

New Way Of Producing Green 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. Self-sustaining 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.

Superseding Conventional Electrolysis.

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, Cobalt, Membrane | Abundant Low Cost Materials. |

A science breakthrough achieves self-sustaining hydrogen production and electricity generation.

A unique, emerging technology that accelerates natural ionic redox reactions between low cost bi-metals. Generating clean Hydrogen with an efficiency 50x greater than conventional electrolyzers.

The Ion Accelerator achieved an efficiency (CoP) well in excess of 1000%. Producing more clean hydrogen per kWh (*less than 1.2kWh/kg/H2*) than conventional electrolyzers and a record low cost of **\$0.34/kg** of Hydrogen produced.

Creating Energy? No!
The abundant Hydrogen atom is the fuel, bound in water like oil is bound in the earth. This is simply a highly efficient method of extracting it

The method is considered by many to be a single-bullet solution to clean energy, zero emission fuels, and industrial processes. The technology enables game-changing applications that were once considered impossible.

H2IL is taking corporate expressions of interest in international technology acquisition including patents and security hidden IP.