H$_2$ 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...

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

Patients at home
Hospitals
Specialty ingredients

~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

CO₂ emissions start decreasing in absolute value

-30%
Carbon intensity in kg CO₂/€ EBITDA\(^{(a)}\) vs 2015

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

Reach Carbon Neutrality by 2050

Air Liquide Commitments

\(^{(a)}\) 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.
Air Liquide new investments in North America

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
Nevada Construction
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
Thank you!