

Hawai'i Powered 

Clean energy for Hawai'i, by Hawai'i

March 21, 2023
Hamakua CDP Action Committee




Hawaiian Electric
March 2023

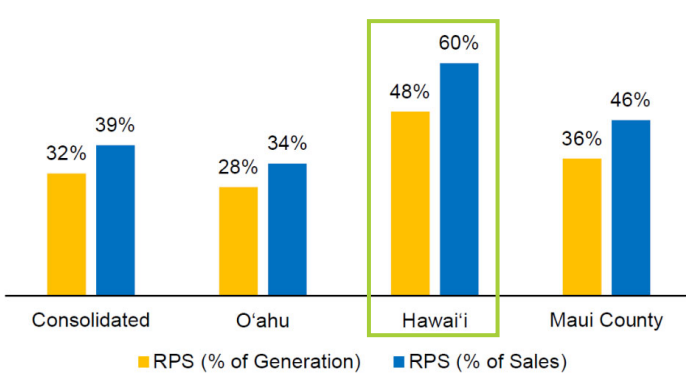
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2022 Renewable Energy

- ♦ 48% based on generation
- ♦ Act 240: A new Renewable Portfolio Standard (RPS) calculation signed into law in July 2022
- ♦ Previous calculation reflected renewable percentage of electricity **sold**.
- ♦ Revised calculation reflects percentage of total **generation** from renewables
- ♦ On track to meet next milestone of 40% consolidated by 2030

Renewable Portfolio Standards Under Amended Definition

2022 RPS



Entity	RPS (% of Generation)	RPS (% of Sales)
Consolidated	32%	39%
O'ahu	28%	34%
Hawai'i	48%	60%
Maui County	36%	46%

■ RPS (% of Generation) ■ RPS (% of Sales)


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New renewable projects on Hawai'i Island

CURRENT – In Progress

- ♦ Hale Kuawehi Solar (30 MW)
- ♦ Waikoloa Solar (30 MW)

FUTURE – In Procurement

[HAWAIIANELECTRIC.COM/COMPETITIVEBIDDING](https://hawaiianelectric.com/competitivebidding)

- ♦ Hawai'i Stage 3 (RFP issued)
- ♦ Kohala Microgrid (RFP filed)

SHARED SOLAR – Final Award Group

- ♦ Ka Lae Solar (0.5 MW)
- ♦ Ka Lae 2 Solar (0.5 MW)
- ♦ Kalaoa Solar A (3 MW + BESS) *
- ♦ Kalaoa Solar B (3 MW + BESS) *
- ♦ Na'alehu Solar (5 MW + BESS) *
- ♦ Waikoloa Community Solar 1 (2.5 MW)
- ♦ Waikoloa Community Solar 2 (2.5 MW)

* Projects dedicated to Low- to Moderate-Income Subscribers only



[HAWAIIANELECTRIC.COM/STATUSBOARD](https://hawaiianelectric.com/statusboard)

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Planning for a sustainable future

Together, we can:

Reduce carbon
emissions by
70% by 2030



Reach **net zero**
emissions by
2045



Be **100% Hawai'i**
Powered—using all
local, renewable
resources—by 2045



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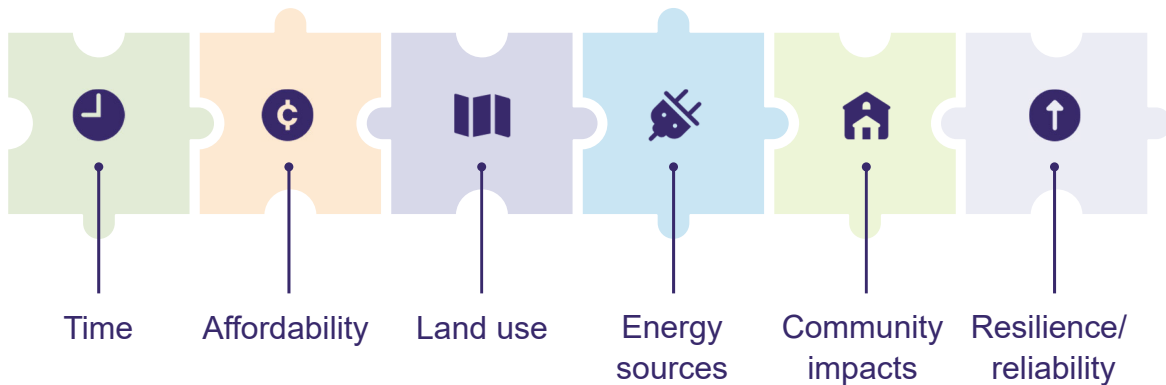
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Why does this matter for everyone?

Achieving a more sustainable future is a complex challenge that takes **collaboration**, **compromise** and **creativity** on customer, community and statewide levels.



Planning challenges





HawaiianElectric.com

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Clean energy for Hawai'i, by Hawai'i

Welcome to Hawai'i Powered!

This is the online hub for community involvement in Hawaiian Electric's plan for a clean energy future.
Looking for Integrated Grid Planning documents?

[WATCH THE WELCOME VIDEO](#)

- [View Renewable Energy Zone comments](#)
- [Sign up for our email list](#)
- [Request a presentation](#)
- [Contact the project team](#)



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What We Heard

ENGAGEMENT SNAPSHOT

Thank you for participating in our Hawai'i Powered survey. We appreciate you taking the time to tell us which IGP consideration is most important to you.

The real-time results collected from online and in-person events are shown in the following graphs.

Haven't taken the survey yet? Take it now!

[LAUNCH THE SURVEY](#)

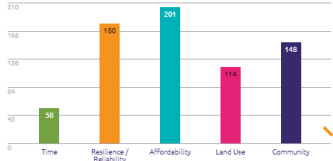
RESULTS BY ISLAND

Hawaii

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Total Events

From July 2022 through December 2022, we participated in:

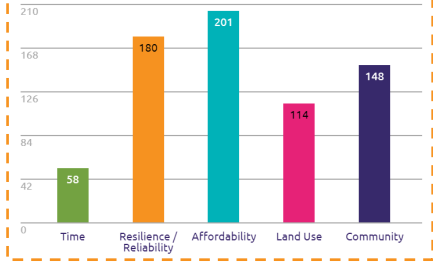
25+
Total In-Person Events



Category	Count
Time	58
Resilience / Reliability	180
Affordability	201
Land Use	114
Community	148



What's most important to you?
Take the survey at
HAWAIIPOWERED.COM



Category	Count
Time	58
Resilience / Reliability	180
Affordability	201
Land Use	114
Community	148



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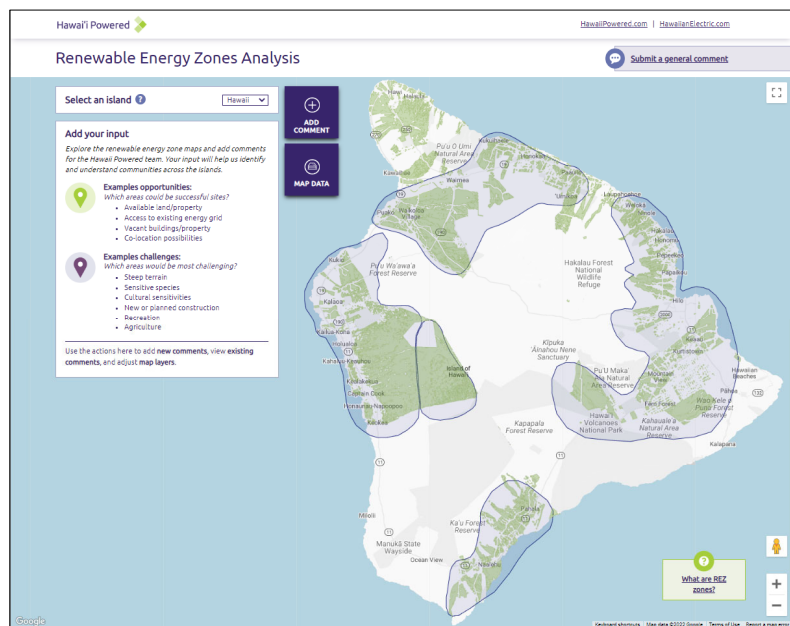
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Renewable Energy Zones

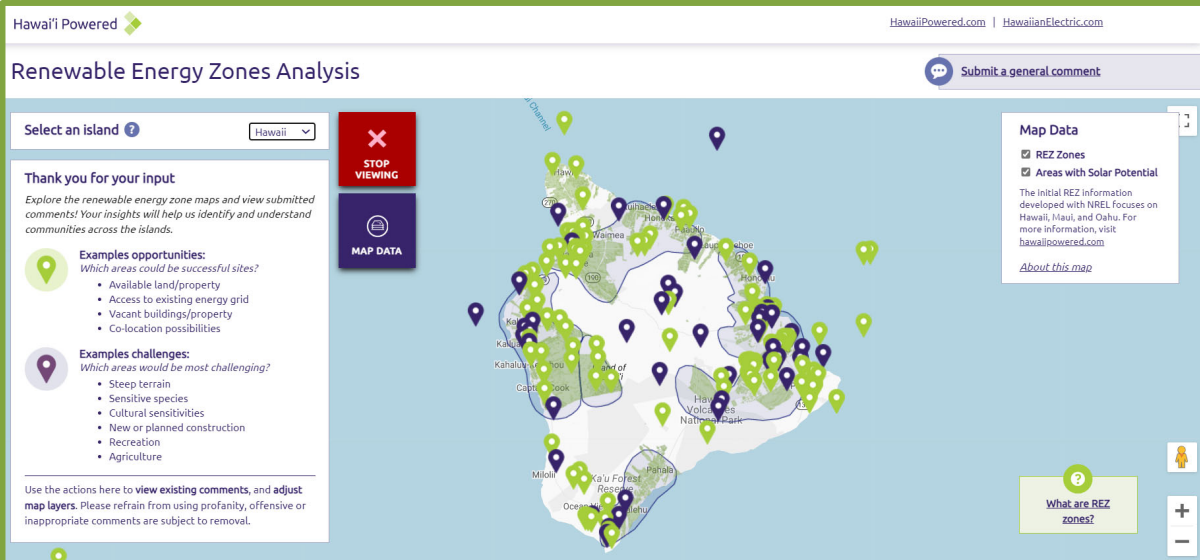
Help us identify areas that may be a good fit for a renewable energy project within each zone including:

- ✓ Land use opportunities
- ✓ Community needs
- ✓ Community interest

[HAWAIIPOWERED.COM/REZ](https://hawaiipowered.com/rez)



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We invite you to join the conversation



Visit our online participation site and sign up for **monthly email updates**:
hawaiipowered.com



Read **Plugged In** – our Hawai'i Powered Blog – for the latest insights and happenings: hawaiipowered.com



Contact us or request a presentation:
IGP@hawaiianelectric.com



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There's no question that reliable, affordable electricity is vital to our daily lives. Still, we in Hawai'i pay more for energy than anywhere else in the country – and that affects how we live, play and do business.

Our Mission
 is to empower island families and businesses to make smart energy choices to reduce energy consumption, save money and pursue a 100% clean energy future.

Together we've made significant progress toward achieving our State's energy goals!

FACT: The amount of energy saved through the Hawai'i Energy program is equivalent to...



The output of a 650 megawatt PV farm

OR



Removing 58,000 cars off the road for one year



Hawai'i Energy

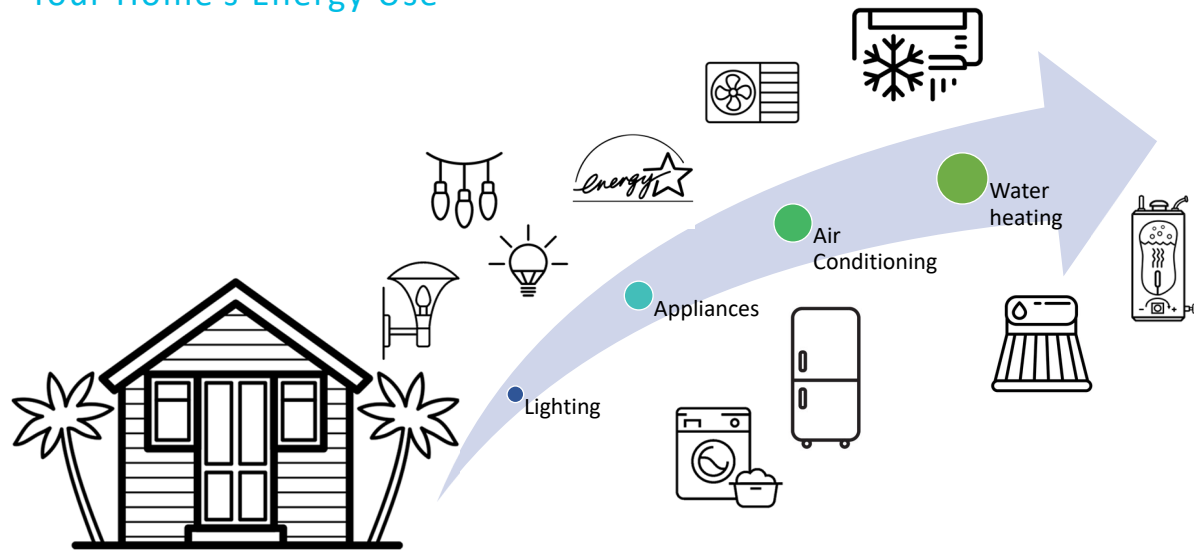


WHO IS HAWAII ENERGY?

Hawai'i Energy helps educate island families and businesses about the many and lasting benefits of energy efficiency and conservation. We encourage and reward smart energy decisions that allow our state to reach 100% clean energy faster and cheaper and to date, have saved Hawai'i more than a billion dollars in energy costs.

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Your Home's Energy Use



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Water Heating Options

\$1250

Solar Water Heater

- Instant rebate available through a Hawai'i Energy Clean Energy Ally

\$500

Heat Pump Water Heater

- Instant rebate available at participating retailers
- Ferguson / The Plumbing Source
- Home Depot
- Lowe's
- Inter-Island Solar Supply

\$200

Solar Water Heater Tune-Up

- Instant rebate available through a Hawai'i Energy Clean Energy Ally

COMPARISON OF WATER HEATING TYPES IN HAWAII

Hawai'i Energy

Based on a household of 4 people. Your home's typical energy usage and cost can vary based on size of household.

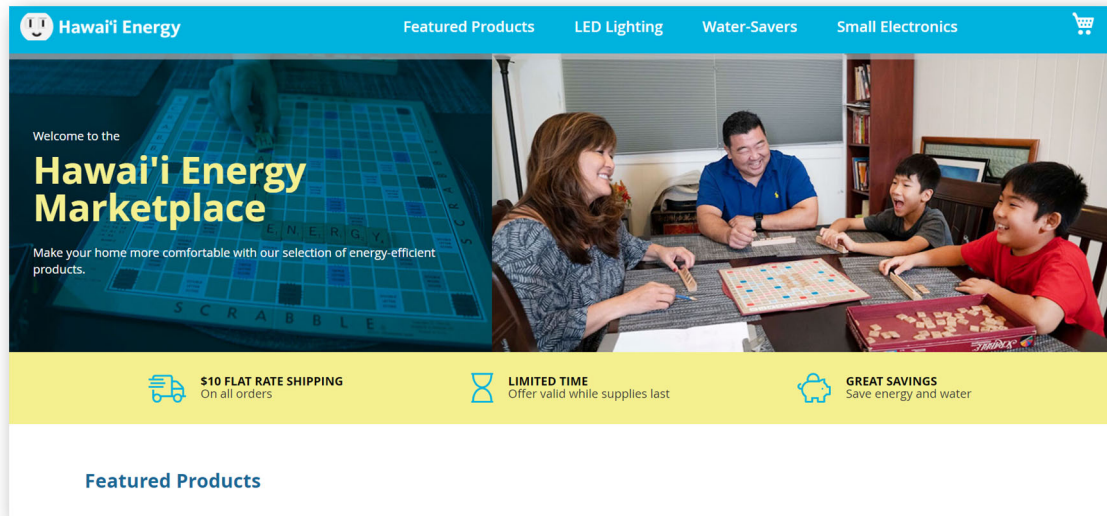
STORAGE 50 GALLON	TANKLESS ON DEMAND	HEAT PUMP 50 GALLON	SOLAR 50 GALLON
Efficiency LOW	Efficiency AVERAGE	Efficiency HIGH	Efficiency MOST EFFICIENT
Annual Energy Use 2,450 KWH	Annual Energy Use 2,200 KWH	Annual Energy Use 680 KWH	Annual Energy Use 365 KWH
Annual Cost of Electricity \$909	Annual Cost of Electricity \$816	Annual Cost of Electricity \$252	Annual Cost of Electricity \$135
Typically Powered By FOSSIL FUELS	Typically Powered By FOSSIL FUELS	Typically Powered By FOSSIL FUELS	Typically Powered By SOLAR ENERGY
Life Expectancy 10-15 YEARS	Life Expectancy 20+ YEARS	Life Expectancy 10-15 YEARS	Life Expectancy 20 YEARS
Eligible for Hawai'i Energy Rebate? NO	Eligible for Hawai'i Energy Rebate? NO	Eligible for Hawai'i Energy Rebate? YES	Eligible for Hawai'i Energy Rebate? YES

<https://hawaiienergy.com/for-homes/water-heating/water-heating-types>

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Hawai'i Energy Online Marketplace



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Energy efficiency and clean power
are good for Hawaii.



Everybody knows this, but it takes some extra effort to change habits and upgrade technologies to make those good intentions into reality. The best way to inspire people to make a change is, of course, to threaten to release compromising photos of them on the internet. The second best way is education.

We offer education and information for professionals, policymakers, and the community.



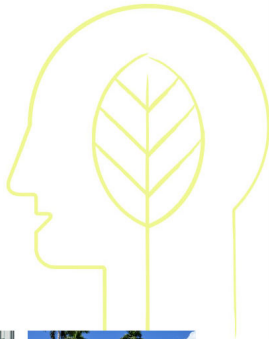
Community



Professional Development



Building Energy Codes



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Hawaii Energy

YOUR CONSERVATION & EFFICIENCY PROGRAM

Graceson Ghen

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