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## **H2 Corridor Occitanie Overview**

- Project developed and financed by Occitanie Region as part of their hydrogen strategy
- Project dates: beginning 2021 end 2023
- % stage of implementation 01/11/2019: starting
- Total project budget (private & public): 109 M€
- EIB funding : 40 M€
- CEF funding: 18 M€
- Partners: Public entities / H2 Producers / H2 distributors / H2 trucks - refrigerated trailers and coaches suppliers / Logistic operators



























## **Context**

### Occitanie Region has great ambitions regarding hydrogen

150 M€ hydrogen plan, probably the largest public support by one region in Europe today





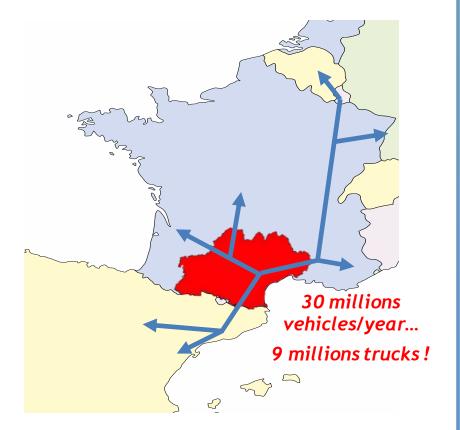
# Why this Project?

Corridor H2 is about tackling the heavy road transportation emissions

- A huge environmental pressure in Occitanie region and on European road corridors
- Road transport expected to grow by 82% between 2015 and 2050 (1)
- Natural gas and batteries cannot solve the pollution issue, hydrogen is the only way to go (2)
- Major truck players starting to invest and customers are in demand for hydrogen, if economically viable















# **Project Overview**

What for?

 Kick start the foundation of a European zero emission corridor for heavy duty road transport using renewable hydrogen energy and associated technologies

### Who's involved?

 Aim to gather relevant actors from across the entire value chain

### **Targeted Applications**

 Powering refrigerated trailers, as well as H<sub>2</sub> fuel cell propulsion for heavy duty tractors and other trucks (from 16 tons to 44 tons) and regional coaches

### **Geographic focus**

 A North Sea-Mediterranean corridor between Brussels and Lyon, which connects to the Mediterranean corridor down to Zaragoza and across participating regions. Other MIE-CEF eligible transport networks would also be connected to this South-North axis

### **Funding strategy**

- European funding from the MIE-CEF and the EIB
- Private investors, OEM stakeholders, chargers and transporters
- Complementary fundings from Regions and national bodies







# Targeted corridors for stations deployment

### A North-South axis

- Project anchor: Occitanie
- Next targeted connecting regions:
  - Wallonia
  - "Grand Est" region
  - Bourgogne Franche Comté
  - Catalonia / Aragon
  - Luxemburg
  - Saarland / Baden Wurtenberg / Rheinland
     Pfalz
- 2 central corridors:
  - North-Sea / Mediterranean, from Brussels to Avignon
  - Mediterranean, from Avignon to Zaragoza
- Additional roads on the TEN-T Comprehensive Network adjacent to these corridors

Structure first cluster



Duplicate Adapt Extend











## **Project Stakeholders**





RECION BOURGOGNE FRANCHE COMTE



























### **Regions & Clusters**

Solution providers

**Transporters** 





colruyt -

DELANCHY

**MALHERBE** 



NivaTrans

STEF (1)



### Infrastructures providers / investors

(real estate, production, distribution)































# H2 based road transport solutions arising

**Carriers** 













Renault PVI - 19, 27 & 32 T

Dongfeng - 7,5 T

Scania - 26 T

Gaussin

Terberg



Toyota - 3 T



Mitsubishi - 7,5 T



Esoro - 18 T + 16 T



Hyundai - 18 T



Scania

E-Trucks

**Tractors** 









JMC - 42 T



Nikola Tre - IVECO 40 T

IVECO VDL - 26 > 44 T





Chéreau - trailer

**Auxiliary Power** 



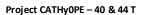
Carrier - refrigeration unit











Daimler Trucks - 36 T

HV Trucks - 7,5 > 44 T

Daimler Trucks - 64 T





# Corridor H2 in Occitanie main objectives

### **Vehicles**

#### 97 end-uses:

- 15 coaches
- 40 trucks
- 40 new refrigerated trailers
- 22 refrigerated units (retrofit)

### HRS

#### 8 in total:

- 6 HRS x 600 kg/day
- 2 production plants of 600kg/day and 1,2 t/day

### **H2**

- 225 tons H2/year
- ± 2,6 M diesel litres avoided / year

### **Budget**

# Total investment cost: €109M:

- Total cost for vehicles: €35.4M
- Infrastructure cost: €73.6M

• CEF: 18 M€

• BEI: 40 M€

2021 ... 2023









## Main deadlines (past and future)



### May - Launch Regional H2 Call for Projects:

- One concerning production, transportation and distribution
- One concerning heavy duty end-uses



#### June

Dedicated mission to support and assist potential end-users in decision making regarding vehicles and refrigerated solutions



### September

One day event with first live demo H2 truck in France - Albi



#### November

Publication of the winners of the call for production, transportation and distribution



#### December

First batch of answers to the call on heavy duty end-uses









## Approved production & distribution sites

European

11

CORRIDOR H2 Following the call for projects for the production and OCCITANIE distribution of renewable hydrogen, seven distribution stations and two production sites have been selected to supply the zero-emission transport needs of the Occitanie Lazère H2 Corridor. Département du Tarn, Albi lyd'Occ, Eurocentre 1 200 kg / day 1 200 kg / day Département du Tarn. Saint-Sulpice Lhyfe, Val d'Hygo 600 kg / day Hyd'Occ, Saint-Jean-de-Védas Bessières - 2 t / day 1 200 kg / day Hvď Occ, Narbonne 600 kg / day Hyd'Occ, Castelnaudary Core TEN-T Network (Trans-European Transport) rénées 1 200 kg / day Hyd'Occ, Corrhyd'Occ Secondary TEN-T Network Port-la-Nouvelle - 4 t /day Renewable H2 production site Hyd'Occ, Perpignan Distribution stations at 350 bar (scalable at 700 bar) Pyrénées-Orientales 600 kg / day **#PRD2021** 

#CleanHydrogen



# One day event around H2 trucks in Albi







## **Question & Answers**



Thanks for your attention

For further information do not hesitate to reach out

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