

One step more towards the global decarbonization

NORDEX ELECTROLYZERS PROJECT IN A GLANCE





01

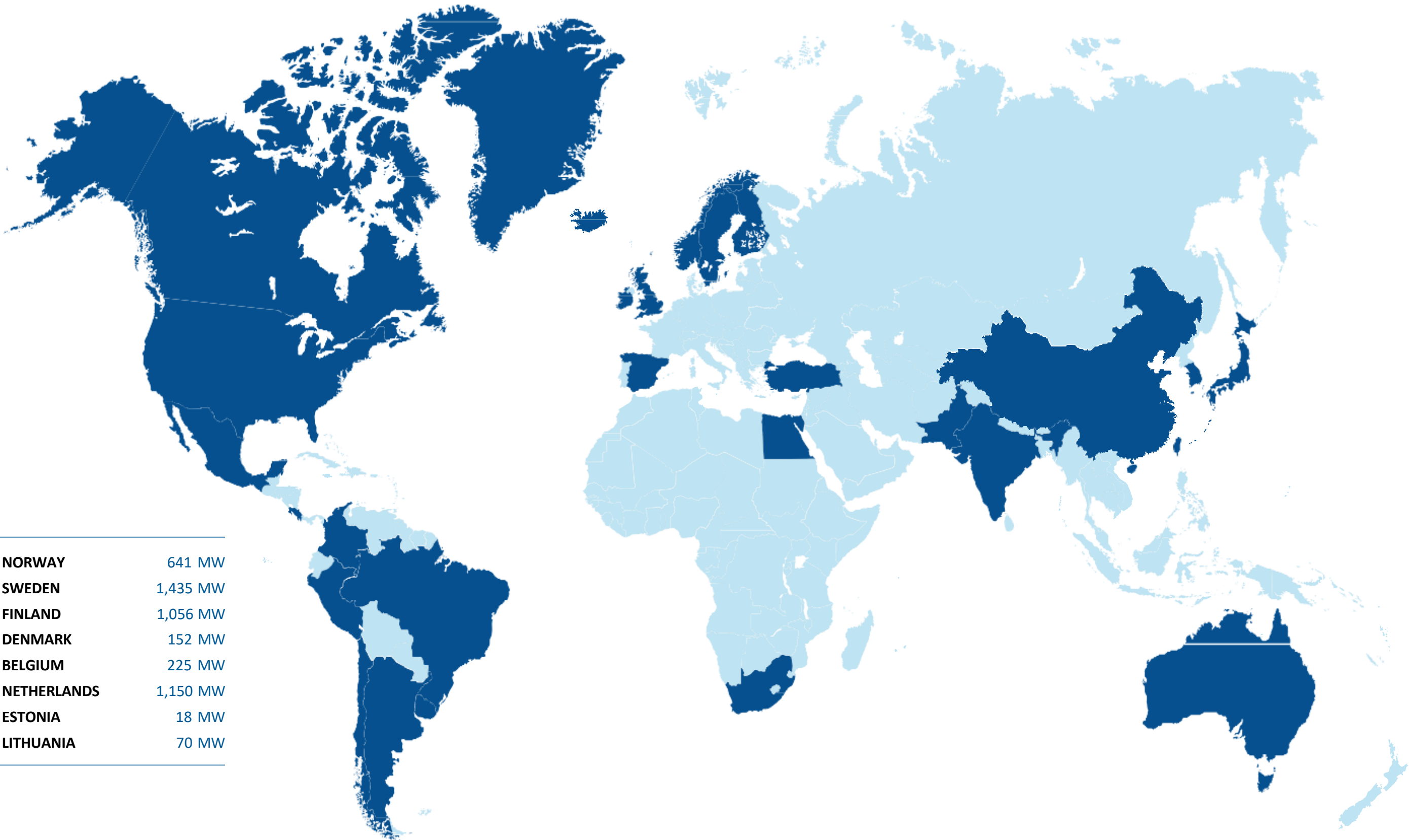
**Nordex
strenghts**
(from wind to hydrogen)

Nordex group: Track record

● **Turbines commissioned:**
More than 53,000* MW worldwide.

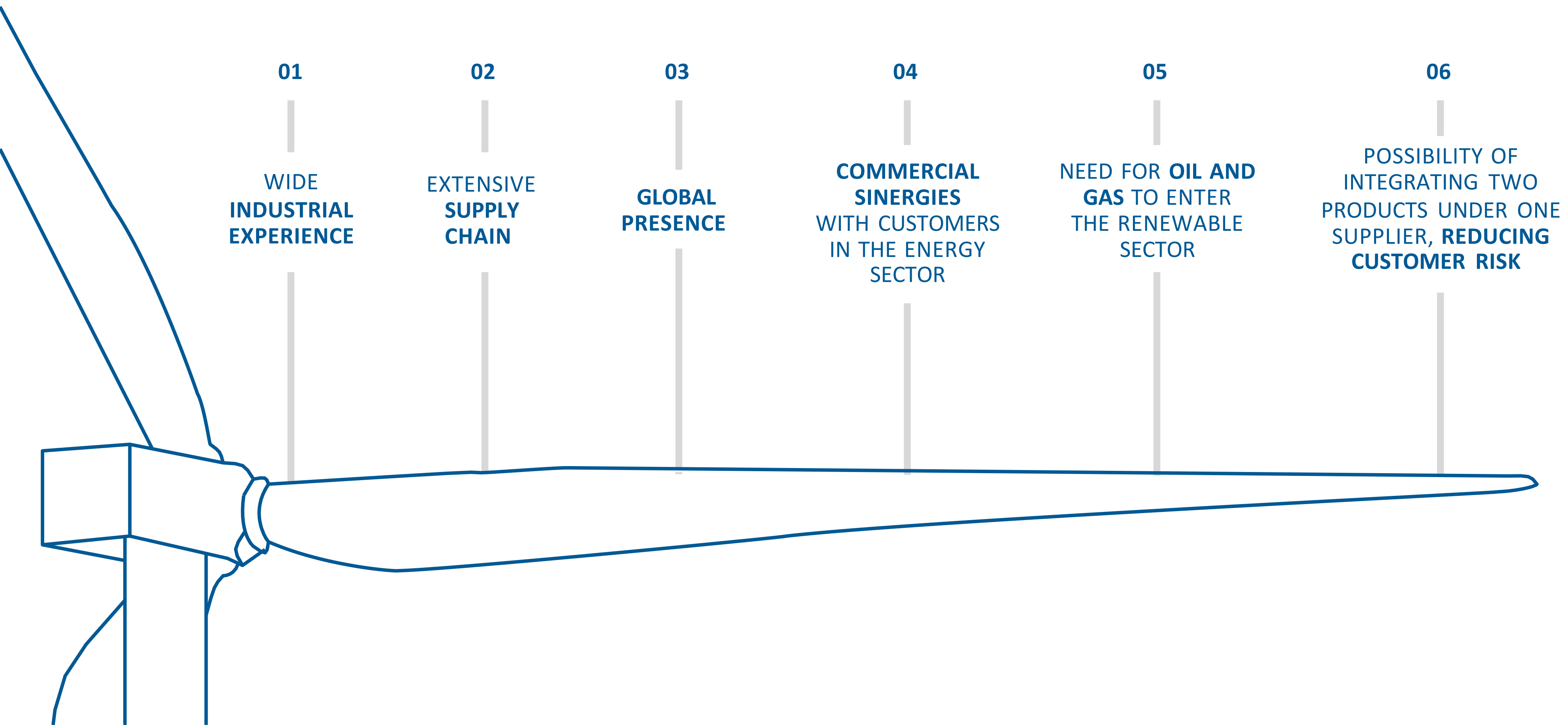
AMERICA		ASIA/AFRICA/OCEANIA	
ARGENTINA	627 MW	TÜRKIYE	3,569 MW
CANADA USA	203 MW	PAKISTAN	300 MW
MEXICO	7,701 MW	INDIA	378 MW
COSTA RICA	1,782 MW	CHINA	1,053 MW
PERU	50 MW	JAPAN	73 MW
COLOMBIA	132 MW	SOUTH KOREA	65 MW
BRAZIL	20 MW	AUSTRALIA	371 MW
URUGUAY	2,458 MW	EGYPT	63 MW
CHILE	309 MW	SOUTH AFRICA	1,103 MW
	569 MW	OTHERS (ROW)	330 MW
EUROPE			
SPAIN	2,922 MW	GERMANY	5,509 MW
FRANCE	3,058 MW	POLAND	718 MW
PORTUGAL	447 MW	CZECH REPUBLIC	12 MW
ITALY	885 MW	ROMANIA	100 MW
CROATIA	312 MW	UKRAINE	322 MW
GREECE	302 MW	BULGARIA	8 MW
UK	1,678 MW	LUXEMBOURG	23 MW
IRELAND	1,014 MW	AUSTRIA	5 MW
		NORWAY	641 MW
		SWEDEN	1,435 MW
		FINLAND	1,056 MW
		DENMARK	152 MW
		BELGIUM	225 MW
		NETHERLANDS	1,150 MW
		ESTONIA	18 MW
		LITHUANIA	70 MW

⊛ **ADDITIONALY > 14,000 MW UNDER CONSTRUCTION.**



Nordex group: from wind to hydrogen

The Numerous synergies between wind and hydrogen energies sectors explain the firm’s commitment to this new energy vector.



NOVEMBER 21, 2022



Spin-off of Nordex Energy Spain S.A.

INSTITUTIONAL DRIVE



**Nordex Electrolyzers is Sodena's
(Government of Navarra) second largest
investment in the renewables sector in
its history.**

“ ”

**Pushing the energy transition forward is
part of the Nordex Group's, that's why we
decided to step foot into the green
hydrogen business to complement our core
business.**

JOSÉ LUIS BLANCO, NORDEX GROUP CEO



02

Product portfolio

Product portfolio

ELECTROLYZER 2.5 MW

H2: 500 Nm3/h

Weight: 74 T

Footprint: 400 m2

Consumption: < 5.3 kWh/Nm3



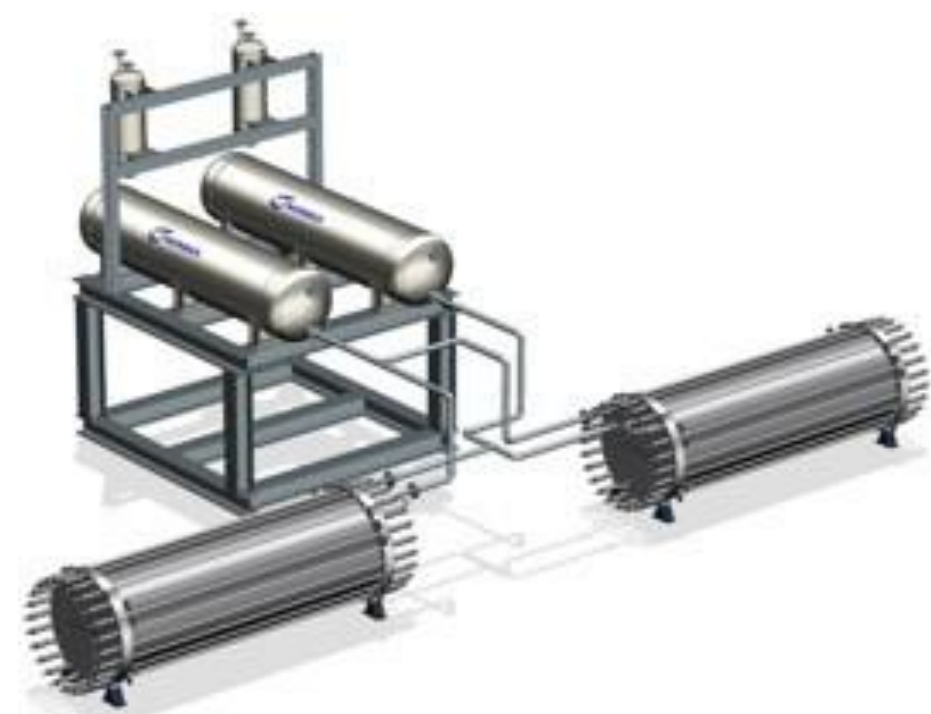
MODULE 5MW

H2: 1000 Nm3/h

Weight: 125 T

Footprint: 500 m2

Consumption: < 5.3 kWh/Nm3



MODULE 10 MW

H2: 2000 Nm3/h

Weight: 250 T

Footprint: 1000 m2

Consumption: < 5.3kWh/Nm3



What makes our product unique

Our product is specifically designed to work under fluctuating conditions of renewable power generation.

01	02	03
Stack mechanical design for a high efficiency	High operation range and quick response	Durability at dynamic operation conditions
Fluid-dynamic optimization	High quality diaphragm material	Electrode materials selection and manufacturing process for dynamic operation conditions
Thermal optimization	Sealing optimization design	
Reduced stray currents	Optimal BoP design quick response	Optimal selection of material for HER and OER electrodes
Low energy consumption	High flexibility	Durability
4.8 kWh/Nm3 (Stack)	25-100%	<1% /Year



03

Our roadmap

Our Roadmap

2023

Electrolyzer
50kW

2024

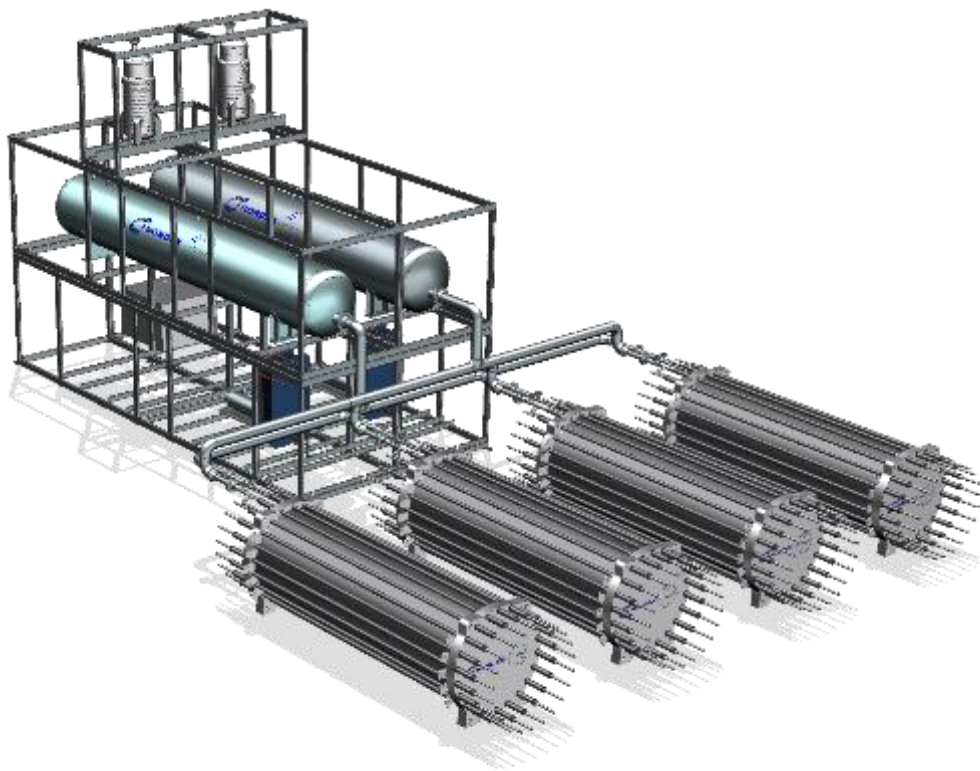
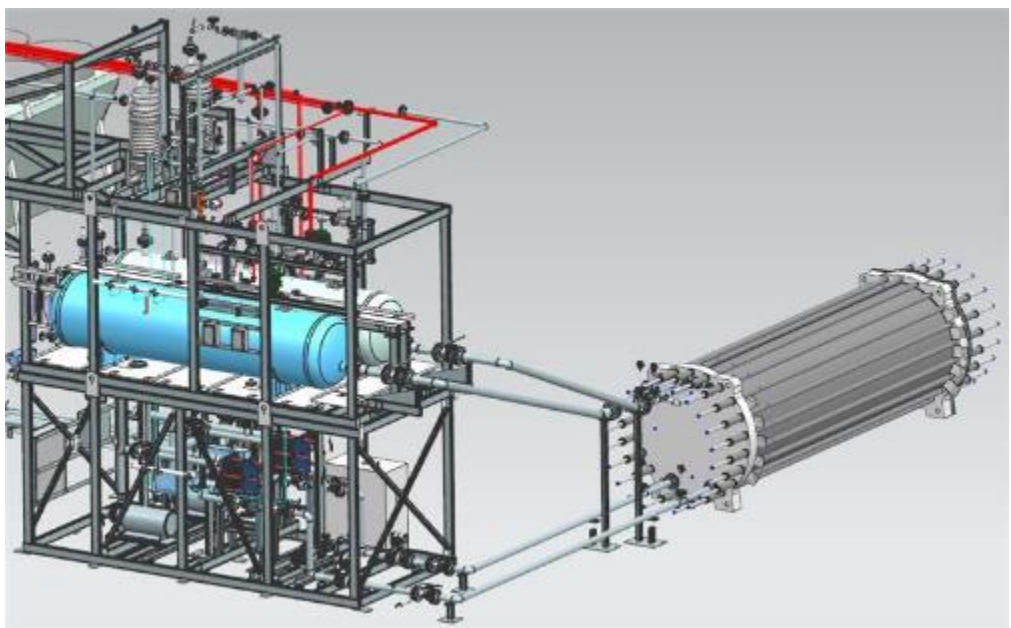
Electrolyzer
500kW

2025

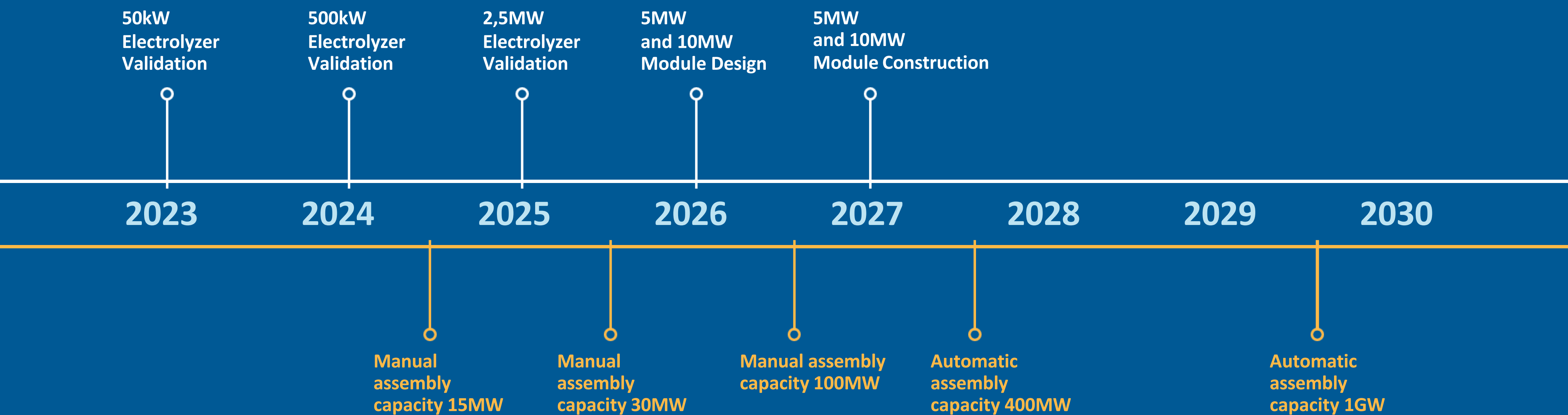
Electrolyzer
2,5MW

2026

5MW - 10MW
Modules



Timeline



Prototypes

Manufacturing

**Thank you
for your attention**

