



Air Liquide transforme l'ambition en réalité

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Capture de CO₂: la technologie Cryocap éprouvée en Normandie



A unique
World's
Reference

➤ Start up in H1 2015 : 10 years of reliable industrial operation

- **Reliable** operation of the compressor, cold box and membranes
- **Increase of H₂ production** flow
- Get **significant return of experience** while addressing technical challenges
 - Deep integration with an existing SMR **with no impact on H₂ reliability**
 - Centrifugal compressor on fluctuation PSA tail gas
 - Operation of a Cryo unit close to CO₂ triple point
 - Ageing of membranes & adsorbents

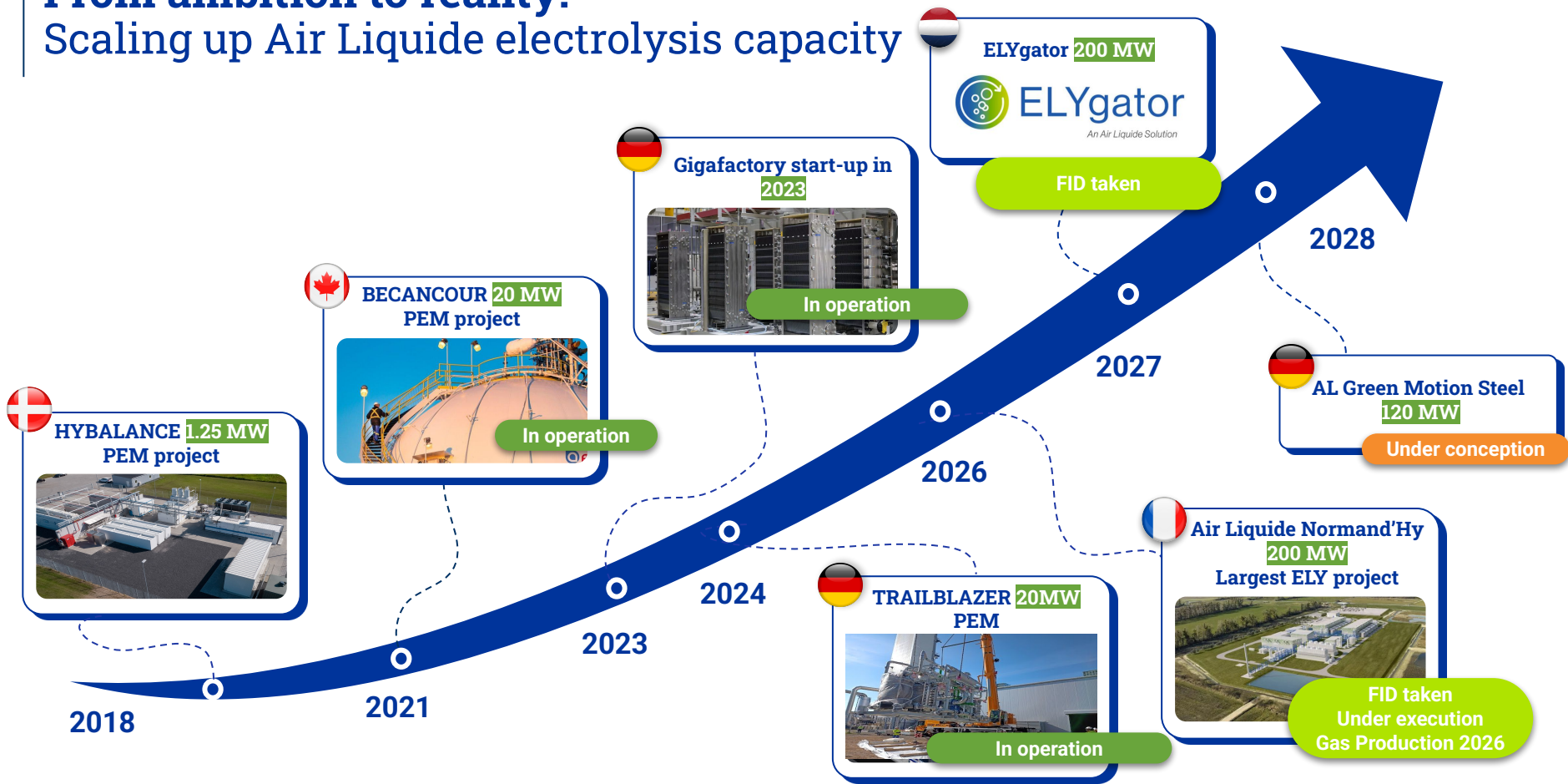
➤ Design to scalability approach:

- Pure scale up to go to full CCS scale

➤ Retrofit of an Air Liquide SMR in Port Jerome

- SMR supplying 50,000 Nm³/h H₂ to **ExxonMobil refinery**
- **Synergies with AL merchant business: 300 tons/day** food-grade liquid CO₂

From ambition to reality: Scaling up Air Liquide electrolysis capacity



200 MW PEM electrolyzer in Port-Jérôme, France, to supply renewable and low-carbon hydrogen for industrial and mobility applications, avoiding the emission up to 250,000 tonnes of CO₂ per year

From 3D Model...

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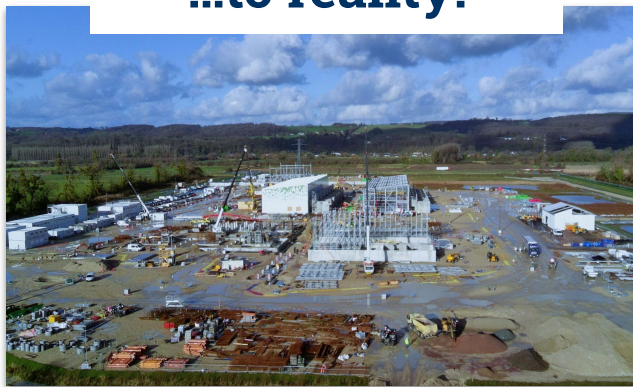
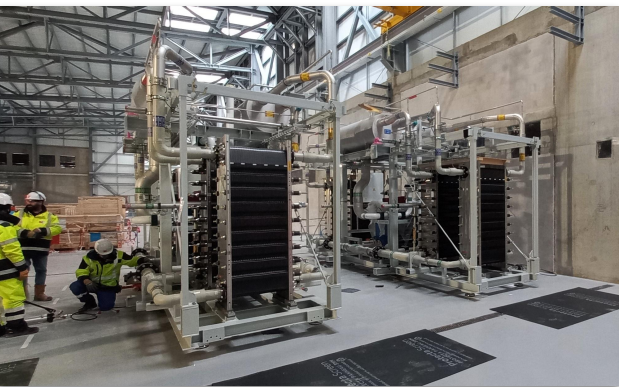


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...to reality!



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Thank you!