## **HYDROGEN PRODUCTS & TECHNOLOGIES**

- Major technology progress achieved in last 10 years!
  - Costs reduced by a factor of 20 over the period
- Commercial products now being marketed across sectors and along the full Hydrogen value chain:
  - H2 production (e.g. electrolyzers), H2 stations, Forklifts, Cars, Buses, Trains, Heating & Power Systems...
- Growing manufacturing capacities across the world, which will yield additional cost decrease in coming years
  - New plants announced in the US, Canada, Germany, Japan, Korea, China...
- Developments driven by a dense ecosystem of large OEM's, specialized SME's and innovative start-ups

## Hydrogen: Ready to scale!





## **BUSINESS & INVESTMENT OPPORTUNITIES**

- Some viable markets today, leveraging cost-competitive products
  Material Handling, Captive fleets of vehicles (taxis, buses...)
- Exponential growth underway in all addressed markets, supported by clear political backing
- No technical bottleneck to reach scale, but need to anticipate investments
  - $\circ$  300 H2 stations worldwide today  $\rightarrow$  3 000 stations needed within 5-7 years
  - Investments to be multiplied by 10 over the period
- Investments required along the full value chain, from product development, manufacturing lines to H2 infrastructure. Get in early!

## Hydrogen: Ready to scale!

