

An aerial photograph of a multi-lane highway bridge supported by concrete pillars, crossing a lush green forest. A white semi-truck is driving on the bridge. A white circle highlights the truck, and a white square is overlaid on the circle.

Hydrogen Energy

Building a sustainable,
low-carbon society

Hydrogen: a unique expertise and experience

60

YEARS OF EXPERTISE

>1,000

EMPLOYEES IN HYDROGEN

€2.2bn

ANNUAL SALES

1.2 Mt

ANNUAL PRODUCTION

~200

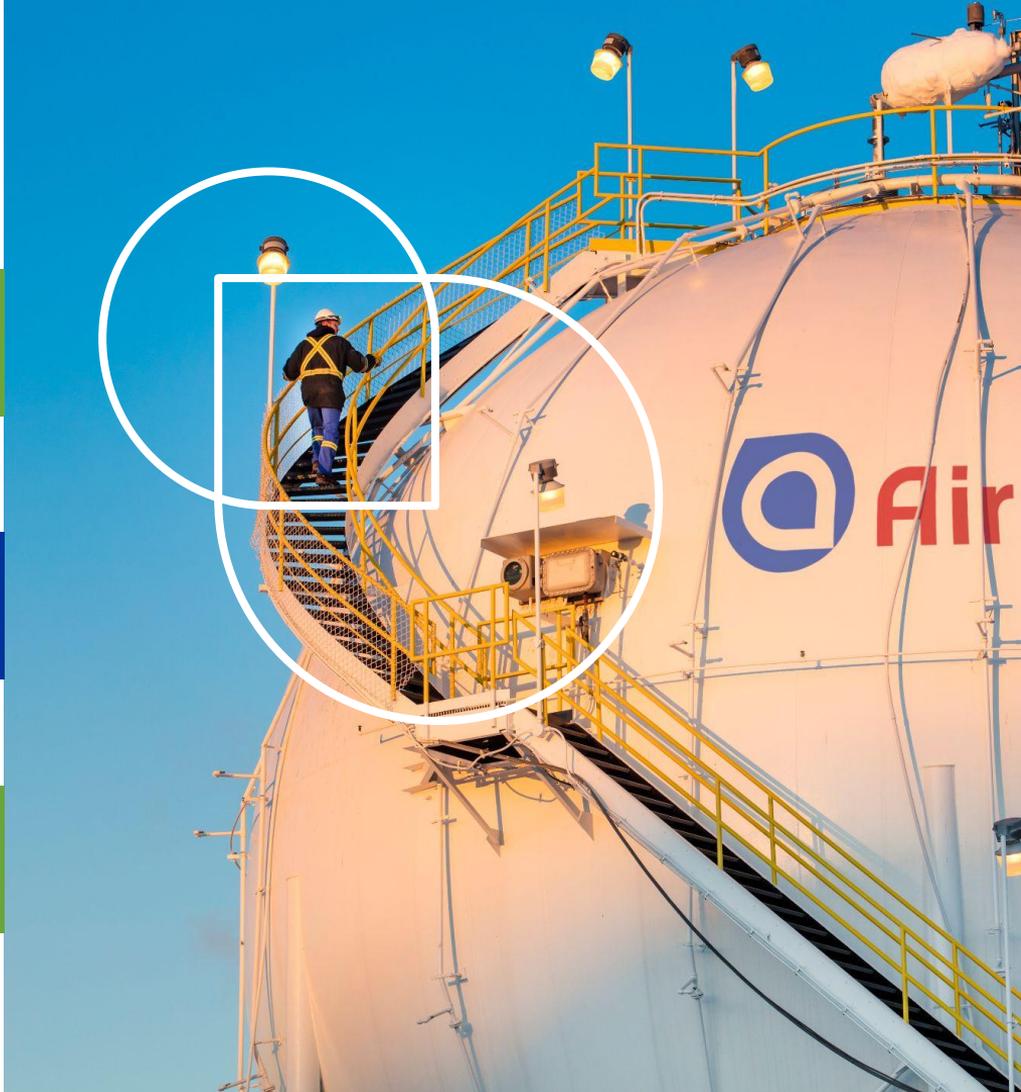
STATIONS DELIVERED

~2,000

KM OF PIPELINES

Hydrogen Energy

Air Liquide



We think BIG for hydrogen

Before 2035

~€8bn

INVESTMENT DECISION

>3x

SALES

By 2030^(a)

3 GW

ELECTROLYSIS

(a) Including a confirmed capacity of 1 GW still under construction





- On-site
- Centralized

3 GW

ELECTROLYSIS BY 2030

5

LIQUEFACTION PLANTS

15

BASINS

26.2

MW OF ELECTROLYSIS
(in operation, 450 MW in progress)



What we bring

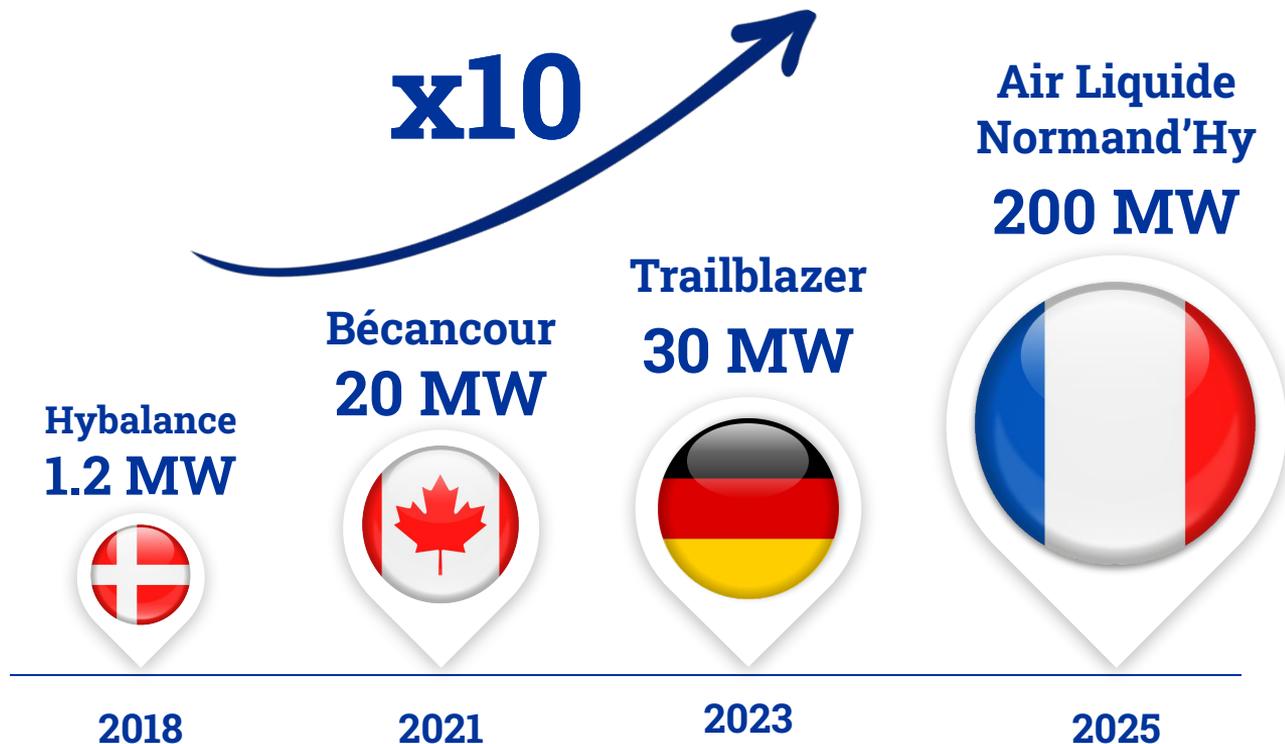
- Competitive electricity sourcing
- Hydrogen production plants
- Mutualisation of assets
- Technology leadership with proprietary technology
- Synergetic technology partnerships



Decision criteria

- Access to competitive renewable electricity
- Access to subsidies schemes
- Access to the closest hydrogen source
- Demand profile

Scaling up our electrolysis capacity



Leading position
in large scale
electrolysis
to reach 3 GW
capacity by 2030



Electrolysis

Bécancour, Canada

The world's largest PEM electrolyzer to produce decarbonized hydrogen in operation



Technology

- Proton Exchange Membrane (PEM)

Hydrogen

- Renewable hydrogen
- Using local hydropower capacity

Capacity

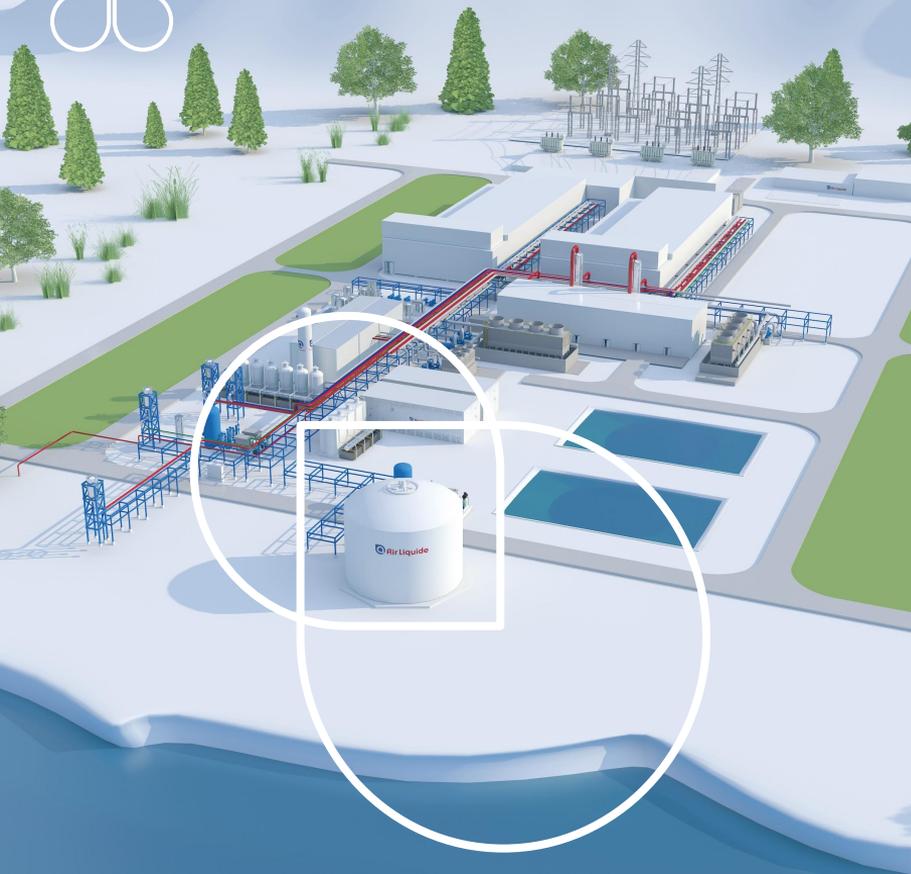
- 20 MW / 8.2 tonnes per day
- 10,000 cars / 16,000 forklifts / 275 buses / 230 large trucks

Emission reduction

- 27,000 tonnes per year

Commissioning

- Commissioned in January 2021



Electrolysis

Normand'Hy, France

A large-scale electrolyzer of at least 200 MW for the production of renewable hydrogen in France



Technology

- Proton Exchange Membrane (PEM)

Hydrogen

- Renewable Hydrogen
- Supporting the development of a low-carbon hydrogen ecosystem in the Normandy industrial basin

Capacity

- At least 200 MW

Emission reduction

- 250,000 tonnes of CO₂ reduction per year

Commissioning

- Planned for 2025



Thank you!