

The Holy Grail of Energy

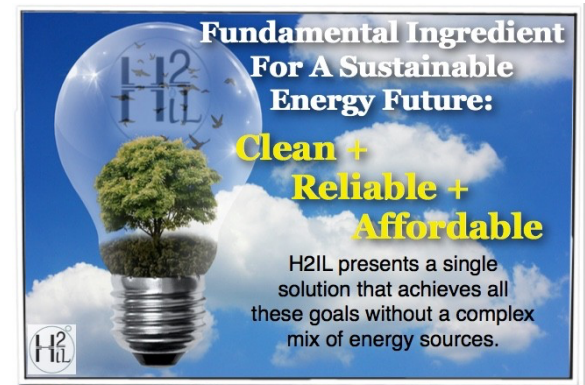
The quest for reliable zero emissions energy is gaining traction as we move even closer to net zero 2050. Can the energy sector reach these targets with current technology and infrastructure?

H2 Innovation Lab (H2IL) presents the next generation in energy that enables these targets to be reached with a reliability unobtainable by any other clean energy method.

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 produces the most sustainable energy - Hydrogen.

H2IL has successfully achieved a level of Coefficient of Production (CoP) well in excess of 100%. This means the input energy is much less than the output energy with an added internal energy harvested from low-cost galvanic metals.

The very low input energy is just a stimulus exciting the electrochemical reactions.



| A New Way of producing clean, reliable and sustainable hydrogen based energy | | |
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| Target | Solution | How |
| CLEAN ENERGY | 100% clean hydrogen, dispensed or converted into electricity at location of energy production and eliminating gas transportation. | A revolutionary, highly efficient method of dissociating sea or rain water to generate hydrogen on-site and any location. |
| RELIABLE ENERGY | A method unhindered by temporary, uncontrolled and unpredictable forces while mastering a net zero footprint. | Totally independent of grid or renewable energy power. A fully scalable, flexible load system that generates energy day and night in all weather. |
| AFFORDABLE ENERGY | Total cost of production comparable to low cost fossil fuels. | Harvesting energy from 'Mass Defect' of low-cost metals within a unique electrochemical cell. Hydrogen production at a cost of just \$0.34/kg or Electricity at a cost of \$10 per Megawatt. |

The process generates high volume, hydrogen gas. When fed into a fuel cell a small portion of the generated electricity powers the Galvanic Enhanced Electrolyser while delivering excess electricity.

This has been achieved and proven in verification test. Please refer to the test results and CCTV footage posted on the H2IL website.

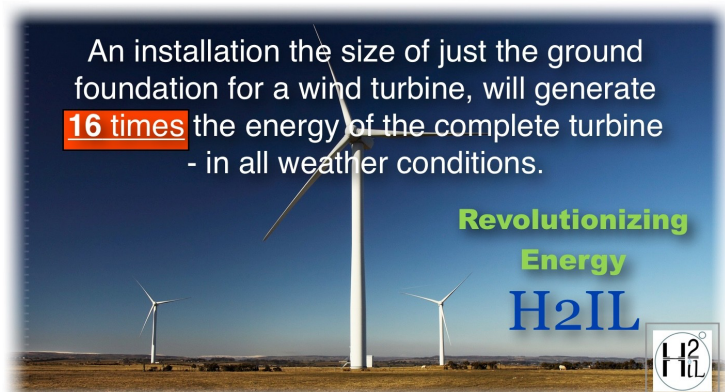
The technology is fully developed over a 14 year period. Within the verification process, scale-ability testing and calculations were established from a 2.4L cell to a 5L cell to a 1 cubic meter cell.

The fully scalable technology introduces energy solutions unmatched by any other single method of energy including:

- 1 On-site Hydrogen Production.** Eliminating costly and risky storage, transportation, shipping and re-processing of hydrogen.
- 2 Local Microgrid Power Generation.** Reliable, flexible, stable grid supply day and night, in all weather.
- 3 Power-plant Refit to Hydrogen Fuel.** Power plants with the construction time and cost matching natural gas while achieving a fuel cost matching nuclear.
- 4 Commercial Ships.** Powered by hydrogen produced from sea water while underway.
- 5 CO2 to Methanol.** On-site Green Methanol production.

The technology also supports renewable energy storage with an efficient method of converting electricity into hydrogen.

The significant advantage is that the hydrogen generators can be tapped into the grid down stream without grid upgrade. Conventional electrolyzers consume huge amounts of current, requiring them to be located close to the wind and solar farms, then hydrogen needs to be stored and transported to site. The H2IL technology skips all the costly, inefficient infrastructure with production at destination site.



H2IL is taking expressions of interest in international patent and hidden IP acquisition. We believe this technology to be a perfect fit for infrastructure ownership and profit through energy supply rather than just selling units. As an example hydrogen priced at \$14/kg can be produced for only **\$0.34/kg**.