

Building Community Capacity to Engage

**National Council on Electricity Policy (NCEP)
2024 Annual Meeting
Tempe, Arizona**

October 30, 2024

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**HAWAI'I
STATE
ENERGY
OFFICE**

Hawai'i State Energy Office

Chief Energy Officer, Mark B. Glick
Deputy Energy Officer, Stephen Walls

Public Affairs

Decarbonization

Administration

Operations

- Contracting
- Procurement
- Grants
- Fiscal
- Compliance

Energy Efficiency & Renewable Energy

- Building Codes
- Green Business Program
- Energy Efficiency
- Home Energy Rebates
- Renewable Energy
- Permitting and Siting

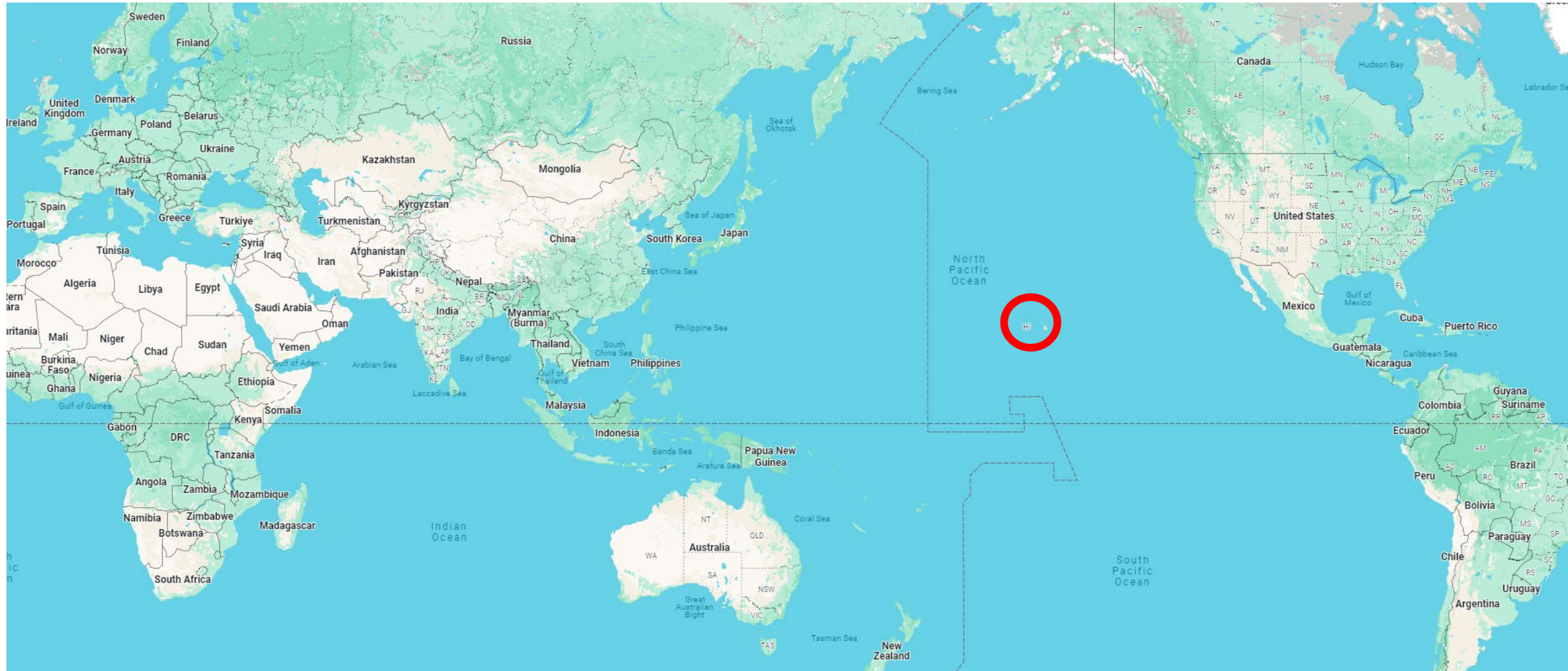
Resilience, Clean Transportation & Analytics

- Emergency Response
- Grid Planning
- Data & Visualization
- Analytics
- Electric Vehicles
- Alternate Transportation

Jobs & Outreach (est. July 2023)

- Community Engagement
- Equity
- Education
- Workforce Development
- Pacific Partnerships

Isolated Archipelago



Hawai'i Petroleum Imports



2024

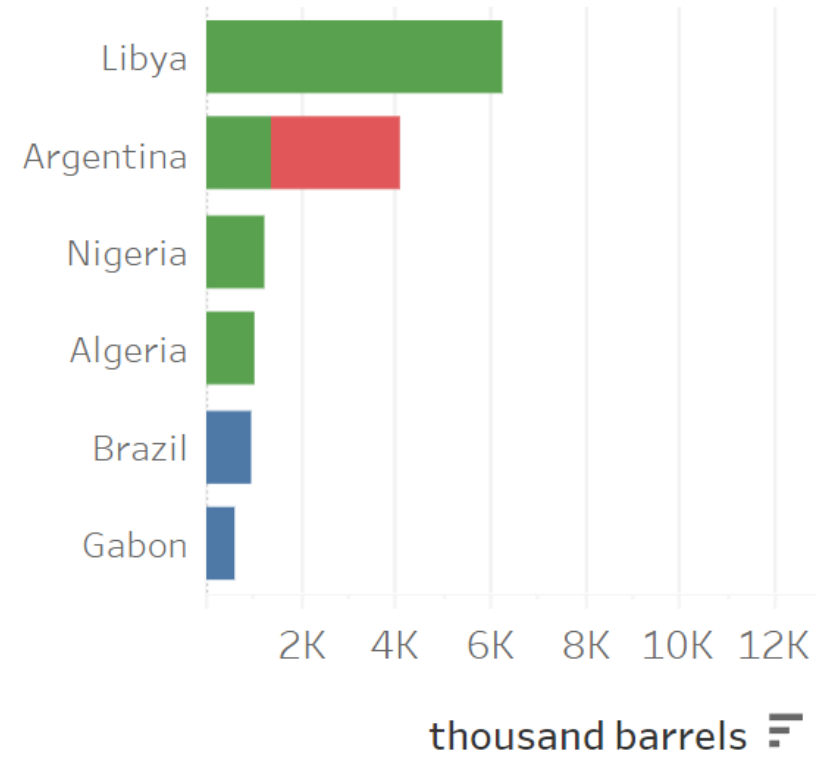
Year

Petroleum Grade

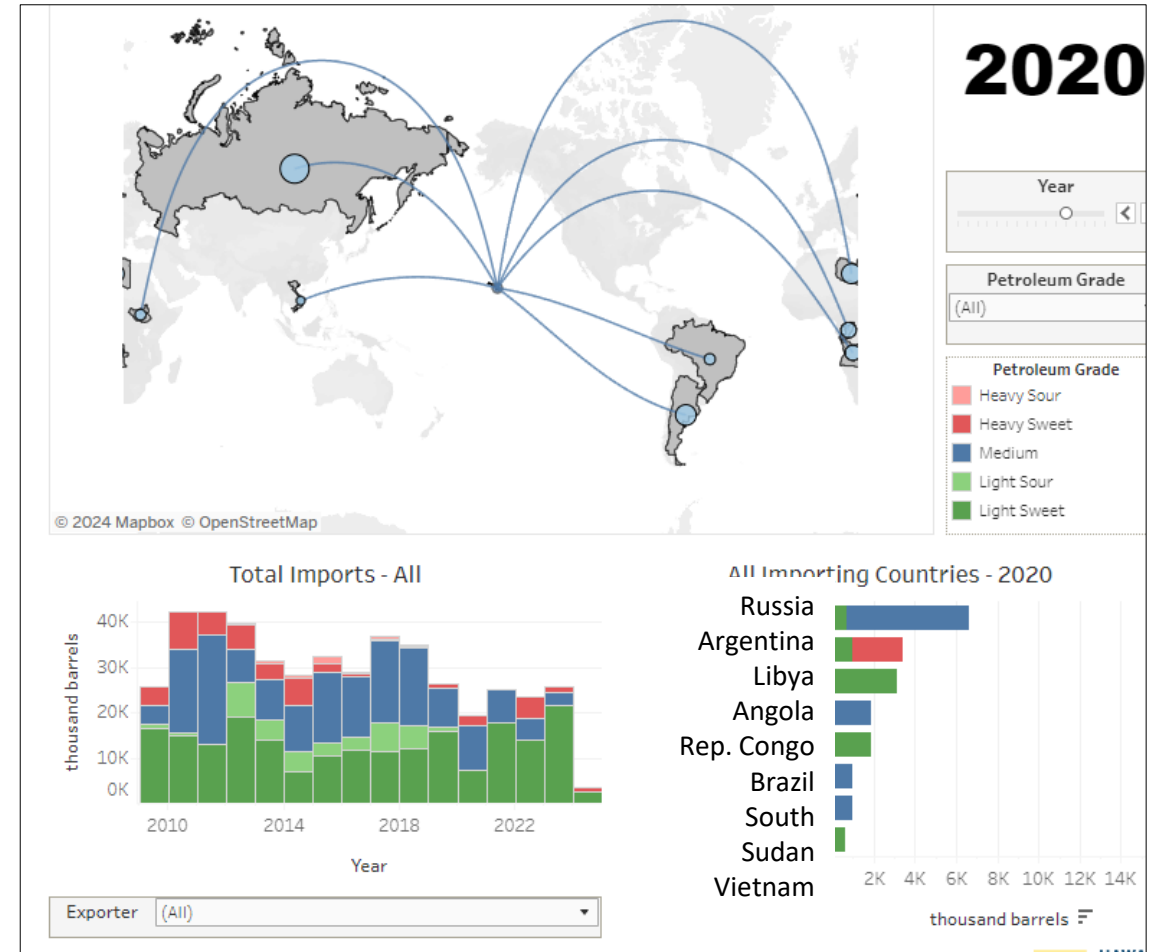
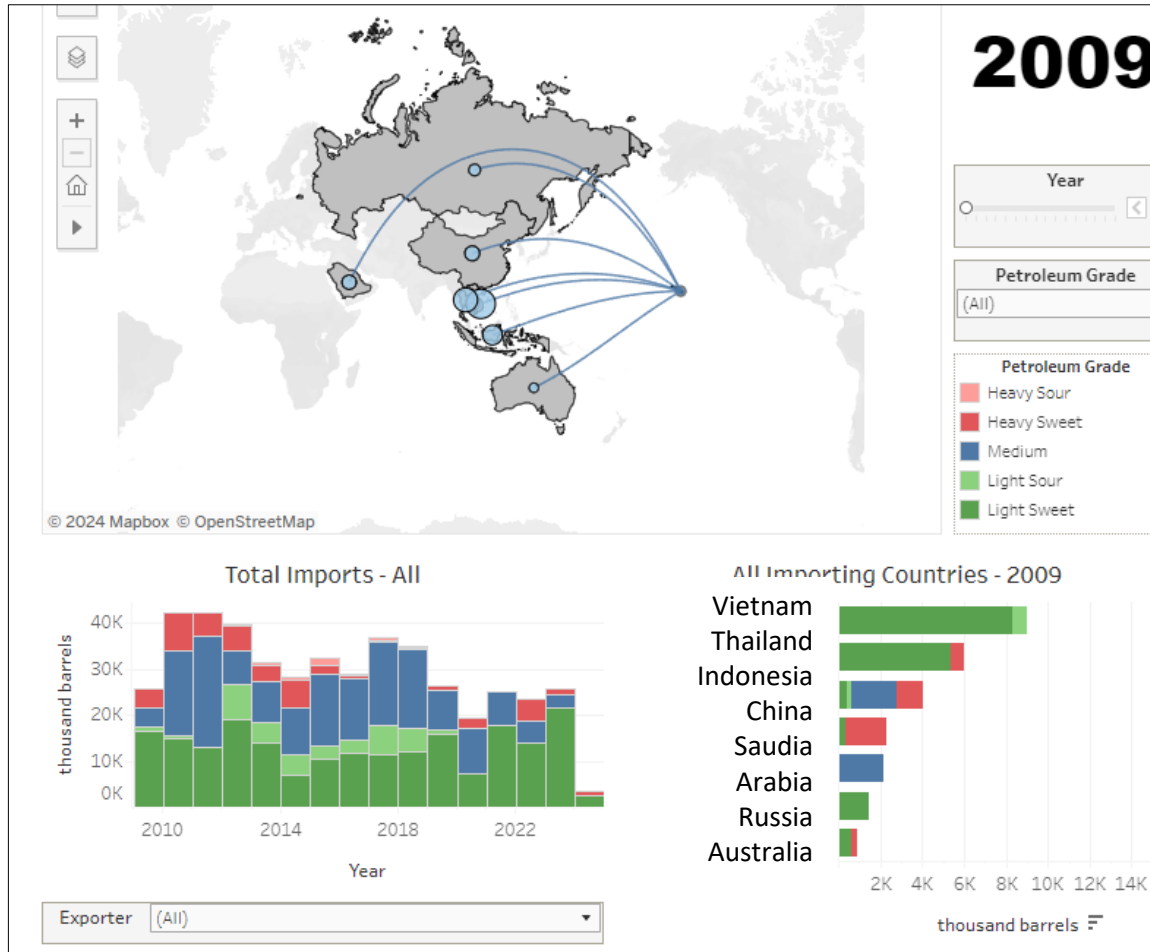
(All) ▼

- Petroleum Grade**
- Heavy Sour
 - Heavy Sweet
 - Medium
 - Light Sour
 - Light Sweet

All Importing Countries - 2024



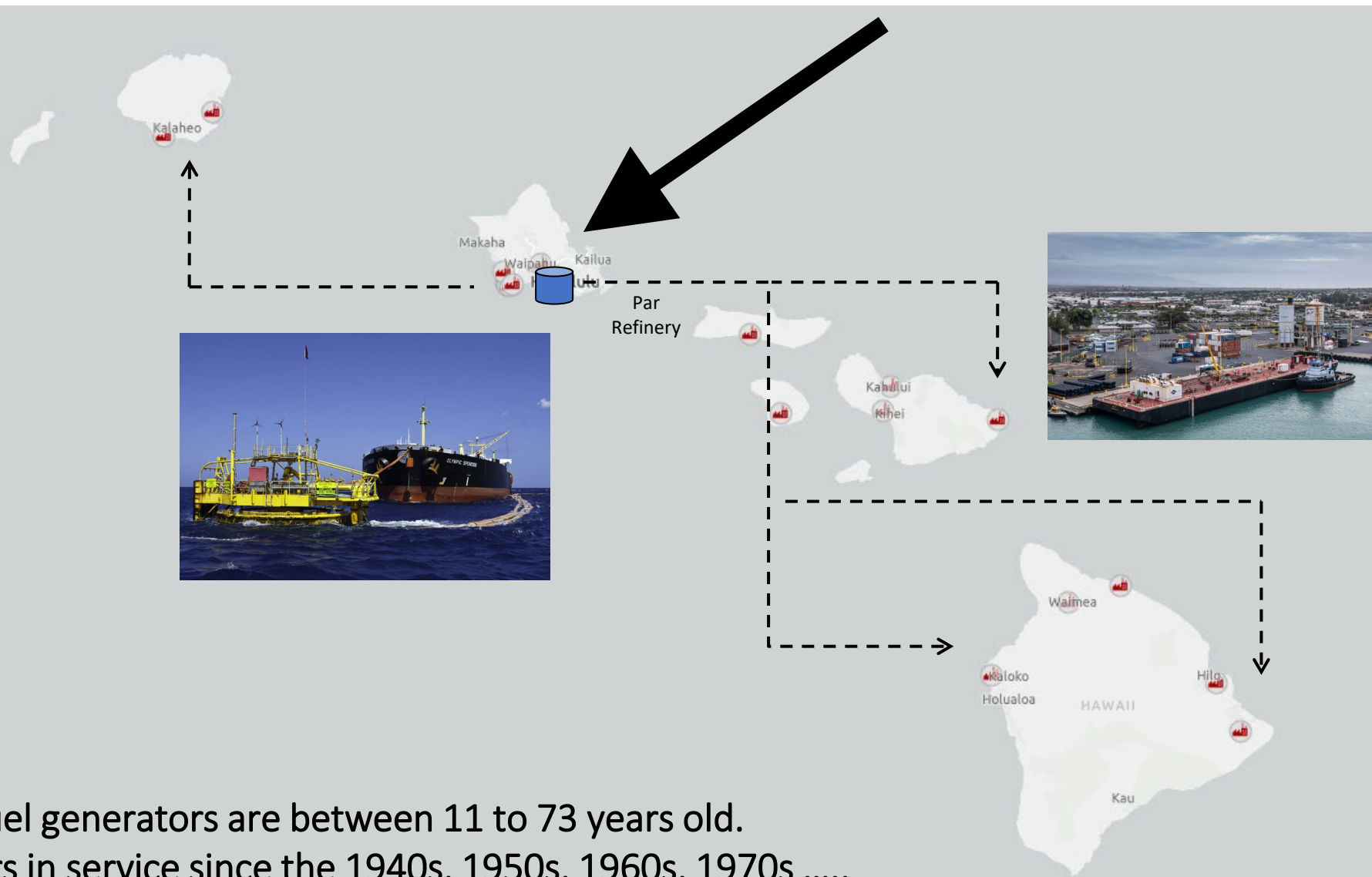
Hawai'i Petroleum Imports: 2009 & 2020



Hawai'i's Fuel Supply Chain & Dated Fossil Fuel Power Plants



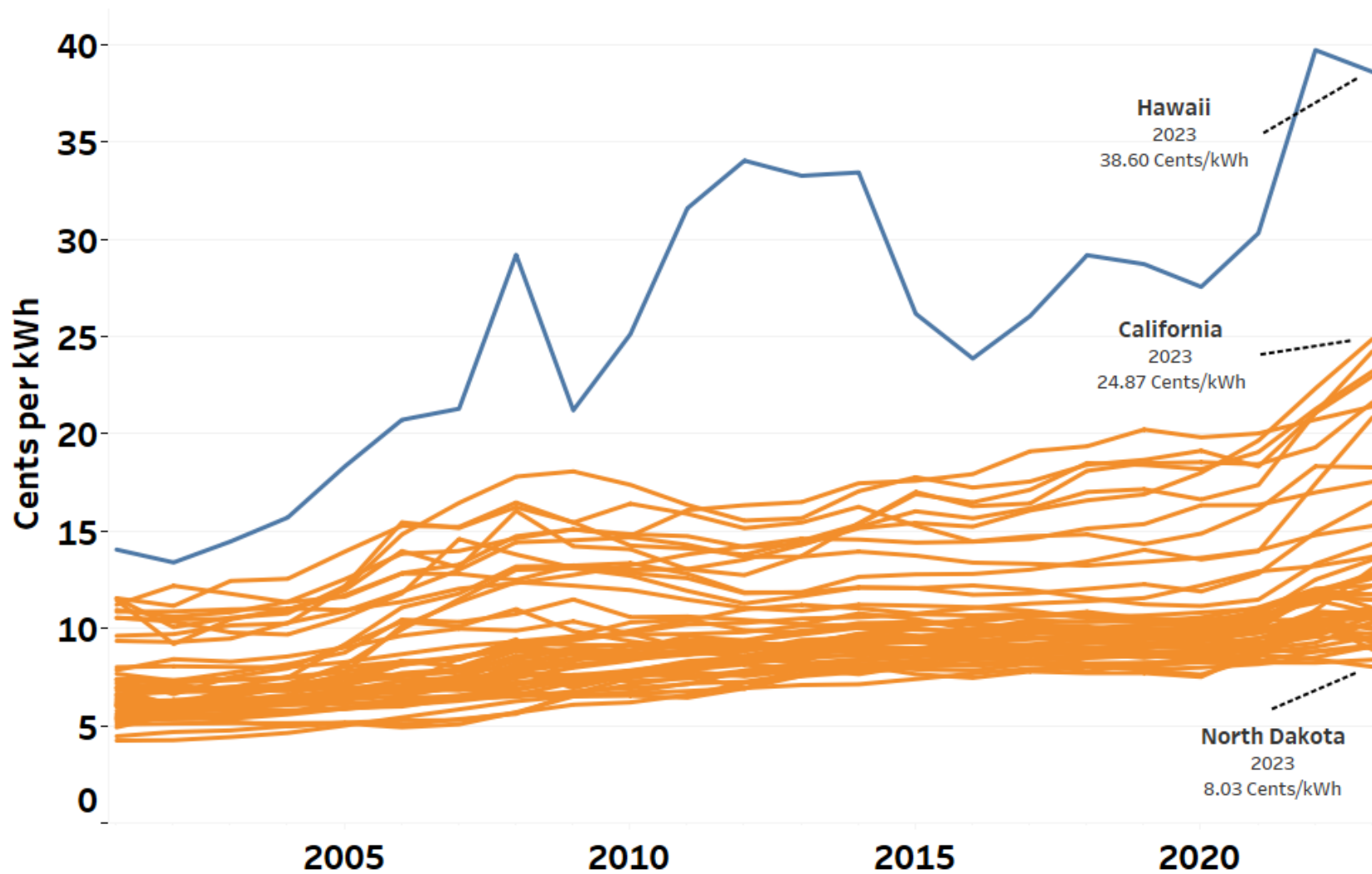
Hawaiian Patriot Oil Spill (1977), 300NM West of Hawaii (Kaua'i)
17,500 tons leaked (Indonesia)



- HI fossil fuel generators are between 11 to 73 years old.
- Generators in service since the 1940s, 1950s, 1960s, 1970s

Average Price of Electricity to All Ultimate Customers

Hawai'i versus Other 49 States & DC (cents/kWh)



Source: U.S. Energy Information Administration (EIA)

Note: Data fetched via EIA's Open Data API



Hawai'i State Energy Laws (Select)

§269-96 Energy-efficiency portfolio standards (2009). (a) The PUC shall establish EEPS that will maximize cost-effective energy-efficiency EEPS shall be designed to achieve four thousand three hundred gigawatt hours of electricity use reductions statewide by 2030; provided that the commission shall establish interim goals for electricity use reduction to be achieved by 2015, 2020, and 2025 and may also adjust the 2030 standard by rule or order to maximize cost-effective energy-efficiency programs and technologies.

(c) The PUC may establish incentives and penalties based on performance in achieving the EEPS by rule or order.

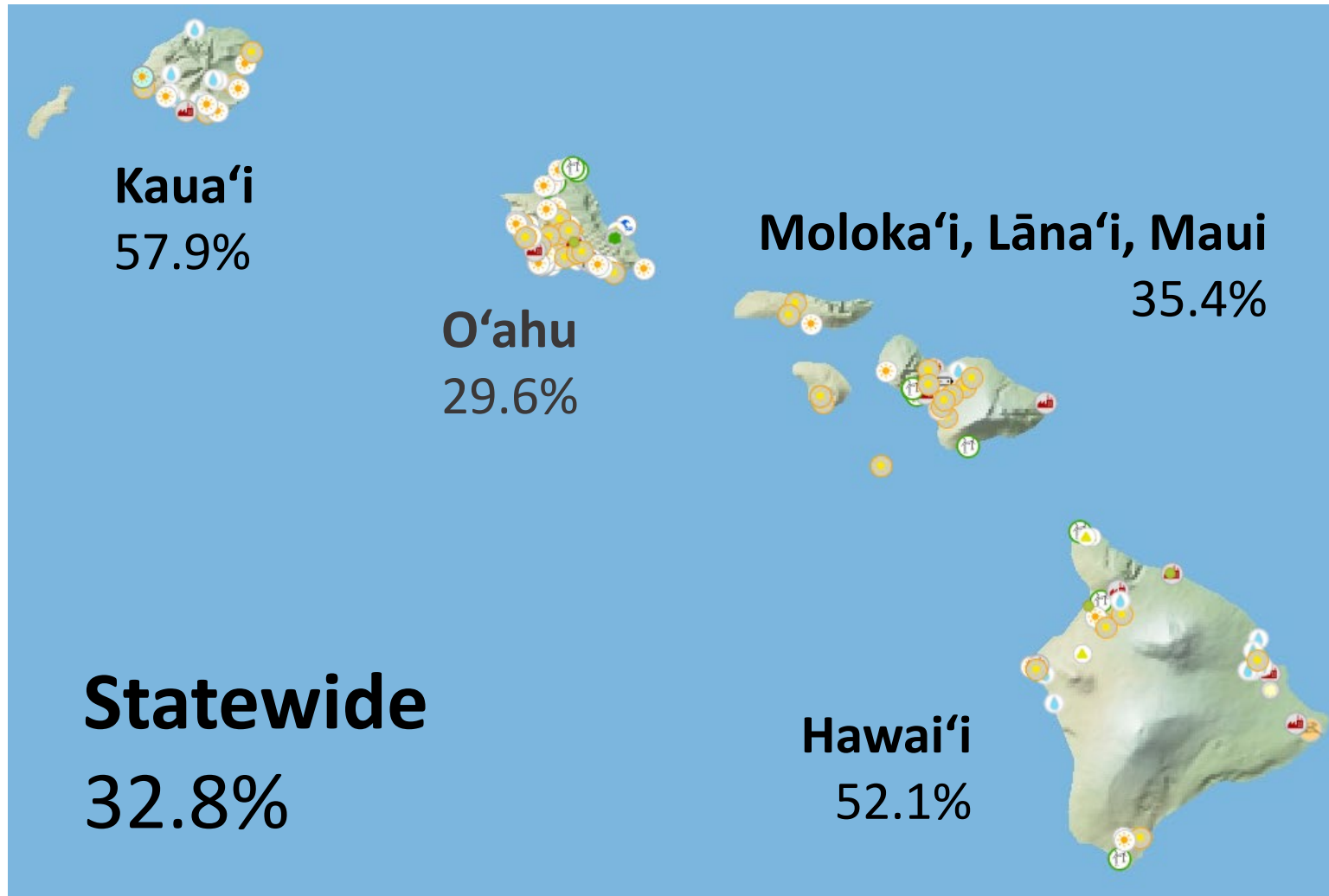
§269-92 Renewable portfolio standards (2015). (a) Each electric utility company that sells electricity for consumption in the State shall establish a RPS of:

- (1) 10% of its net electricity sales by December 31, 2010;
- (2) 15% of its net electricity sales by December 31, 2015;
- (3) 30% of its net electricity sales by December 31, 2020;
- (4) 40% of its net electricity generation by December 31, 2030;
- (5) 70% of its net electricity generation by December 31, 2040; and,
- (6) 100% of its net electricity generation by December 31, 2045.

(c) If the Hawai'i PUC determines an electric utility company failed to meet the RPS, after a public hearing, the utility shall be subject to penalties to be established by the PUC;...

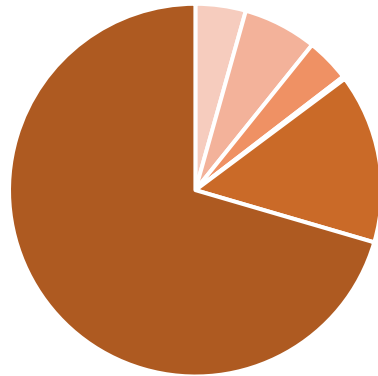
§225P-5 Zero emissions clean economy target (2022). (a) Considering both atmospheric carbon and greenhouse gas emissions as well as offsets from the local sequestration of atmospheric carbon and greenhouse gases through long-term sinks and reservoirs, a statewide target is hereby established to sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as practicable, but no later than 2045; provided that the statewide target includes a greenhouse gas emissions limit, to be achieved no later than 2030, of at least fifty per cent below the level of the statewide greenhouse gas emissions in 2005.

Renewable Energy Generation: 2023



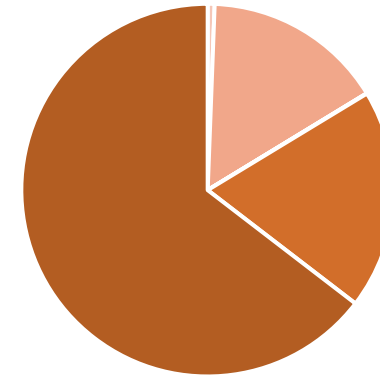
Electricity Mix By Island or County

O'ahu



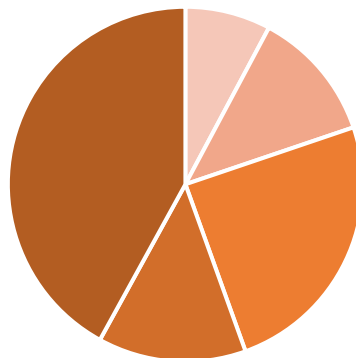
■ Biomass ■ Utility PV ■ Wind ■ Biofuels ■ Customer-Sited PV ■ Fossil Fuel

Maui, Lāna'i, Moloka'i



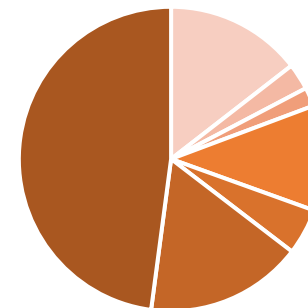
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Kaua'i



■ Biomass ■ Hydro ■ Utility PV ■ Customer-Sited PV ■ Fossil Fuel

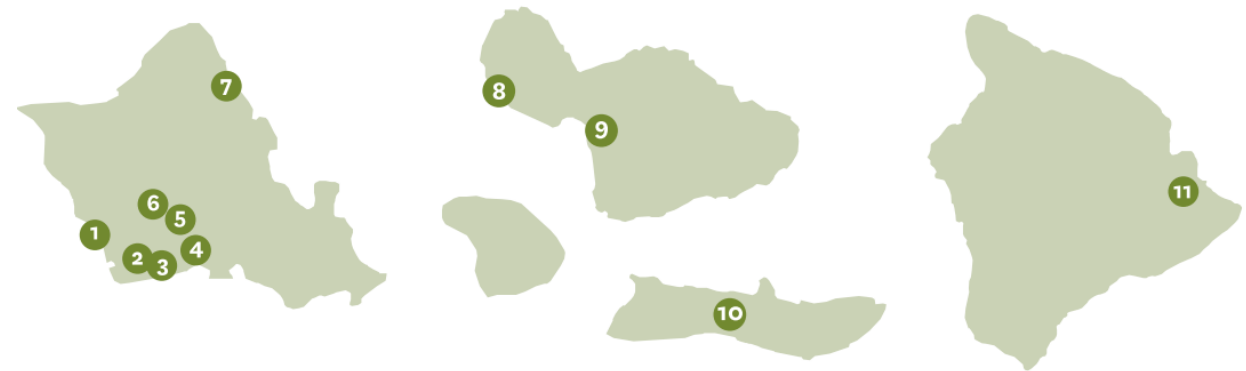
Hawai'i



■ Geothermal ■ Utility PV ■ Hydro ■ Wind
■ Biofuels ■ Customer-Sited PV ■ Fossil Fuel

Energize Kākou (we, us, community)

- **Cultural Narrative:** Brief genealogy of natural resource management in Hawai‘i, provides a deeper understanding of their relationship to the cultural history of Hawai‘i (**kuleana = responsibility**).
- **Playbook:** A guidance document of best practices for community engagement design and execution.
- **Strategic Work Plan:** A roadmap for community engagement workshops, including stakeholder maps, meeting materials, and promotional materials.




- 1) Wai‘anae
- 2) Kapolei & Kalaeloa
- 3) ‘Ewa Beach
- 4) Pearl City
- 5) Wai‘pio Village & Kunia
- 6) Mililani
- 7) Kahuku

- 8) Lāhainā
- 9) Kīhei
- 10) Moloka‘i

11) Pāhoa



Clean Energy Wayfinders

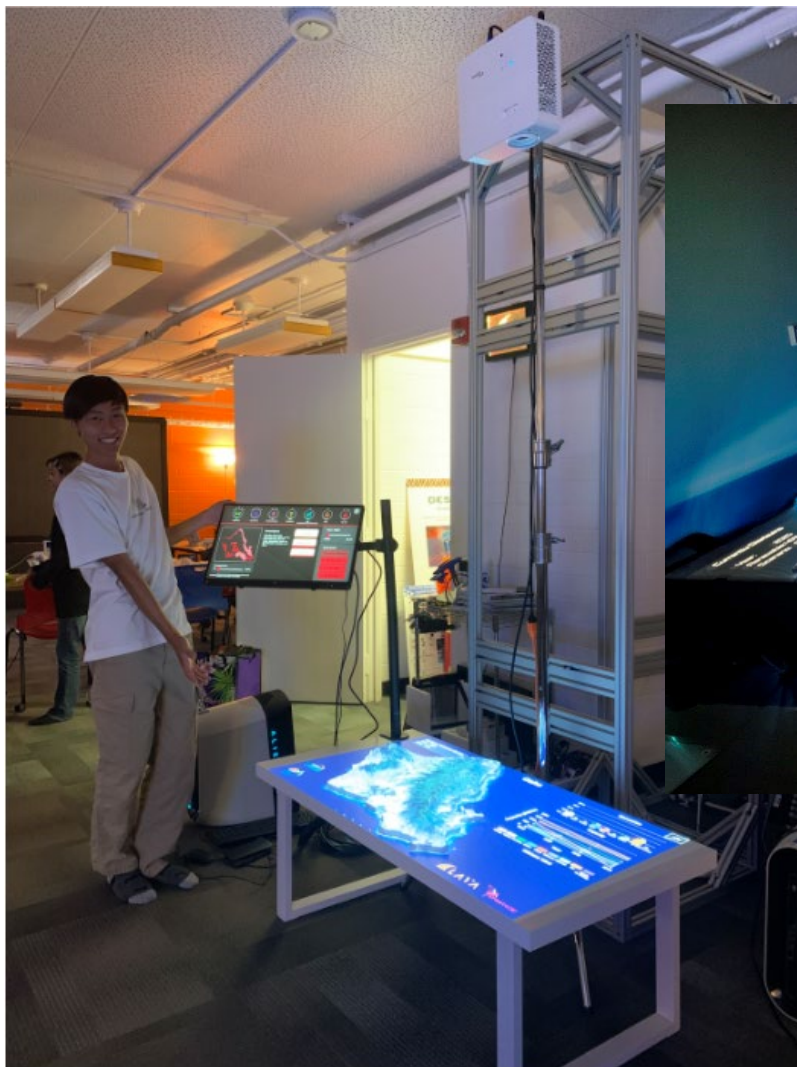
- 'Aina Corps partnership with 
 - Now entering Year 3
 - Seeking six (6) new Wayfinders
- Hosted by grassroots organizations
- Share information and opportunities for energy conservation and clean energy adoption
 - Schools, community organizations, homes, and businesses (Green Business Program)
- Share information on career opportunities
- Help establish trust, communication, presence
- Create new professionals in conservation sector



Partnering w/ Community-Based Organizations

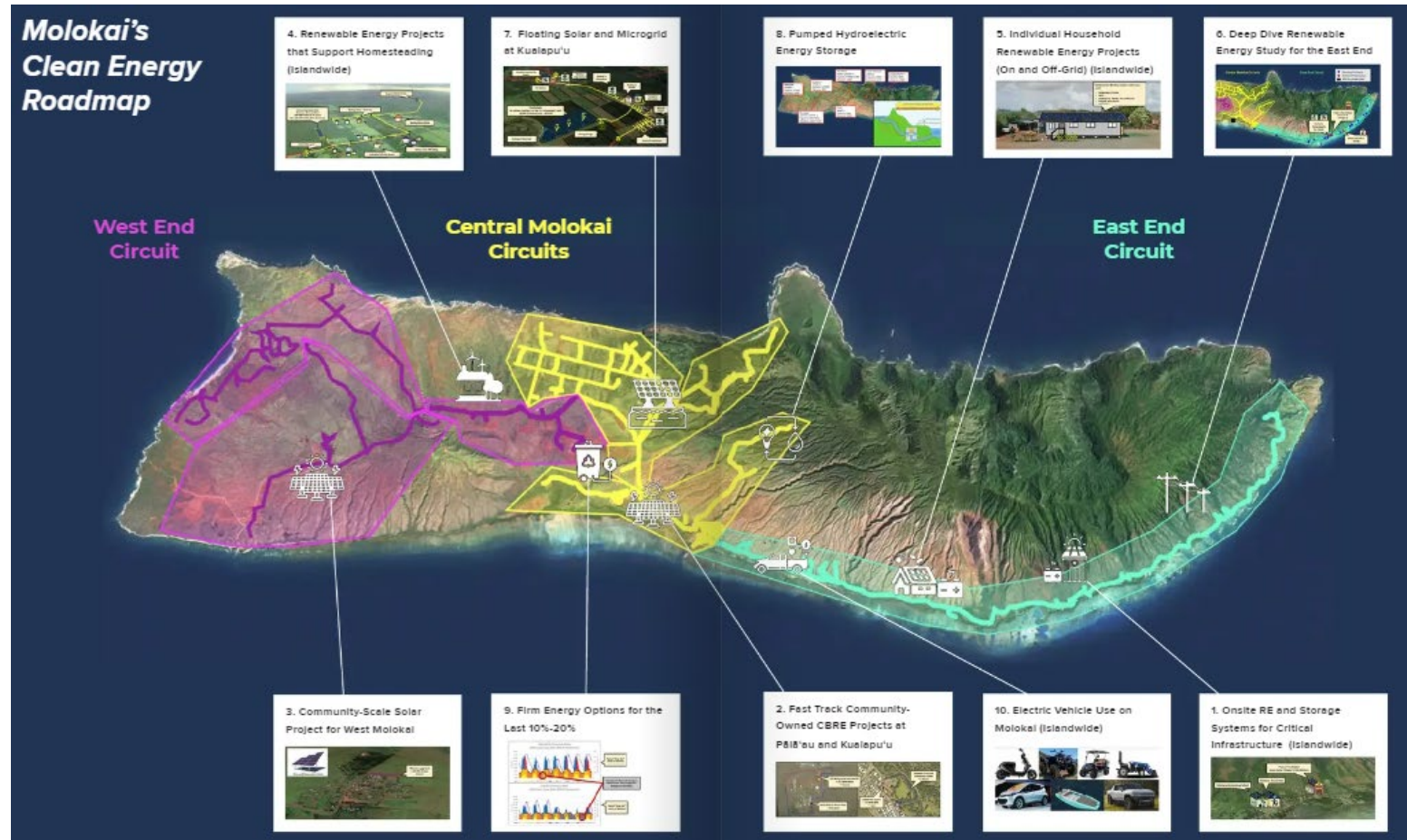
- Wayfinders Expansion (USD OE: August 2024 – December 2026)
 - Partner w/ CBOs to conduct outreach on priority energy topics
 - Develop community workplans, meetings, lessons learned report
- University of Hawai'i Sea Grant (NOAA)
 - Partner w/ CBOs, provide Wayfinders professional development
- HSEO Sponsorships
 - Sponsor aligned programs and events in HI
- HSEO cultural competency training (NEW)

HSEO Visualization Tools



Community-Led Energy Planning and Action

- Examples
 - Moloka'i Community Energy Resilience Action Plan
 - Hui O Hau'ula Community Resilience Hub
 - Vibrant Hawai'i Resilience Hubs



Engaging Local Schools

- Energy Curriculum (K-12)
 - [Energy Education - Hawai'i State Energy Office \(hawaii.gov\)](https://www.hawaii.gov/energy/education/)
 - Expansion underway – purchase of advanced visualization equipment
- Teacher Externships (October 7-8, 2024)
- Career and Technical Education – Hawai'i Dept. of Education
 - Areas of focus:
 - Foundations of Energy
 - Alternative Fuels
 - Power Grid Technology
 - Renewable Energy



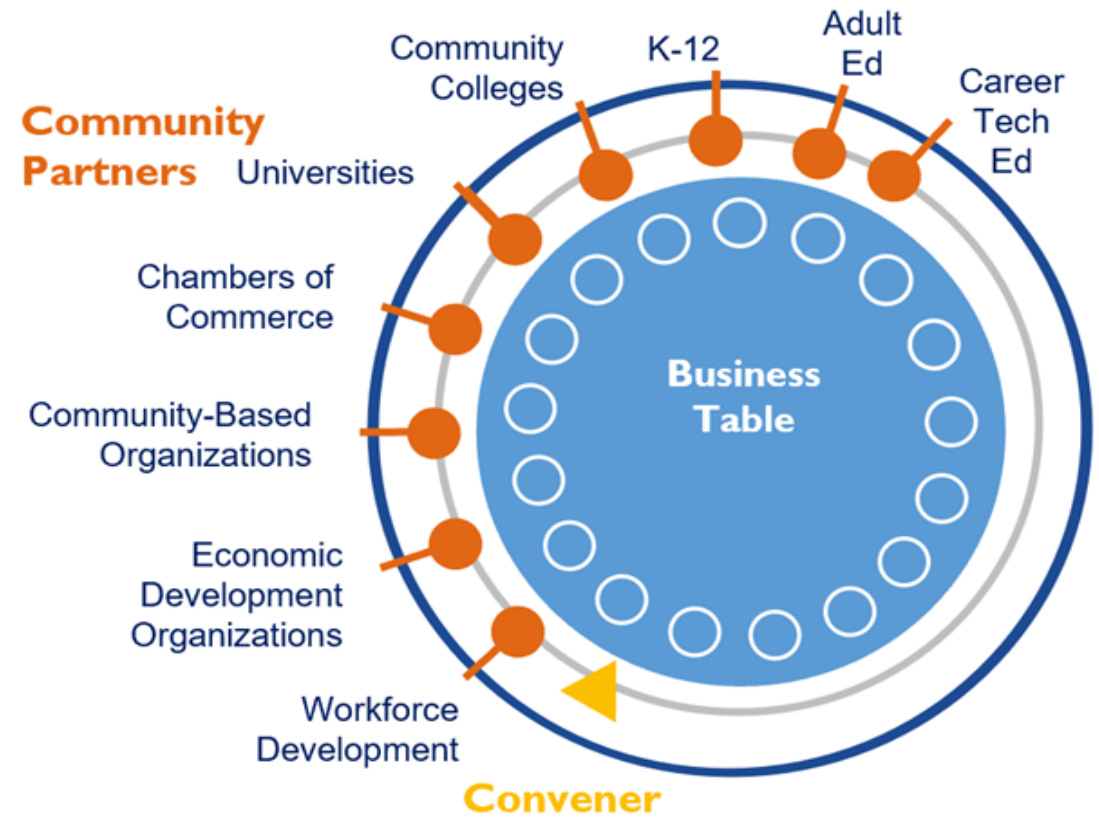
Energy Equity Efforts

- HSEO hired new Energy Equity Coordinator (April 2024)
 - Developing HSEO Equity Program
- Energy Equity & Justice Docket (2022-0250) – Hawai'i PUC
 - (1) Procedural Equity, (2) Affordability, (3) Siting of Infrastructure, (4) Access to Clean Energy, (5) Utility Performance and Tracking
 - PUC ongoing RFP for community engagement partner
- Energy Equity Hui (Group)
 - Monthly knowledge sharing open to all
- Community benefits for new projects – Hawaiian Electric (2023)
 - \geq \$3K / MW / year for needs ID'd by host community

Clean Energy Sector Partnership

Employers and Community Partners:

1. ID in-demand entry-level occupations
2. ID desired skills-training
3. Develop career pathways Provide on-the-job training
4. Entry-level employment



Thank You!

