

V O L V O

Progress towards low emission vehicles

Volvo Group / Volvo Trucks

Bert D'Hooghe – Advisor EU Public Affairs

2024-08-29

What we do

Volvo Group offers trucks, buses, construction equipment, power solutions for marine and industrial applications, financing and services that increase our customers' uptime and productivity.

We develop and offer electrified and autonomous solutions for the benefit of customers, society and for the environment.



V O L V O

Volvo Trucks in numbers

global network of
2,200
dealers

dealer and
workshops

130
countries

1.2
MILLION
running population

assembled in
12
countries

145,000
Volvo trucks delivered worldwide

Long-term ambitions

100%

Safe

Fossil-free

More productive

COMPANIES TAKING ACTION TOWARDS SCIENCE-BASED TARGETS



V O L V O

TOWARDS FOSSIL FREE TRANSPORTS

50%

CO₂ reduction by

2030

100%

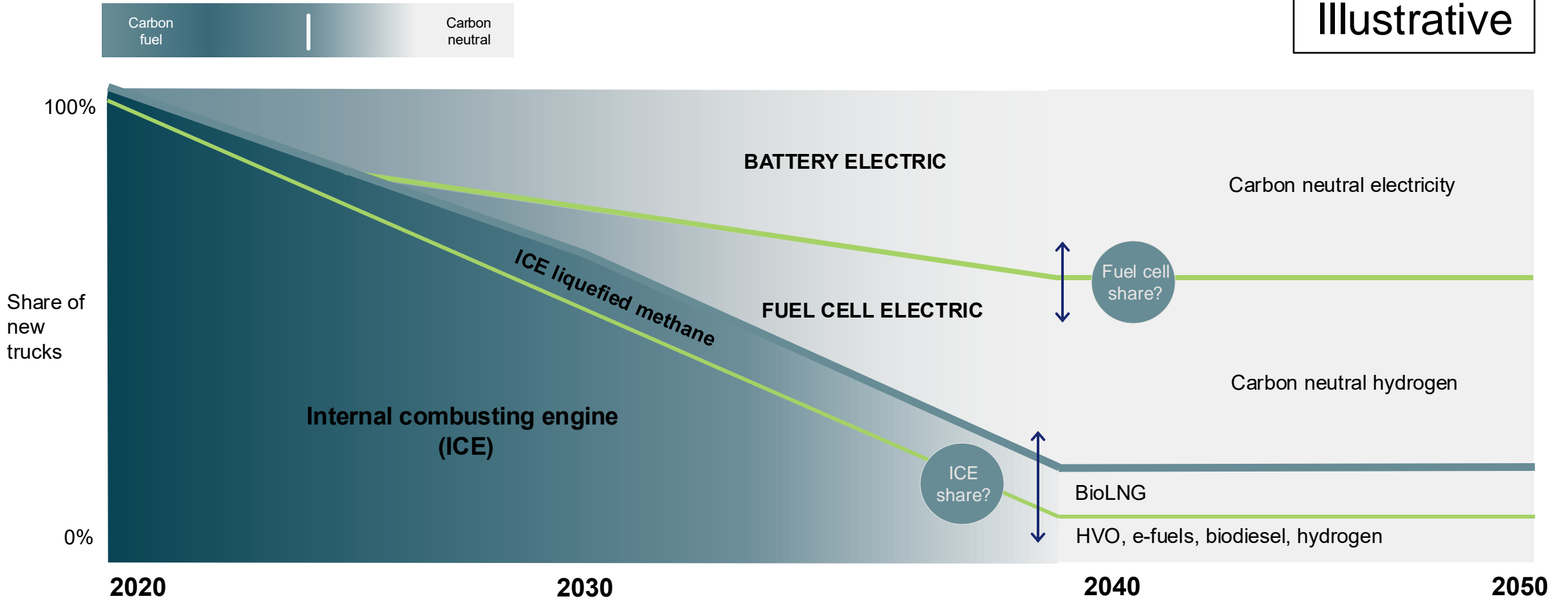
CO₂ reduction by

2040



Three-pronged strategy

Illustrative



V O L V O



FULL RANGE ELECTRIC TRUCKS

VOLVO



ADR

ADR-2023: AT VEHICLES ONLY

ADR-2025: ALSO FL VEHICLES (NOT EX)



V O L V O

40%

...of all goods
in EU travel less
than 300km

Eurostat figures for 2022



VOLVO

Enabling conditions for

Zero

emission
transport

Vehicles
& machines

Infrastructure

Fossil free
energy

Business
case

TRUCK CHARGING LOCATIONS

Private



On a vehicle "home" basis

Usually charge overnight, possible daytime recharge

8 hours +
20-100kW

Semi-public



At the customer's site

During loading/unloading, changing drivers, etc.

1-3 hours
150kW+

Public

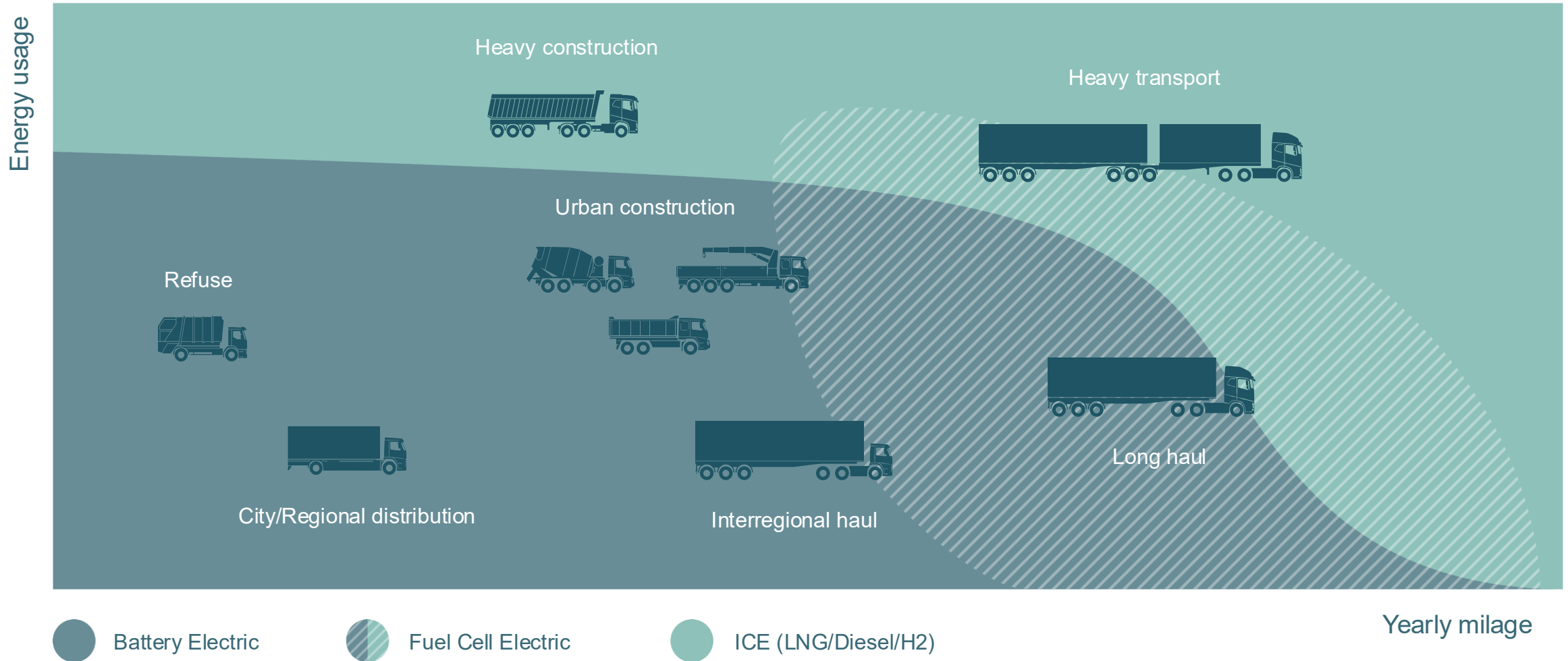


On industrial estates and along motorways



Combine with rest breaks or overnight stay

0,5-1,5 hours en 8 hours +
350kW+ and 20-100kW

A mix of products will be required in 2030 to support - 50% CO₂



Alternative energy carriers

	 Fossil fuel sources				 Energy from non-fossil sources					
	Diesel	CNG	LNG	Electricity	Biodiesel	HVO	Bio-CNG or Compressed Biogas	Bio-LNG or Liquefied Biogas	Electricity	Hydrogen
Source	Oil	Natural gas	Natural gas	Coal and natural gas	Vegetable oils	Waste and vegetable oils	Biomass and waste	Biomass and waste	Sun, wind, water and nuclear	Sun, wind, water and nuclear
CO ₂ emission reduction	Diesel is the reference	Up to 10% reduction	Up to 20% reduction	Up to 20% increase	Between 30% and 70% reduction	Between 30% and 90% reduction	Between 70% and 100% reduction	Between 80% and 100% reduction	Up to 95% reduction	Up to 90% reduction
Advantages	Accessible and relatively cheap	Normally more accessible than LNG	Good energy density	High efficiency	Accessible in some markets	Good performance, can be mixed with diesel	Lower well-to-wheel* value than CNG	Lower well-to-wheel* value than LNG	Zero tailpipe for both CO ₂ and NO _x	Zero tailpipe for CO ₂
Areas to consider	High CO ₂ impact, air pollutants	Lower energy density, high fuel price fluctuations	Infrastructure, high fuel price fluctuations	Infrastructure, how the electricity is produced, relatively cheap	8% lower energy content, higher vehicle maintenance	Access to raw materials, food vs. fuel discussion**	Access to raw materials, lower energy density	Access to raw materials, infrastructure	Access to renewable energy, infrastructure, relatively cheap	Limited infrastructure, high price
Volvo models and engine sizes	All except FM Low Entry	FE 9 liters	FM/FH 13 liters	All except FH16	FL/FE and FM/FH/FH16 5, 8, 13, 17 liters	All except FM Low Entry	FE 9 liters	FM/FH 13 liters	All except FH16	–
Availability	Now	Now	Now	Now	Now	Now	Now	Now	Now	Second half of the decade

Alternative fuels - checklist

Are you thinking of adding a truck with an alternative driveline to your business?

- ✓ Total Cost of Ownership
- ✓ Drive cycles
- ✓ Infrastructure
- ✓ Availability
- ✓ Reliability
- ✓ Legislation and policy



V O L V O