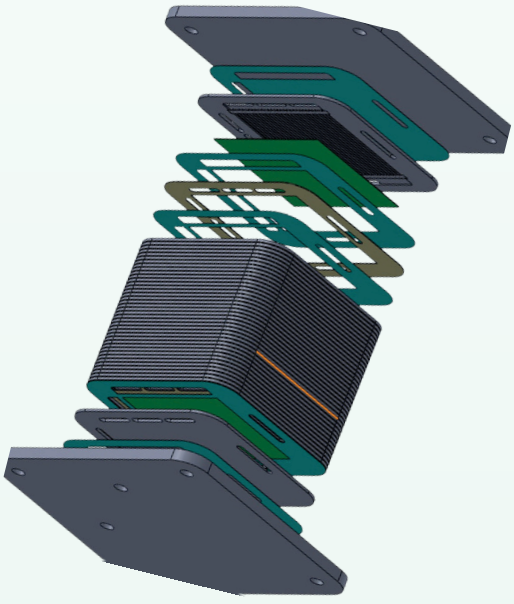
HYLAN POWER ONE

THE FUTURE IS NOW

Hylan's R-SOC

One System,
Infinite Solutions.

WWW.HYLAN.IN



Reversible Solid Oxide Cell (R-SOC)

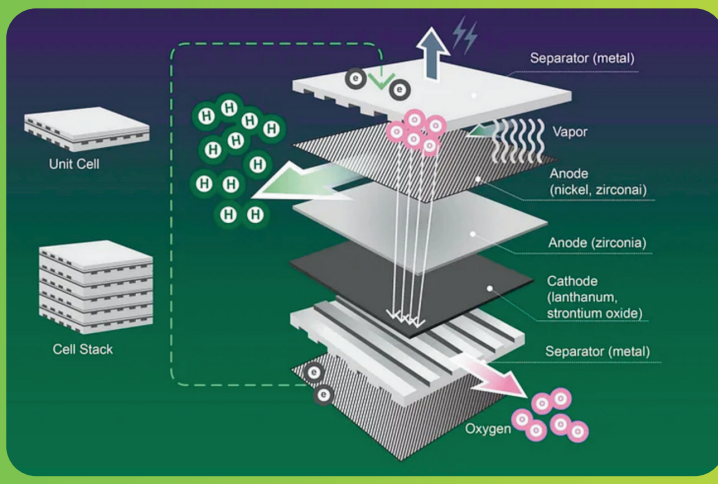
TECHNOLOGY

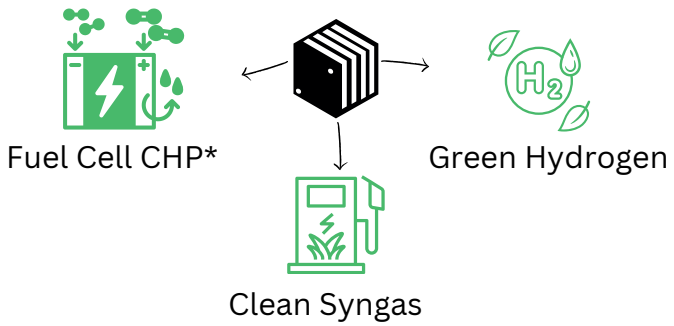
Reversible Solid Oxide Cells (RSOCs) are state-of-the-art electrochemical systems offering unparalleled efficiency and versatility. These advanced devices operate in three distinct modes:

Electrolysis Mode | Co-Electrolysis Mode | Fuel Cell Mode

Engineered for operation at 700–900°C, RSOCs offer unparalleled thermodynamic efficiency, leveraging waste heat to enhance performance. Their versatility makes them pivotal for renewable energy integration, hydrogen production, and synthetic fuel generation, enabling decarbonized energy systems.

Harness the cutting edge of energy conversion with RSOCs—optimized for tomorrow's energy demands.





Upto 30% higher efficiency <39kWh/kgH2

Fuel Flexibility in both Electrolyser and Fuel Cell modes

Industrial waste heat utilisation for low cost H2 Production

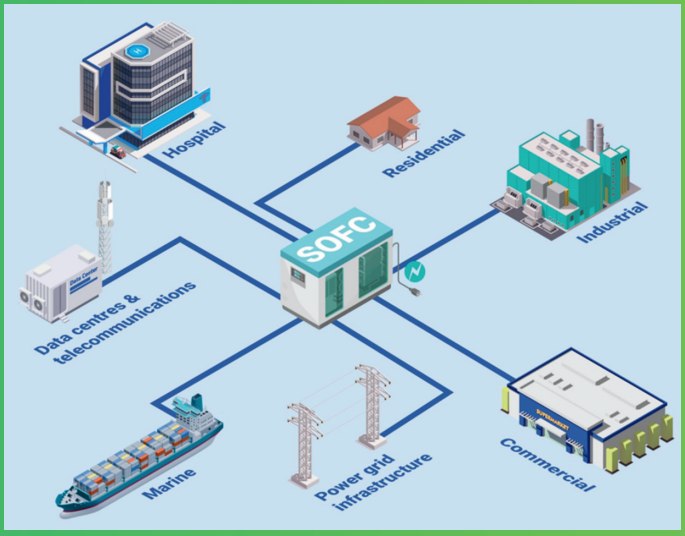
Single system works on three modes

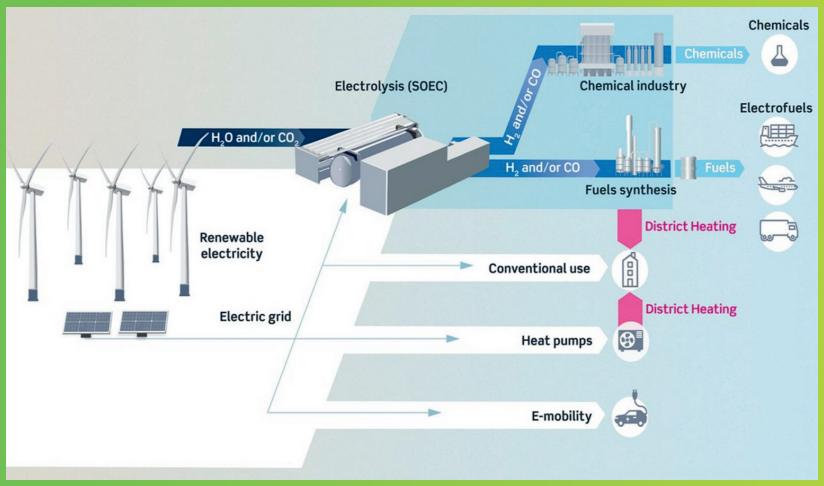
TECHNICAL SPECIFICATION

Operating Temperature	700°c - 900°c
Cell Artchitecture	ASC | ESC
Capacity (Electrolyser Mode)	5kW to 1MW systems
Lifecycle	Tgtd. life of >20,000hrs
Electrolyser Efficiency	Tgtd. Eff of <39kWh/kgH2
Fuel Cell Efficiency	Tgtd. Electrical Eff of >55%
	Tgtd. Thermal Eff of >30%
	Tgtd. Total Eff of >85%

Reversible Solid Oxide Cell (R-SOC)

Applications





Chemicals & Refineries | **Steel** | **Fertilizers** | **Power & Heat** | **Mobility**

Why Hylan's SOC

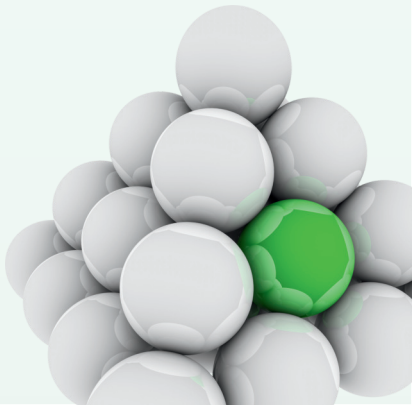
- High tolerance to impurities and thermal cycling
- Competitive pricing due to local manufacturing
- Customization & Scalability
- Zero emissions during operation
- Integration with Renewable Energy Sources

Our Offerings

- ESC Cells (10*10 | 5*5 | Button Cells)
- ASC Cells (10*10 | 5*5 | Button Cells)
- SOC Stacks
- Balance of Plant System
- End to End Solution





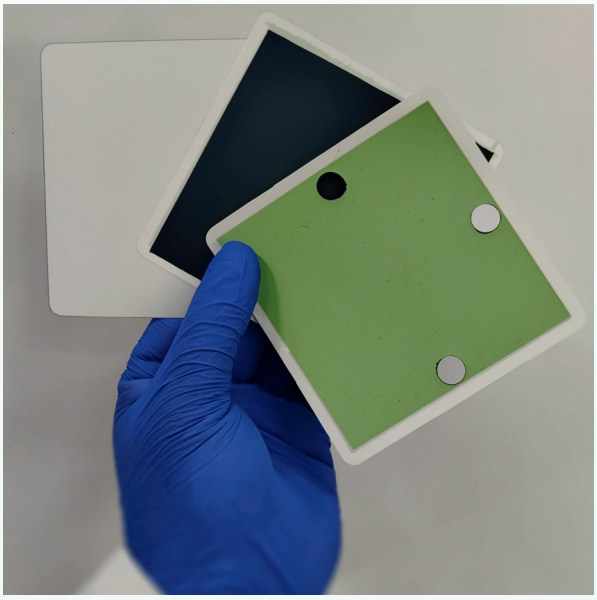
Hylan is at the forefront of developing advanced, indigenously manufactured Solid Oxide Cells (SOC) for Electrolyser and Fuel Cell applications to support India's hydrogen economy. Our cutting edge SOCs are designed to deliver superior performance, high efficiency, and sustainability, aligning with the nation's mission to achieve energy self-reliance and net-zero emissions.

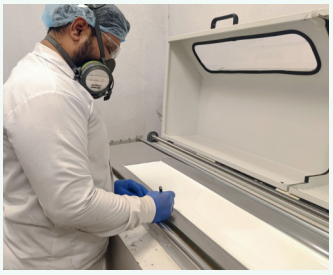
MISSION

Our mission is to deliver innovative, high-quality, and performance-enabled R-SOC systems, accelerating adoption by all relevant stakeholders and becoming a leading electrolyser manufacturer in India.

VISION

To see Bharat emerge as one of the global leaders in the hydrogen market by achieving the global target of "111" $1 per 1 KG of Hydrogen in 1 Decade, and to provide solutions for the worldwide transition towards sustainable energy, fostering a greener, cleaner, and sustainable future





HYLAN POWER ONE PRIVATE LIMITED
No 1219/66, First Floor, 11th Cross Road, Ashok Nagar,
Banashankari, Bengaluru 560050, Karnataka, Bharat.

info@hylan.in
www.hylan.in