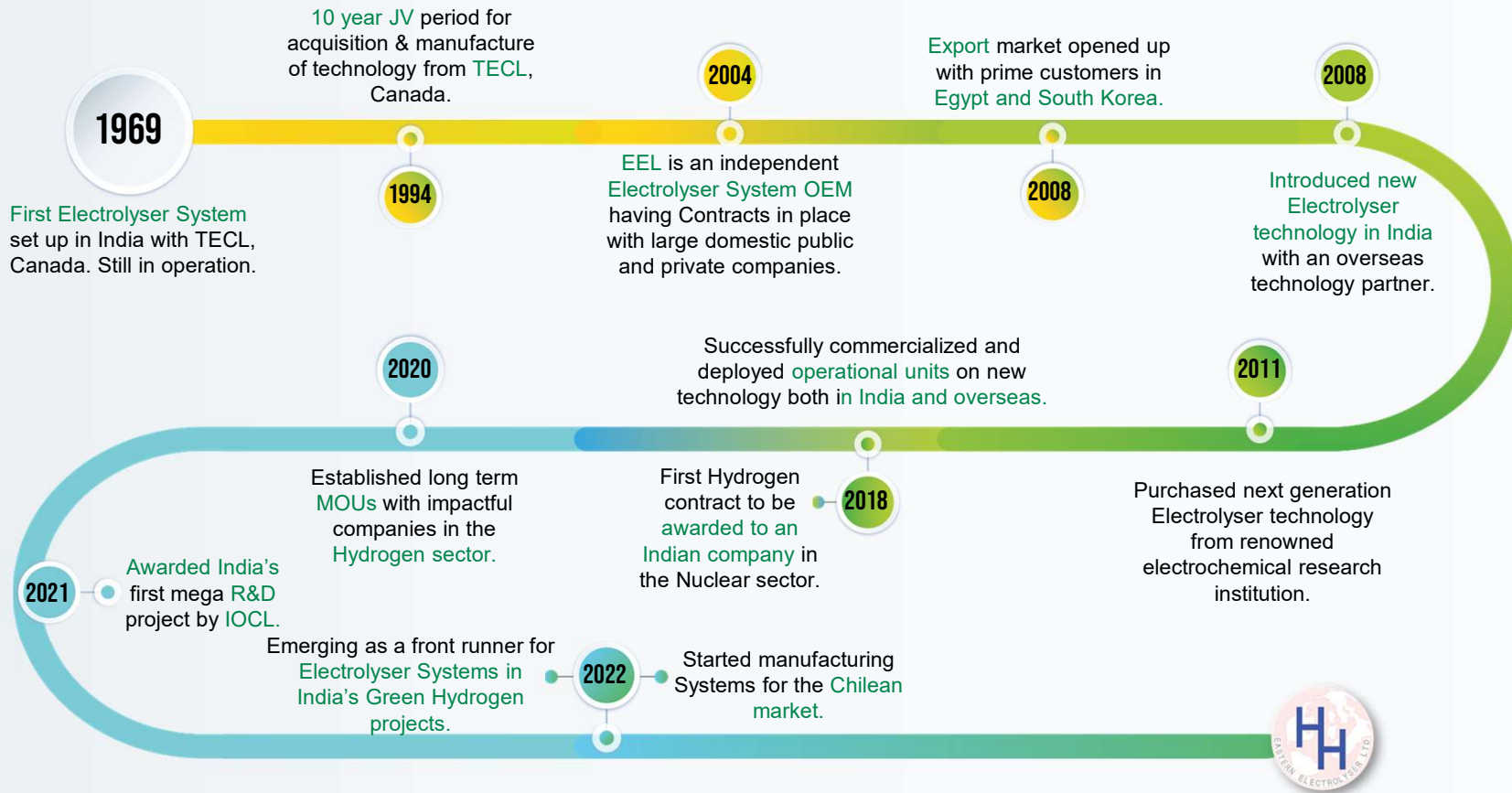




# EASTERN ELECTROLYSER

# JOURNEY SO FAR



# OUR EXPERTISE

## DOMAIN KNOWLEDGE

Over 40 years of experience with Water Electrolyser Systems.



## ENGINEERING CAPABILITIES

Complete in-house Product, System and Solution design and engineering.



## SUPPLY CHAIN KNOWLEDGE

Over 25 years of commercial Electrolyser manufacturing employing global codes and standards.



## SAFETY TRACK RECORD

Zero accidents till date.



## TECHNOLOGY

Expertise in both small and large PEM and Alkaline Systems. R&D focussed on Stacks & Dispensers.



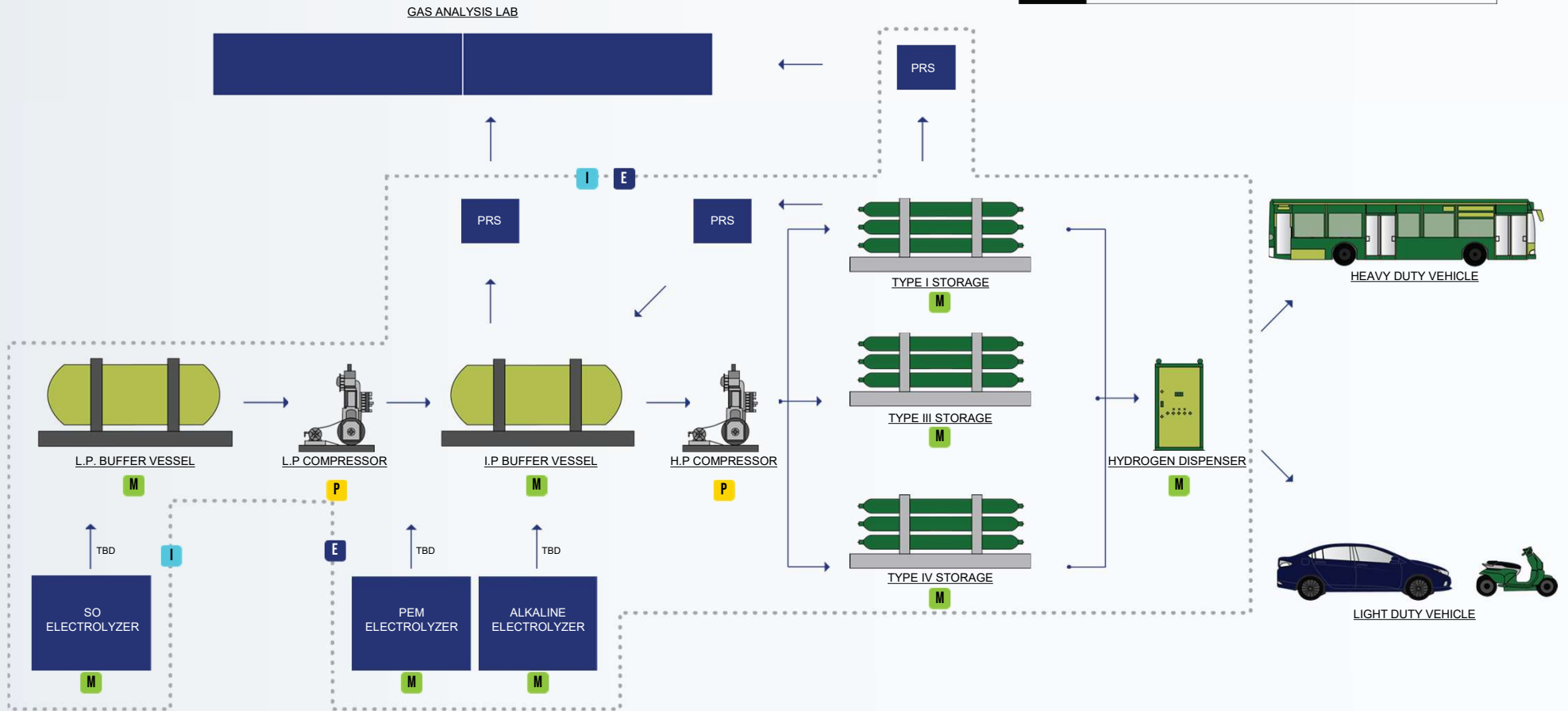
## MAKE IN HOUSE

Class 1 Supplier with over 75% in-house content in Systems adhering to international norms.



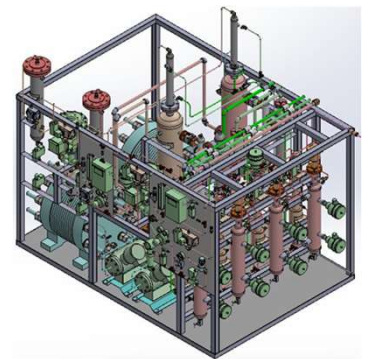
# OUR CAPABILITIES

**M** Manufacture   **E** Engineer   **I** Integrate   **P** Package





# OUR SYSTEMS



# ELECTROLYSER STACK

INDUSTRY LEADING  
CURRENT DENSITY:  
4500 A/m<sup>2</sup> (present)  
18 month target:  
5000 - 5200 A/m<sup>2</sup>.

INDUSTRY LEADING  
STACK LIFE: 80,000  
hrs. (present)  
18 month target:  
100,000 hrs.

INDUSTRY LEADING  
EFFICIENCY: 88% HHV  
at peak (present)  
18 month target: 91%  
HHV at peak.

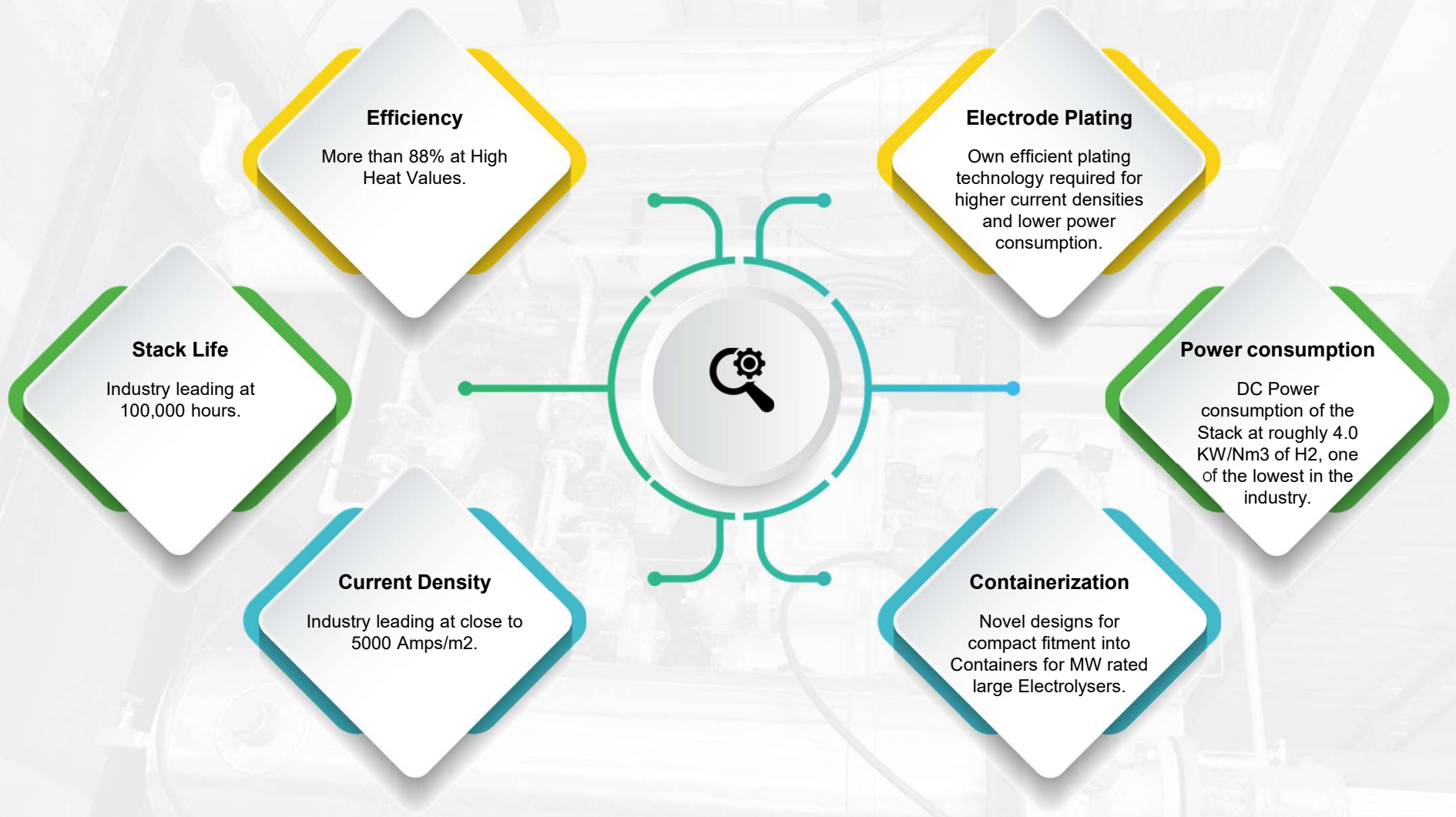
LOW POWER  
CONSUMPTION: 4.2  
Kw/Nm<sup>3</sup> DC (present)  
18 month target: 4.0  
Kw/Nm<sup>3</sup> (DC)

LOW DEGRADATION  
FACTOR: 0.7% per year  
(present)  
18 month target: Less  
than 0.5% per year.



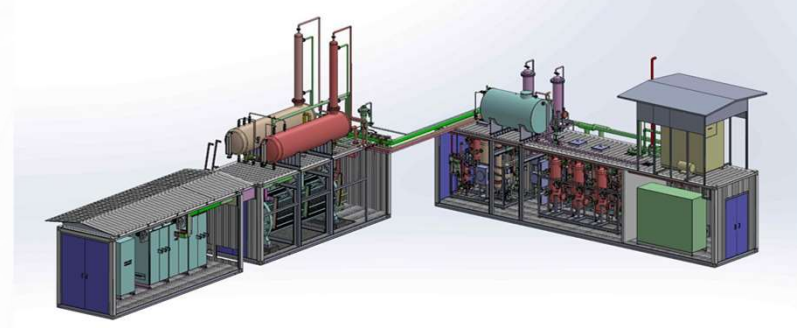


# OUR ELECTROLYSER





# ELECTROLYSER SYSTEM CONTAINERS



## OUTPUT CHARACTERISTICS

- ▶ Purity of H<sub>2</sub> Gas better than 99.999%
- ▶ Direct feed pressure of 30 bar(g).



## PERFORMANCE

- ▶ Availability of 98% or more.
- ▶ Automated (no operator required).
- ▶ Operating temperature: -40 Deg. C. (-104 Deg. F.) to +50 Deg. C. (+122 Deg. F.)
- ▶ Seismic qualification.



## COMPACT

- ▶ Low footprint for high capacity Systems.



## DESIGN STANDARDS

- ▶ As per global ISO, ASME, IEC and ATEX requirements.



## OPERATIONS & MAINTENANCE

- ▶ Plug & Play construction.
- ▶ Designed for outdoor operation.
- ▶ Very low maintenance.
- ▶ Compliant with latest energy efficient directives (Eg- IEEE)

## CUSTOM DESIGN ENGINEERING

Established proven system solutions for various processes:



Industries (Refinery, Steel, Cement, Fertilizer)



Mobility



In-house development and implementation of proprietary software (PLC automation).



Micro-Grid



Balance of Plant design, engineering and construction for customer specific requirements.

## PACKAGING EQUIPMENT



### STORAGE SYSTEMS

Skidding and Manifold Systems for Type 1, Type 3 and Type 4 cylinders (up to 500 bar pressure)

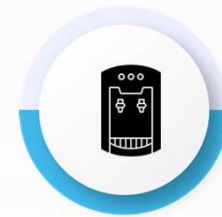
Technology for manufacturing 200 bar Type 1 cylinders with stackable skid capability (a global first).



### COMPRESSORS

Skidding and assembly of bare block Compressors up till 500 bar.

Control & Automation engineering.



### DISPENSERS

Technology for manufacturing Dual Hose 350 & 700 bar H2 Refuelling Dispensers designed on global SAE protocols

In-house integration of both T20 and T40 cooling equipment covering advanced Heat Exchangers.

# OUR FOOTPRINT

Hydrogen Plants delivered & commissioned  
More than 50 (Alkaline 75%, PEM 25%)

No. of clients:  
More than 25

Largest Stack capacity till date:  
1000 Nm<sup>3</sup>/Hr. (5 MW).

Annual Mfg. capacity:  
40 MW (approx.)





# KEY CLIENTELE



THANK  
YOU