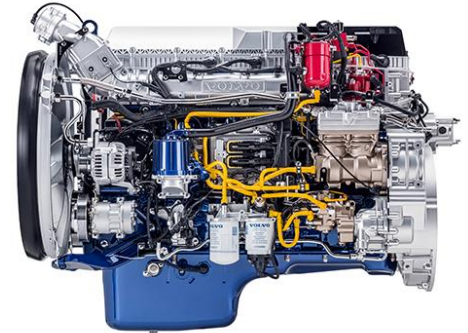




VOLVO FH LNG AND FM LNG



TRANSPORT CHALLENGES AND SOLUTIONS – TOWARDS ZERO EMISSIONS

Marek Gawroński, Vice President Public Affairs, Volvo Group



Volvo takes the lead towards a more sustainable future

Environmental vision

ZERO
EMISSIONS FROM
VOLVO TRUCKS



Alternative fuels – our way forward

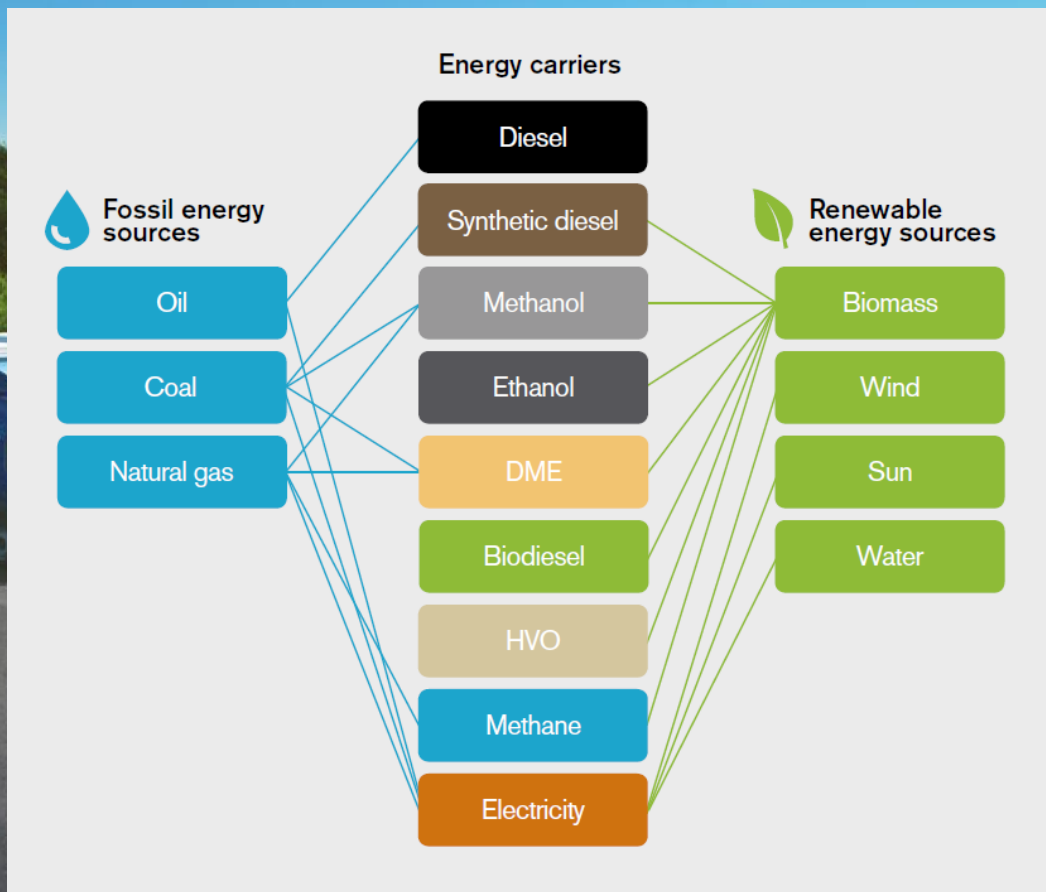


Different criteria

- Climate impact
- Energy efficiency
- Land use efficiency
- Fuel potential
- Vehicle adaptation
- Fuel cost
- Fuel infrastructure

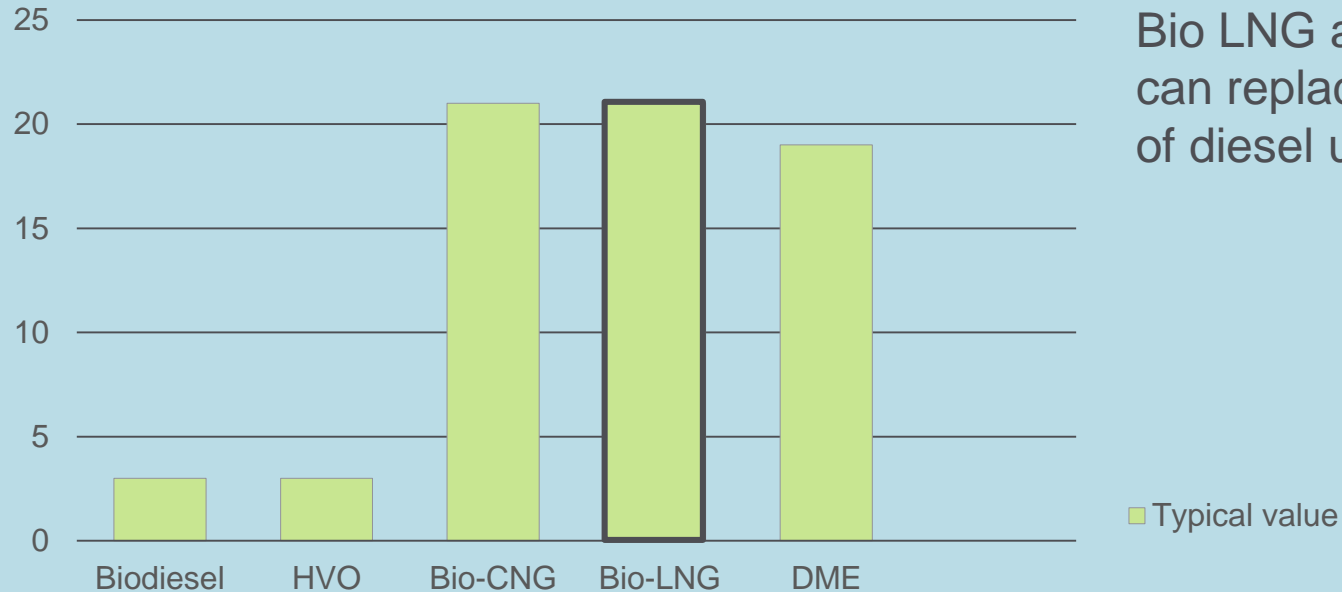


Alternative fuels – The way forward



Replacing diesel with biofuels

Fuel potential (%)*



Bio LNG and Bio CNG
can replace 20%
of diesel use

Typical value

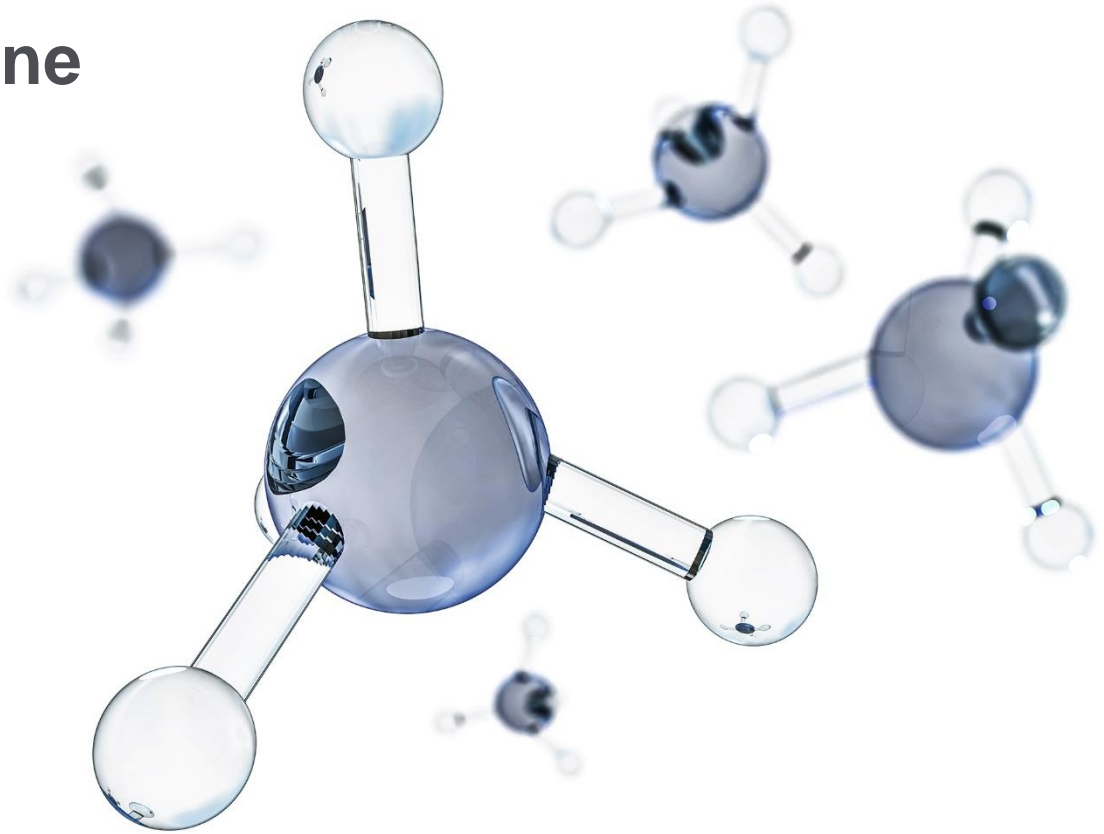


LNG – Liquefied natural gas

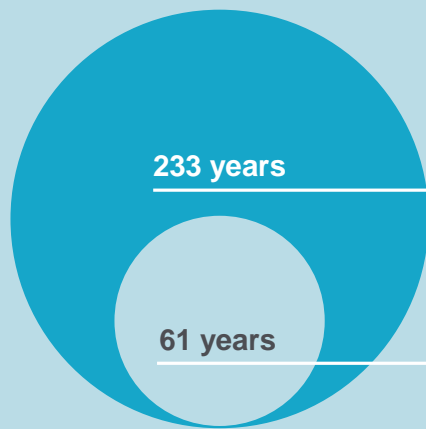


Reasons for methane

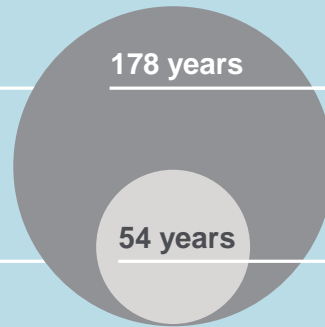
- High energy content
- Growing infrastructure for gas
- Reduced climate impact
- Competitive price



Natural gas



NATURAL GAS



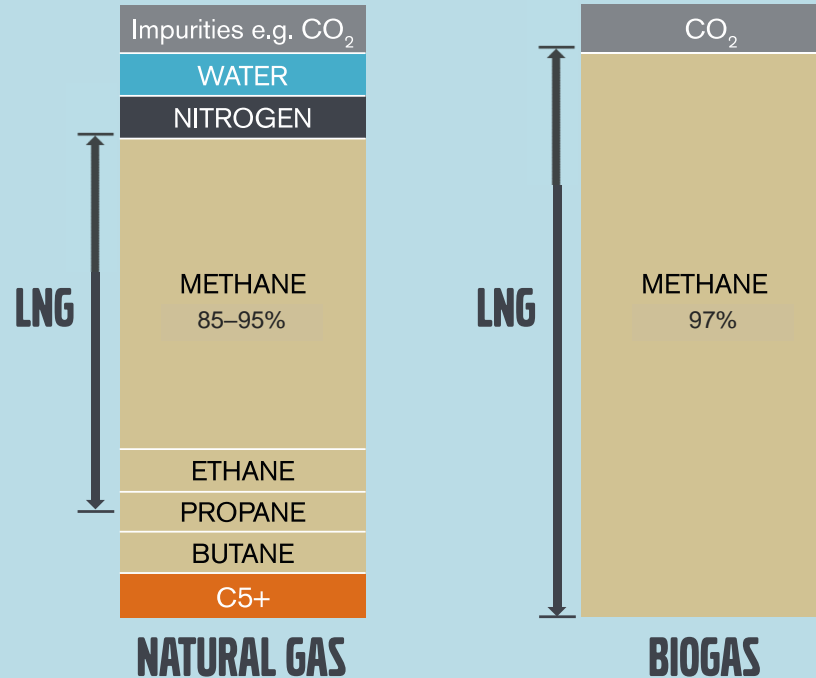
OIL

Total remaining
recoverable reserves

Proven reserves

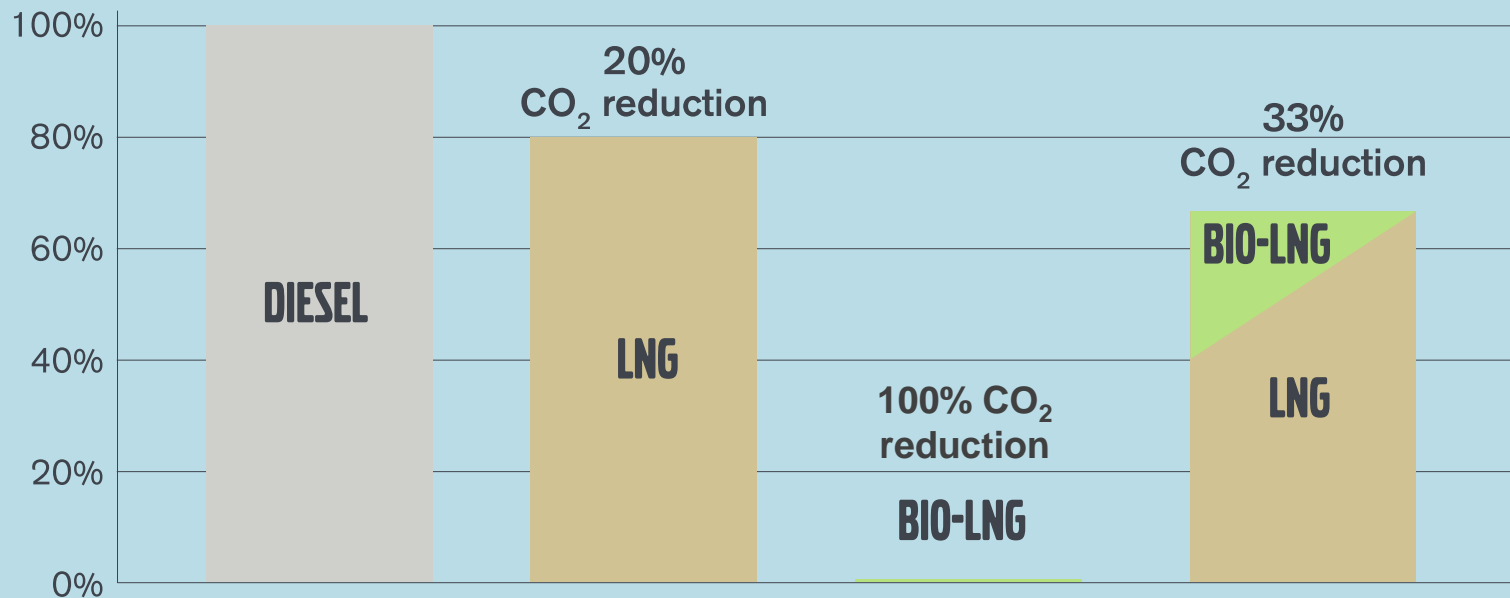


LNG is liquefied natural gas or biogas



LNG – CO₂ saving potentials

CO₂ emissions



Valid for tank to wheel



1 Climate
ambitions

2 Society
demands

3 Economical
benefits



Volvo FH LNG & Volvo FM LNG



PLANET



PROFIT



PERFORMANCE



The European market is dominated by long- and regional haul

72%
Long- and
regional haul

Total European
market 2016



Energy efficiency is key

Lowering CO₂ emissions for
our largest segment is crucial



Diesel performance with lower CO₂ emissions



Setting new standards for regional and long haul





WE DON'T COMPROMISE ON PERFORMANCE

Volvo FH & FM LNG

TRACTOR

Axle configuration	Wheel base (mm)	Gas tank size (kg)
4x2	3700/3800	205
6x2P	3800/4100	115/155
6x2T	3400/3700/3900	155(WB3400)/205
6x4	3900	205

RIGID

Axle configuration	Wheel base (mm)	Gas tank size (kg)
4x2	5200	205
6x2T	4300/4600/4800	155
6x2T	4800/4900/5200	205
6x4	4300/4600	155
6x4	4900/5200	205



Volvo LNG engine

Volvo G13C Euro 6.

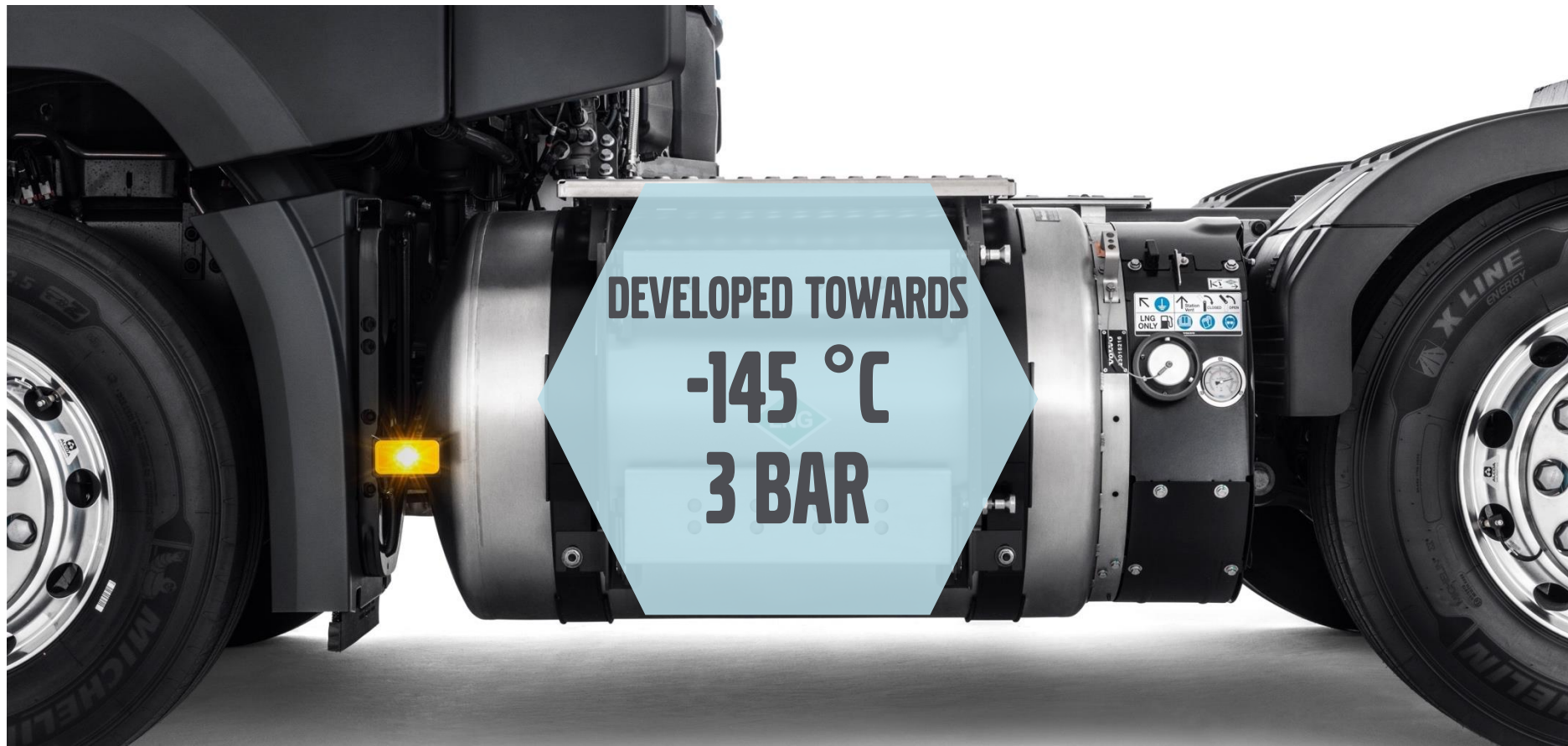
- In-line 6-cylinder 13-litre common rail engine,
- 420 hp/2100 Nm and 460 hp/2300 Nm.
- Up to 1000 km operating range





90-95% LNG

**20% LOWER
CO₂ EMISSIONS**



DEVELOPED TOWARDS
-145 °C
3 BAR

Expected driving range

40 ton smooth European long haul

115 kg

Up to 550 km

155 kg

Up to 750 km

205 kg

Up to 1000 km



Ambitious plans for LNG infrastructure in Europe



We all need to work together



