

Infrastructures and energy costs for a competitive H2 mobility





Patrick Koller
CEO of Faurecia

June, 19 2021

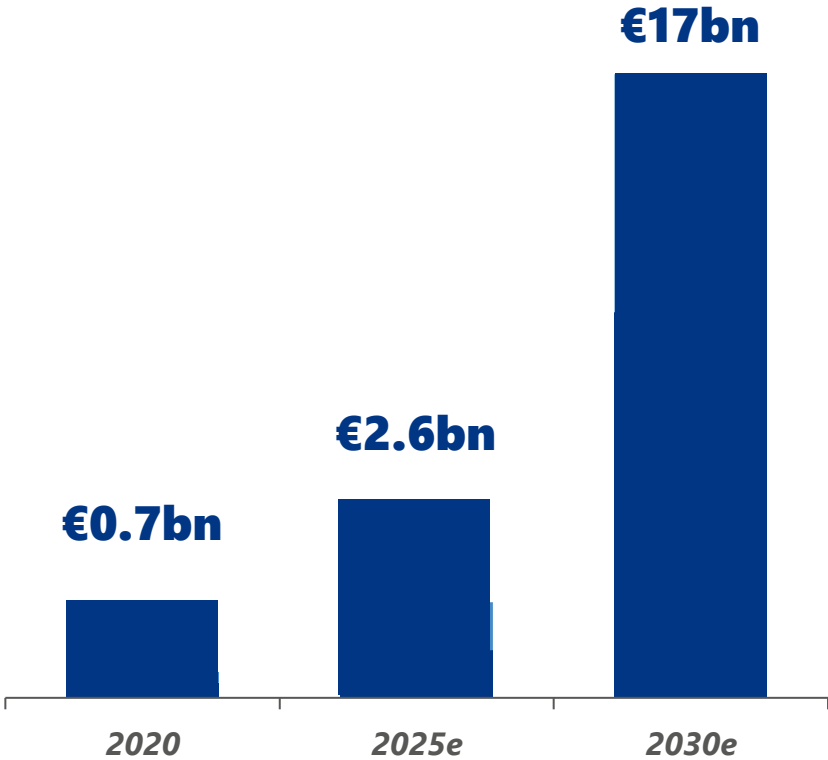


H2 availability and affordability drives €17bn market in 2030 with 2.5m passenger and commercial vehicles

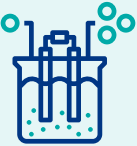


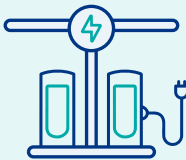
> Fuel cell market drivers

	2030 vehicle production	2030 hydrogen-powered vehicles	Average 2030 value	
			Storage systems	Stacks
Passenger & light commercial vehicles 	100m	2m	€2k	€4k
City buses & coaches 	0.5m	50-100k	€6k	€10k
Medium-duty vehicles 	1.0m	100-150k	€10k	€12k
Heavy-duty vehicles 	2.4m	200-250k	€25k	€25k

> Fuel cell addressable market



Energy costs for 100km in 2030

ENERGY NEED TO DRIVE 100KM (for a passenger car/LCV)	PRIMARY ELECTRICITY COSTS	DISTRIBUTED ELECTRICITY COSTS AT HOME (with taxes)				RECHARGING COSTS HIGH POWER (with taxes)
17kWh	Average mix in Europe 50€/MWh	3,75€ average EU – peak hours 2,3€ France – off peak hours				From 6€ to 13€
	Best renewable cost in Europe 20€/MWh	Electrolysers*	H2 transportation*	Cost of the station*	TOTAL COST AT THE STATION (without taxes)	
		 1,7€	 1€	 1 to 2€	 Cumulated 3,7 to 4,7€	

* Sources: Faurecia & Hydrogen Council

The challenges to overcome



**Decarbonized
electricity**



**Competitive
technologies**



**Electrolyser
scale up**



**Infrastructure &
refuelling stations**



**Safety &
regulations**



**Training &
competencies**

Consistency and synchronization are main drivers for success

