

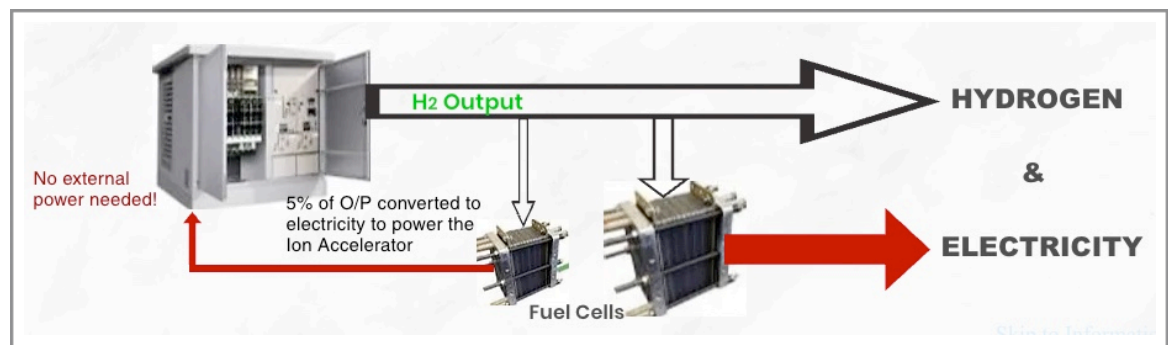
HYDROGEN NEWS

Solution To
Worlds Energy
Demands



H2innovationlab.com

- SIMPLE
- SCALEABLE
- RELIABLE
- VERSATILE
- SELF-SUSTAINING



HIGHLIGHTS

UNIQUE

With just 5% of the generated hydrogen converted back to electricity, the Ion Accelerator achieves self-sustaining energy production!

SCIENTIFIC

Accelerating ions to extract hydrogen from rain or sea water rather than old school brute-force electrolysis.

COST EFFICIENT

Slow consuming, low cost, abundant metal energy rods priced at just \$0.34 per kg of H₂ or \$10 per megawatt of energy generated.

GAME-CHANGING

Hydrogen generated on-site eliminates complex storage, transportation, pipelines and massive power infrastructure!

Ion Accelerator Extracts H₂ from H₂O with Record Breaking Efficiency

By David Hendrick

Nuclear energy is no longer the only self-sustaining, carbon neutral, method of energy supply. H2IL's highly efficient water electrolysis extracts more H₂ fuel than the energy needed to power the process.

In much the same way that Geologic Hydrogen is produced naturally by oxidation of metals in earths crust, a controlled process does the same with a small charge accelerant and slight metal decay.

Producing hydrogen at any location for just \$0.34c per kg/H₂ or \$10 per megawatt of electricity.

Creating Energy? No.

An existing fuel is extracted

It's common knowledge that metals of differing charge potential immersed in an electrolyte slowly oxidize and release hydrogen as a result of ionization. The volume of H₂ produced is barely noticeable but

inducing an external charge in the right order, strengthens these ions, speeding up the process.

Accelerating ions, rather than brute-force electricity, to provide the charge potential needed to split water.

Conventional, 200 year old brute-force electrolysis, first converts the applied electricity to ions within the electrolyte before the charge potential occurs. Most of the 237kj/mole, or 60kWh of electricity, is consumed by conversion to ions, generating more waste heat than hydrogen. Much less energy is needed when ions are already active within the electrolyte.

The revolutionary technology has no resemblance to the common method of rapid metal decay using strong acids or alkaline solutions.

The process is not a simple synthesis. Control systems govern the reaction, constantly altering the process to prevent

side effects that would normally collapse the electrochemistry.

The input power is so low that just a small portion of the bulk hydrogen produced is converted back to power the system, thus enabling self-powering energy generation.

The bi-metal energy rods are exchanged every 90 days and priced at just \$0.34/kg of hydrogen generated. The metals are amongst the top 12 most abundant on earth. They slowly dissolve into the waste byproduct that can be recycled to reproduce the energy rods.

Constantly generating clean energy day and night in all weather. Fully scalable to accommodate the supply demands of any application.

H2IL is focused on international technology acquisition and is taking expressions of interest from major companies.

Discover more details at: h2innovationlab.com