



**Hawaiian
Electric**

Integrated Grid Planning

Listening + Integrating + Collaborating to Reach 100% Renewables by 2045

What is IGP?

Be part of the Integrated Grid Planning (IGP) conversation to shape our renewable energy future together.

Our Energy Future



Achieve Energy Independence

Reduce oil dependency and volatile fuel costs by increasing renewables



Climate Change Considerations

Add more renewables to reduce greenhouse gas emissions and build a resilient grid



Modernize Our Island Grids

Integrate new technologies to facilitate 100% renewable energy

Our Goal for the Future:

100% Renewables by 2045



END 2020



BY 2030



BY 2040



BY 2045

*RPS = Renewable Portfolio Standard

How Does This Benefit Our Customers?



More options to control and lower bills

Time-of-Use rates to save money and lower fuel and maintenance costs



Financial incentives for purchasing an electric vehicle

Benefits of solar energy by offsetting bills without installing PV panels on their property



Integrate higher levels of renewables into the modern grid

Faster power outage restoration with greater convenience



Improved efficiencies and integration of renewables

What Do We Need to Consider?

Integrated Grid Planning looks into the best technology options for all aspects of our energy system and identifies energy needs and behaviors of future customers taking into consideration key factors.



Future customer needs



Community impact



Cost to design and build large projects



Future resource costs



New technologies



Number of electric vehicles



New businesses and industries



Number of residents installing rooftop solar



Preparing for extreme events

Participating in the Process

As part of the IGP process, we are collecting your input and considering all our options in planning for our renewable future. Here are the participants Hawaiian Electric is collaborating with:

Working Groups

Address specific topics in an advisory capacity and not as a decision-making group

Stakeholder Council

Represents customers and broad stakeholders to review work and provide guidance and insights

The Public

Communication with customers

Technical Advisory Panel

Provides independent evaluation and feedback on the working group activities and review point filings

How Do We Get There? Integrated Grid Planning

1 Data Collection

Gather data from participants on key factors

2 Define Plan

Analyze data to determine system grid needs and costs

3 Refine Plan

Request proposals for potential projects to meet grid needs and determine actual costs

4 Optimize Plan

Determine the best solutions to fulfill the plan within the time frame

5 Regulators Review

Present solutions to regulators for review

Customer Priorities

We're Listening

In response to engagement, surveys, and focus groups, we were told affordability, reliability, and energy choices are most important to customers.

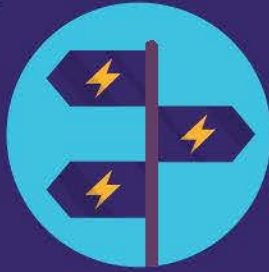
Affordability

Lower energy bills



Reliability

Fewer outages



Energy Choices

More control over energy generation and use

Is this true for you?

Let us know if you have different opinions. We're using this information to help make smart future energy decisions for customers.

WE WANT TO HEAR FROM YOU

We welcome your input! Here are the many ways to stay connected with us.

Email:
IGP@hawaiianelectric.com

Website:
www.hawaiianelectric.com/igp

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5 Ways Customers Can Help Hawai'i Reach 100% Renewables



Visit hawaiianelectric.com/products-and-services/ to learn more ways you can help