



SETTANTACINQUE ANNI DI ENERGIA

Future technologies in Heavy duty trucks

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ROMA 6 NOVEMBRE 2019

ALTERNATIVE PROPULSION

Tightening emission
rules and awareness
of climate change

DIGITALIZATION & SERVITIZATION

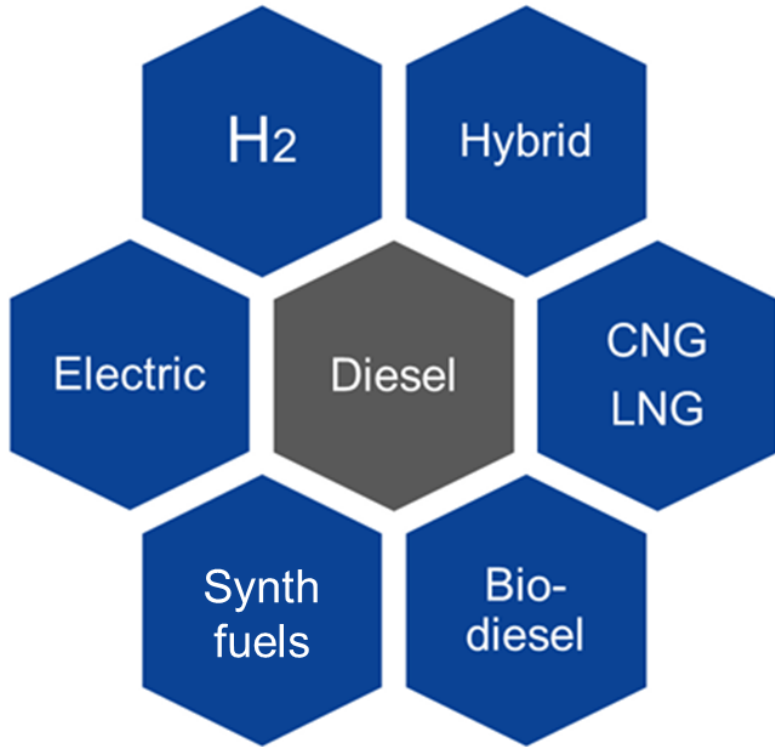
Broad diffusion of digital
and connected application
Rise of “as a service”
offerings

AUTONOMOUS DRIVING

Automation enabled
by digitalization and robots



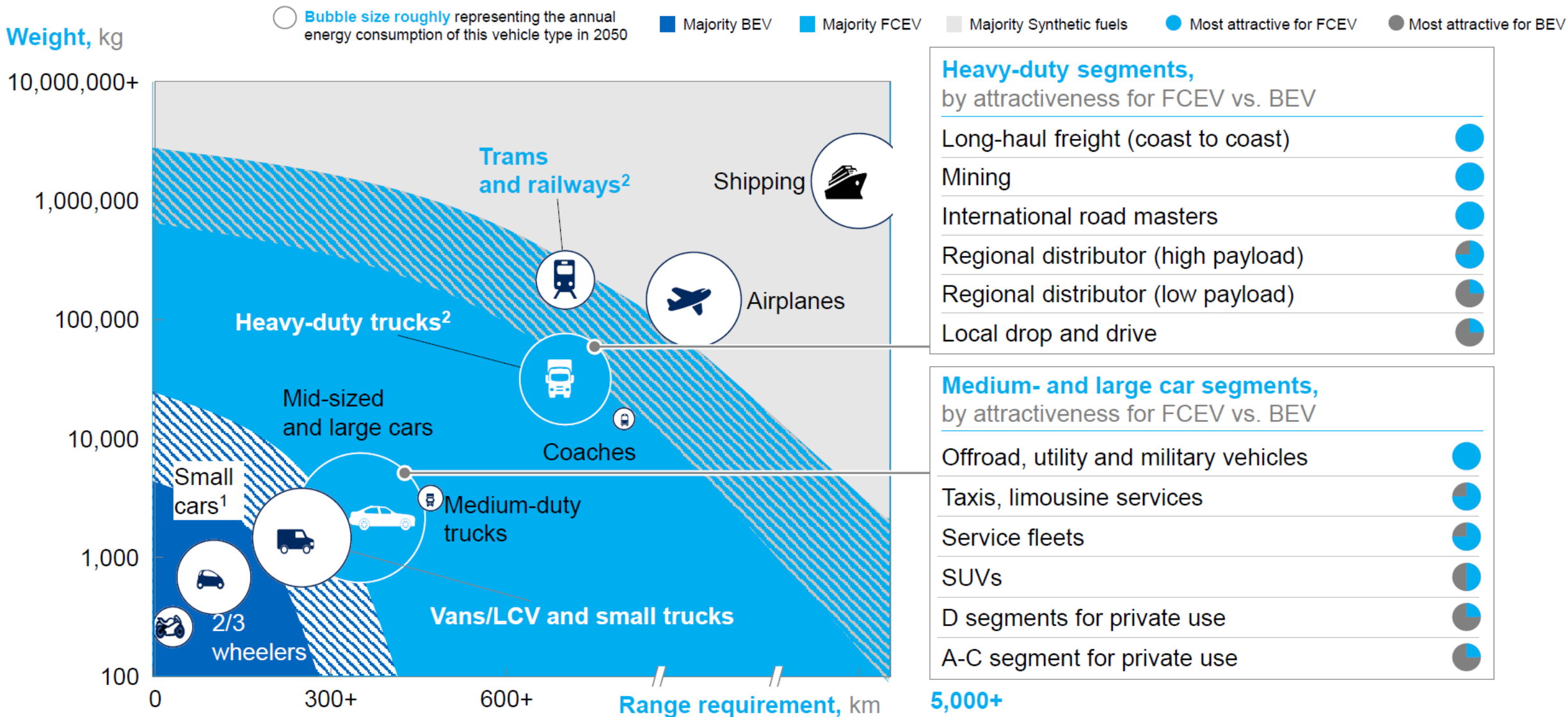
- Euro VII introduction
- CO2 reduction: -15% by 2025 / - 30% by 2030



Not a single technology but a set of solutions to perfectly fit any Customer need and mission



Path to 2050 – McKinsey perspective



1 A/B segment

2 Battery-hydrogen hybrid to ensure sufficient power

SOURCE: IEA ETP, IHS; FCH JU (2010); Thiel (2014); Hydrogen Council

ZERO-EMISSION: FUEL CELLS & BEV

WE WILL PARTNER WITH NIKOLA
TO DISRUPT THE INDUSTRY

IVECO



NIKOLA™

- High-quality truck technology, superior design
- World-class engineering and manufacturing
- Strong European distribution network
- Proven technology disruptor with LNG

- Leader in fuel cell truck technology
- Own hydrogen filling infrastructure
- New & disruptive business model
- Founder's mentality with zero-emission intent



NIKOLA ONE™

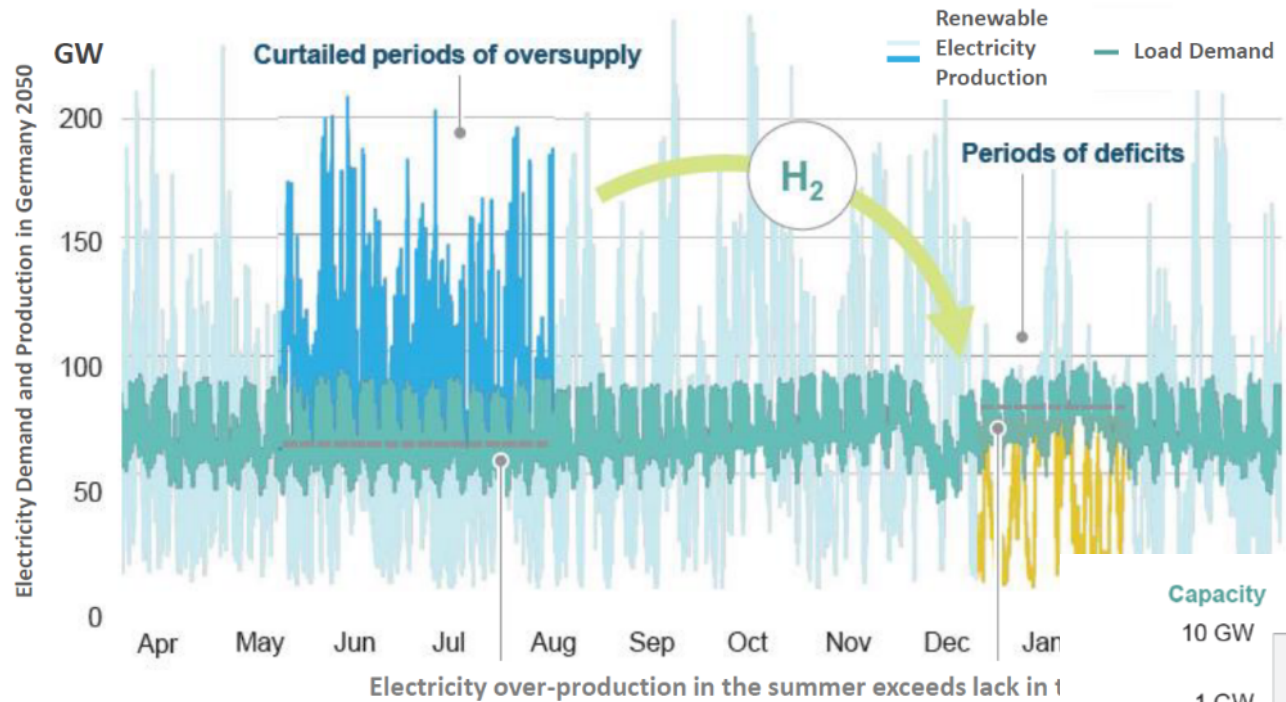


NIKOLA TWO™



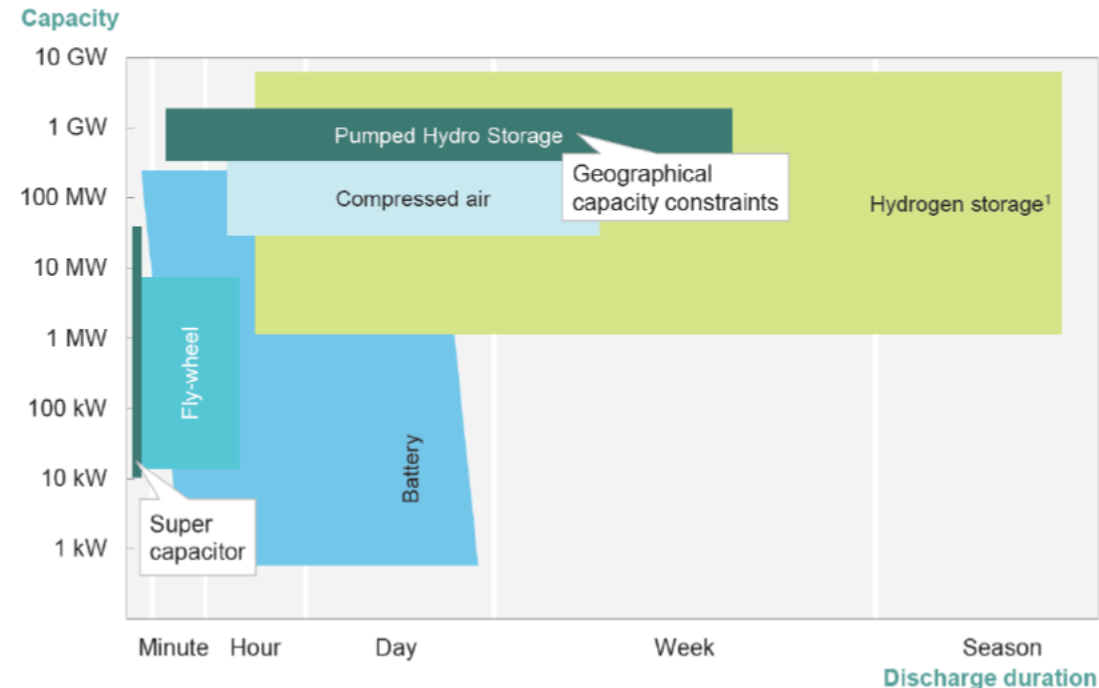
NIKOLA TRE™

Why Hydrogen?



In Germany in 2017 aprox 5.000 GWh of renewable energy has been lost

- Energetic independency
- Infrastructure for distribution partially existing
- Italy could play a primary role for renewable



¹ IEA data updated due to recent developments in building numerous 1MW hydrogen storage tanks
Source: IEA Energy Technology Roadmap Hydrogen and Fuel Cells, JRC Scientific and Policy Report 2013

Natural Gas will play a significant role in decarbonization



-90% NO₂
-99% PM
-10% CO₂

Less noise 71 dB(A)
(Piek)

TCO Reduction
(total running cost)

**Available today & fully
industrialized**

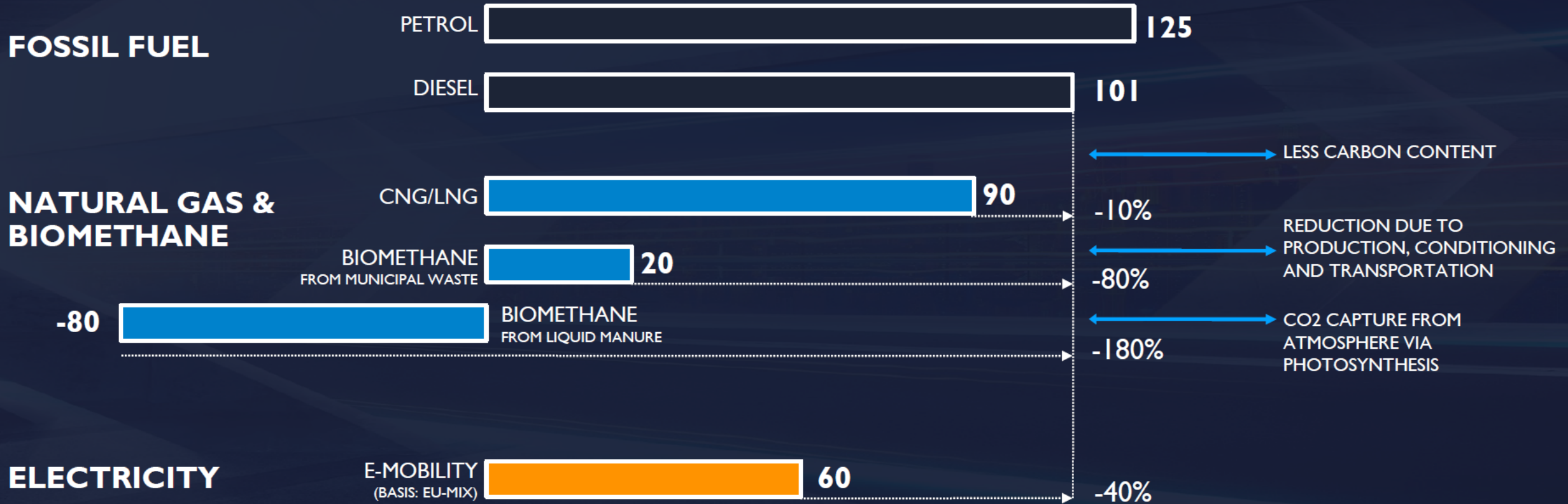
**vs.
equivalent
Diesel
Euro VI**



WELL-TO-WHEEL EMISSIONS

ALTERNATIVES TO DIESEL

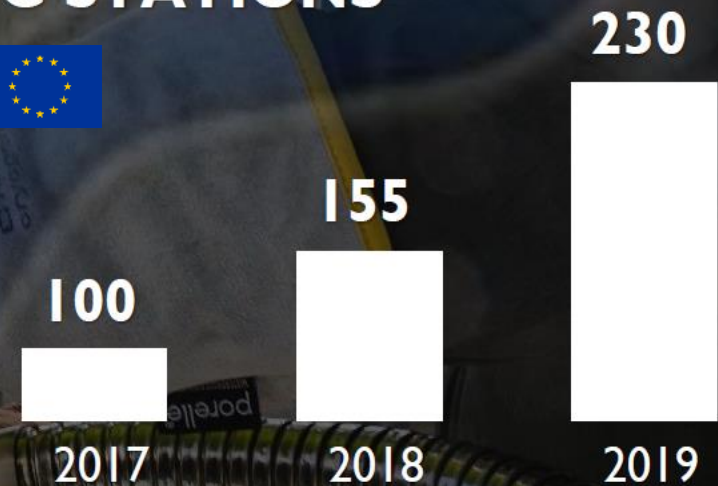
WELL-TO-WHEEL (WTW) – GHG EMISSIONS IN CO₂ G/KM



NATURAL GAS DISTRIBUTION

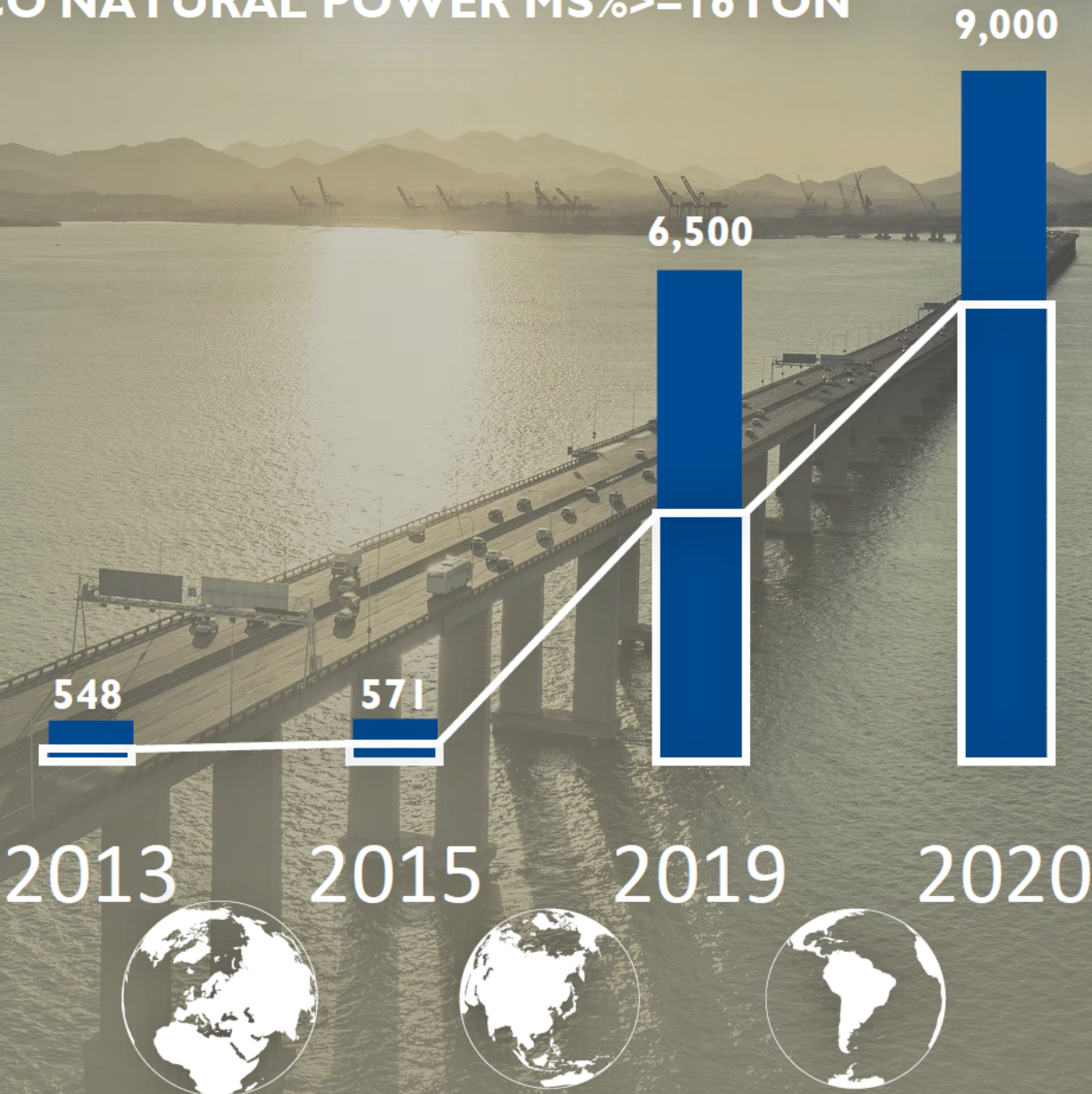
EXPANSION OF THE NETWORK

LNG STATIONS

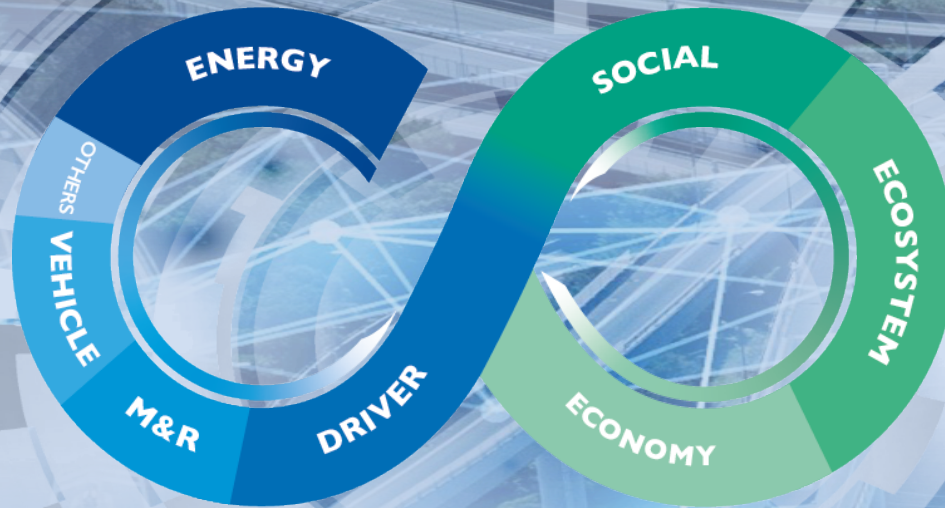


NATURAL POWER TIV >=16TON
IVECO NATURAL POWER MS%>=16TON

NATURAL GAS IVECO SHARE 2013-2020



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OUR MISSION

FOR THE DRIVER, YOUR BUSINESS AND OUR ENVIRONMENT

IVECO

FPT
POWERTRAIN TECHNOLOGIES