New Way Of Generating Hydrogen



HIGHLIGHTS

2.1 GAME-CHANGING EMERGING TECHNOLOGY

Combining 3% input stimulus electrical energy with 97% electrochemical spontaneous redox reactions to electrolyze water and produce large scale green hydrogen. Selfsustaining by fuel cell feedback or power from standard residential grid.

2.2 VERSATILE INFRASTRUCTURE

On-site production at any location, simplifies the supply chain and reduces costs by eliminating pipelines, storage and transportation.

2.3

GAME-CHANGING APPLICATIONS

- Stable self-sustaining electricity generation day and night. Sell electricity back to the grid or enables microgrids at any location. Reliability superior to other renewable energies.
- Establish a hydrogen fuel supply network along with grid electricity generation at any location.
- Cost effective clean hydrogen for any industrial applications including synthesis fuels, green steel production and ammonia.

Not just another electrolyzer.

Comparison With Conventional Electrolyzers

	Conventional	H2IL
Input Power to produce 660kg/day	1,450 kWh	19 kWh
Production Rate At 1450 kWh	660kg/day	50,368kg/day
Electrolyte	Purified Water	Sea or Rain Water
Water Consumption	20L/kg/H2	12L/kg/H2 Deceleration Not Required.
Total Generation Cost	\$6.00 / kg/H2	\$0.34 / kg/H2 In self-powering mode #
Electrolyzer COP for 660kg/day	\$363,000	\$98,000
Lifespan	7 Years	Indefinite Serviceable modular system
Scalable	Yes	Yes
Electrodes	Platinum, Iridium,	Abundant Low Cost
	Cobalt, Membrane	Metals.
		No Membrane OH- separation through covalent bonding.

A new way of generating energy that, like nuclear energy, converts mass into energy but in this case clean, safe and controllable. Energy converted through ion exchange from slow consuming galvanic metals.

H2IL has successfully achieved a level of Coefficient of Production (CoP) well in excess of 100%. This means the input stimulus energy is much less than the output energy therefore enabling selfsustaining generation.



(#) The generated hydrogen can feed directly into a fuel

cell. A small portion of the converted electricity can feed back to power the Galvanic Enhanced Electrolyser and generate stable electricity day and night in all weather.

H2IL is taking corporate expressions of interest in technology acquisition including worldwide patents and IP.