HYDROGEN NEWS

A Solution To Japans Hydrogen Economy

HIGHLIGHTS

UNIQUE
Reliable, Clean, Safe, Abundant Energy. Hydrogen based generated on-site, supporting renewables or self-sustaining!

SCIENTIFIC
Harvesting Galvanic energy through spontaneous redox reactions and ion exchange to produce bulk hydrogen with exceptionally low input power.

COST EFFICIENT
Slow consuming low cost, abundant, galvanic metal electrodes converts energy at a metal cost of just $0.34/kg of hydrogen or $10 per megawatt of energy.

GAME-CHANGING
Eliminates costly storage, transportation, shipping and pipelines. Reliable, clean energy produced at any location.

Hydrogen alternative to offshore nuclear power plants.

By David Hendrick

Docked to the Pevek harbor wharf is a floating nuclear power plant delivering electricity to the region.

Nuclear power is a zero carbon self-sustaining energy but is no longer the only self-sustaining energy method. Self-powering hydrogen production is now a proven technology that could revolutionize the energy industry.

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

"This is not just another method, but a whole new way of generating energy"

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 successfully achieved a 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.

Like self-sustaining nuclear reactions, energy is not being created but simply transferred from one form (metals) to another and supporting the laws of thermodynamics.

The input power is so low that a small portion of the output hydrogen can be converted back to power the cell thus enabling self powering energy generation.

Galvanic metal is the main fuel supplying more than 95% of the internal charge potential. The quick change galvanic metal electrodes are priced at just $0.34c per Kg of hydrogen or $10 per megawatt of energy.

The rods are exchanged every 40 to 90 days. The galvanic metals are amongst the top 12 most abundant on earth and are not radioactive. Since the metals slowly dissolve into the waste byproduct, this too can be recycled to reproduce the energy rods.

An innovative solution to convert semi-retired ships into floating power or hydrogen production plants without consuming valuable land. A ship sized as illustrated would house the equipment to produce more than 33000kg of hydrogen per day.

Constantly generating energy day and night in all weather. No permanent, costly and high maintenance offshore fixture requiring government approval and public consent.

A simple solution to Japans demand for hydrogen without high volume storage, shipping and transportation.