

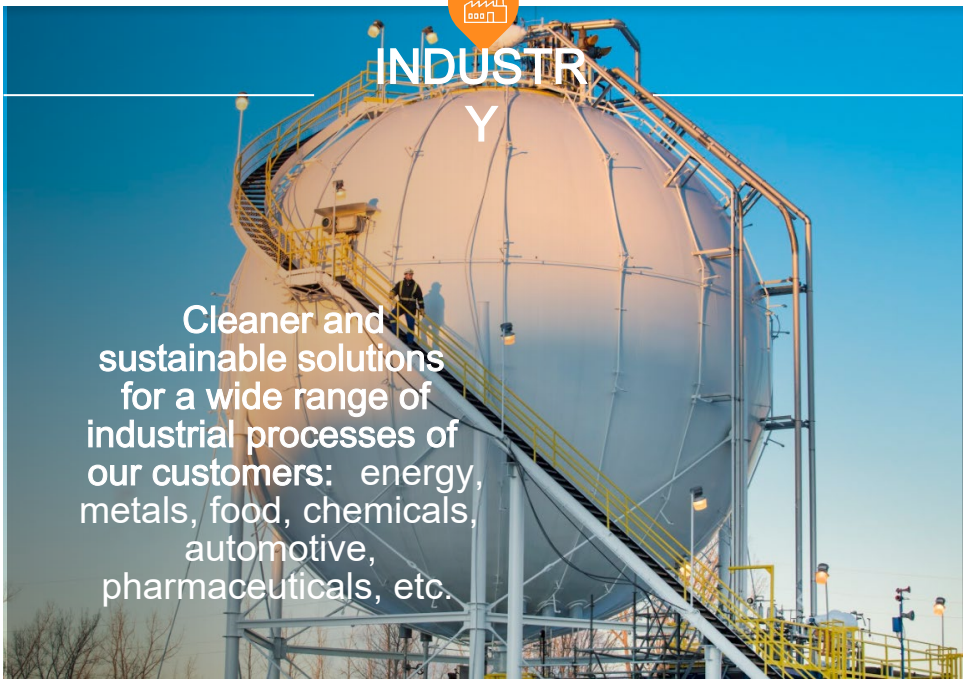
H₂ Energy

At the heart
of the energy transition

Dave Edwards

Director and Advocate for Hydrogen Energy
Air Liquide

A world leader in gases, technologies, and services for...



INDUSTRY

Cleaner and sustainable solutions for a wide range of industrial processes of our customers: energy, metals, food, chemicals, automotive, pharmaceuticals, etc.



HEALTH

Patients at home
Hospitals
Specialty
Ingredient s



~64,500
EMPLOYEES



PRESENT IN
78 COUNTRIES



+3.8 MILLION
CUSTOMERS &
PATIENTS



REVENUE
€20.5bn



NET PROFIT
(GROUP SHARE)
€2.4bn



INVESTMENT
DECISIONS
€3.2bn

ABATEMENT OF CO₂ EMISSIONS

SETTING A TRAJECTORY TO REACH **CARBON NEUTRALITY**

Air Liquide Commitments



CO₂ emissions **start decreasing** in absolute value

~2025

-30%

Carbon intensity
in kg CO₂/€ EBITDA^(a)
vs 2015



2035

Decrease scope 1 & 2
CO₂eq emissions in
absolute value by
-33%^(b)

Reach **Carbon
Neutrality** by **2050**

2050



(a) at 2015 exchange rate and excluding IFRS16 for greenhouse gas emissions scopes 1 and 2
(b) from 2020 Market based emissions of 32.5 million tonnes CO₂eq (Scope 1+2)

Air Liquide has nearly 50 years of hydrogen development for industries

Production & Supply chain

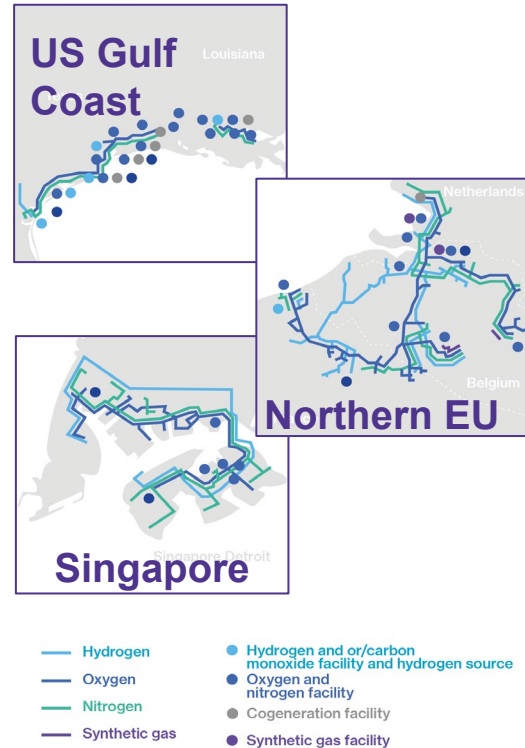
Production



Supply chain



Distribution Networks



Markets Segments

Process industries

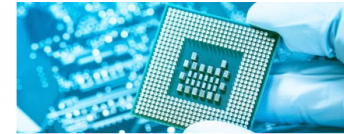
Oil & Gas



Steel, Glass



Electronics



Transportation

Space



Key Figures

14 Bm³/yr

1,850 km H₂ pipeline

46 large H₂/CO plants

40 electrolyzers
in operation

2 B€ sales

Air Liquide new investments in North America



Nevada



1st large scale **renewable liquid hydrogen** production plant dedicated to the Hydrogen energy markets

- Investment: **\$200M**
- Capacity: **30 tons per day** (40,000 FCEVs in the West Coast)
- Location: **North Las Vegas, Nevada**
- Construction: **Began in 2020; operations & delivery in 2022**



World's Largest PEM Electrolyzer to supply ~100% decarbonized hydrogen for Canada and the East Coast Markets

- Investment: **\$40M** (additional investment to existing site with liquefier)
- Capacity: **>8 tons per day (20 MW PEM electrolyzer)**
- Location: **Bécancour, Québec**
- Construction: **Began in 2019; operations & delivery 2020**

Bécancour



Nevada Construction



Becancour Site



Becancour Site - Aerial view



The future of Hydrogen supply

The challenge is scale

Production, supply and distribution - proven at scale

Applications - vehicles in service and under development

Dispensing infrastructure - leverage existing

CLEAN
MOBILITY
by  Air Liquide

Thank you!

 Air Liquide