



EXION[®]

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WE

BUILD

BETTER

ELECTROLYZERS

EXION[®]
HYDROGEN

Exion Hydrogen : **We** build better electrolyzers

⚡ Est. 2021, privately-owned

- ZE PAK S.A. and Cyfrowy Polsat S.A.

⚡ Decades of experience

- Industry experts in engineering, design and development
- Construction, integration and servicing of industrial equipment
- Well-connected in the industry

⚡ Ambitious and knowledgeable



Exion Hydrogen : **We** build better electrolyzers

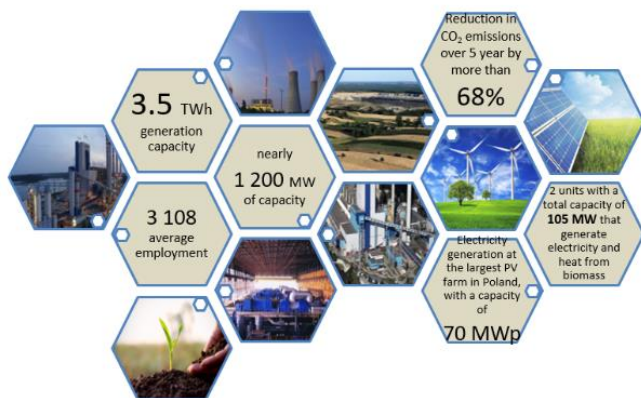
⚡ Backed by large & stable Shareholders:
ZE PAK S.A. and Cyfrowy Polsat S.A.

- Investing in low-carbon energy sources:

- Solar
- Wind
- Biomass
- LargeScale energy production

- Investing in Hydrogen Mobility:

- PAK PCE: Polski Autobus Wodorowy
 - Neso Bus
 - Neso Hydrogen filling stations



EXION.
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Exion Hydrogen : We *build better* electrolyzers

Gdańsk, Poland

- ❧ Headquarters
- ❧ Manufacturing & Testing
- ❧ Warehouse
- ❧ Service



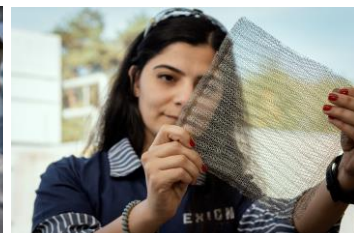




Exion Hydrogen : We build *better electrolyzers*

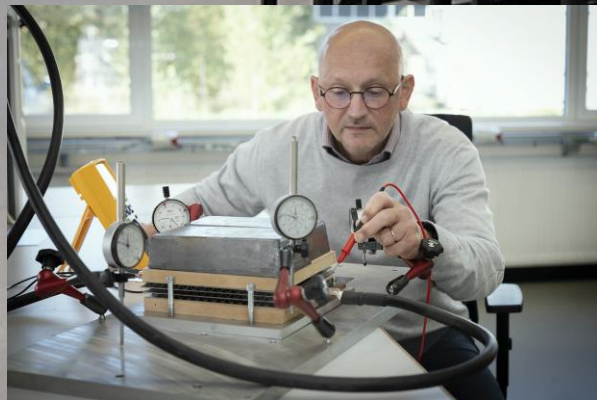
Turnhout, Belgium

- ✧ R&D Center and Lab
- ✧ Product Management
- ✧ Business Development



Q1 2024: 16FTE's

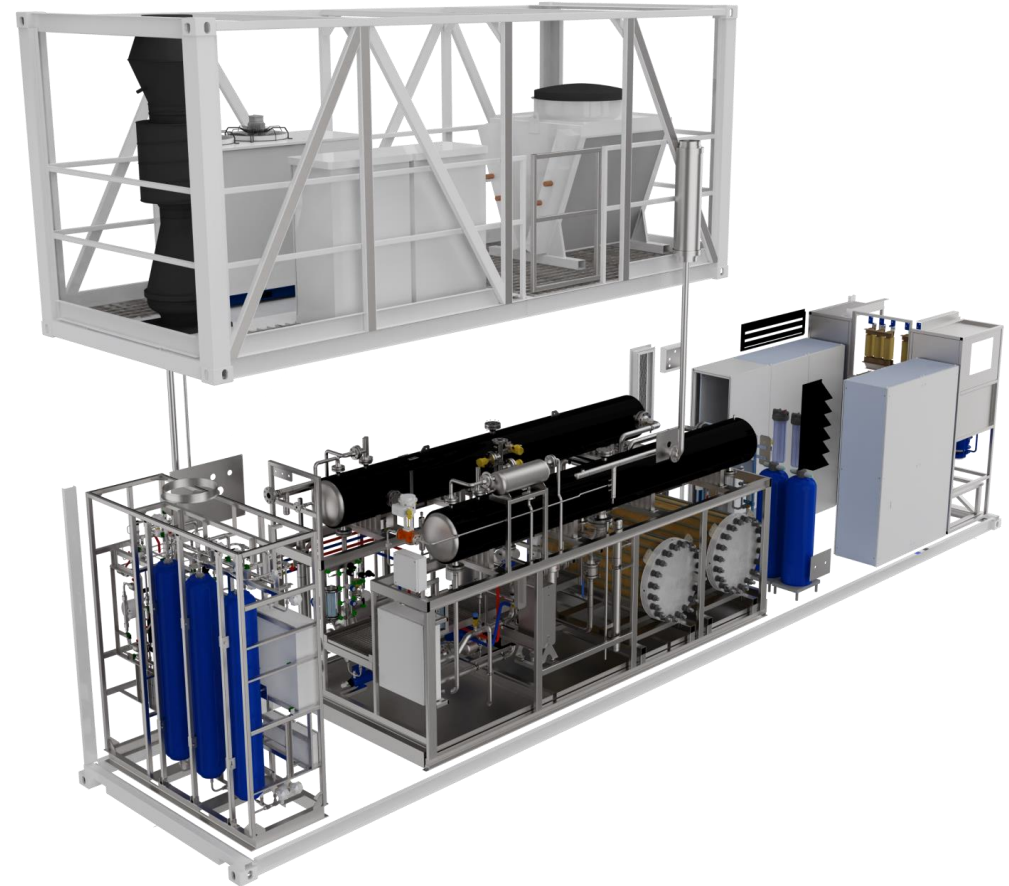
300m² Lab & offices



First development : Alkaline Pressurized

HyGGe™ 100A - Key specifications

- ❖ **Hydrogen Gas Generator**
- ❖ Nominal H₂ output flow: **100Nm³/h** (2 Stacks)
- ❖ **Alkaline electrolyzer** (30% KOH)
- ❖ Gas Purity: 99,998% (4.8)
- ❖ Hydrogen Pressure: 30barg
- ❖ Housing: 40ft ISO HC container
+20ft top frame
- ❖ Electrical power: approx. 520kW

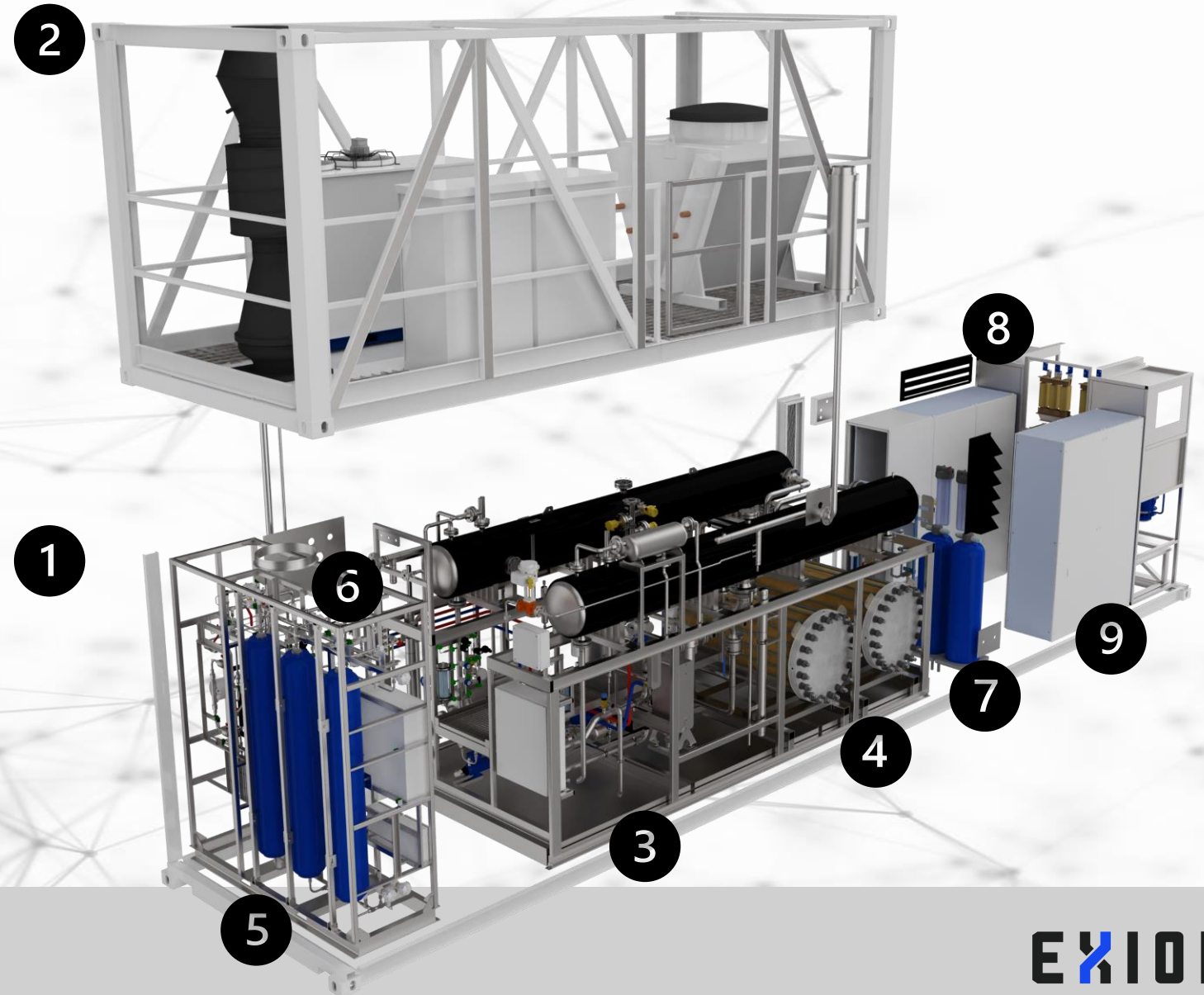


HyGGe™ 100A



HyGGe™ 100A - Main modules

- 1 Main Unit Housing
- 2 Rooftop Frame
- 3 Gas Generation Module
- 4 Cell Stacks
- 5 Gas Purification Module
- 6 Gas Quality Control Panel
- 7 Water Purification System
- 8 Power Supply
- 9 Control Cabinet



Hydrogen Application Domains



- Sulphur removal for refineries
- H₂ for the ammonia/fertilizer industry
- Eco-friendly methanol and chemicals
- CO₂ reduction in cement production
- CO₂ reduction in metallurgy (DRI)



- Food; fat & oil
- Flat glass production
- Annealing in metallurgy
- H₂ for (petro)chemical and pharma industries
- Ultra-pure hydrogen for electronics
- Cooling large Powerplants



- Grid stabilization & balancing
- Optimization of renewable energy sources
- Energy storage



- Pure hydrogen for fueling stations
- Hydrogen to produce synthetic fuels
- Ammonia as a fuel

Target Markets

⚡ Specialized Industries

- Flat glass production site
- Sintering site
- Hydrogenation of edible oil
- Chemical plants
- Electronics
- Gas Suppliers

⚡ Energy

- Pilot plant
 - Energy Storage
 - PtX
 - Methane
 - Methanol
 - Ammonia
- Grid Balancing

⚡ Mobility

- Distributed Refuelling Stations
 - Road Transport
 - HDV (bus/truck)
 - LDV (cars)
 - Water
 - Air
 - Rail Transport

Focus Markets for the HyGGe™100A

- ⚡ Industrial Projects - typically up to 3MW or 600Nm³/h
 - ⚡ Initial Focus: European Market (CE certification)
- ⚡ Demonstration RE projects
- ⚡ Mobility projects



Any further questions?
Don't hesitate to ***contact us:***

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Thank you

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