



LOGISTICS & MARITIME FORUM

European trends and regional perspectives

15-16 February 2017, Piacenza Expo

On-Road logistics evolution

LNG&CNG TECHNOLOGIES

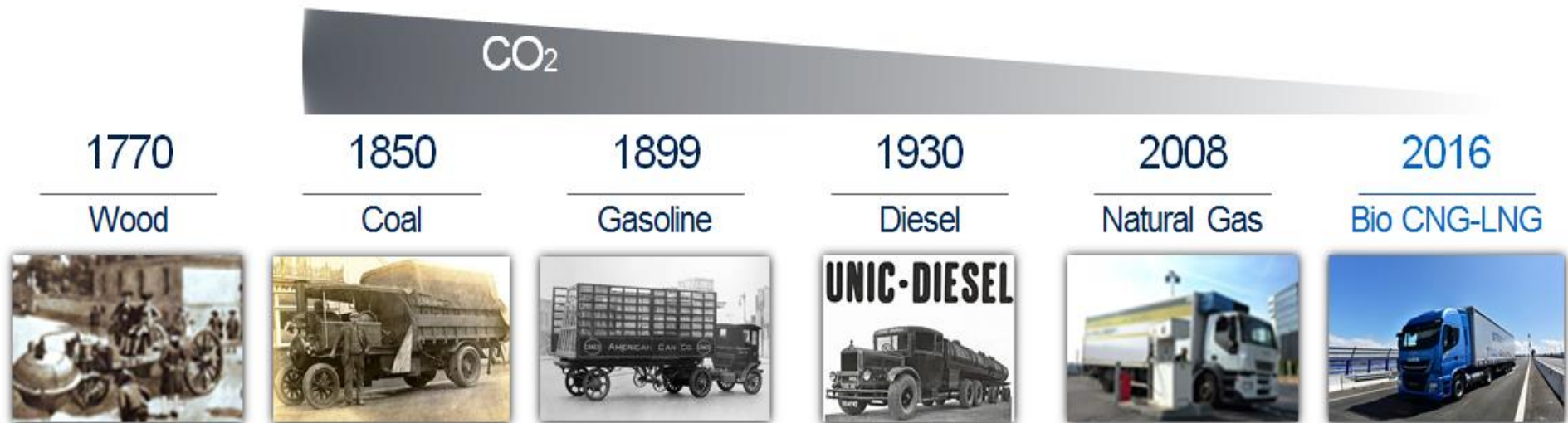
Fabio Pellegrinelli

Gas Business Development - Iveco Italy





THE CHALLENGES



TCO

Road transport challenges

Reduce pollutant
emissions

Competitive
costs

Reduce CO₂
emissions



ALTERNATIVES APPLIED TO GOODS TRANSPORT

		Alternative technologies				
		Full Electric	Parallel Hybrid	Plug-in Hybrid	CNG Bio CNG	LNG Bio LNG
Missions	Urban	+++	+	+++	+++	+++
	Regional	Impossible	No benefit	+	+++	+++
	Light Of-Road	Impossible	No benefit	+	+++	+++
	National	Impossible	No benefit	No benefit	+++ rigids only	+++
	Long Haul	Impossible	No benefit	No benefit	Difficult	+++ New !

➡ Various alternatives

+++ : Environmental benefits

➡
➡
Mature, versatile & cost-effective solutions



IVECO ANSWER: NATURAL GAS!

The alternative to traditional fuels that is available today and cost effective



— EMISSIONS
+ SILENCE

-32% NO_x
-99% PM
up to **-15% CO₂**
up to **-95% CO₂** with bio-methane
- 3 dB(A) (Noise)

**Vs.
Diesel
Euro VI**

EFFECTIVE

TCO Reduction
(total cost of ownership)

NOW

Available today
Fully industrialized.
Versatile

Comparison Iveco Stralis Euro VI (Natural Power vs Diesel) on-road long distance mission



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READY FOR THE ENERGY TRANSITION TODAY

COMMERCIAL VEHICLES

LIGHT 3,5 to 7,2t

> 6.800 UNITS



MEDIUM 11 to 16t

HEAVY 18 to 44t

> 3.500 UNITS



BUS

10, 12 & 18m
Std and BRT

> 5.800 UNITS



ENGINES

3, 6, 8 & 9 L
140 to 400 hp

32.600 UNITS



>30% ITA

> 16.000

CUMULATED SALES

1996	2000	2001	2007	2009	2010	2012	2015	2016
1 st Truck	1 st LCV	1 st below EEV	1 st below Euro VI	1 st medium truck	1 st CNG Tractor	1 st LNG Tractor	1 st Rigid LNG Truck	1 st Long Haul LNG Truck



WINNING PARTNERSHIP



- **2011** start of collaboration with Iveco for **LNG** vehicles
- **2014** first **5** Stralis **LNG** on road
- **2015** added **35** Stralis **LNG** added to the fleet
- **2017** **30** New Stralis NP

40% of the fleet is Natural Powered



2017

**20% of the fleet is
Natural Powered**



2017

**40% of the fleet is
Natural Powered**



SUSTAINABILITY LEADERS



Couriers

Supermarket

Automotive

Food &
Beverage

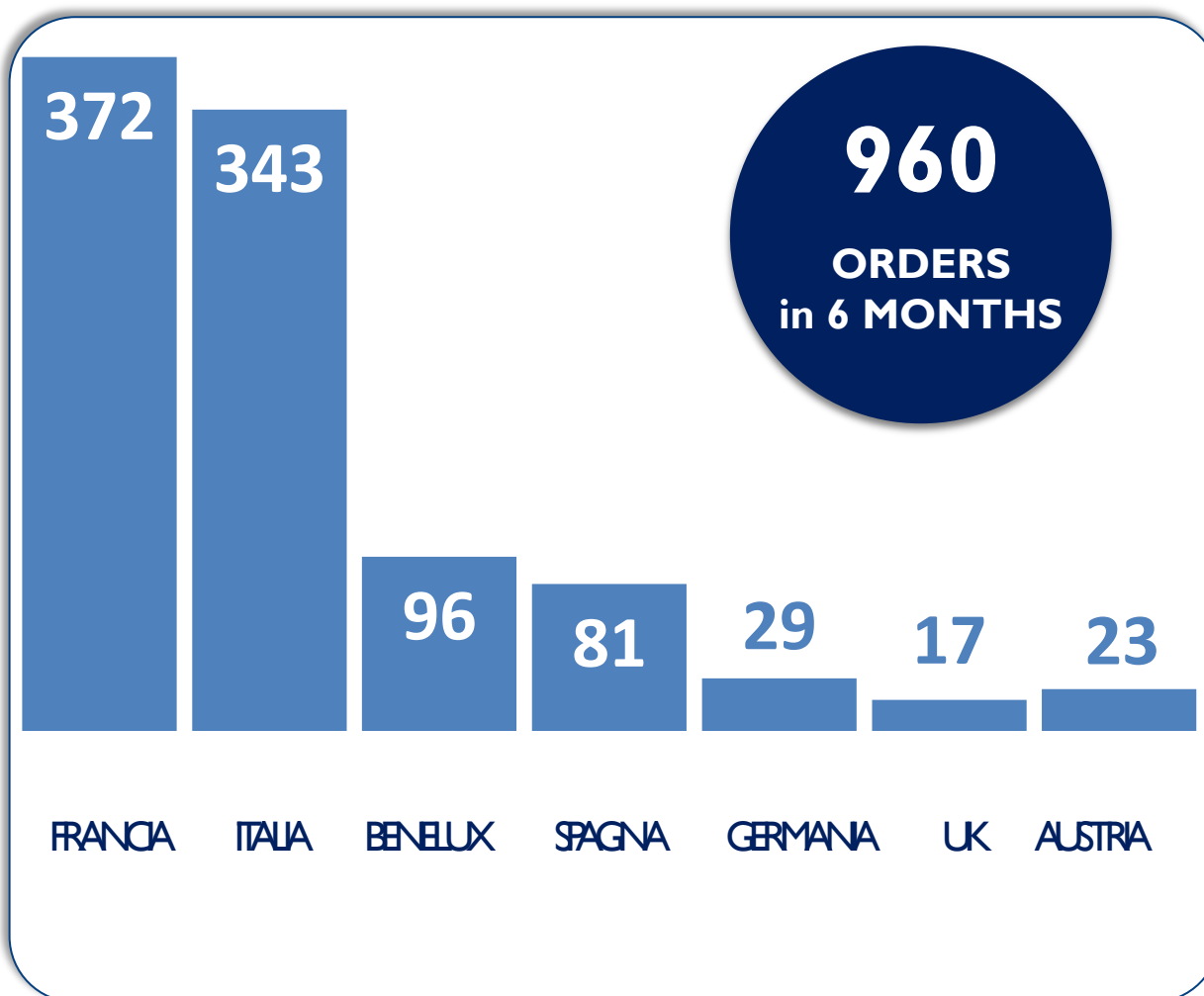
Furniture &
home furnishings



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NEW STRALIS NP 400 HP – A EUROPEAN SUCCESS



343 Stralis NP 400hp
in Italy in **6 months**

Almost **9%** of total Iveco artics
order entry of 2016

SPAIN - National Transport Awards
Vehiculo Ecologico del año

AUSTRIA - European Gas Awards of Excellence
Project of the year 2017

UK - Green Fleet Awards 2016
IVECO maker of the year



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All EU countries are committed to develop a CNG and LNG network by 2025 at the latest (Directive on Alternative Fuel Infrastructures)

EU is funding many pan-European projects aiming to accelerate the network creation along the major European road corridors

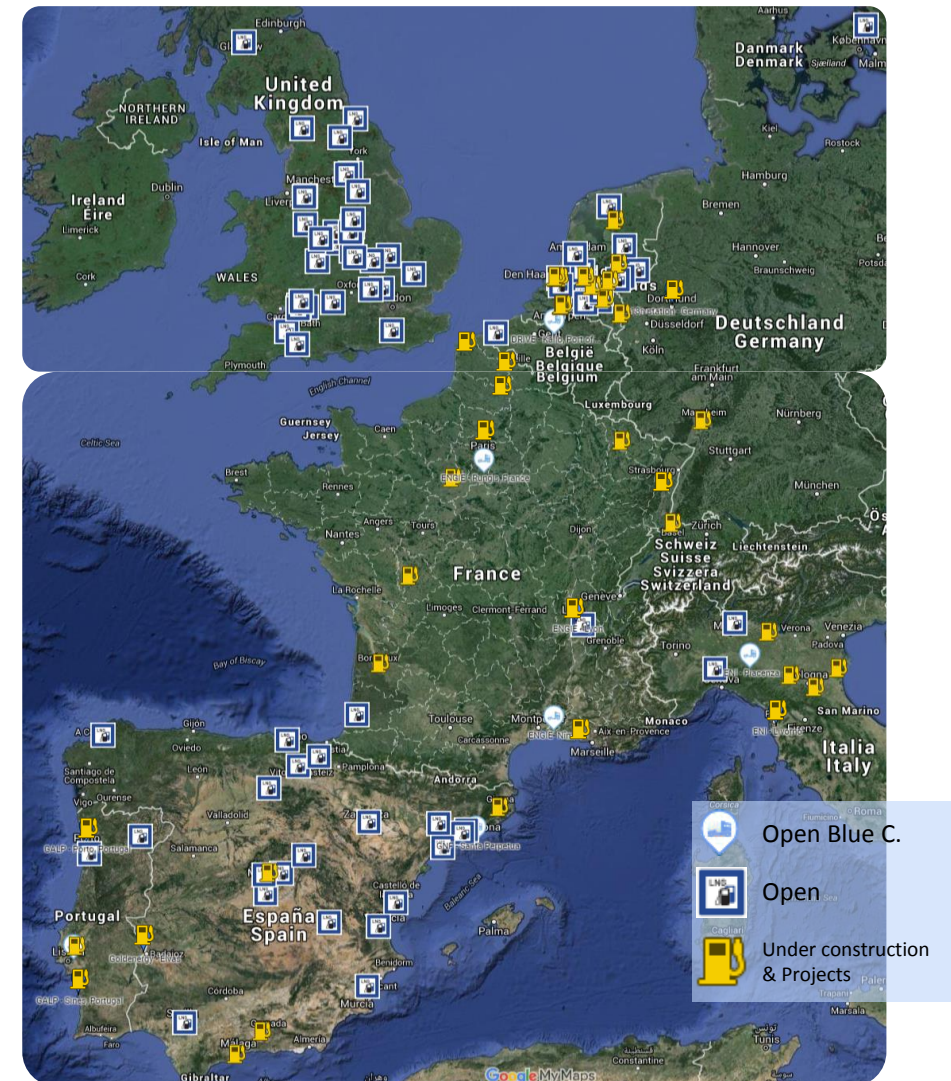
«Historical» markets (UK, Spagna, Netherlands): continue network expansion

Fast growth in France in 2016: 35 LNG and 50 HD stations by the end of 2017

Italia: fast growth, especially in the north

Germany: favorable conditions started in 2016 with 3 new stations

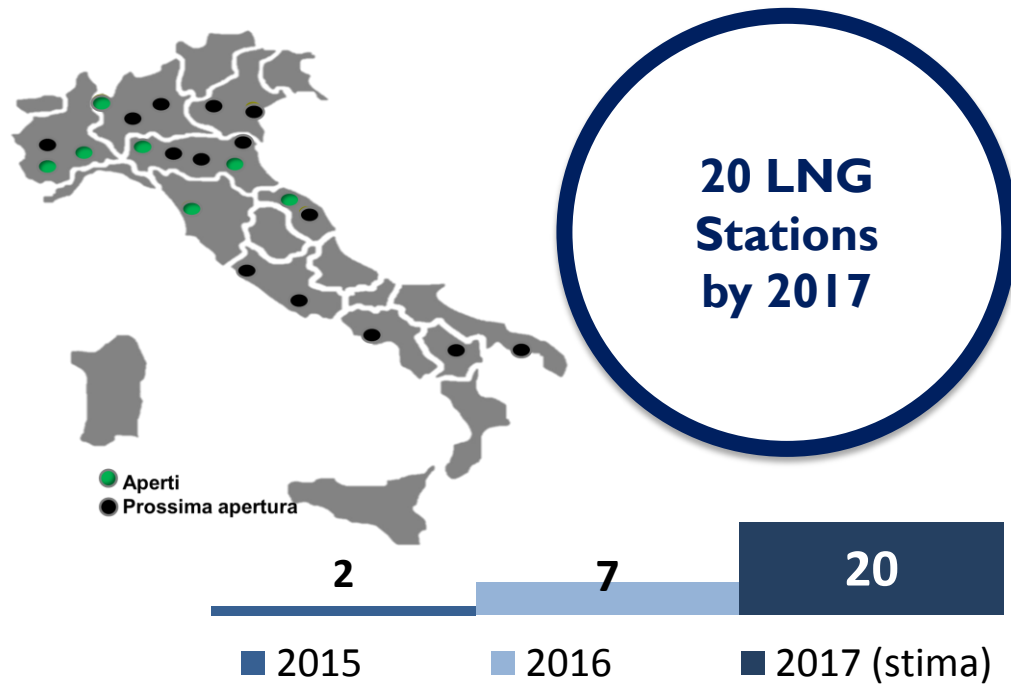
Central Europe : Slower development due to higher taxes





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MoU with





CO₂ SAVING EQUIVALENCE vs 100% CARBON-FREE ELECTRICITY



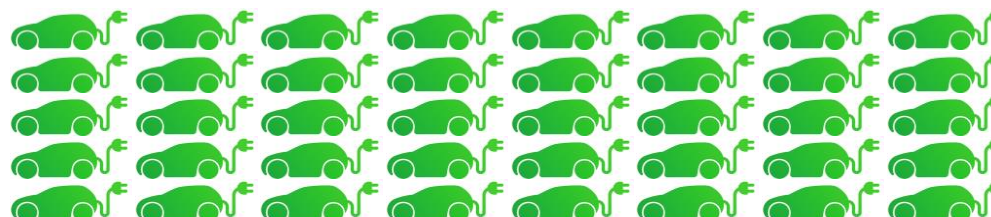
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15 EV



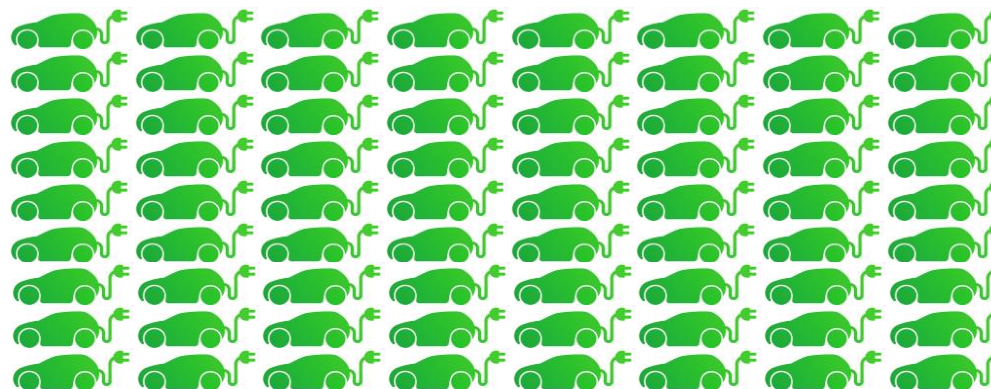
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40 EV



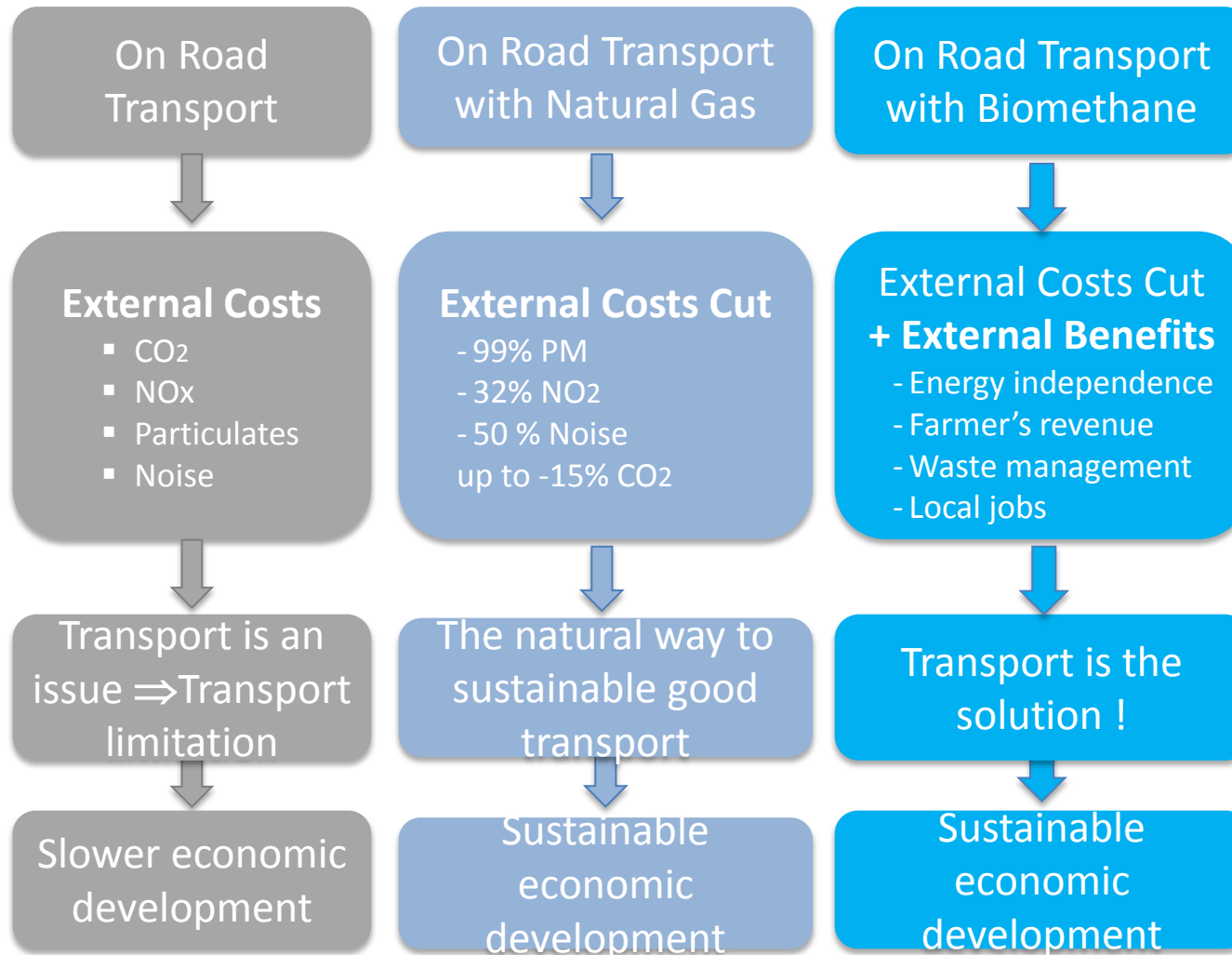
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72 EV



SUSTAINABILITY IS POSSIBLE... IT IS UP TO US





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IVECO

Your partner for sustainable transport



IVECO