



Sustainable Energy Hawai'i

Pacific Islands Regional Hydrogen Hub™

Vision for a
Strategic Regional
Clean H₂ Production
Hub In Hawai'i

What Will Hawaii's H₂ Economy Look Like?



Geothermal Power
Production
500 – 750 MW Capacity



Green Hydrogen
Production
100 – 250 MT/day Capacity



Green Ammonia
Production
1000 – 1500 MT/day Capacity

Target Markets

- Pacific Transoceanic Shipping
- Transpacific Airline Fueling
- US Dept. of Defense
- Power 2 'X'
- Hawaiian Grid Storage
- Hawaiian HDV Fueling
- Fertilizer Production



Economic Assumptions

- Still an emerging global market – Momentum building rapidly
- Will play significant role in industrial scale transportation
- 2/3's of US imports come from Asia Pacific
- Ammonia is currently industry's leading candidate to replace MGO & Aviation Fuel as Carbon Free alternatives
- Costs for intermittent solar and wind systems poised to rise over time due to CRM contracting supply and growing demand
- Geothermal and hydro have much longer system lifecycles
- Intend to operate outside the typical regulatory structure



Community Benefits

- Diversify Economy
- Grow job opportunities
- Raise overall standard of living
- Mitigate reliance on imported energy
- Enable Social Equity
- Stimulate local food production via financial support
- Incentives for youth to maintain residency

Leadership & Collaborators

Sustainable Energy Hawaii

- Noel Morin – Board Chairman/Climate Mitigation Specialist
- Peter Sternlicht – Board of Directors/Communications
- Desmon Haumea – Board Member - Educator & Native Hawaiian Leader
- Jerry Chang – Board Member - Former Hawaii State Representative (24 yrs)
- David De Luz, Jr. – Board Member - Businessman, Community Leader
- Kanani Aton - Board Member - Hawaiian Cultural Educator
- Brig. Gen. Stanley Osserman (USAF / ret) -Board Member Military Hydrogen Implementation Expert
- Richard Ha – Community Leader – SEH Ex Officio Board Member

Collaborators / Advisors

- Chris McWhinney – CEO, Millennium Reign Energy – Manufacturer of H₂ Fueling Stations and H₂ Electrolyzer systems
- Dr. Nicole Lautze – Director, Hawaii Groundwater and Geothermal Resources Center (HGGRC) – UH Manoa
- Dr. Donald Thomas – Co-Founder, HGGRC and Senior Researcher
- David Anton – Former Project Manager, Biofuel Commercialization Specialist, Du Pont Chemical
- Mitch Ewan – Hydrogen Systems Program Manager Hawaii Natural Energy Institute – UH Manoa
- Dr. Simon Michaux – Assoc. Professor, Circular Economy Solutions @ Geological Survey of Finland
- Doug Adams/Riley Saito – County of Hawaii
- Kevin Waltjen – Hawaiian Electric

Mahalo



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