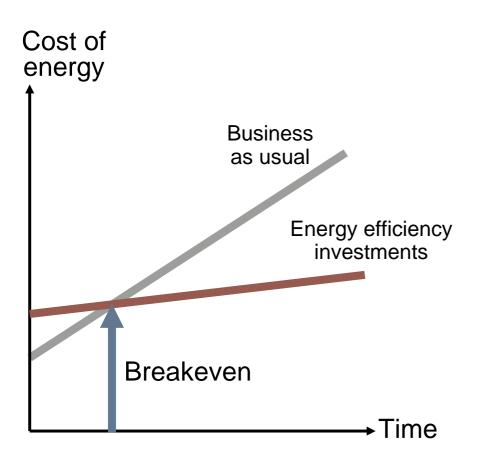




- 15–20 years leasing agreement: no capital investment for Volvo
- Co-operation on energy saving activities:
  - Windmills
  - Solar panels
  - Skylight windows
  - Bio energy

# Investments in reduced energy consumption

Good for both environment and shareholder return



#### Ghent, Belgium

- Breakeven reached already year 1
- Estimated cost savings
  - 2009: SEK 5 M
  - 2020: SEK 20 M

#### DIRECTION 2008

#### DRIVE ENERGY EFFICIENCY

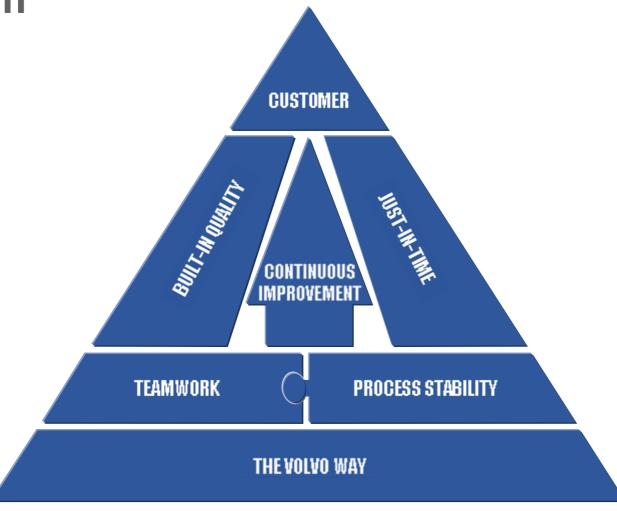
- Products
- Production

#### DRIVE PRODUCTIVITY AND PROFITABILITY

- Volvo Production System
- Productivity enhancing investments
- Business Units



Implementation of Volvo Production **System** 



#### DIRECTION 2008

#### DRIVE ENERGY EFFICIENCY

- Products
- Production

#### DRIVE PRODUCTIVITY AND PROFITABILITY

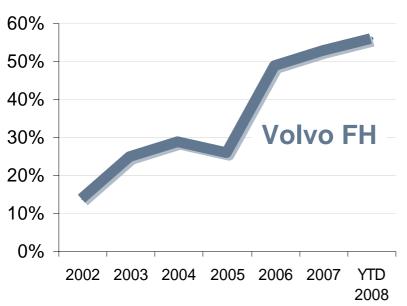
- ▶ Volvo Production System
- Productivity enhancing investments
- Business Units



**Productivity enhancing investments** 

**Example: Automated Mechanical Transmission** (AMT)

#### Penetration of AMT

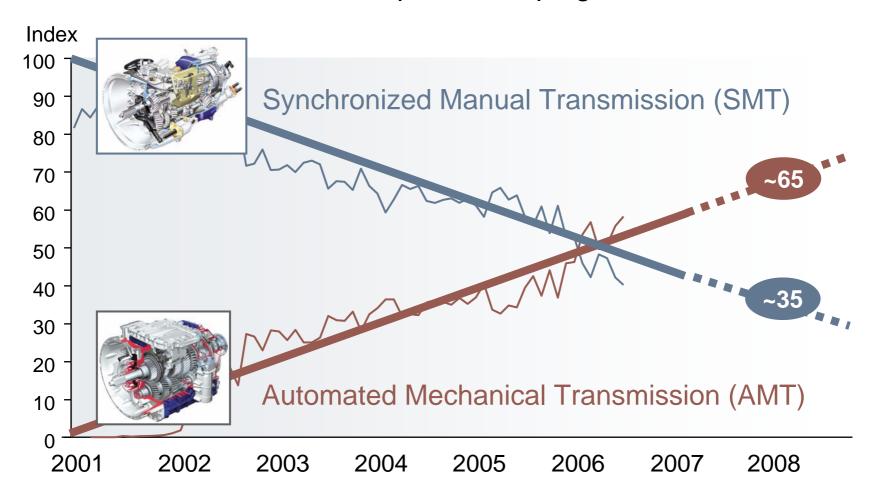


#### Success factors

- Automated manual transmission, advantages:
  - low weight
  - low friction
  - few moving parts
- Widened offer now construction and up to 80 tons
- Low fuel consumption
- Good drivability attract new drivers
- Matured product Strong brands

# AMT gearbox the new truck standard

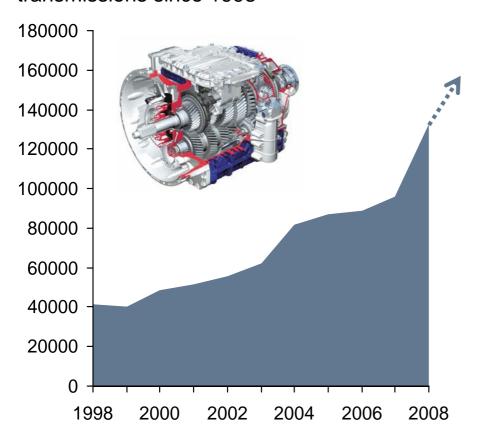
Deliveries from transmission plant in Köping, Sweden 2001-





# Capacity investments in AMT

Volume development of in-house heavy duty transmissions since 1998



#### **Investment of SEK 400 M**

- Capacity increase +55%
- Productivity increase >25%
- Improved flexibility through merged SMT+AMT assembly lines
- Manning: -15%
- Reduced lead times inventory effect

#### DIRECTION 2008

#### DRIVE ENERGY EFFICIENCY

- Products
- Production

#### DRIVE PRODUCTIVITY AND PROFITABILITY

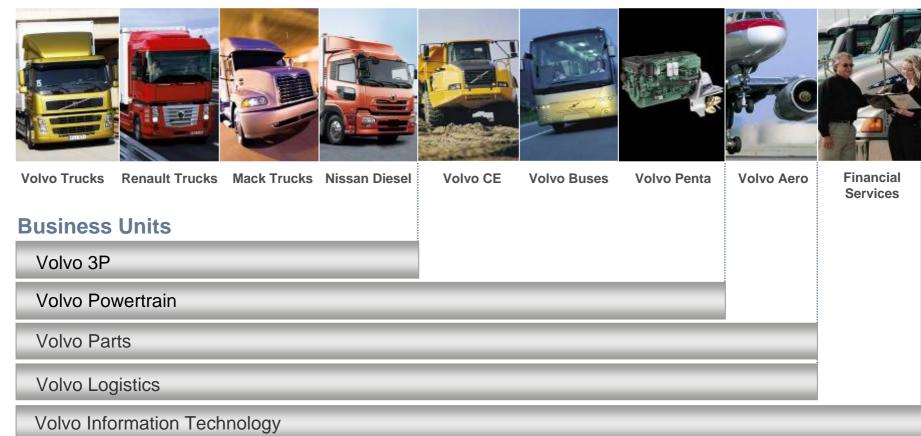
- ▶ Volvo Production System
- Productivity enhancing investments
- Business Units



### **Volvo Group**

#### Organized to deliver sharp customer focus and shared global strength

#### **Business Areas**



# Volvo 3P and Volvo Powertrain Business units to drive integration and internal efficiency

#### **INDUSTRIAL EFFICIENCY**

#### **Example**

- Volvo 3P
- Volvo Powertrain



#### Focus on:

Products and features, synergies, economies of scale, cost and quality

#### **CUSTOMER FOCUS**



Sales



Final Assembly



- Marketing
- After Market
- Customer Offer

**CUSTOMER** 

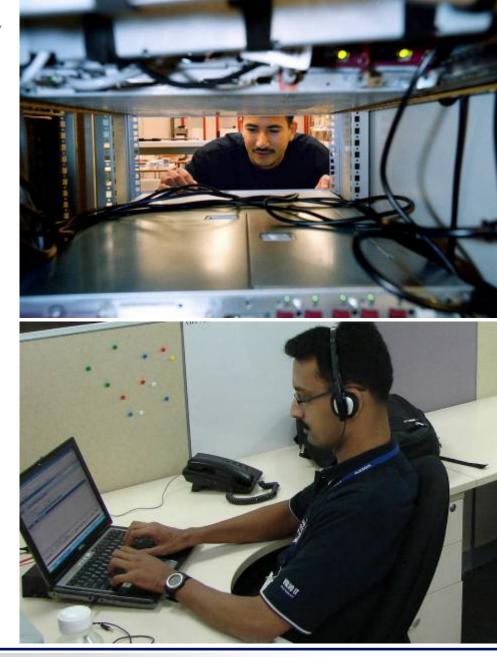
#### Focus on:

Customer satisfaction, brand image, profitability and cash flow

#### DRIVE PRODUCTIVITY AND PROFITABILITY

### Volvo IT

- Providing IT support for more than 100,000 Volvo Group employees
- Present in 40 locations worldwide
- Established in Poland
- Established in India



### **Volvo Parts**

### Parts logistics for the whole Group





**Toronto** 



Ghent



Moscow



Dubai



Seoul



**Singapore** 



**Dallas** 



Curitiba



**Johannesburg** 

#### **Key facts**

- 40 warehouses/sites worldwide
- >40,000 users of diagnostic tools, service and parts information
- Over 600,000 stocked part numbers
- 32 million order lines per year
- Deliveries to customers in 120 countries

#### DRIVE PRODUCTIVITY AND PROFITABILITY

### **Volvo Logistics**

- Optimizing Volvo Group transportation flows for
  - In-bound
  - Out-bound
- Scale in purchasing transportation services

#### **Key facts**

- Present in 34 locations world-wide
- Inbound in 2007 5,420,000 tons
- Outbound in 2007 755,000 vehicles
- Pallet and package transactions: 104 million annually





#### **Volvo Business Services**

#### Drive productivity through centralization and process simplification



Greensboro



Curitiba



Göteborg



Wroclaw



Lyon

#### **Key facts**

- 3,300,000 AP invoices processed annually
- 525,000 customer payments per year
- 50,000 calls to Front Line at global HR Service Center

- Volvo Trucks
- Mack Trucks
- Volvo Buses
- Volvo Penta
- Volvo Aero
- Volvo Financial Services



### **Volvo Trucks**

#### **NEW TRUCK LAUNCH**

- Competitive product range
- News
  - Safety and Security
  - Driver focus
  - Lighter engine, D11
- Total transport solutions
  - Grow soft product business
  - Sales training 3,500 people



### **Volvo Trucks**

- The new trucks launch
- Price management
- Business cycle management
- Retail business
  - Forward integration
- Capacity and productivity enhancing investments
  - Increased flexibility and efficiency
- Europe
  - Safeguard strong performance
- International markets
  - High growth potential
- North America
  - Operational performance
  - US10





### **Mack Trucks**

- Particularly impacted by weakness in housing construction
- New Titan by Mack model and 16-liter MP10 engine continue a period of intense product renewal resulting in strongest ever portfolio
- Very positive customer response to the new Mack MP engine series, particularly improved fuel economy
- Strong dealer profitability and customer service support despite downturn
- Delivery of Mack US'10 SCR customer test vehicles underway





### **Buses**

- Europe
  - Consolidation and improved city bus performance
  - Synergies with Trucks in network, service and parts
- North & South America
  - Export from Mexico
  - New coach range in Brazil
  - Bus Rapid Transit in focus
- International
  - Export from India and China
- Product cost rationalization
  - Direct assembly hours cut by 50% in next generation
- Introduction of hybrids in 2009



### **Volvo Penta**

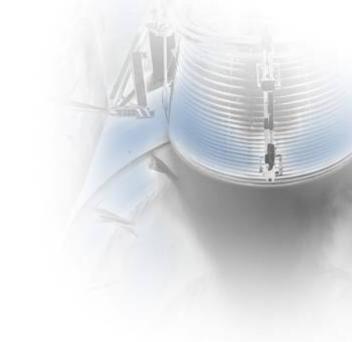
- Continue to build on the strong momentum for Volvo Penta IPS – Inboard Performance System
- Broadening customer offering and sales of soft products like:
  - Joystick
  - GPS based anchor
- Leverage sales of industrial engines based on the new Volvo Group engine offer
- New order-to-delivery system for increased efficiency and shorter lead times





### Volvo Aero

- Product cost reduction
  - Raw material inflation
  - Weak USD
- Manage supply chain ramp-up for 2009-2010
- Capitalize on composite knowledge
- Continue aftermarket profitability improvement





### **Volvo Financial Services**

- Disciplined portfolio and asset management
- Downturn management in North **America**
- Expansion in Region International
- Growth opportunities in Greater Europe
- Employee Development



### **Priorities**

1998-2007

# **GROWTH 1998-2007**

- Build competitive industry positions
  - Trucks
  - Volvo CE
  - Engines
- Intense period of <u>large scale</u> integration
  - Industrial restructuring
  - Engine consolidation
  - Common truck architecture
  - Consolidate post acquisitions in Volvo CE



### **Priorities**

2008 →

1998-2007

# INTEGRATION/EFFICIENCY 2008 ->

- Execute industrial investments
  - Eliminate bottle-necks
  - Improve productivity
- Integration in Asia and Volvo CE
- Grow aftermarket & service and other soft products