

IVECO

Your partner for sustainable transport

**A NEW ERA OF
SUSTAINABLE TRANSPORT ...**



IVECO

Air quality ...



Diesel ...

**Volkswagen
in meltdown
after faked
diesel tests**

Drivers face mass recall as share price crashes

**Toxic
scandal
on our
roads**



Low Emission Zones



Urban Access 2021+



FACT: Euro VI trucks are exceptionally clean ...

- Exhaust emissions are cleaner than the air drawn into the engine
- Almost act as vacuum cleaners for particulates in many cities
- Thanks to screening effects of diesel particulate filters

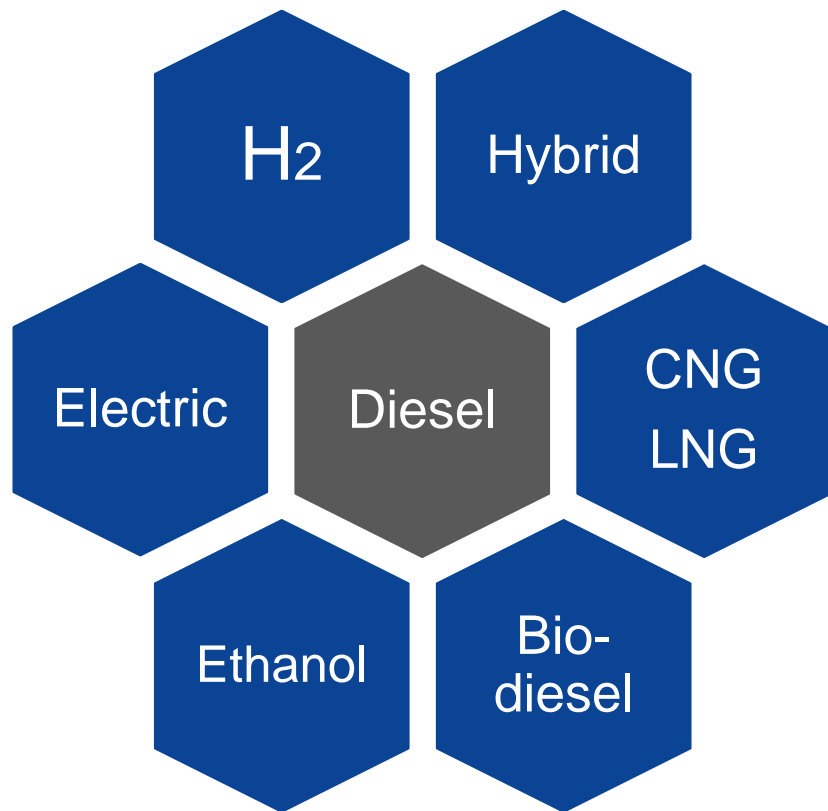


BUT ...

- As a fossil fuel, diesel has the highest carbon content per energy unit
- Diesel combustion produces particulates
- Diesel combustion generates noise
- Production & transport risk major ecological damages (oil spills)
- Diesel taxation is only going to increase

Alternative solutions are needed ...

Replacement candidates



Must be as efficient as diesel

- Total Cost of Ownership
- Reliability & Safety
- Payload & Versatility
- Comfort & Performance

Must be low environmental impact

- Reduced CO₂ emission
- Reduced air pollutants
- Reduced noise levels

Efficient distribution network

- Widespread availability
- Ongoing, easy access supply

Replacement candidates

		Alternative technologies				
		Full Electric	Parallel Hybrid	Plug-in Hybrid	CNG Bio CNG	LNG Bio LNG
Missions	Urban	+++	+	+++	+++	+++
	Regional	Impractical	No benefit	+	+++	+++
	Off-Road	Impractical 10 years +	No benefit	+	+++	+++
	National	Impractical 10 years +	No benefit	No benefit	+++ Rigids only	+++
	Long Haul	Impractical 10 years +	No benefit	No benefit	Difficult	+++

BLUE POWER DAILY ELECTRIC





- Batteries are heavy - so loss of payload. ...
Extending car driving licence limit to 4.25 tonnes
- Not on O licence
 - 1 September 2018

	MODEL	POWER (kW)	CHASSIS CAB	CHASSIS COWL	VAN	MINIBUS
SINGLE WHEEL	35S/E	60	●		●	
TWIN WHEEL	35C/E	60	●			
	45C/E	80	●	●	●	
	50C/E	80	●	●	●	●

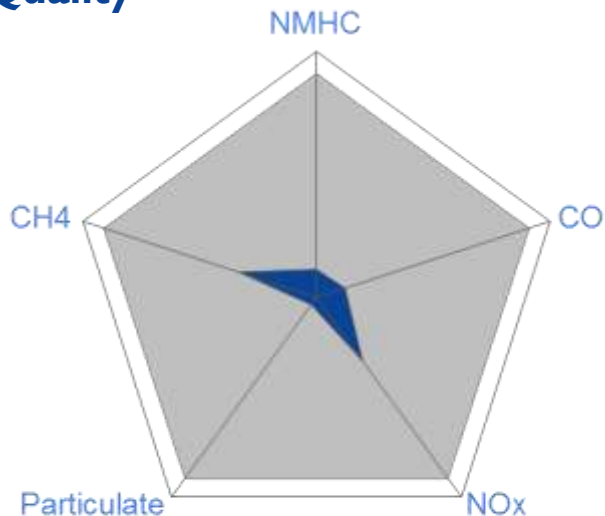
Battery configuration from 1 to 3 units, up to 200 km range

Natural Gas: a clean solution ...



Natural Gas

Air Quality



■ Euro VI limits

■ Natural Gas

EMISSIONS VERSUS EURO VI LIMITS

70 % less **NOx**

99 % less **PM**

90 % less **NMHC**

88 % less **Methane**

Global Warming

10 to 95% CO₂ emissions annually

Up to 20 tonnes CO₂ saving per truck

Up to 125 tonnes CO₂ saving per truck with Bio-CNG/LNG

Noise

3 dB noise reduction

Piek Quiet Truck Certification (-72 dB)

Night time delivery possible

Natural Gas BIO

CNG-LNG vs DIESEL Euro VI

NOx Emissions	-54%
NO2 Emissions	-96%
CO2 Emissions	-10% (15 tonnes/truck/yr)

BIO CNG-LNG vs DIESEL Euro VI

NOx Emissions	-54%
NO2 Emissions	-96%
CO2 Emissions	-80% (120 tonnes/truck/yr)



Daily Natural Power (with Hi-Matic)



Eurocargo NP



Stralis NP



Stralis NP 460



460 NP
STRALIS



RANGE
1,600
KMS

Stralis NP 460



4X2 TRACTORS
UP TO 1,600 KMS



6X2 TRACTORS
UP TO 750 KMS



LOW TRACTORS
UP TO 1,150 KMS



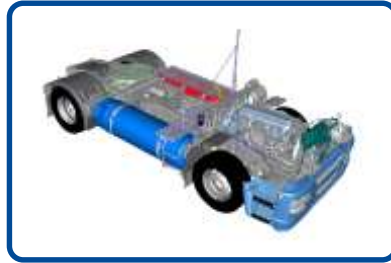
2 & 3 AXLE RIGIDS
UP TO 1,600 KMS

Stralis NP 460



CNG

UP TO 570 KMS



CNG + LNG

UP TO 1,100 KMS



DOUBLE LNG

UP TO 1,600 KMS



SINGLE LNG

UP TO 800 KMS

Natural Gas engine range ...

F1C



136 hp

350 Nm

**URBAN
DISTRIBUTION**

NEF 60



204 hp

750 Nm

**INTER-URBAN
DISTRIBUTION**

CURS0R 8 NP



330 hp

1,300 Nm

**MUNICIPAL &
DISTRIBUTION**

CURS0R 9 NP



400 hp

1,700 Nm

**REGIONAL &
LONG HAUL**

CURS0R 13 NP

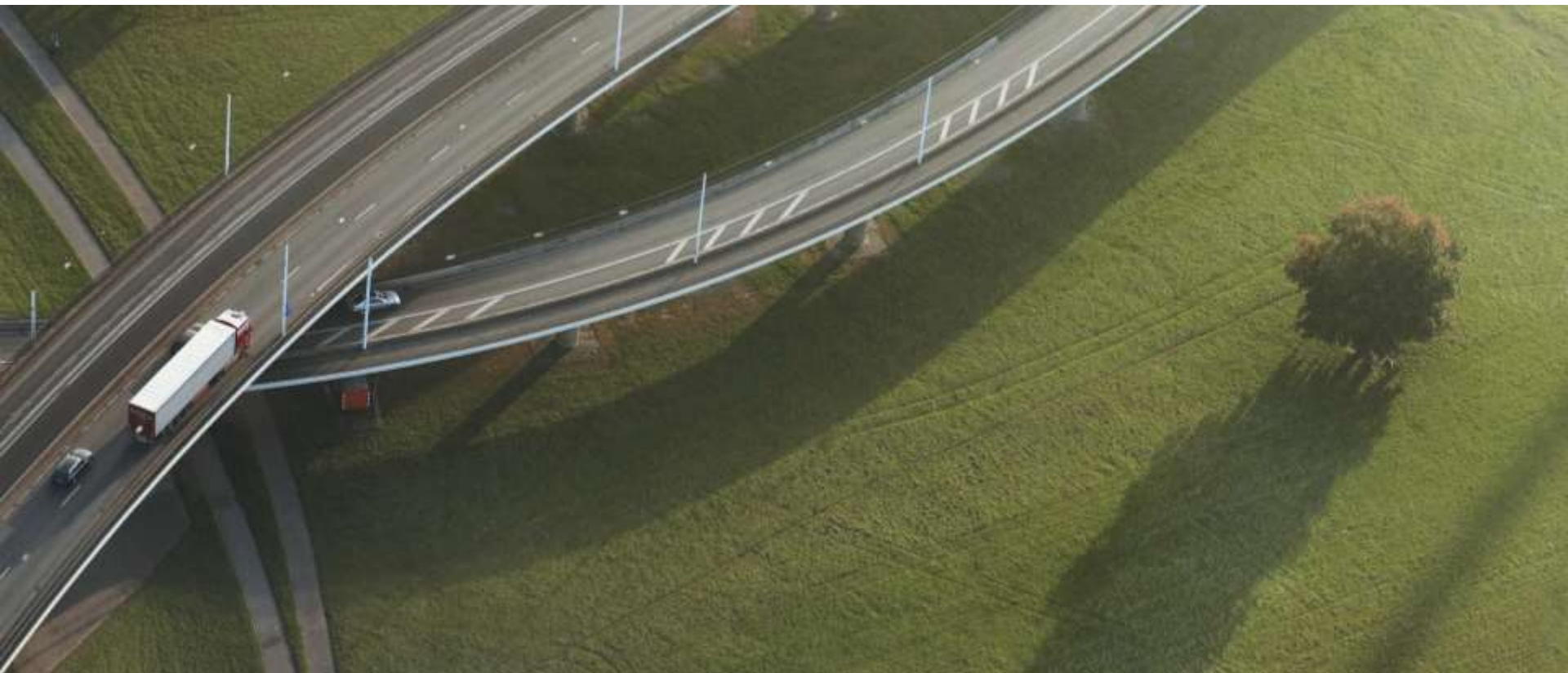


460 hp

2,000 Nm

INTERNATIONAL

Natural Gas: Because the world won't wait ...



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LEADER IN ALTERNATIVE FUELS



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