

28 novembre 2023

#H2 PUGLIA 2030

LA STRATEGIA REGIONALE PER L'IDROGENO
STATO DELL'ARTE E PROSPETTIVE
ESPERIENZE IN DIALOGO

IVECO INVESTMENT IN PUGLIA
VINCENZO FICARELLA

Iveco presence in Puglia



Engine plant



1975

Components plant



2000

R&D Testing



2005

Bus plant



2023

Total headcount
1630

#H2
PUGLIA
2030

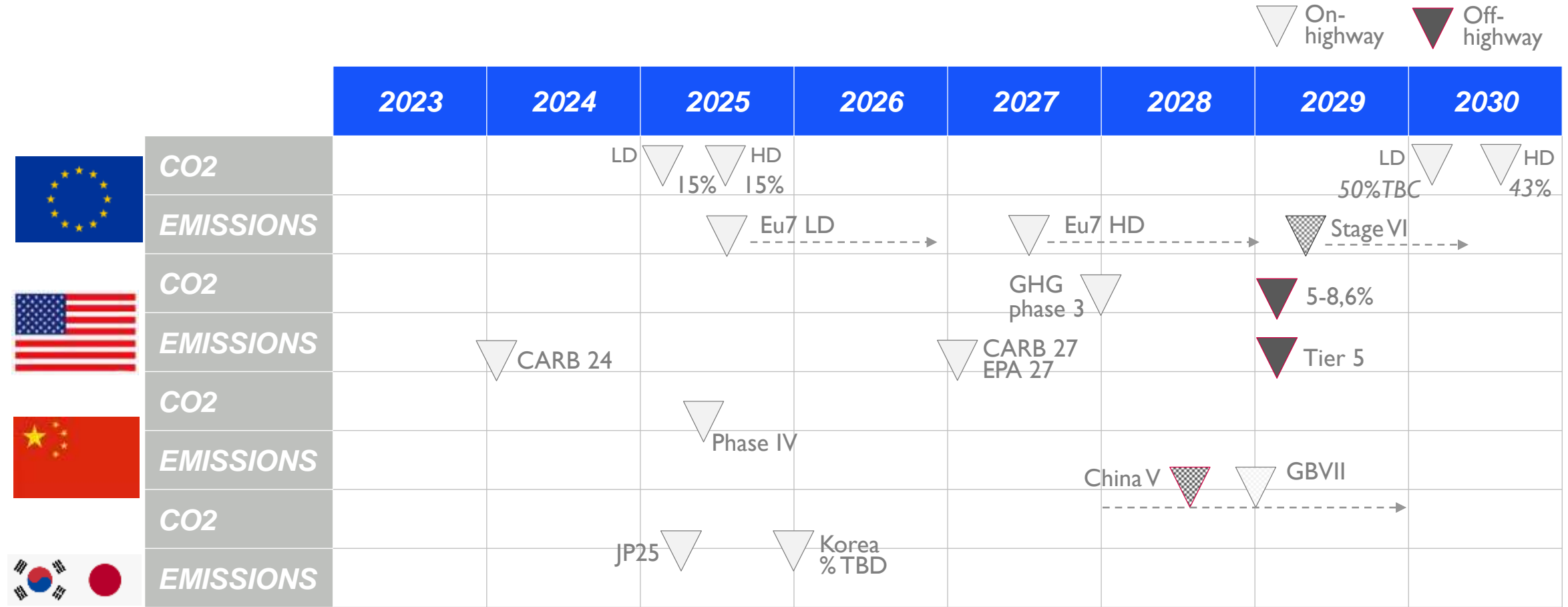
LA STRATEGIA REGIONALE PER L'IDROGENO
STATO DELL'ARTE E PROSPETTIVE
ESPERIENZE IN DIALOGO



Future4Puglia

Regulations trends of powertrain industry

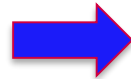
Next decade evolution



The European negotiation on CO2

Reduction vs 2020

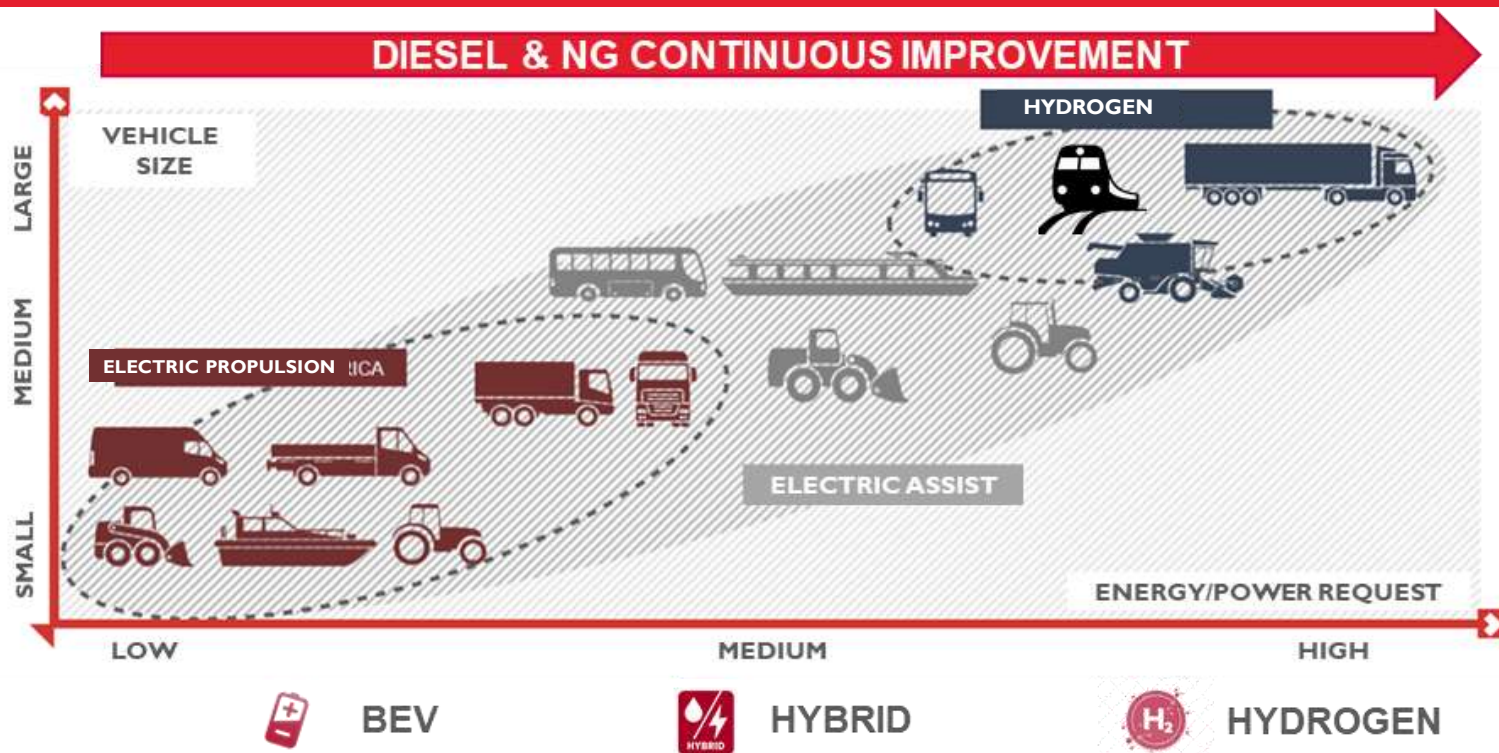
Actors	EU COMMISSION PROPOSAL		EU COUNCIL POSITION		EU PARLIAMENT POSITION	
Timing	HD	Urban buses ZEV	HD	Urban buses ZEV	HD	Urban buses ZEV
2025	-15%	-	-15%	-	-15%	-
2030/2034	-45%	100%	-43%	85%	-45%	100%
2035/2039	-65%	100%	-64%	100%	-70%	100%
2040	-90%	100%	-90%	100%	-90%	100%
ZEV definition	5 g/t*Km 2034		3 g/t*Km 2034		5 g/t*Km 2034, 1 g/t*Km in 2035	



Complementary CO2 reduction technologies

Rational and opportunities BEHIND H2 Powertrains

There is not a unique sustainable solution to fulfill all different application needs
Diversified energy vectors will contribute to achieve carbon neutralization



H2 can be the preferred solution for high energy demand HD applications (proper autonomy and recharge time) and the enabler for future people transportation, a solution for goods haulers and food producers to cover long distance.

#H2
PUGLIA
2030

LA STRATEGIA REGIONALE PER L'IDROGENO
STATO DELL'ARTE E PROSPETTIVE
ESPERIENZE IN DIALOGO

FPT: A Multi-Energy strategy

Sustaining leadership in diesel and gas while investing into new ZEV solutions

Sustainable internal combustion engines
(Diesel, NG, H₂)



H₂
Bio-fuels

Position as *Zero Emissions* solution provider



- Line-up extension and **continuous improvement**, matching new customer needs
- Alternative fuels focused approach: leadership in **Natural Gas** and technology transfer to sustainable circular models
- H₂ Internal Combustion Engines** as viable solution

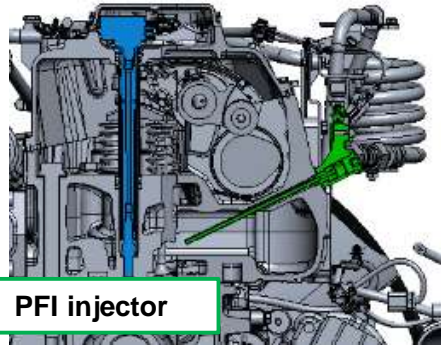
- Extend FPT value chain** into the Electrification area
- Primary focus on Propulsion (**eAxles**), complemented by **Battery** Solutions, **Software** Management capabilities and fuel cell systems

#H2
PUGLIA
2030

LA STRATEGIA REGIONALE PER L'IDROGENO
STATO DELL'ARTE E PROSPETTIVE
ESPERIENZE IN DIALOGO

H₂ ICE – Technology Approach: PFI vs DI systems

INVESTMENT STRATEGY IN PUGLIA

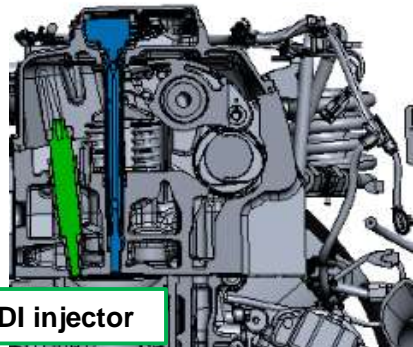


PFI injector

Port Fuel Injection (PFI) system



New Hythane Project
H₂ – NG blend
-20% CO₂



DI injector

Direct Injection (DI) system



New H₂ project
H₂ 100%
-100% CO₂





Decarbonization is one of the industry key trends driven not only by legislation (On-road) but also by customer requirements (Off-highway).



We are now in the **Industry Turning Point** where business is still on Internal Combustion Engine PWT, but where an increasing % of R&D/Capex are dedicated to Zero Emission product, while keeping investment in “traditional technologies”



There is not a unique sustainable solution to fulfill all different application needs: a mix of diversified energy vectors will contribute to achieve CO2 reduction targets and climate neutrality.



2 Challenges are related to

- ✓ the availability of infrastructural supply for fuel refilling
- ✓ the cost of H2 at the pump → < 5 €/kg

28 novembre 2023

#H2 PUGLIA 2030

LA STRATEGIA REGIONALE PER L'IDROGENO
STATO DELL'ARTE E PROSPETTIVE
ESPERIENZE IN DIALOGO

IVECO INVESTMENT IN PUGLIA
VINCENZO FICARELLA