



**INTEGRATED HYDROGEN MOBILITY PLATFORM**

**ZEFER Roundtable**

**June 2023**



# Hype's integrated platform

Launched in Paris in **2015** at COP 21 in response to the public health emergency of air and noise pollution in urban areas, Hype is developing the first **hydrogen mobility platform** integrating simultaneously:

## Production & supply



## Hydrogen refuelling stations



## Usage, with taxis as first market



- Hype deploys ahead of competition its **network of green hydrogen production and distribution** – open to all types of users...
- ... while directly operating the world's largest fleet of hydrogen taxis – the **taxi market** being immediately relevant for hydrogen
- Allowing **to accelerate the scaling-up and massive transition towards zero-emission** for on-demand transport and other **mobility professionals** (commercial vehicles, buses, trucks, etc.).

# Hype, a French and European independent entrepreneurial project, supported by leading private and public stakeholders

## Our financial and industrial partners



Long-term investor dedicated to France's economic development



World leader in concessions, energy and construction



French leader in H2 refuelling station equipment



French leader in H2 production and distribution equipment



French producer of renewable energy

## Our institutional partners



Hype has been awarded c. €74 m in subsidies, of which c. €40 m to finance its infrastructure network in the Paris region

# A mobility platform which delivers... since 2015



**#1**

Fleet of hydrogen vehicles in the world



**300+**

Vehicles in operation today



**1.7 million**

passengers carried since inception



**9 tons**

NOx avoided since inception



# Continuous support from the Clean Hydrogen Partnership, including ZEFER and H2ME projects



**The Clean Hydrogen Partnership** contributed to finance...

- 60 vehicles under **ZEFER**<sup>1</sup> project since 2018
- 250 sedan vehicles under **H2ME2**<sup>2</sup> project since 2017
- and world's first fleet of 50+ hydrogen wheelchair-accessible vehicles
- and > €800k dedicated to support Hype's refuelling infrastructure rollout

...**helping to bridge the gap** with the equivalent internal combustion engine vehicles, allowing for large-scale deployments and enabling the economies of scale needed for the deployment of innovative zero-emission mobility like hydrogen.



Beyond the Clean Hydrogen Partnership, the deployment of Hype's **vehicles and infrastructure network** in France and Europe is **strongly supported by the European Union**, notably through the CEF-AFIF programme.



<sup>1</sup>[Zero Emission Fleet Vehicles for European Roll-out](#)

<sup>2</sup>[Hydrogen Mobility Europe 2](#)

# Strategic partnership with Stellantis

- Partnership for the supply and operation of hydrogen-powered vehicles
- Deployment of a **first batch of 50 Peugeot e-Expert Hydrogen and Citroën ë-Jumpy Hydrogen zero emission (Crit'Air 0) vehicles manufactured in France and designed for the Transport of People with Reduced Mobility (PRM) i.e. wheelchair-accessible**
- 100% electric "hybrids" (plug-in battery + fuel cell system)
- Setting up by Hype of a **dedicated organisation** to manage this fleet, leveraging notably its specially trained salaried drivers and a priority access mobile application
- **Potential deployment of 1000 PRM taxis by the end of 2024**, as part of the mechanism planned by the French authorities for granting "PRM Parisian taxis licences"



# Hype's stations in operation today

## Issy-les-Moulineaux

- 200 kg/day station from HRS; dual pressure 350 and 700 bar; supplied with renewable hydrogen
- Opening ceremony on April 1<sup>st</sup>, 2023
- 1<sup>st</sup> H2 station in Hauts-de-Seine
- 1<sup>st</sup> H2 station of the Last Mile by Hype project
- Supported by the Clean Hydrogen Partnership as part of the H2ME2 project



**+ 9 other stations ordered** from HRS and McPhy

**+ 2 autonomous stations** ordered from Enhywhere

**+ 2 electrolysers ordered** from McPhy

currently being deployed

## Le Mans

- 200 kg/day station from HRS; dual pressure 350 and 700 bar; supplied with renewable hydrogen
- Commissioned in June 2023
- 1<sup>st</sup> H2 station developed in collaboration with Le Mans Métropole
- Supported by the Clean Hydrogen Partnership as part of the H2ME2 project



# Hype's development objectives

## In 2023

- Deploy more than 700 Hype taxis, with integration of wheelchair-accessible vehicles from Stellantis in the fleet
- Commission 7 Hype green H2 stations, open to all
- Open and expand the Hype platform to independent taxi drivers
- Diversify towards new mobility users (last mile delivery, buses, garbage trucks...)
- Deploy Hype in 2 new regions



## By the end of 2025

### In Paris and the Ile-de-France Region

- 26 publicly-accessible stations (including at least 20 large-capacity stations, each with a capacity of ~1 t/day) supplied with locally-produced green H2, capable of powering 10,000 taxis and other uses

### In France (outside Paris region) and internationally

- Deployment in 15 regions in France and worldwide
- At least 19 stations and 3 electrolyzers deployed in the first 7 selected regions: Le Mans, Bordeaux, Brussels, Madrid, Barcelona, Lisbon and Porto



# Hype's experience feedback

## Hype drivers' utilisation feedbacks

Hype taxis run 24/7 in the Paris region; Hype taxi drivers typically run about 200 km a day and

- enjoy a **comfortable and safe** driving experience with **premium and reliable cars**
- **reduce air and noise pollution** in the Paris region
- benefit from **an expanding and redundant 700 bar HRS network**, with HRS located at strategic locations
- rely on **minimal refuelling** during operational hours, and when necessary, **quick refuelling times**, not allowed with BEVs

## End-user acceptance

- Some initial concerns about safety of FCEVs (gas, pressure, risk of explosion...), reduced by explanations from Hype drivers
- Enjoyment of the comfort experience; no noise or vibration from the use of an electric drive train, same as BEVs
- Appreciation of the environmentally-friendly nature of the vehicle; strong demand from corporate customers



# Key learnings

- **FCEVs are perfectly suited for intensive and random conditions of use**, incl. for light-duty vehicles
- **Taxis are a great way to start the hydrogen journey:**
  - Vehicles already available (and in 2<sup>nd</sup> generation)
  - **Perfect use case to deploy and debug a network of hydrogen refuelling stations** (site selection flexibility, easier and more reliable HRS operations, network usage optimisation) and then address other mobility users
- At the beginning of the hydrogen ecosystem, an **integrated approach** makes more sense: deploy jointly and simultaneously hydrogen infrastructure (production, refuelling stations) and mobility users
- Hydrogen mobility has proved its technological readiness and its strong advantages; it now just needs **an increase in volumes to become competitive and widely accessible**



## Hype, a service already available to everyone

- Hype offers its customers a **zero-emission**, premium, safe and responsible service at the same price as a traditional taxi.
- Hype is convinced that it is the **private and public institutions** that will lead by example and therefore **provide the impetus** to rapidly scale up zero-emission mobility.
- Hype thus forms an **initial circle of pioneering organisations** that have made the energy transition and the fight against urban pollution a priority.



Together let's accelerate  
the scaling-up of  
hydrogen mobility



Download  
the Hype app

