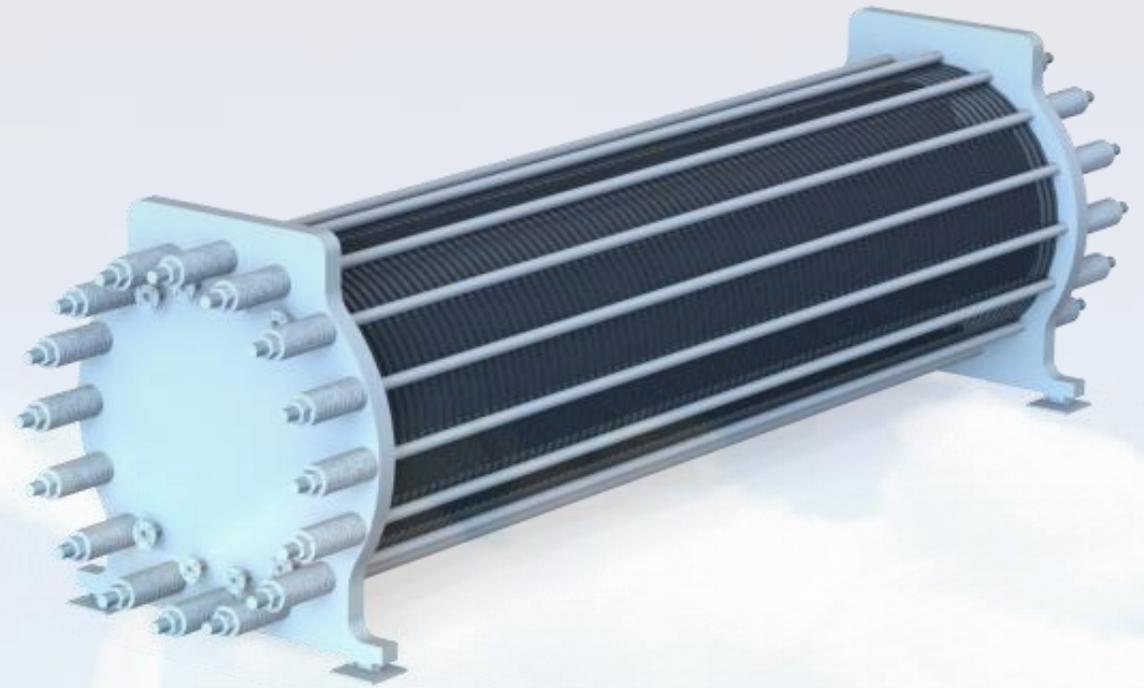
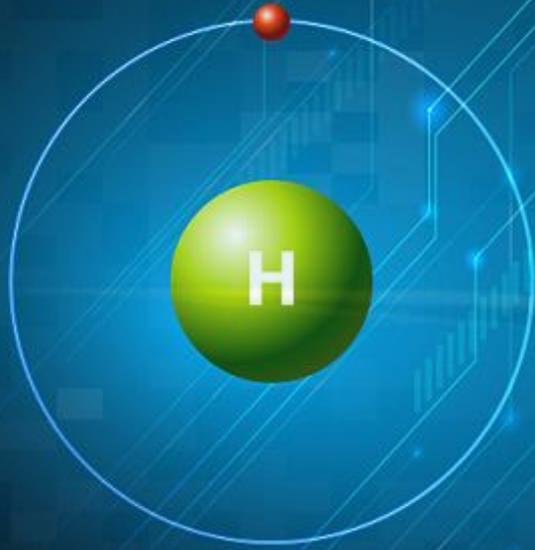
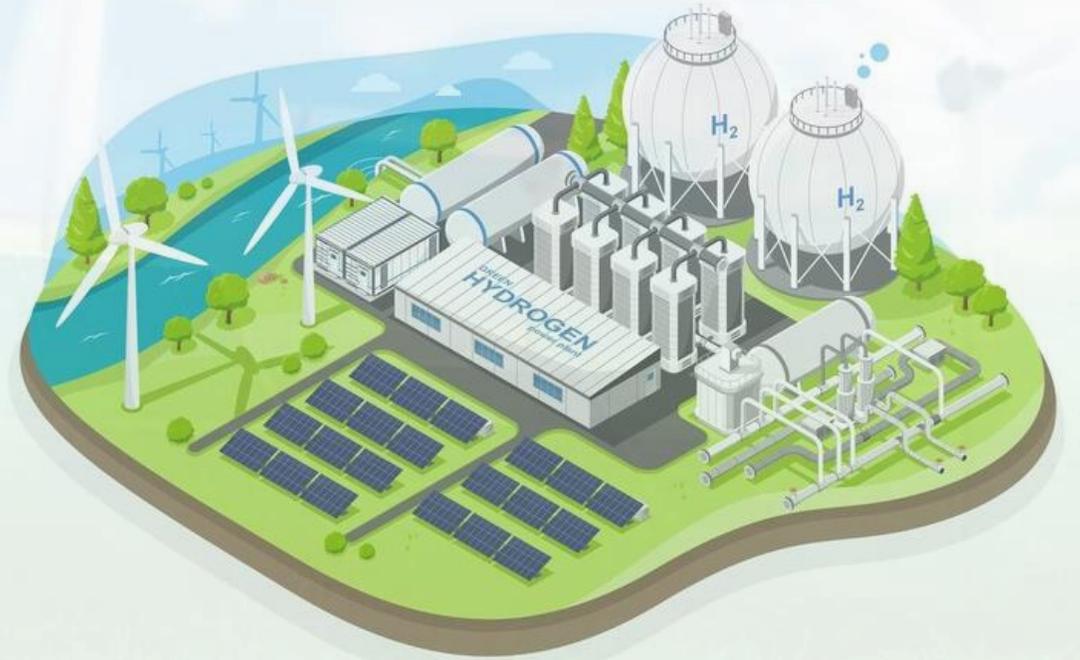


Hydrogen



**DHT Green Hydrogen
Technology**



DHT Version 1

1 MW Alkaline Electrolyser System Information

Type	DHTLyzer 200-30, (Version 1 - Base Line Model Before DHT Tech.)
Design	Indoor / Indoor
No. of Cell Stack & Capacity	1 x 1 MW
Stack Operating Temperature	75 °C
Electrolyte	30% KOH aqueous solution
Nominal Hydrogen Flow	200 Nm3/hr
Hydrogen delivery Pressure (Processing Unit Outlet)	30 barg
Hydrogen delivery temperature (Processing Unit Outlet)	9 - 30 °C
Hydrogen Purity (Processing Unit Outlet)	99.99%
O2-Content in H2 (ppmv)	< 1
H2O-Content in H2 (ppmv)	< 1
System Nominal Power Rating (AC Full Load)	1 MW
Specific Power Consumption (AC, 100% Load) (Stack DC + Utilities Included at nominal capacity AC)	< 5.1 kWh/Nm3
Turndown ratio	10 - 100 %
System Footprint	1 x 40 ft
Utilities (AC-DC Rectifiers, Water Purification, Cooling, Instrument air, H2 Purification)	Included

DHT Version 2

1 MW Alkaline Electrolyser System Information

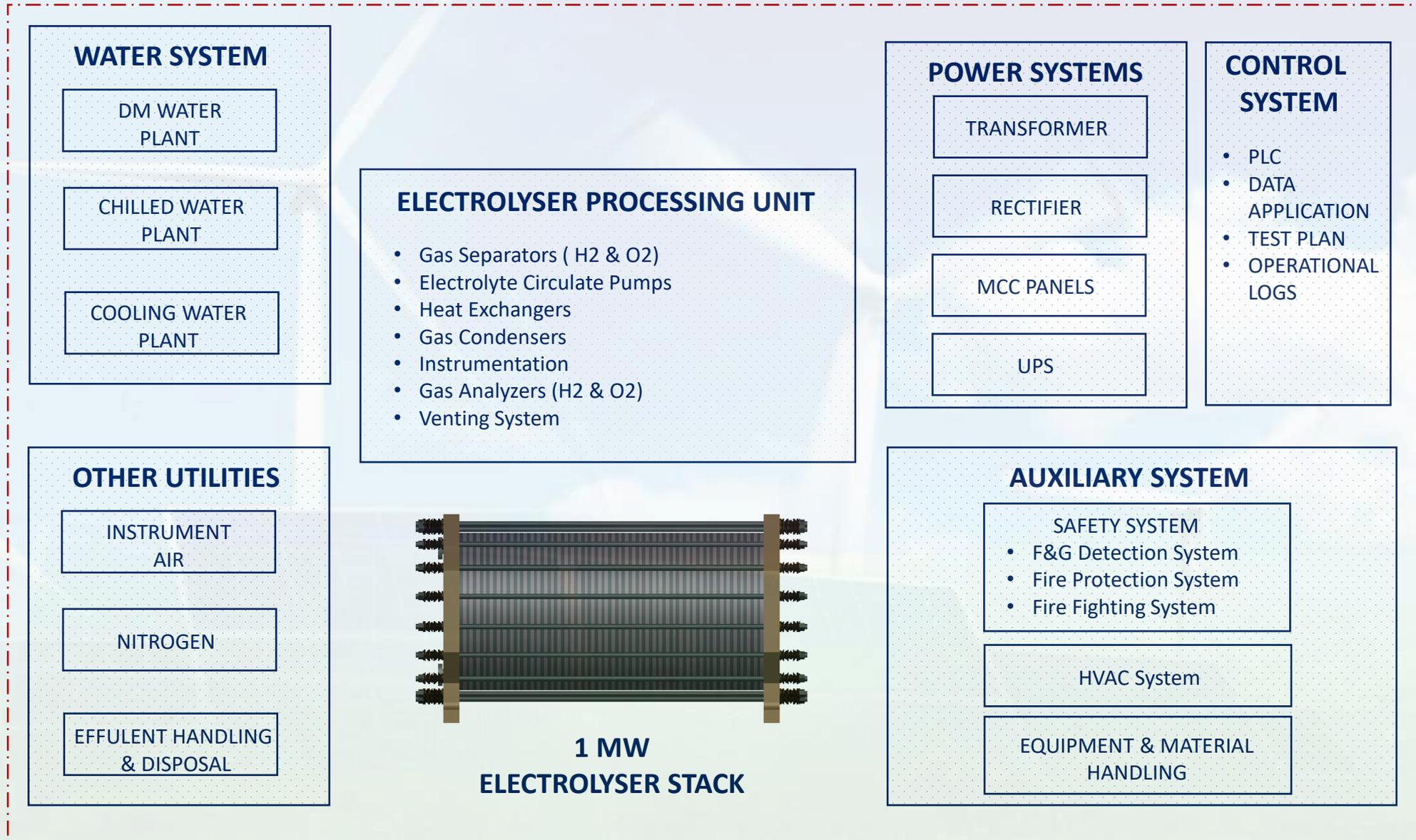
Type	DHTLyzer 200-30, (Version 2 - DHT Tech. Model)
Design	Indoor / Indoor
No. of Cell Stack & Capacity	1 x 1 MW
Stack Operating Temperature	75 °C
Electrolyte	30% KOH aqueous solution
Nominal Hydrogen Flow	200 Nm3/hr
Hydrogen delivery Pressure (Processing Unit Outlet)	30 barg
Hydrogen delivery temperature (Processing Unit Outlet)	9 - 30 °C
Hydrogen Purity (Processing Unit Outlet)	99.99%
O2-Content in H2 (ppmv)	< 1
H2O-Content in H2 (ppmv)	< 1
System Nominal Power Rating (AC Full Load)	1 MW
Specific Power Consumption (AC, 100% Load) (Stack DC + Utilities Included at nominal capacity AC)	< 3.25* kWh/Nm3
Turndown ratio	10 - 100 %
System Footprint	1 x 40 ft
Utilities (AC-DC Rectifiers, Water Purification, Cooling, Instrument air, H2 Purification)	Included

* With subsequent versions the DHT target is less than 3 kWh/ Nm3

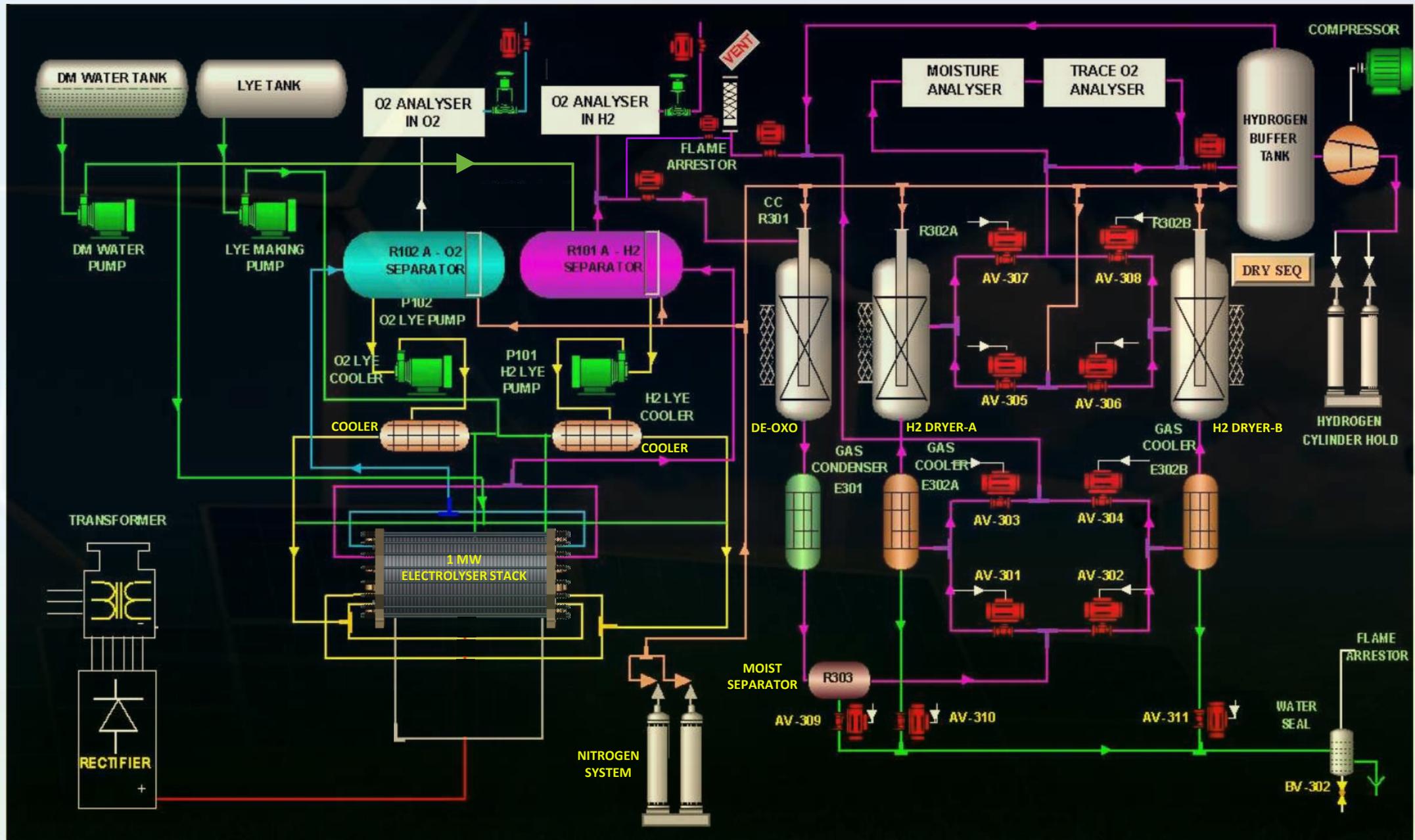
DHTLyzer 1 MW Containerized solutions for mobility



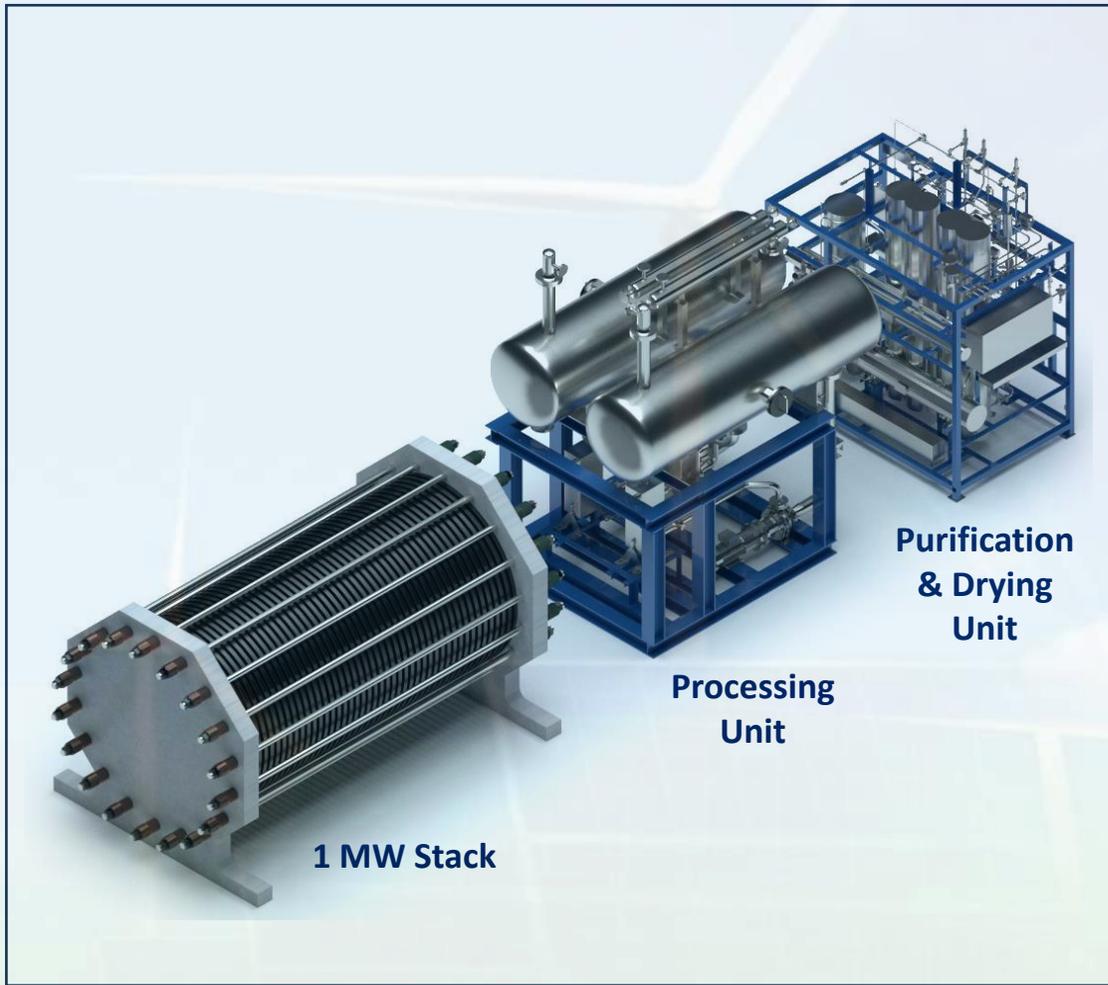
Overall Scheme of the Green Hydrogen Plant Facility



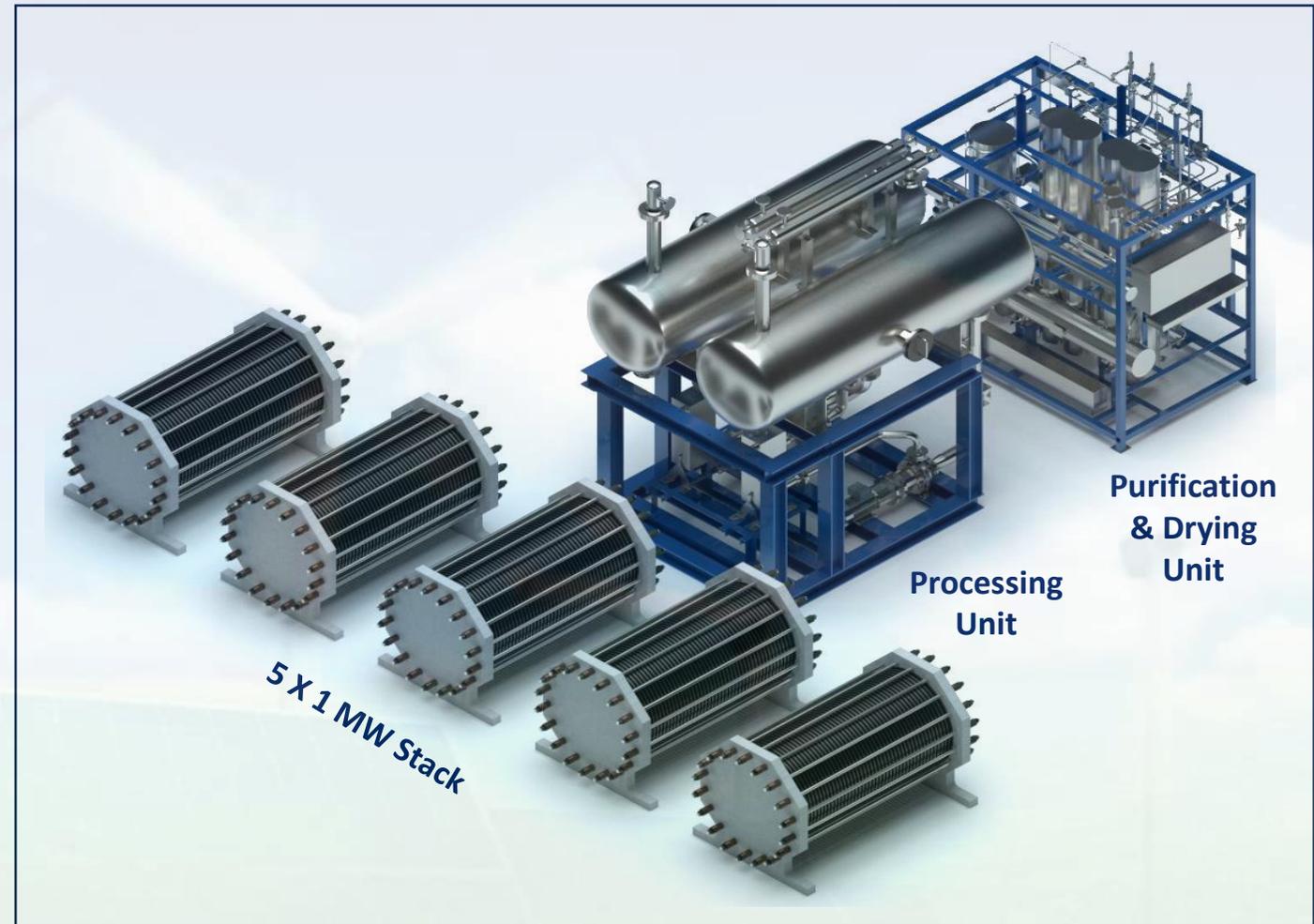
DHT Hydrogen Generation Process Flow Diagram



DHT Modules Development Roadmap

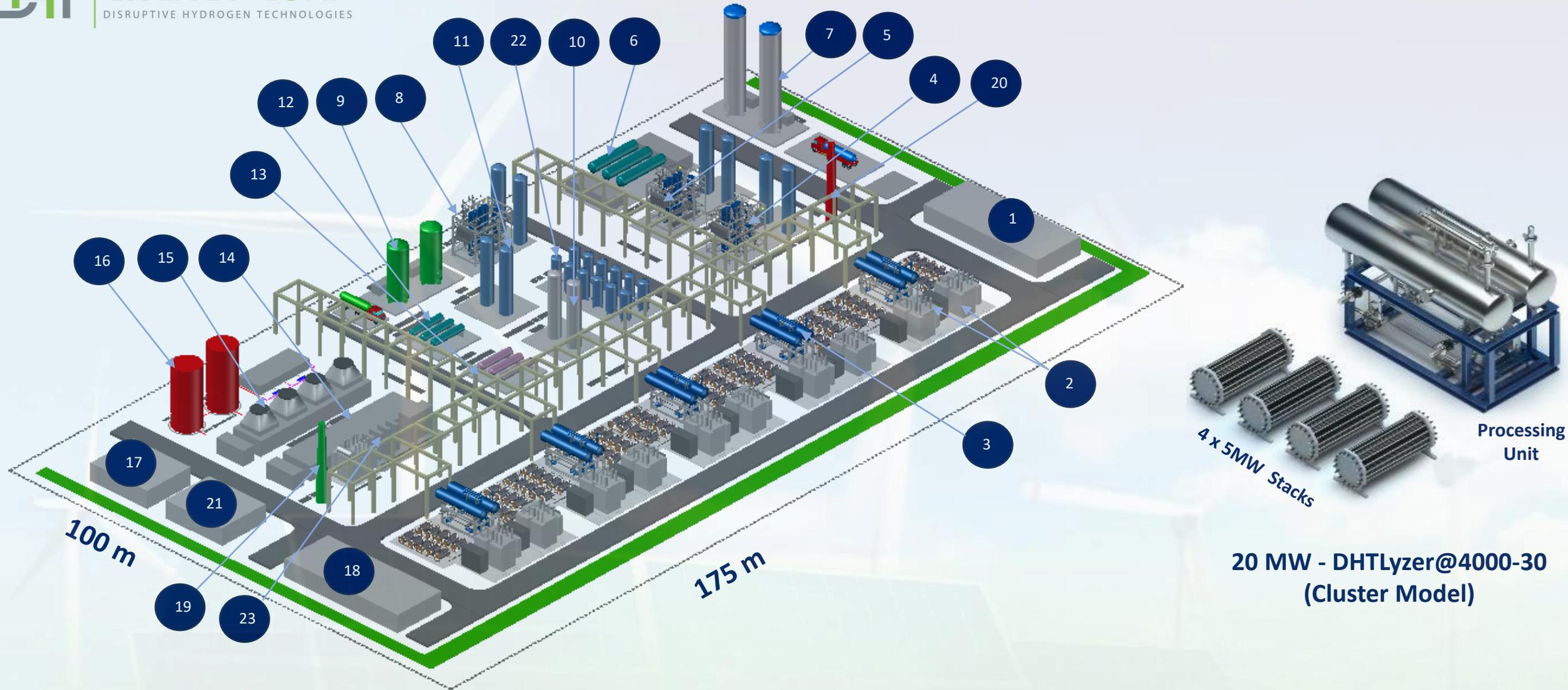


1 MW- DHTLyzer@200-30
(Containerized Model)



5 MW - DHTLyzer@1000-30

100 MW Green Hydrogen Plant Layout – 3D Model

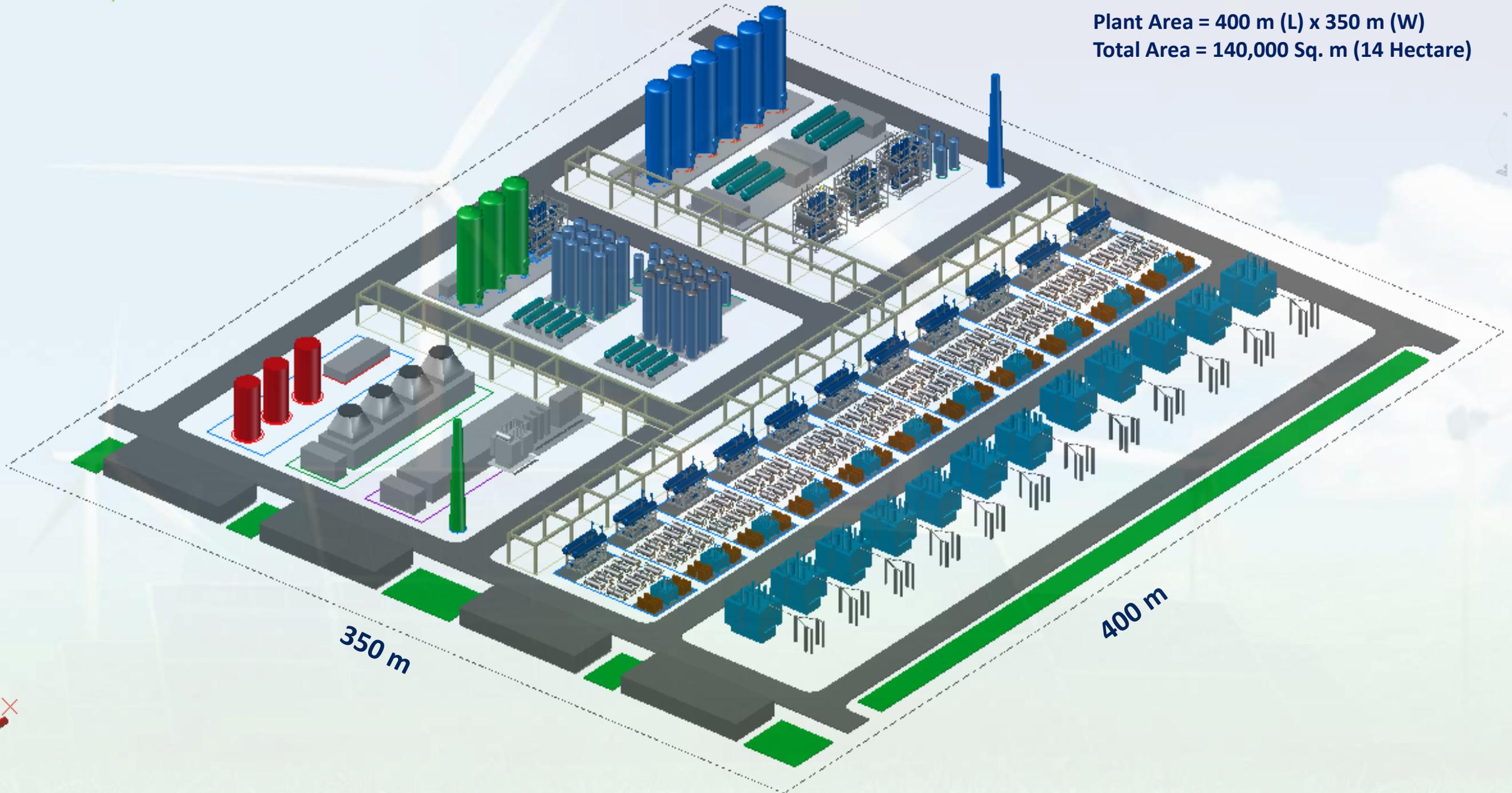


20 MW - DHTLyzer@4000-30
(Cluster Model)

- | | | | | | |
|-----------------------------|---------------------------|----------------------|--------------------------|----------------------|--------------------------|
| 1. Control Building | 5. H2 Purification System | 9. O2 Storage | 13. KOH Storage | 17. Service Building | 21. Maintenance Building |
| 2. Transformer – Rectifiers | 6. Compression System | 10. Instrument Air | 14. Chilled water system | 18. Main Building | 22. DM Plant |
| 3. Stack & Gas Separators | 7. H2 Storage | 11. N2 Storage | 15. Cooling water System | 19. O2 Vent | 23. BOP Power System |
| 4. De-oxidation System | 8. O2 Purification System | 12. Chemical Storage | 16. Fire water & Pump | 20. H2 Vent | |

550 MW Green Hydrogen Plant Layout - 3D Model

Plant Area = 400 m (L) x 350 m (W)
Total Area = 140,000 Sq. m (14 Hectare)



DHT 50 MW Typical Module

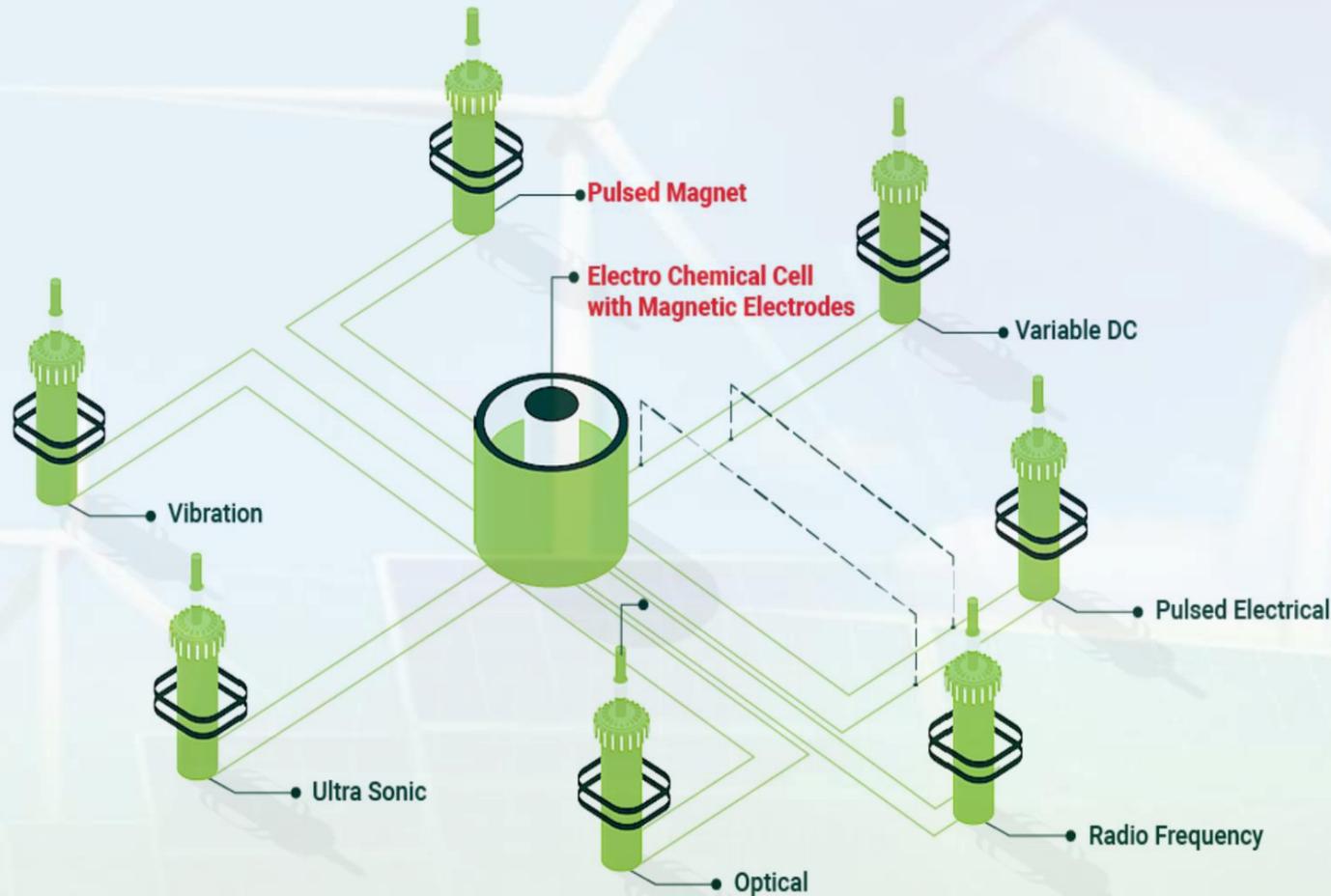


10 x 5 MW Stack



Electrolyser Processing Unit

50 MW - DHTLyzer@10000-30
(Cluster Model)



DHT Technology

The DHT system involves multiple components and excitations which, used in various ways, lower the energy consumption used in electrolytic hydrogen production, and therefore reduces the cost of electrolytic hydrogen production.

DHT system includes a strong focus on the efficiency gain benefits of using magnetic technology.

The DHT system is a stimulus package which introduces 6 different “excitations” to stimulate the chemistry of water to significantly reduce the amount of electrical energy needed to split water into hydrogen and oxygen. The DHT stimulus package can be integrated directly into industry-leading electrolyzers as well and DHT’s own brand of next generation electrolyzers



THANK YOU