

# ***NEW PRODUCT INTRODUCTION MICHELIN AND FUEL CELL***

**Pierre Loiret**



# Michelin : Sustainable mobility of people and goods

## Historic commitment to sustainable mobility

- Michelin is the leading company in green tires technologies



Michelin is designing specific tires for EVs like ENERGY™ E-V tire for the RENAULT ZOE

- Since 1998 the Challenge Bibendum has gathered all road transport stakeholders involved in sustainable mobility

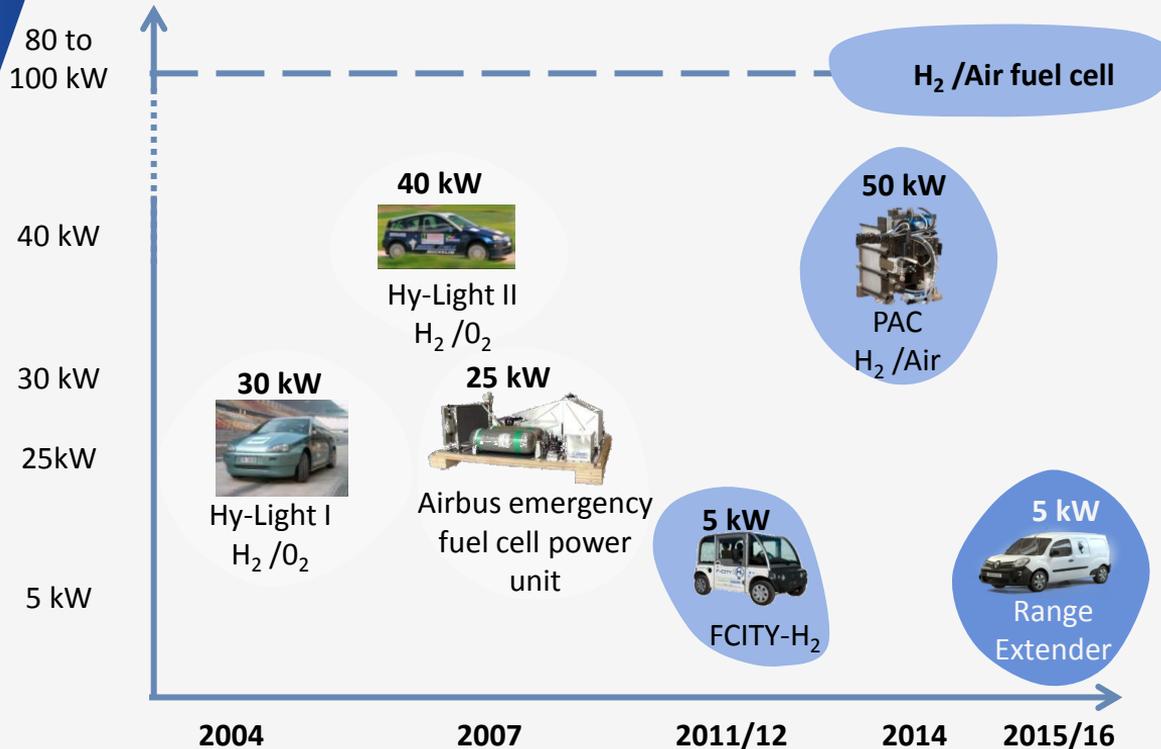


- In 2015, Michelin participates actively to the COP21 and is mandated by the UN to speak for the transport sector (PPMC initiative)



# Michelin has interest in vehicle electrification since 1996

## Real know-how applied to system integration



## Legitimate expert in sustainable Mobility

### Auto

+ Micro-Evs



### Aero

+ Commercial Airliner

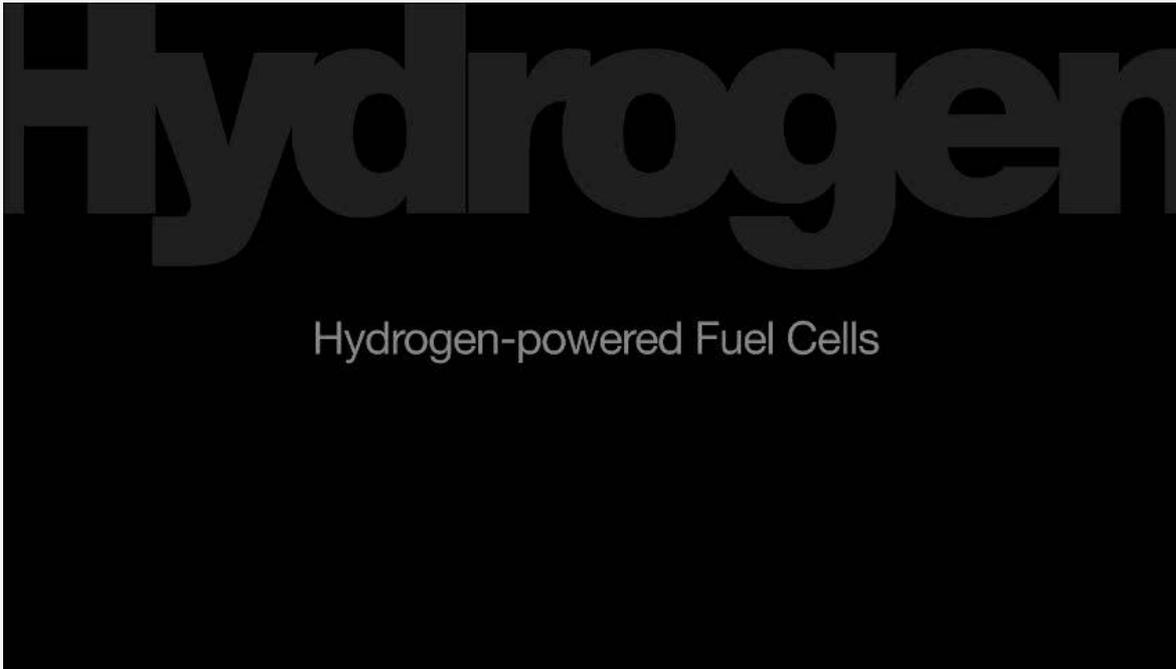


### Maritime

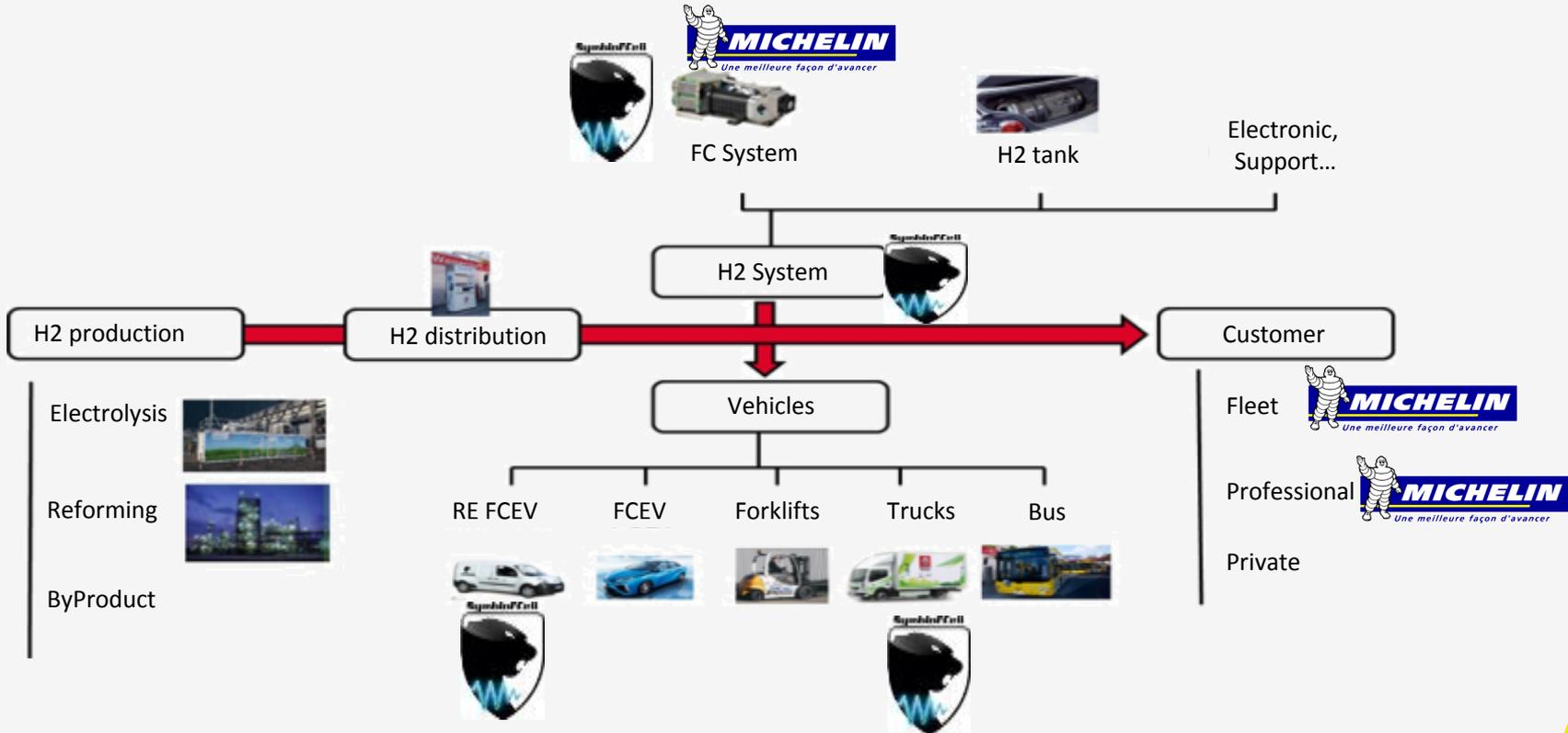
+ Ships



**■ Christophe Laprais, Corporate VP, Norms & Regulation  
Michelin chairman at PFA**



# Michelin Position in the H2 mobility value chain



# Being active in H2 is totally in line with Michelin global innovation strategy

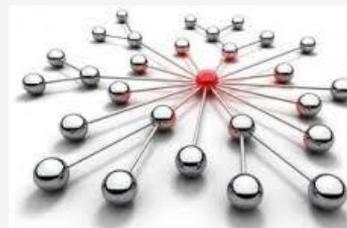


- The mission of the Incubator Program Office is to accelerate the time to market for new innovations that are outside the traditional core business of the Michelin Group but still within sustainable mobility perimeter
- Our role is to accelerate the growth of the startups we are supporting

## How do we contribute to create the H2 Market ?

- ✓ Create a booster effect between exiting hydrogen businesses and future ones ( Connecting the dots)
- ✓ Facilitate the market deployment of technologies that have been in development at Michelin since 2000
- ✓ Get in-depth knowledge of the market and techno from inside
- ✓ Underline the overall innovation strategy of the Group and generate business opportunities
- ✓ Facilitate the emergence of this market and get other actors on board with us

Vehicles	Electrolyser	H <sub>2</sub> Prod.	HRS Supp.	Operator

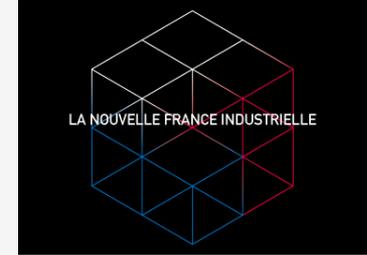


# ***Role of Norms & Regulations to support the market development***

- I** To facilitate the development of the market for range extender, in avoiding unnecessary regulatory constraints on medium power fuel cell (between 5 and 20 kW, from light delivery vehicle to small trucks)  
→ ISO TC 105 (NWIP made and working group to be established)
  
- I** To support deployment of affordable H2 recharging stations, in order to boost and densify the fueling stations network

# Michelin is also strongly involved within the H2 eco-system in France and in Europe

**FUEL CELLS AND HYDROGEN  
JOINT UNDERTAKING**



**Mobilité Hydrogène France**

## AVERE

The European Association for Battery, Hybrid & Fuel Cell Electric Vehicles

**AVERE  
FRANCE**

### COMMUNITIES OF INTEREST



French and European public entities



Vehicle OEMs



Hydrogen providers/ producers and utilities



Technology & equipment providers



Regional representatives

