The Road to Zero Emissions

Darren Tasker - Vice President, Industrial Sales

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Volvo Group

102,000 employees | 190 markets

10 business areas | 13 brands

Sharing resources

Safer | Cleaner | More efficient









V O L V O

VOLVO

VOLVO





Our brands

Volvo Group's brand portfolio consists of several distinct brands, targeting a variety of customers and segments.











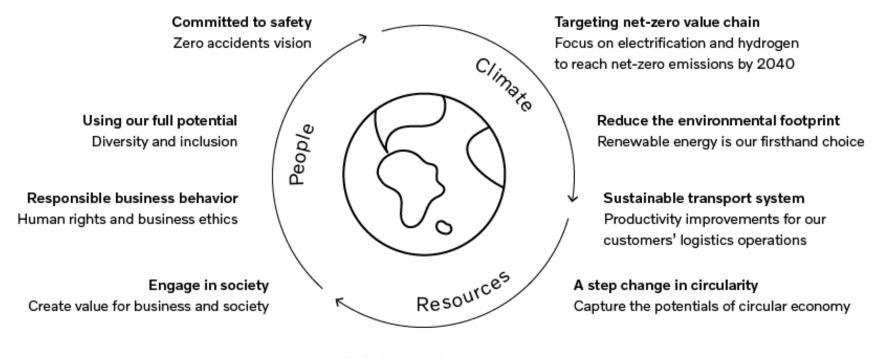








Our sustainability priorities



Substances of concern

Limit use of materials and substances of concern

Volvo Group

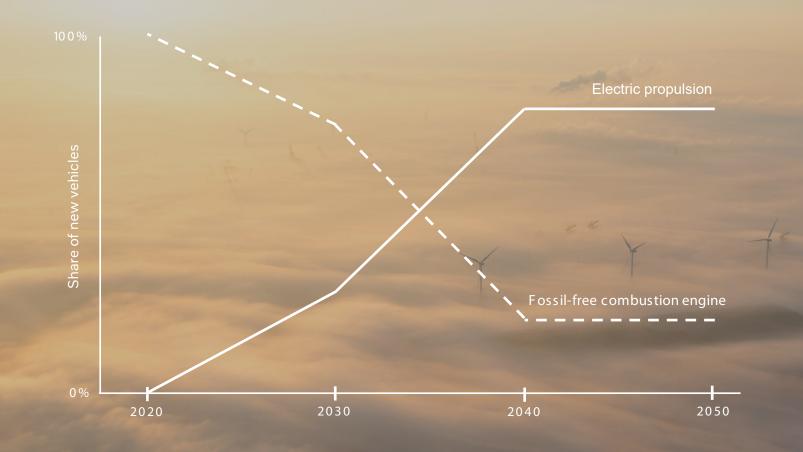


We have set ambitious targets Net Zero Value Chain GHG by 2050



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Accelerating the sustainable transformation to 100% fossil-free fuel



- → Our ambition is for 100% of our products to be driven by fossil -free fuels by 2040.
- → To contribute to an emissions-free future, there will be a steady shift into electric propulsion, and combustion engines will run on biofuel.

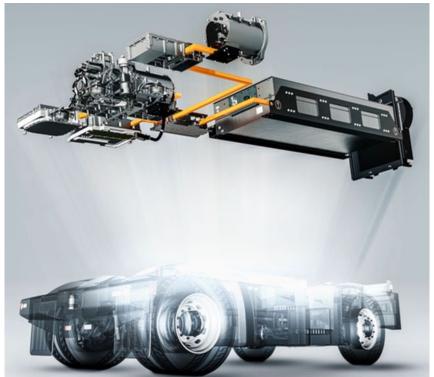


VOLVO PENTA

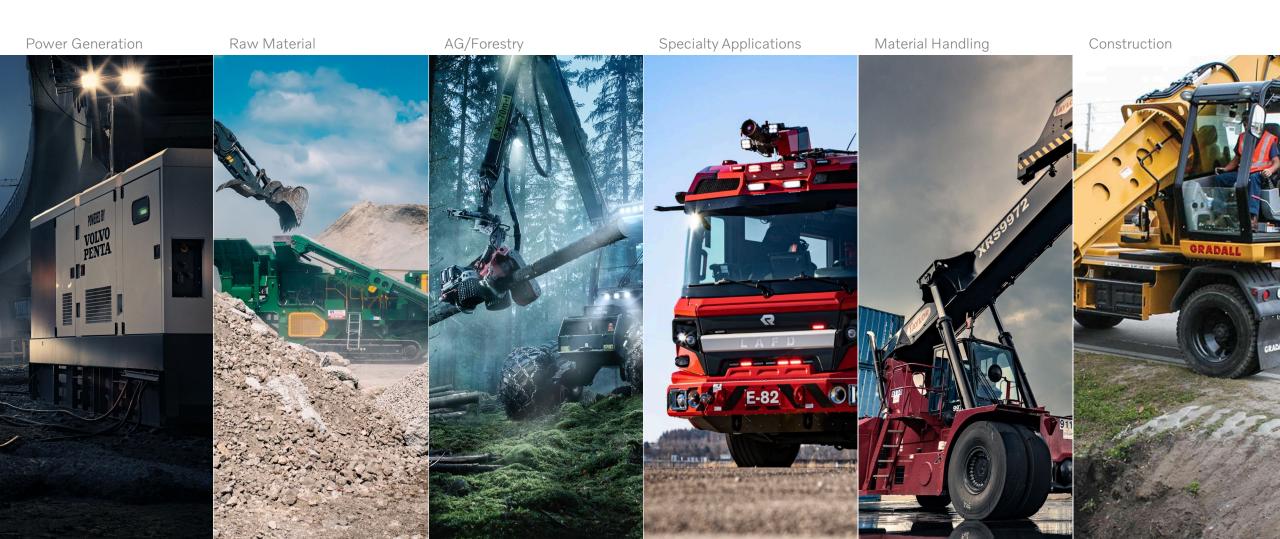
Develops, manufactures and markets world -leading engines and complete drive systems for boats and industrial applications

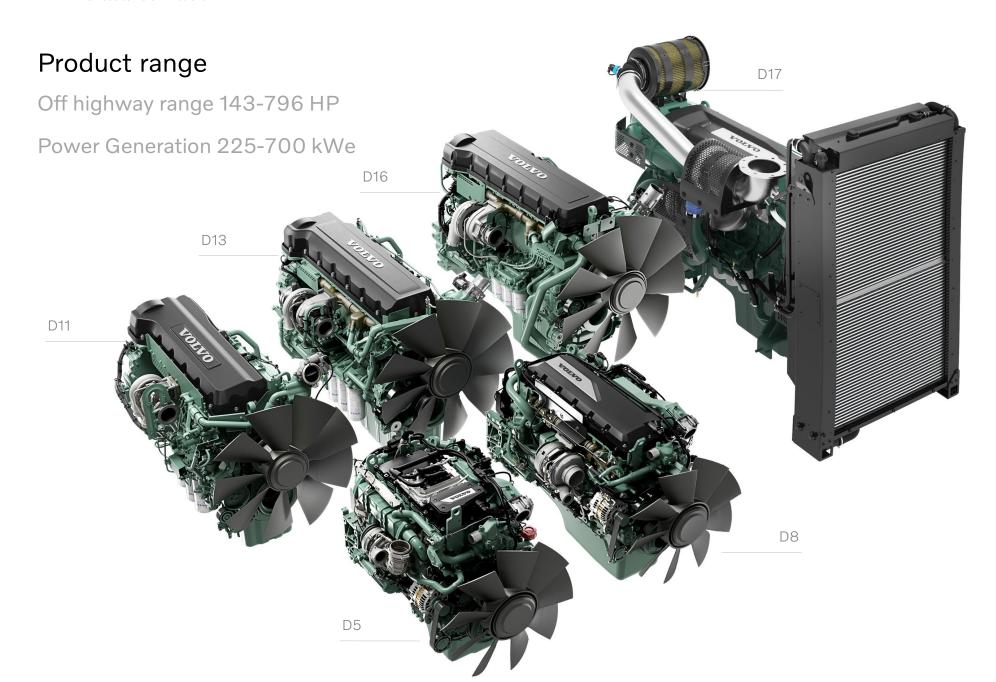
Premium brand with global presence and sales in more than 130 countries

The Volvo Group sales channel to the external OEM market



Segments





The Road to Zero Emissions

VOLVO PENTA

D17 Power Gen Engine Most powerful genset engine.

Introduced: February 2023



D17 Power Gen Engine







Compact Installation footprint

ECM 4





Stage 2

The Road to Zero Emissions

EPA Tier 2



17 LITER
SERIES

Volvo Group
Technology base

Noise optimized design

1000 h oil change interval



Up to

4%
Reduced Fuel consumption

G/kWh vs earlier technology

D8 Power Node 8% reduction in fuel cons

Introduced: February 2023



D8 Power Node

The Road to Zero Emissions

275 kWe L





Compact Installation footprint

EMS 2.4





Stage 2

Stage 3A

8 LITER SERIES

EPA Tier 2

Reg 96

Noise optimized

CAN (((x)))
bus

Communication

Globally Manufactured



Shorter Lead times

Volvo Group
Technology base

The Way Forward





VOLVO PENTA

Battery electric

Serial Hybrid

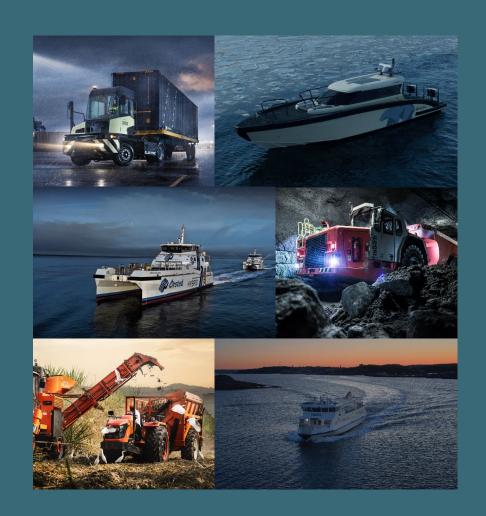
Parallel Hybrid

Diesel

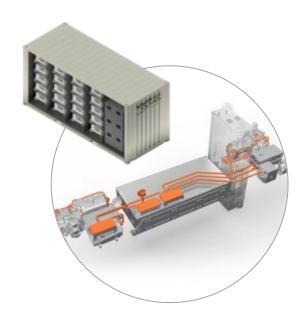
Methanol

Hydrogen ICE

Fuel cells



Multifaceted offer



Battery Electric & Hybrids



Non-Fossil Fuels



Fuel Cells

The Journey to Net Zero

The Road to Zero Emissions







Electric terminal tractor in partnership with TICO, US

600 V electric driveline to Rosenbauer's electric city fire truck

Dual fuel (hydrogen/diesel) solution for combustion engine in partnership with CMB.Tech

The Journey to Net Zero





Battery Energy Storage Subsystems

Based on Volvo Group components

New Technology

Complete solution provider

Based on proven Volvo Group components

First customers secured

- Terminal Tractor
- Excavator
- BESS

Industry announcements made and further coming

Interest in charging and autonomous solutions

In detailed discussions with several potential customers

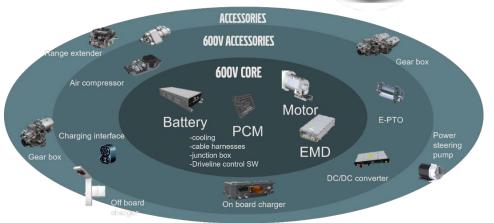












BESS Sub-system

Volvo Penta approach:

Based on proven Volvo Group components

Sub System supplier

Strategic partnership with UIG

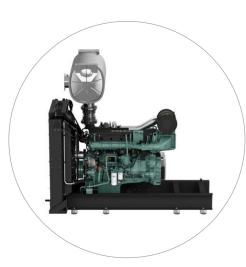




Hydrogen & Gas fuels



Dual fuel



SI Methane GE

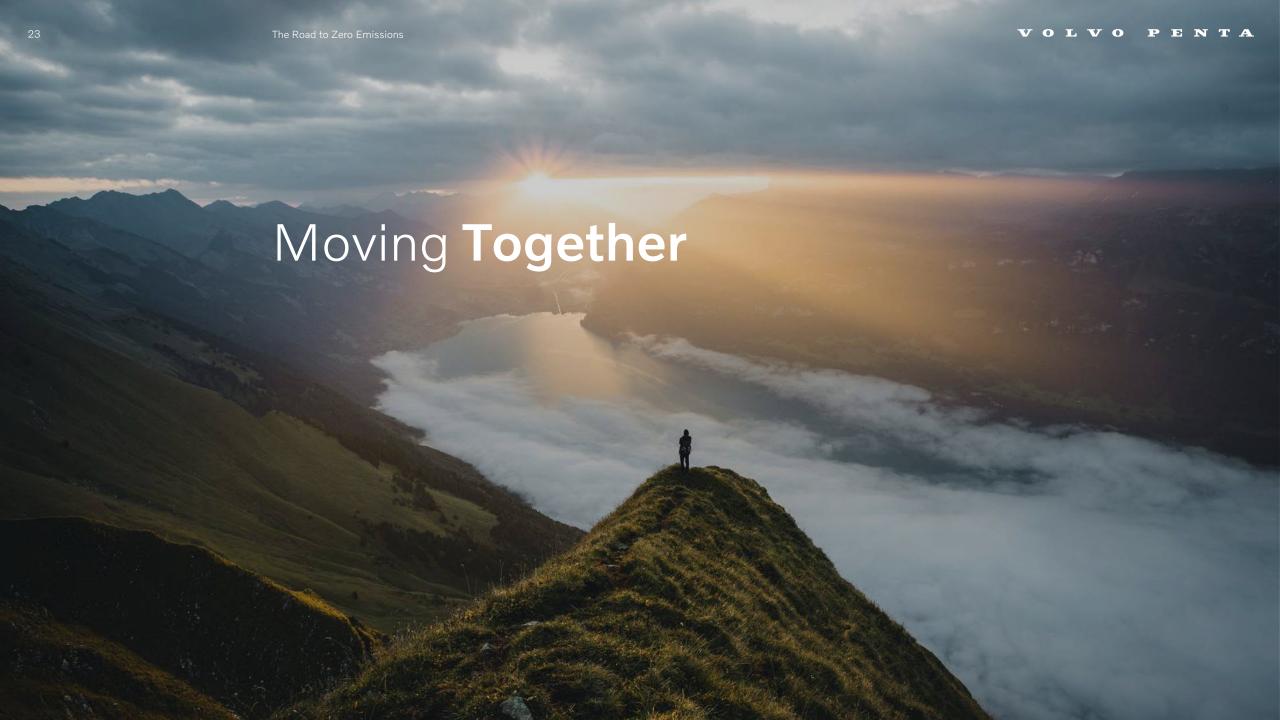


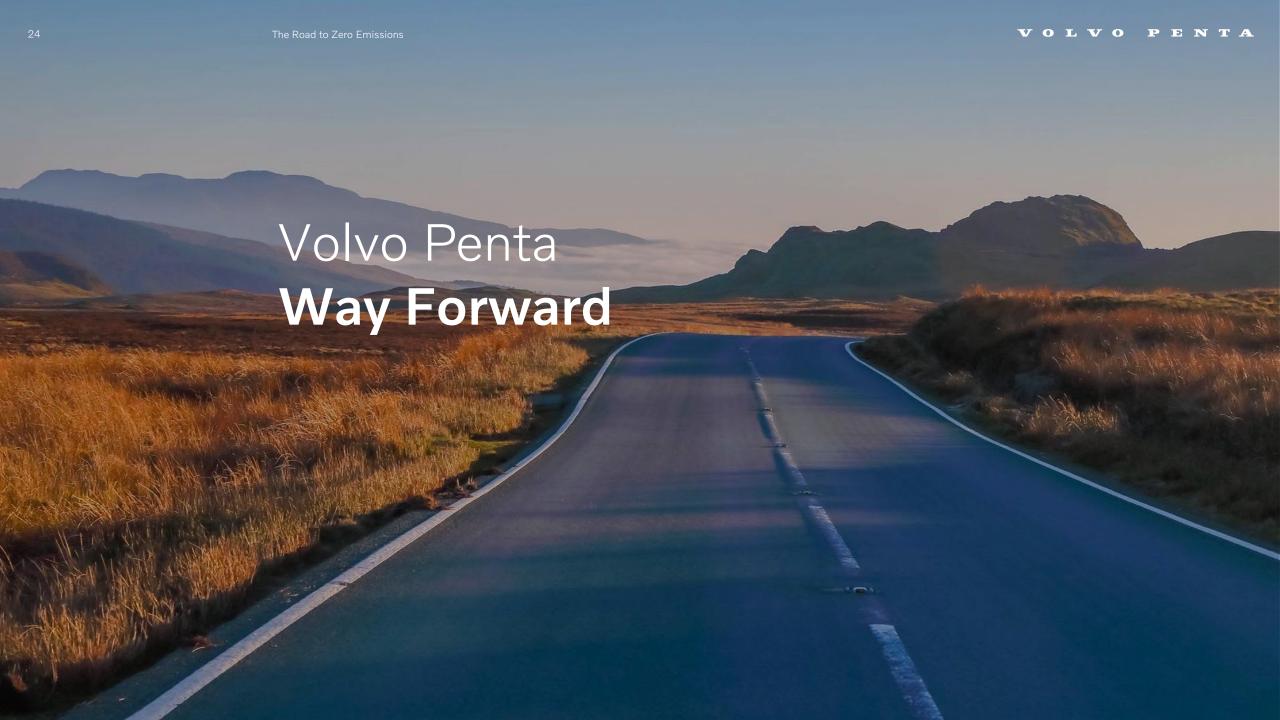
100% Hydrogen



Fuel Cell

Hydrogen availability





Made to move you

VOLVO PENTA