



HYDROGEN PILOT SUMMIT

Provincie Noord-Brabant



18th November 2024, Brussels

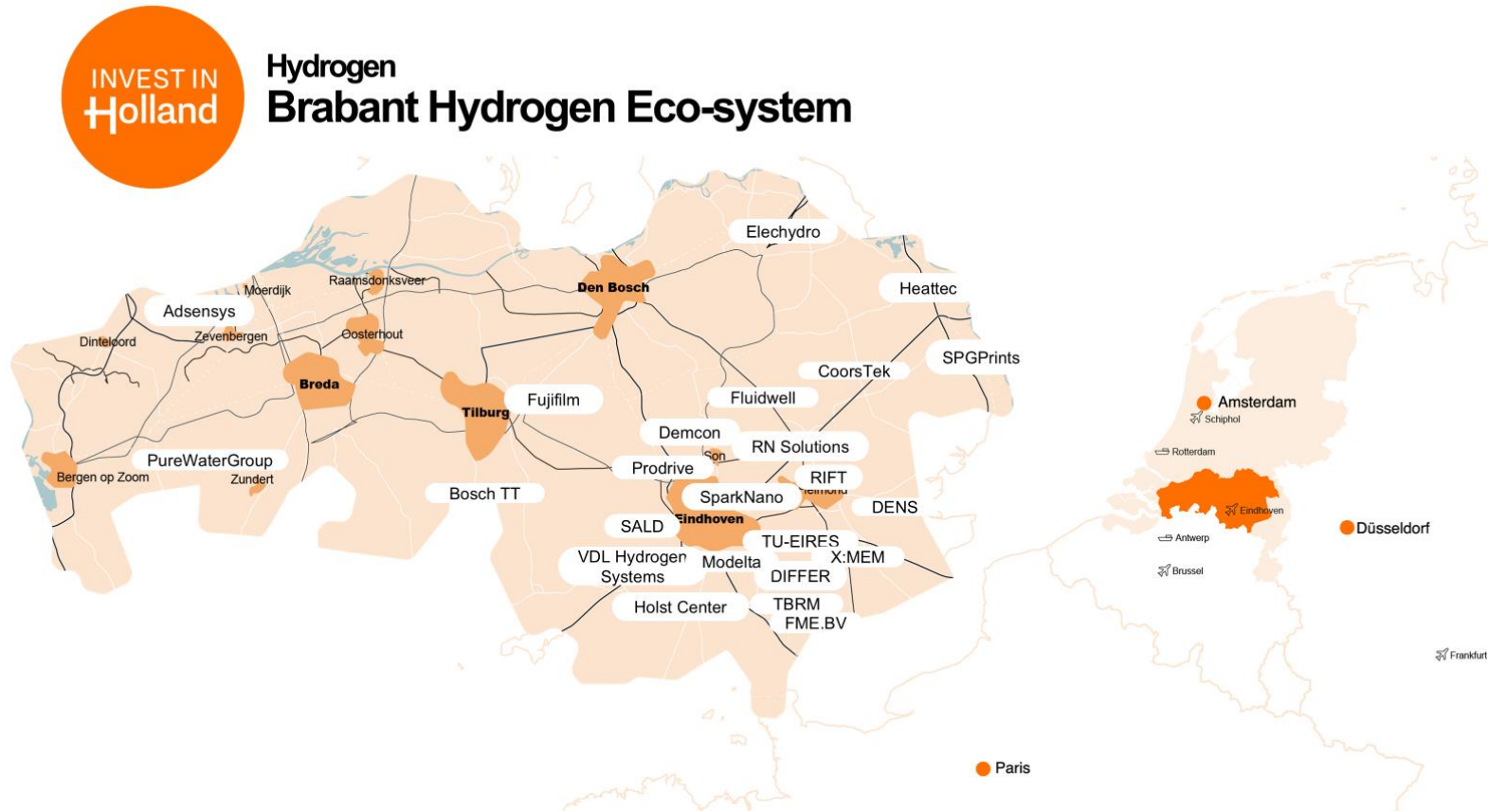


Hydrogen in the region

Innovation Coalition Hydrogen

enabling technology for the world to effectively produce and use green hydrogen

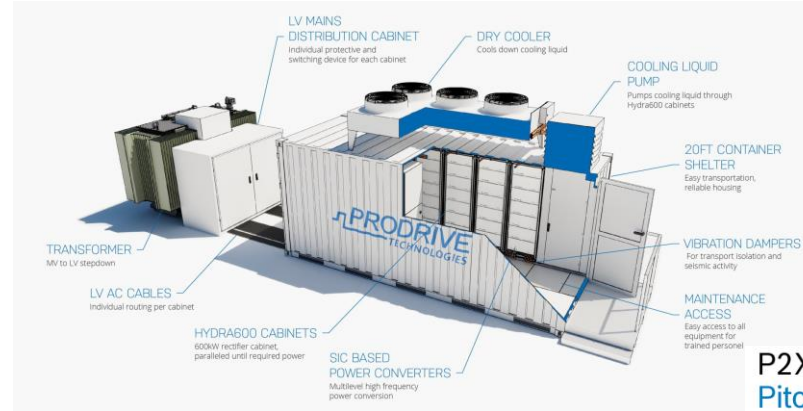
- **Focus** : development of equipment for cost-effective hydrogen production.
- **Ambition**: Develop and realize a robust H2-High Tech Systems and Materials ecosystem in Brabant based on an innovative 2nd or 3rd generation electrolyzer (Alkaline (ALK/AEM), Proton Exchange Membrane (PEM) and/or SOEC), produced here using flexible manufacturing systems.
- **Goal**: realization of a strong Brabant supply chain and OEMs / system suppliers with a world-wide position.



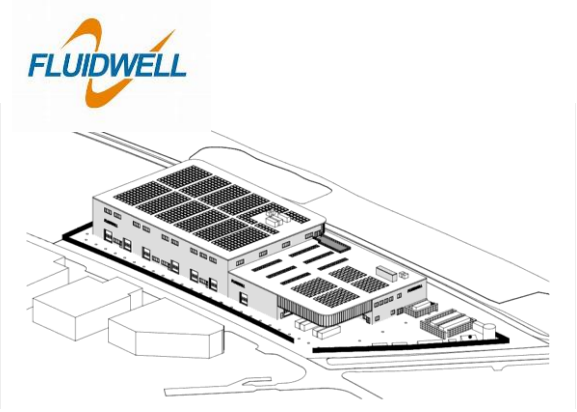
H2 best practices



Spatial ALD tool (application of nano coatings to a surface; works atmospherically) from SALD



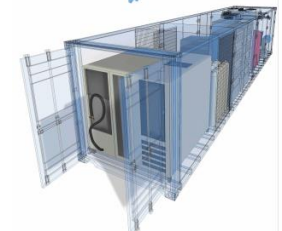
Rectifier (important part of electrolyzer that does the power electronics; power input, conversion, current to water/membrane etc) from ProDrive



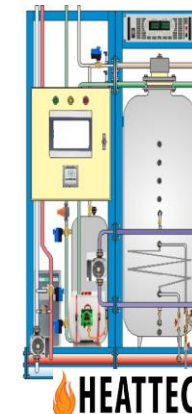
P2X test center Tilburg
Pitch: Tilburg Test Technology for a CO₂ neutral future



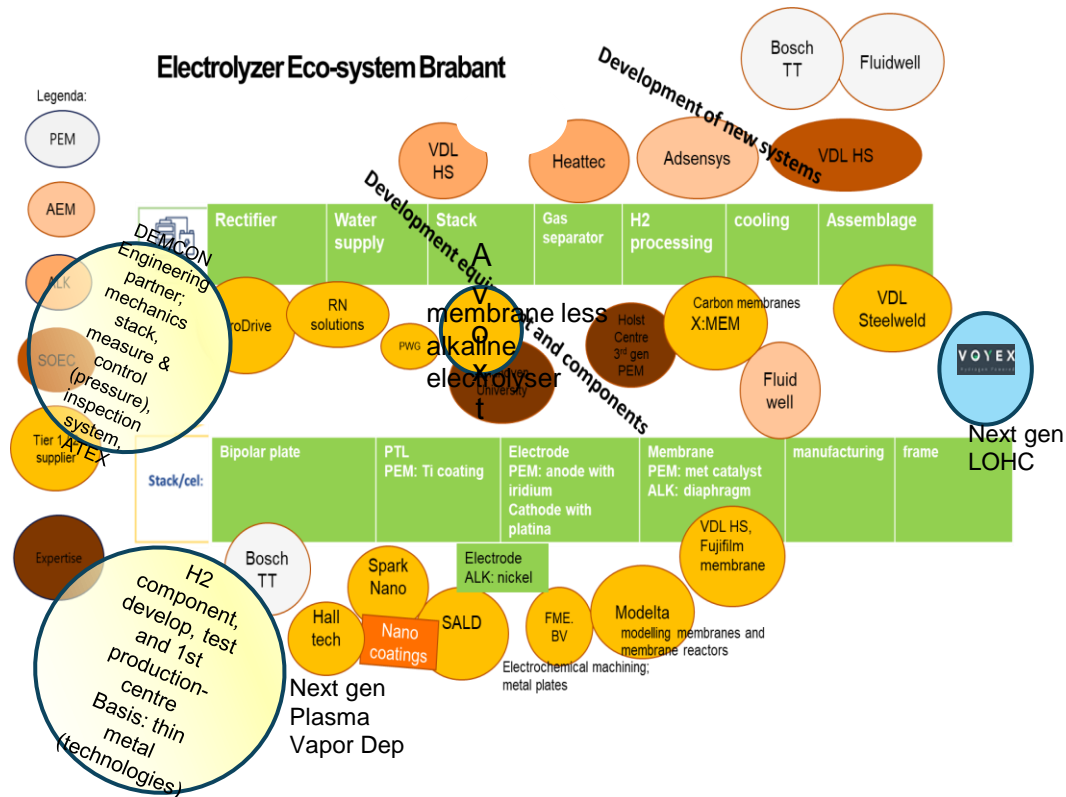
- Product D**
- P2X test center
 - Bosch work assignments
 - Work force (
 - Use general Liquide, ...)
 - Strong on-site
- Value Prop**
- Testing of P...



Alkaline electrolyzer from VDL Hydrogen Systems (system to produce green hydrogen)



Region's offer & needs



Needs:

1. Membrane / stack companies
2. Large scale nickel surface coaters
3. New electrolyzer cell or fuel cell developers
4. Companies interested in
 1. electro chemical machining;
 2. next gen PV CVD tools
 3. Spatial ALD
5. Turn-key / BOOM companies

- High-tech systems DNA
- New generation elektrolyzer OEMs
- Deposition technologies, Spatial ALD or other special coating technologies
- OEM, tier1 or tier2 in elektrolyzer or fuelcell manufacturing

Proposal for collaboration

- B2B projects
 - Crossing border joint business projects and public funding
 - Business matchmaking
- K2K projects
 - Knowledge exchange; joint project development (next gen ALK, next gen SOEC) on elektrolyzer and on stack level
 - No rare earth metals, industrialized production, low energy consumption
 - Joint degrees, business challenges & student projects
- G2G projects
 - Cooperation between governmental bodies to simply and support more business between NL and Polish/Slovenian/Slovak/Spanish/... companies; develop more trade
 - Joint tenders, joint tendering



Contact details

- Paul Gosselink
 - program manager new energy
 - Brabant Development Agency (BOM)
 - T +31 (0)6 – 15 24 98 63
 - E pgosselink@bom.nl
 - W www.bom.nl and www.brabantisbright.nl

