

# 2024 Sustainability Report



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# About this Report

This is HEI’s sixth consolidated Sustainability Report. This report is designed to help investors, customers, employees and other stakeholders understand our performance in a variety of sustainability-related areas.

This report was prepared in accordance with Sustainability Accounting Standards Board (SASB) and Edison Electric Institute (EEI) guidance. This report includes disclosures related to our utility, Hawaiian Electric.

This report should be read in conjunction with our Securities and Exchange Commission (SEC) filings (including our 2024 Annual Report on Form 10-K), as well as certain presentations, documents and other information that may be of interest to investors, all of which are available at [www.hei.com](http://www.hei.com).

*Note: This report covers information we have determined to be important from a sustainability reporting perspective, which is distinct from the materiality standard used for purposes of our financial disclosures. For additional information regarding HEI, please see our filings with the SEC.*

## Additional Sustainability-Related Reports

- **Task Force on Climate Related Disclosures (TCFD):** See HEI's March 2023 TCFD-aligned disclosure available [here](#).
- **Governance processes and incentive compensation metrics:** see HEI's latest Proxy Statement available [here](#).
- **Risk considerations:** see HEI's latest Form 10-K available [here](#).
- **Priority sustainability areas and alignment with UN Sustainable Development Goals:** see March 2023 Priority Assessment available [here](#).
- **Political engagement policy and disclosures:** see March 2023 Political Engagement Policy available [here](#).

# Building a Strong Future

## Aloha mai kākou, greetings everyone,

This past year was pivotal for our company. We made significant progress in overcoming the challenges that were before us and resetting our foundation for sustainable, long-term success.

The sale of American Savings Bank marks the beginning of a new chapter for our company, allowing us to dedicate ourselves fully to serving Hawai‘i as a resilient and sustainable utility. This clarity further empowers us to deliver on our mission to provide affordable, reliable and clean energy while supporting the well-being of the communities we serve.

At the heart of our efforts is resilience — resilience in our infrastructure, in our environment, in our people and in our communities. This year, we fortified this resilience by implementing our updated Wildfire Safety Strategy, advancing renewable energy initiatives and reducing greenhouse gas emissions. The growing threats posed by climate change are all too evident, and we are determined to meet them with urgency and collective action.

We first launched our Wildfire Safety Strategy in 2019, and we recently updated it for 2025–2027. It reflects input from a wide range of community stakeholders and demonstrates our commitment to a “whole-of-society” approach. We continued to rapidly progress our wildfire mitigation efforts throughout the year. Operational changes, new technology and the Public Safety Power Shutoff program implemented in 2024 have led to substantial strides in reducing the risk of ignition from utility equipment. And we continue to execute our Wildfire Safety Strategy, implementing actions that are expected to reduce risk further by 2027. This work is essential to protecting Hawai‘i’s people, ecosystems and infrastructure. We will continue to refine and adapt our strategy to meet the evolving needs of our communities while leading Hawai‘i’s transition to a clean energy future.

As we look to the future, we know that the transition to a more sustainable Hawai‘i requires laulima — collaboration at every level. We remain steadfast in our commitment to working with businesses, community leaders and policymakers to expand access to clean energy and foster community-centered solutions that support the needs of the people of our state.

Our journey is rooted in aloha for all who call these islands home, respect for our lands and integrity and humility in our leadership. Together, we are building a future that honors Hawai‘i’s unique heritage while creating opportunities for generations to come.

Thank you for your ongoing support as we continue to move toward a strong, resilient and sustainable future for Hawai‘i.

*Me ke aloha pumehana* — with warm regards,



**Scott Seu**  
President and Chief Executive Officer



**Adm. Thomas Fargo (Ret.)**  
Chair, Board of Directors

## Our Common Purpose

We dedicate ourselves to a better Hawai‘i — one that is thriving economically, environmentally, culturally and socially — where all in our community enjoy an abundance of resources and opportunities that enable them to achieve their hopes and dreams.

Our collective impact is amplified by the talent, innovation and commitment of employees working together across our family of companies and with partners throughout Hawai‘i.

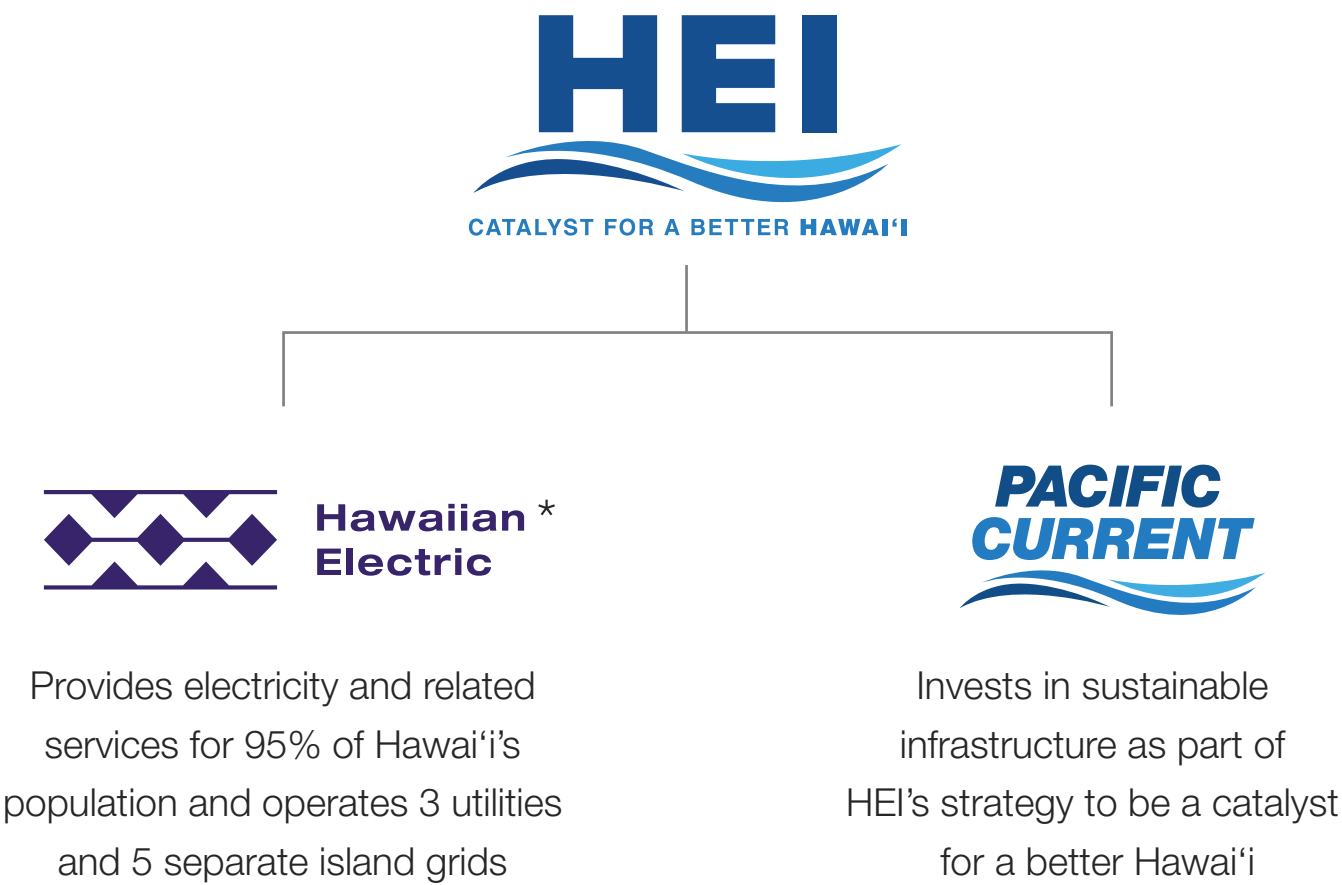
We will navigate a path toward a resilient and sustainable future, rooted in aloha for one another, respect for our lands and integrity and humility in our leadership.



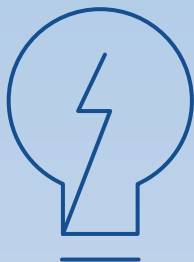
# 2024 Highlights

HEI is the parent company of two subsidiaries delivering essential services and advancing a more sustainable Hawai‘i.

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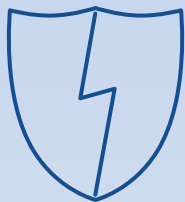


## 2024 Hawaiian Electric Highlights



36%

2024 Renewable Portfolio Standard  
(% of Generation)



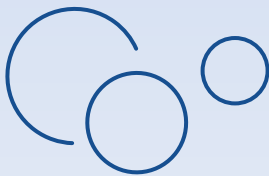
99.96%

Reliability  
(Average Service Availability in 2024)



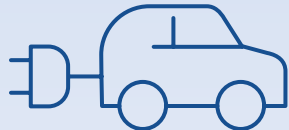
95%

Customers Upgraded to Advanced Meters by the End of 2024



-27%

Reduction in GHG Emissions from Generation (vs. 2005 Base Year) Based on Preliminary 2024 Data\*\*



+20.5%

Growth in Electric Vehicles in Hawaiian Electric’s Service Territory (from January to December 2024)



43%

Single-family Homes with Rooftop Solar



\$1.5 Million

Donated by HEI Charitable Foundation and Hawaiian Electric in 2024

\*Hawaiian Electric Company, Inc. is a subsidiary of HEI. As a holding company, HEI does not sell products or services and therefore is not regulated by the state Public Utilities Commission. \*\*Includes whole system generation stack emissions (including third-party independent power producers).



# Wildfire Safety Strategy

Hawaiian Electric’s highest priority is the safety of our communities, customers and employees. To advance this commitment, Hawaiian Electric has developed an enhanced Wildfire Safety Strategy (WSS) that builds upon our immediate actions in response to the August 2023 windstorm and wildfires and establishes a 3-year action plan for 2025-2027. The objective of the WSS is to identify and implement measures that can accomplish the greatest risk reduction while balancing affordability and reliability for our communities.

The cost of the 2025-2027 plan is estimated at about \$450 million, including \$137 million budgeted for work in 2025. Some of the cost is already funded through existing programs, including a federal grant for grid resilience received in 2024. The company plans to continue refinement of the program and the long-term cost and scope of work are subject to change.

The full 179-page document outlining Hawaiian Electric's 2025-2027 Wildfire Safety Strategy is available [here](#) ↗

## Hawaiian Electric’s enhanced Wildfire Safety Strategy is founded on a four-pillar approach:



### Harden and redesign the grid

Upgrading infrastructure, such as installation of covered conductors, targeted undergrounding and equipment replacements to enhance fire safety. These efforts also aim to improve reliability impacts resulting from the safer operational practices put into place in 2024.



### Expand and improve situational awareness

Deploying weather stations, AI-assisted cameras and spotters to improve real-time fire weather monitoring and early identification of potential ignitions, as well as implement a Watch Office and operational wildfire risk model to inform real-time operational decision-making.



### Improve operational practices

Using enhanced fast trip settings and public safety power shutoff (PSPS) with advanced weather monitoring to reduce ignition risks. Enacting restoration procedures in areas with elevated wildfire risk. Expanding vegetation management programs and annual inspection of electrical assets in the highest-risk areas.



### Strengthen stakeholder and community partnerships

Engaging the partners and the public through tailored outreach and collaborative events like the Wildfire Safety Symposium and Working Group meetings.



Hawaiian Electric invested approximately \$120 million to make wildfire safety improvements in 2024, including:

**2,124** Wood poles replaced and upgraded

**5,805** Poles tested

**23** miles of older overhead lines replaced with new, more resilient lines

**3,177** single-phase fault current indicators installed, which allow crews to more quickly locate disturbances on lines in high-risk areas

**3,558** sparkless fuses installed, which help reduce the risk of ignition

**213** substation relay settings changed to shut off power quickly if a disruption is detected

**53** weather stations installed in wildfire-prone areas on four islands to provide key information about wind, temperature and humidity to help the company better predict and respond to fire weather conditions. The weather stations, mounted on utility poles, provide meteorological data that will help the company decide whether to activate and deactivate a Public Safety Power Shutoff (PSPS)

**44** artificial intelligence-assisted high definition wildfire detection cameras installed

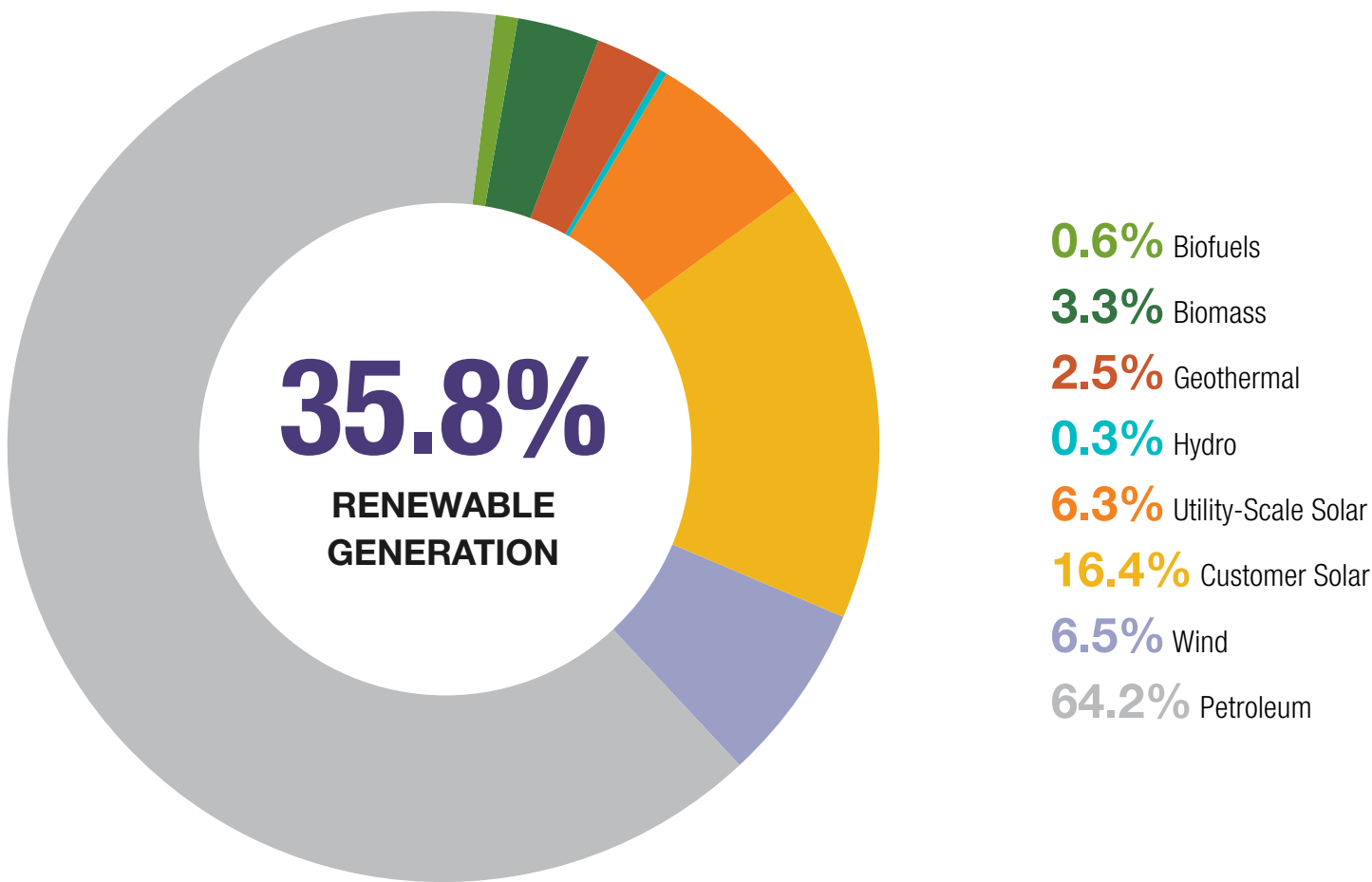
**680** new lightning arrestors installed

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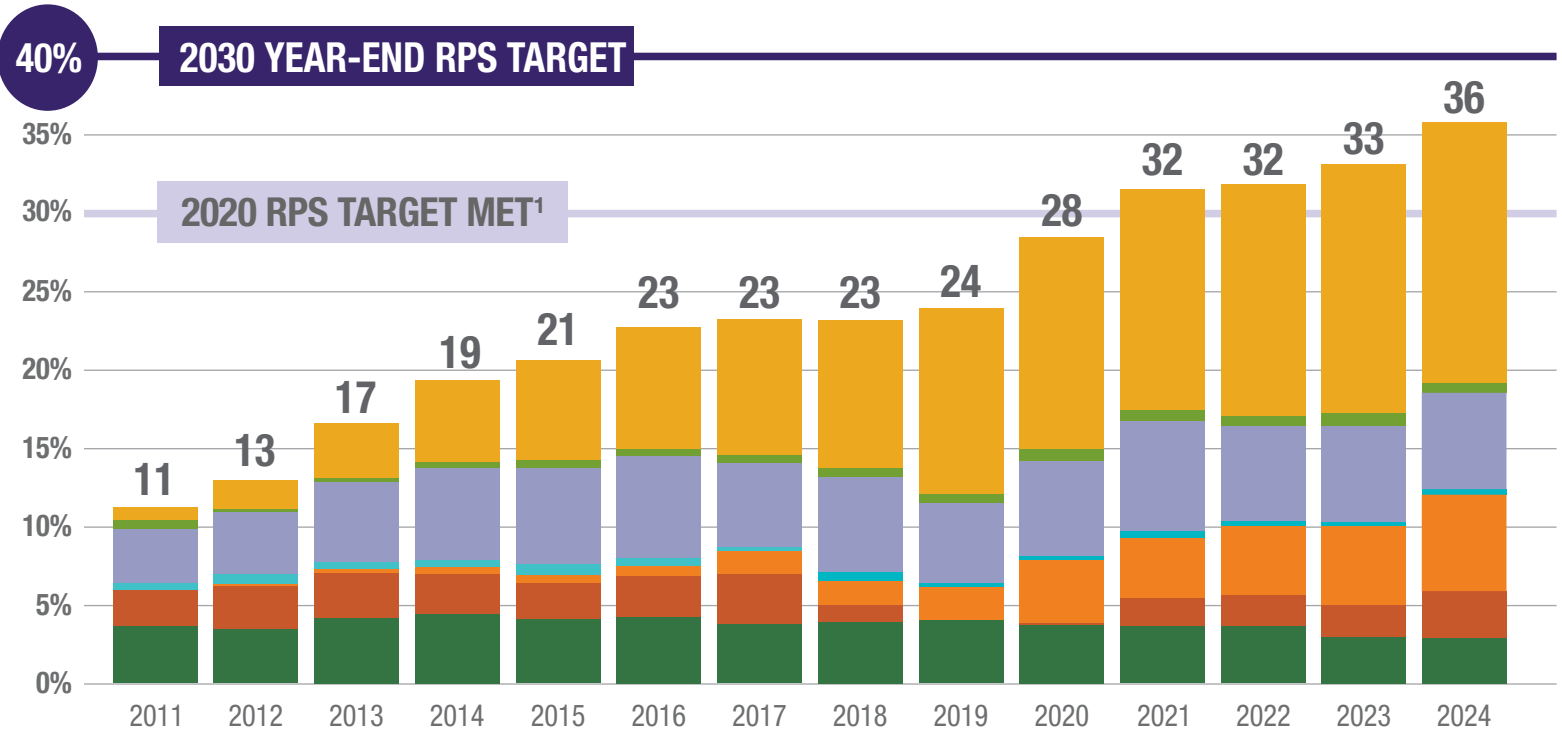


# Generation Mix

2024 Total System Generation Mix

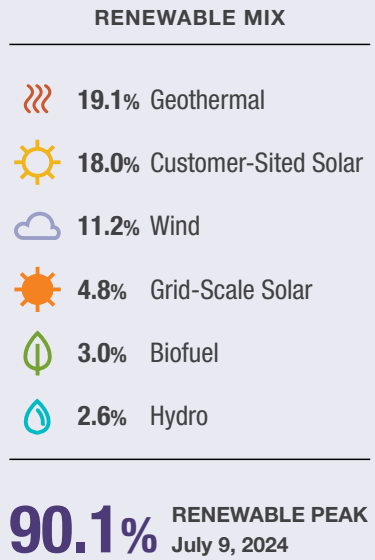
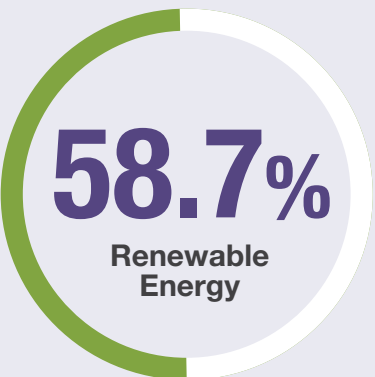
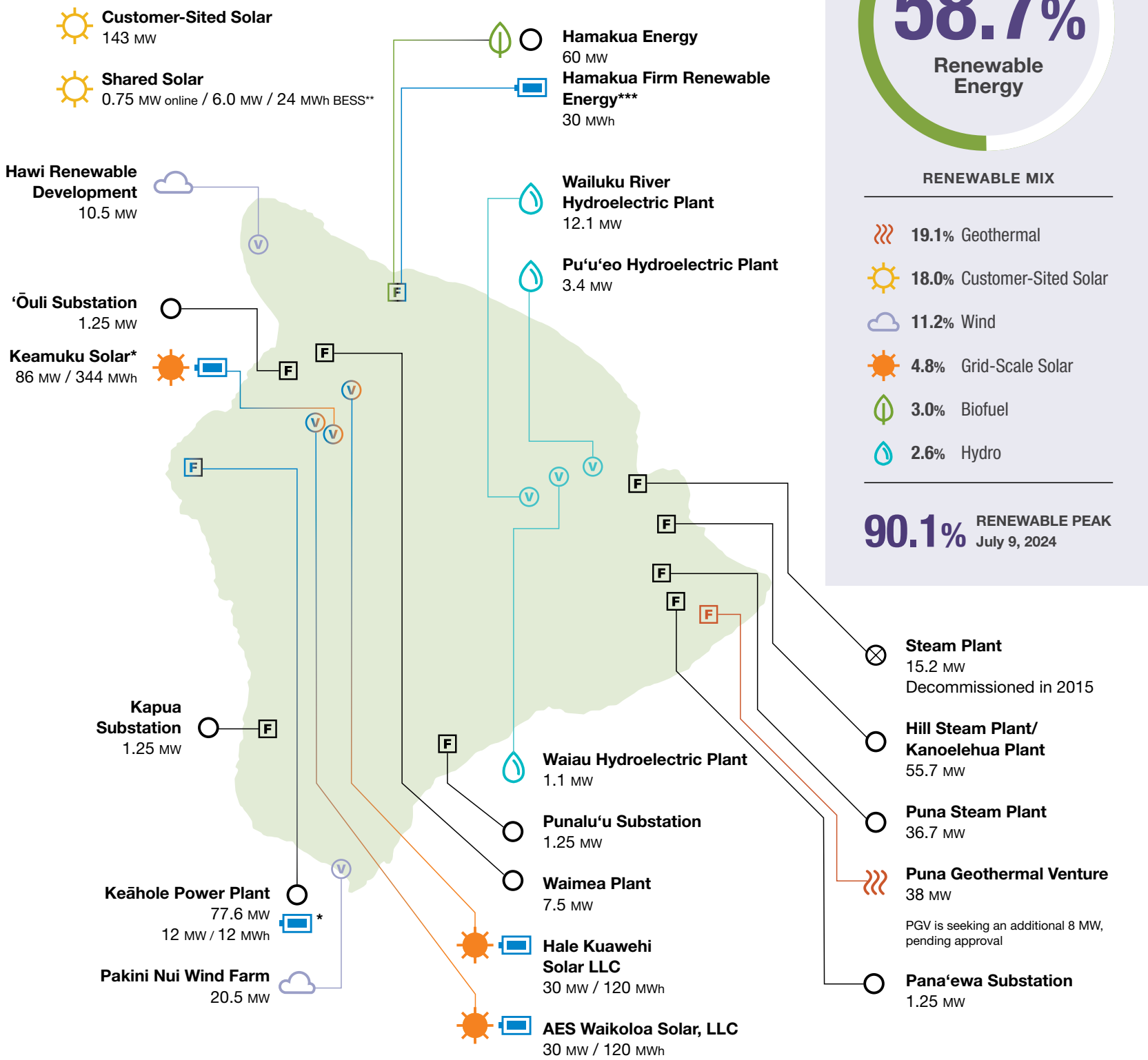


Renewable Portfolio Standard Progress  
(% of generation)



1 2020 RPS target was met based on the RPS formula in place in 2020. The formula was changed by state law in 2022.

## Hawai‘i Island



### Generating Facilities

These maps show existing and planned generating facilities and the maximum potential power in megawatts (MW) they can produce.

- F FIRM GENERATION:**  
Energy available on demand, which can be adjusted as needed.
- V VARIABLE GENERATION:**  
Energy that may not always be available or controllable.

- BIOFUELS  
BIOMASS  
GEOTHERMAL  
HYDRO  
CUSTOMER-SITED SOLAR  
GRID-SCALE SOLAR
- BATTERY ENERGY STORAGE SYSTEM  
WASTE TO ENERGY  
WIND  
COAL  
OIL  
OIL (DEACTIVATED or DECOMMISSIONED)

\*Awaiting approval \*\*In progress \*\*\*In negotiation (Status as of March 2025)

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Wildfire Safety Strategy

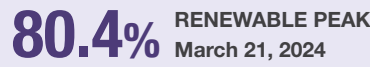
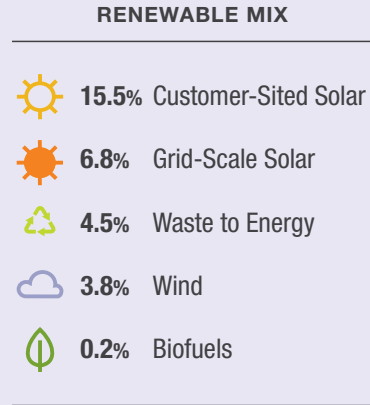
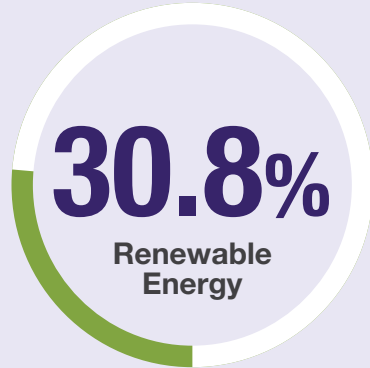
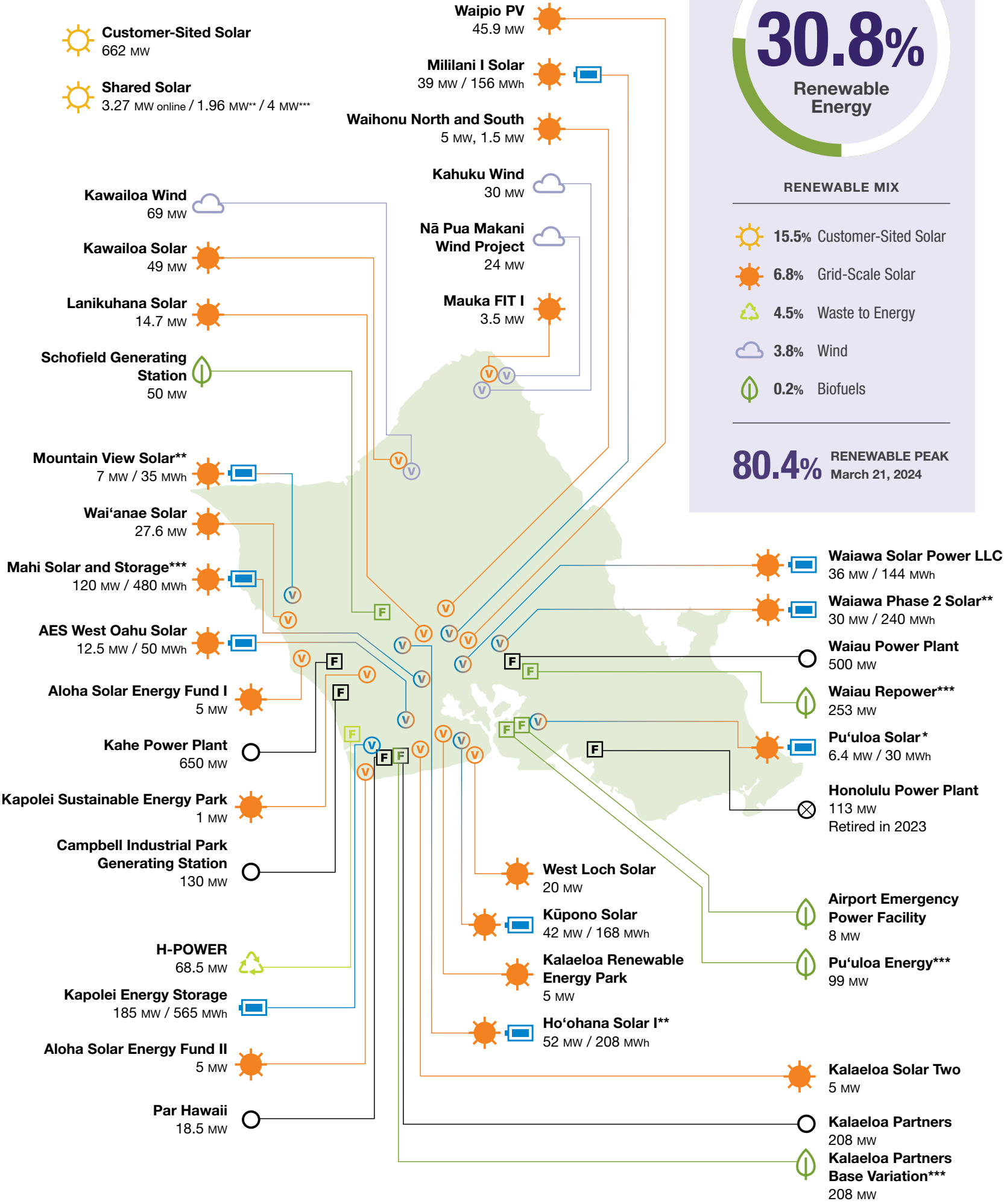
Generation Mix

Sustainability Data

Appendix

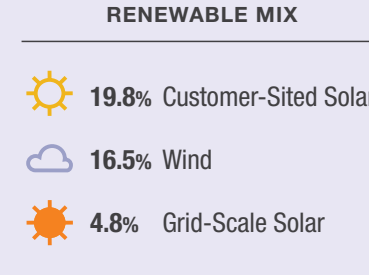
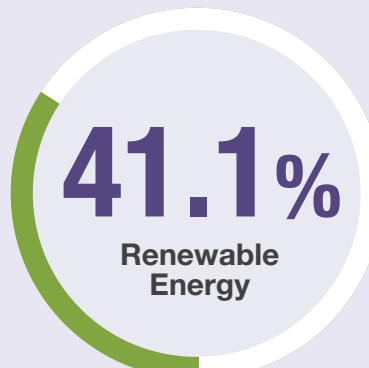
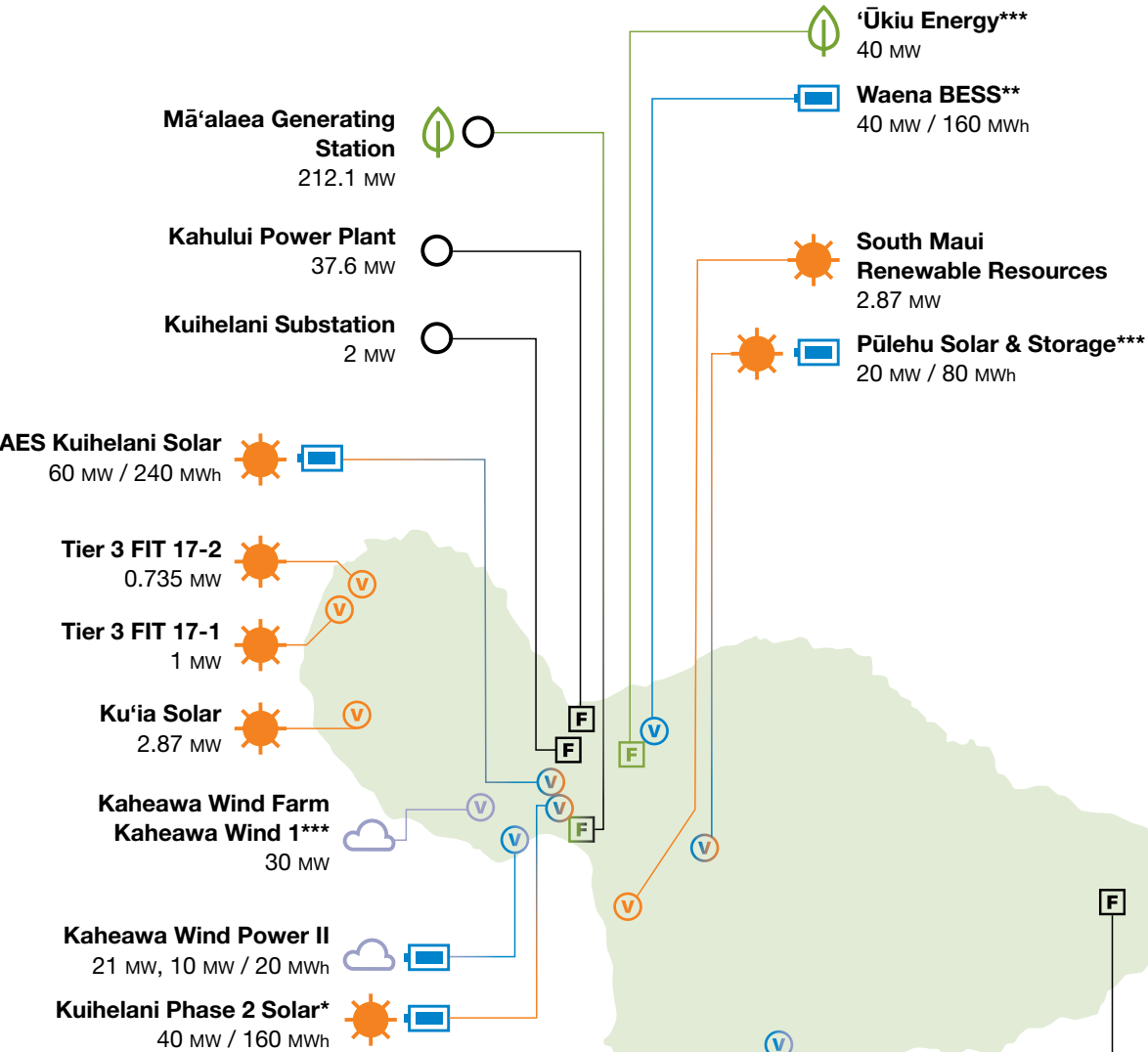
# O‘ahu

- Customer-Sited Solar  
662 MW
- Shared Solar  
3.27 MW online / 1.96 MW\*\* / 4 MW\*\*\*



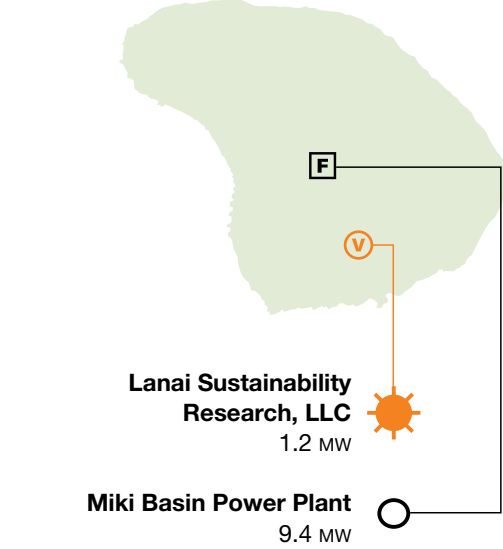
\*Awaiting approval \*\*In progress \*\*\*In negotiation (Status as of March 2025)

# Maui County



## LĀNA‘I

- Customer-Sited Solar  
0.94 MW



## MAUI

- Customer-Sited Solar  
147.6 MW
- Shared Solar  
0.028 MW online / 2.5 MW, 10 MWh BESS\*\*

## MOLOKA‘I

- Customer-Sited Solar  
2.7 MW
- Shared Solar  
0.25 MW online / 2.45 MW, 11.1 MWh BESS\*\*

\*Awaiting approval \*\*In progress \*\*\*In negotiation (Status as of March 2025)





# Sustainability Data

## Greenhouse Gas (GHG) emissions inventory

The following pages include a summary of our consolidated GHG inventory. Please see Appendix — GHG Inventory Methodology for notes on methodologies and emissions factors used in developing the inventory.

We have chosen to display a consolidated view of our inventory to show our combined footprint across Hawaiian Electric and the HEI holding company. We have not included Pacific Current because its Scope 1 owned generation in 2024 largely represents energy sold to Hawaiian Electric that was generated at the then-owned Hamakua Energy facility (sold in March 2025). These emissions are thus already reflected in Hawaiian Electric's Scope 3 purchased electricity for resale category. As the electricity used by our companies is nearly entirely generated by Hawaiian Electric (with the exception of Pacific Current's operations on Kauai), Scope 2 electricity use emissions are reflected in Scope 1 and 3 generation emissions.

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Sustainability Data

- GHG Emissions Inventory
- SASB Index
- EI ESG Metrics

Appendix

GHG EMISSION SCOPES	
SCOPE 1	<b>Direct emissions</b> , including: Company-owned generation Company vehicle fleet Fugitive emissions from company operations
SCOPE 2	<b>Indirect emissions</b> , including: Electricity use (already reflected in Scope 1 and 3 emissions, as Hawaiian Electric produces the power it consumes in its territories)
SCOPE 3	<b>Value chain emissions</b> , including:  Purchased electricity for resale Upstream emissions from purchased fuel-related activities, such as extraction and production Business travel and employee commuting

## Climate Change Action Plan

In 2021, Hawaiian Electric set an aggressive goal to cut carbon emissions from power generation by 70% by 2030, compared with 2005 levels. The emissions covered by this goal include stack emissions from generation owned by Hawaiian Electric and independent power producers (IPPs) who sell electricity to the utility. In addition, the utility has committed to achieving net zero carbon emissions from power generation by 2045 or sooner.

Since the time the 2030 goal was established, delays and cancellations in the commercial operation of new renewable third-party generation resources and higher costs as a result of supply chain disruptions and inflationary pressures, as well as federal policies related to solar panel imports, have slowed the pace of progress toward reducing GHG emissions. The downgrade of Hawaiian Electric's credit ratings after the 2023 Maui windstorm and wildfires is anticipated to be an additional impediment to completion of new renewable energy and storage projects. As a result of these challenges, Hawaiian Electric expects the planned 70% reduction in carbon emissions to be achieved later than the original 2030 target date. However, the utility will continue to replace significant amounts of fossil fuel generation with renewable energy between now and 2030 and expects to meet or exceed the State of Hawai'i's RPS goals.

The utility's structure (vertically integrated with no access to wholesale electricity markets) means that its Scope 2 electricity use emissions are already reflected in its Scope 1 and 3 generation emissions. The utility's generation emissions are also inclusive of transmission and distribution (T&D) losses, reflecting the electricity that is consumed/lost in a T&D system. While utilities sometimes report independent power producer (IPP) T&D losses as Scope 2 emissions, the utility has categorized these IPP T&D losses as Scope 3 to remain consistent with its other IPP-related public reporting. As of 2024, the utility's preliminary GHG emissions from electric generation represented a 27% reduction from its Climate Change Action Plan 2005 baseline. The utility maintains a publicly available, online GHG emissions scorecard to report annual emissions from sources that supply electricity to our grids.

### Hawai'i Pathways to Net Zero

In 2023, Hawaiian Electric commissioned a study of long-term economywide decarbonization scenarios for Hawai'i; for more detail, please see [Hawai'i Pathways to Net Zero](#).

### Renewable Project Status Board

For an updated look at our clean energy progress, please see Hawaiian Electric's [Renewable Project Status Board](#).

**-27%**  
**Decrease in GHG emissions from electric generation from 2005 to 2024**

*Note: All figures should be considered preliminary and subject to future verification. Detailed GHG methodology and assumptions are available on [page 18](#). Biogenic CO<sub>2</sub> emissions from biofuel combustion are considered carbon neutral. They are calculated and shown on [page 7](#) but not included in emissions totals, in line with the GHG Protocol guidance.*





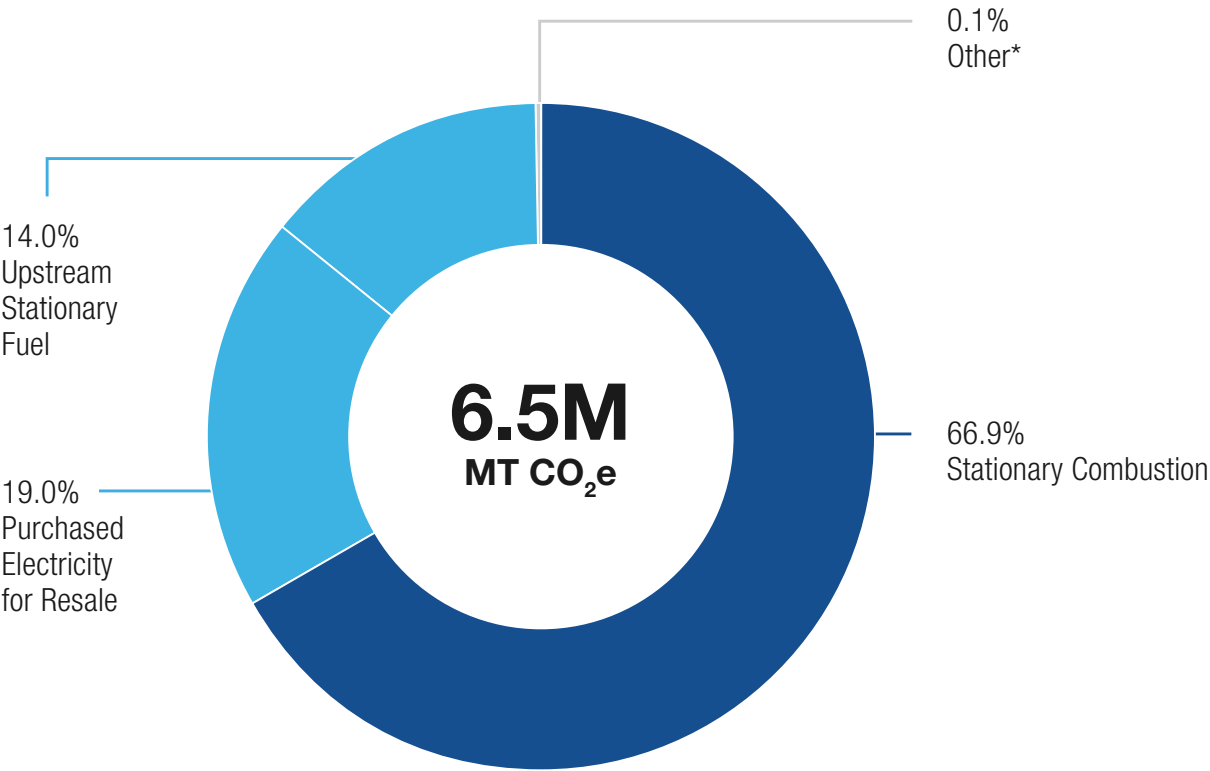
## GHG Emissions Inventory (MT CO<sub>2</sub>e)

	2015 (BASE YEAR)		2022		2023		2024	
Hawaiian Electric <sup>1</sup>	SCOPE 1	SCOPE 3	SCOPE 1	SCOPE 3	SCOPE 1	SCOPE 3	SCOPE 1	SCOPE 3
Stationary Combustion	4,086,070		4,092,365		4,407,204		4,351,192	
Mobile Combustion	6,007		4,556		5,098		4,955	
Purchased Electricity for Resale <sup>2</sup>		3,012,770		1,920,392		1,297,365		1,235,816
Biogenic CO <sub>2</sub> (not included in totals) <sup>3</sup>	68,557	434,257	12,028	453,884	13,176	419,526	12,794	467,910
Upstream Stationary Fuel		851,884		867,730		926,499		908,900
Upstream Mobile Fuel		1,462		1,386		1,621		1,579
CONSOLIDATED ENTERPRISE								
Enterprise-Wide Emissions (by Scope)	4,092,077	3,866,116	4,096,921	2,789,508	4,412,302	2,225,485	4,356,147	2,146,295
Net Enterprise-Wide Emissions (all Scopes)	7,958,193		6,886,429		6,637,787		6,502,442	

*Note: Figures have been developed in partnership with an experienced GHG emissions advisor, and should be considered preliminary and subject to future verification. Numbers may not add up precisely due to rounding. Certain totals for prior years have been revised slightly from previous disclosures to reflect updated methodology adjustments and changes in HEI's structure. 2024 figures were primarily calculated using global warming potentials (GWPs) from the UN IPCC 5th Assessment Report (AR5). Figures for earlier years were primarily calculated using GWPs from AR4, consistent with environmental regulatory reporting requirements at the time.*

*The company also tracks other emissions categories in addition to those above. These categories include Scope 1 SF<sub>6</sub> fugitives (estimated as approximately 5,000 MT CO<sub>2</sub>e in 2024) and Scope 3 business travel and employee commuting (estimated as approximately 3,000 MT CO<sub>2</sub>e in 2024).*

## 2024 HAWAIIAN ELECTRIC CO<sub>2</sub>e EMISSIONS



HEI's **Scope 2** emissions are from electricity produced either on-site or from the grid, and are already captured in generation-related Scope 1 and 3 emissions.

■ SCOPE 1: Direct Emissions  
■ SCOPE 3: Value Chain Emissions

\* Company vehicle fleet mobile combustion and upstream mobile fuel.

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1 Hawaiian Electric is a vertically integrated utility without access to wholesale electricity markets; Scope 2 electricity use is already reflected in Scope 1 and 3 generation emissions.

2 T&D losses associated with purchased power are included in Scope 3 purchased electricity emissions.

3 Biogenic CO<sub>2</sub> emissions from biofuel combustion are reported separately and not included in totals (CH<sub>4</sub> and N<sub>2</sub>O from biodiesel are included in totals).

# SASB Index

## Hawaiian Electric

### SASB Index: Electric Utilities and Power Generators Standard

#### Activity Metrics

Number of: (1) residential, (2) commercial, and (3) industrial customers servedIF-EU-000.A					
NUMBER OF ACCOUNTS AT YEAR END					
Accounts	2020	2021	2022	2023	2024
Residential	412,484	414,713	413,744	416,072	417,253
Commercial	54,861	55,201	55,228	54,831	54,571
Industrial	694	698	696	702	712
Total	468,039	470,612	469,668	471,605	472,536

Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers'IF-EU-000.B					
ANNUAL NET ENERGY PROVIDED (MWh)					
Accounts	2020	2021	2022	2023	2024
Residential	2,525,400	2,491,600	2,415,200	2,342,100	2,295,400
Commercial	2,476,800	2,595,200	2,643,100	2,611,100	2,622,200
Industrial	3,118,000	3,174,300	3,295,700	3,273,500	3,301,300
Total	8,120,200	8,261,100	8,354,000	8,226,700	8,218,900

Length of transmission and distribution lines²IF-EU-000.C			
Service Territory	Line Classification	Total (miles)	Total (kilometers)
O'ahu	Transmission	786	1,265
	Distribution	2,559	4,118
Maui County	Transmission	250	402
	Distribution	1,148	1,848
Hawai'i Island	Transmission	604	972
	Distribution	1,870	3,009
Total	Transmission	1,640	2,639
	Distribution	5,577	8,975

1 All customer categories are covered by (1), (2) and (3).

2 T&D line lengths are the three-phase equivalent length and have been updated as of 2024.

Total electricity generated, percentage by major energy source, percentage in regulated markets						IF-EU-000.D
TOTAL SYSTEM GENERATION — BY SOURCE <sup>1, 2</sup>						
	2022		2023		2024	
	MWh	%	MWh	%	MWh	%
CONVENTIONAL						
Coal	665,589	6.47%	0	0.00%	0	0.00%
Natural Gas	0	0.00%	0	0.00%	0	0.00%
Nuclear	0	0.00%	0	0.00%	0	0.00%
Petroleum	6,350,933	61.75%	6,797,126	66.71%	6,616,553	64.17%
Total Conventional	7,016,522	68.2%	6,797,126	66.7%	6,616,553	64.2%
RENEWABLE						
Biomass / Biogas						
Biodiesel	63,114	0.61%	82,844	0.81%	58,798	0.57%
Waste-to-energy (biomass)	370,668	3.60%	327,545	3.21%	339,257	3.29%
Geothermal	208,346	2.03%	192,587	1.89%	258,940	2.51%
Hydroelectric	27,409	0.27%	26,557	0.26%	34,714	0.34%
Solar						
Utility-Scale	450,769	4.38%	528,449	5.19%	645,704	6.26%
Customer-sited	1,522,444	14.80%	1,585,545	15.56%	1,691,196	16.40%
Wind	625,916	6.09%	648,502	6.36%	666,170	6.46%
Other	0	0.00%	0	0.00%	0	0.00%
Total Renewable	3,268,667	31.8%	3,392,029	33.3%	3,694,780	35.8%
Total MWh generated	10,285,189		10,189,155		10,311,332	

All of the electricity generation listed above is in a regulated market. 2023 figures reflect the closure of Hawai'i's last remaining coal plant (IPP-owned) in late 2022.

Total wholesale electricity purchasedIF-EU-000.E	
This metric is not applicable to Hawai'i, as Hawai'i does not have a wholesale electricity market. Hawaiian Electric purchases energy directly from independent power producers (IPPs). The information regarding the amount of MWh purchased from IPPs can be found in footnote 2 to table IF-EU-000.D (see below).	

1 Minor methodology differences regarding renewable components of certain generators and timing of underlying reporting account for differences between the SASB and EEI ESG reported metrics and the Form 10-K.

2024 MWh GENERATED BY SOURCE AND OWNER				
	Utility-Owned	IPP-Owned	Total MWh	Total %
Oil	5,193,299	1,423,254	6,616,553	64.17%
Coal	0	0	0	0.00%
Biomass	0	339,257	339,257	3.29%
Geothermal	0	258,940	258,940	2.51%
PV and Solar Thermal	36,464	609,240	645,704	6.26%
Hydro	4,113	30,601	34,714	0.34%
Wind	0	666,170	666,170	6.46%
Biofuels	17,728	41,069	58,798	0.57%
Customer-Sited Grid-Connected			1,691,196	16.40%



## Greenhouse Gas Emissions & Energy Resource Planning

**Key:**

AES = AES Hawai'i

CIP = Campbell Industrial Park Generating Station

DOH = State of Hawai'i Department of Health

Hamakua Energy = previously owned by Pacific Current, sold in March 2025

HAR = Hawai'i Administrative Rules

KPLP = Kalaeloa Partners

PGV = Puna Geothermal Venture

Gross global Scope 1 emissions	IF-EU-110a.1
Hawaiian Electric's greenhouse gas (GHG) emissions from power generation (stationary combustion) are calculated using fuel consumption data (collected by fuel meters, fuel purchase receipts, tank gauging), carbon content in fuel (determined by laboratory analysis), default emission factors from 40 CFR Part 98 Subpart C, and Global Warming Potentials (GWPs) from the Intergovernmental Panel on Climate Change (IPCC) Fourth and Fifth Assessment Report (AR4 and AR5). Hawaiian Electric's GHG emissions from its mobile fleet (mobile combustion) are generally calculated using fuel consumption data, vehicle mileage, and emission factors from the EPA Center for Corporate Climate Leadership. Three (HFCs, PFCs and NF <sub>3</sub> ) of seven GHGs under the Kyoto Protocol are not generated by Hawaiian Electric. The GHG emissions presented below exclude biodiesel CO <sub>2</sub> emissions and include biodiesel CH <sub>4</sub> and N <sub>2</sub> O, which is consistent with the State of Hawai'i's GHG Emissions regulations (HAR, Title 11, Chapter 60.1, Subchapter 11), in which biodiesel is assumed to be 100% plant-based and to not include any fossil fuels. Disclosures are aligned with regulatory reporting and exclude emissions from units and emergency generators not under covered source permits, which represent approximately 0.05% of total GHGs.	

SCOPE 1 GREENHOUSE GAS EMISSIONS (IN METRIC TONS CO <sub>2</sub> e) AND INTENSITY				
Entity	2015 Base Year	2022	2023	2024 Preliminary
Total Scope 1 (metric tons CO <sub>2</sub> e) <sup>1</sup>	4,098,096	4,109,983	4,418,695	4,361,243
Intensity (g/kWh) <sup>2</sup>	800	820	827	830
2023 increase in Scope 1 emissions reflects increased output in company-owned fossil fuel generation to offset decreases in IPP-owned generation (see page 8). See page 7 for details of our GHG emissions inventory by emissions scope.				

Percentage of gross global Scope 1 emissions covered under emissions-limiting regulations	IF-EU-110a.1
Under the State of Hawai'i Act 234 and HAR Title 11 Chapter 60.1, Subchapter 11 — Greenhouse gas (GHG) emission regulations, Hawaiian Electric and GHG Emission Reduction Plan (ERP) partners (AES, KPLP, and Hamakua Energy) were required to reduce GHG emissions by 16% below partnership's cumulative 2010 emission levels by 2020, achieved a 23% reduction in 2020, and continued to meet this reduction requirement through 2024.	
Under the covered source permit for the Schofield Generating Station, emissions of CO <sub>2</sub> generated from the facility are limited to 1,700 lb/MWhe, gross, on a 12-month rolling average basis. In 2024, Hawaiian Electric reported 1,265 lb/MWhe of CO <sub>2</sub> emissions on a 12-month rolling average basis, or equivalent to 74% of the permit limit. The covered source permit allows use of diesel, biodiesel and natural gas as fuels. The CO <sub>2</sub> limit applies to emissions from burning any of these fuels, including biogenic and non-biogenic emissions.	
Percentages in the table below represent the GHG emissions affected by emissions limitations divided by total gross global Scope 1 emissions.	

PERCENTAGE OF SCOPE 1 EMISSIONS COVERED UNDER EMISSIONS-LIMITING REGULATIONS 2015, 2022 THROUGH 2024				
	2015 Base Year	2022	2023	2024
Percentage of Scope 1 emissions covered under emissions-limiting regulations(%) <sup>3</sup>	99.2%	98.9%	99.1%	99.0%

1 Includes CO<sub>2</sub>e emissions from Hawaiian Electric power generation facilities and mobile fleet (mobile combustion) on O'ahu, Maui County and Hawai'i Island and its O'ahu transmission and distribution (T&D) sulfur hexafluoride (SF<sub>6</sub>) emissions from gas insulated equipment. Excludes biogenic CO<sub>2</sub> emissions.

2 Intensities in g/kWh are calculated by dividing Scope 1 emissions by total Hawaiian Electric owned generation.

3 Calculated as the total amount of gross global Scope 1 GHG emissions (CO<sub>2</sub>e) that are covered under emissions limiting-based regulations divided by the total amount of gross global Scope 1 GHG emissions (CO<sub>2</sub>e).

Percentage of gross global Scope 1 emissions covered under emissions-reporting regulations	IF-EU-110a.1
Under the EPA GHG Mandatory Reporting Program, an emissions-reporting based regulation that requires disclosure of GHG emissions data, Hawaiian Electric has provided its data annually since 2011, starting with reporting year 2010 data, for facilities that emit 25,000 metric tons or more of CO <sub>2</sub> e, not including biogenic CO <sub>2</sub> .	
The State of Hawai'i DOH requires all covered source facilities to report GHG emissions annually for the purpose of emissions fees in accordance with HAR, Title 11, Chapter 60.1, Subchapter 6. The emissions fees are assessed following the fee schedule set forth by the DOH.	
Percentages in the table below represent the GHG emissions reported under the EPA GHG Mandatory Reporting Program and the State of Hawai'i DOH divided by the total gross global Scope 1 emissions	

PERCENTAGE OF SCOPE 1 EMISSIONS COVERED UNDER EMISSIONS-REPORTING REGULATIONS 2015, 2022 THROUGH 2024				
	2015 Base Year	2022	2023	2024
Percentage of Scope 1 emissions covered under emissions-reporting regulations (%) <sup>1</sup>	99.3%	99.2%	99.2%	98.9%

Greenhouse gas (GHG) emissions associated with power deliveries	IF-EU-110a.2
The GHG emissions presented below are total GHG emissions reported from Hawaiian Electric generation, transmission, distribution, and IPPs. Hawaiian Electric transmission and distribution operations do not generate HFC, PFC and NF <sub>3</sub> emissions, three of the seven GHGs under the Kyoto Protocol. The GHG emissions presented below exclude biodiesel CO <sub>2</sub> emissions and include biodiesel CH <sub>4</sub> and N <sub>2</sub> O, which is consistent with the State of Hawai'i's GHG Emissions regulations (HAR, Title 11, Chapter 60.1, Subchapter 11), in which biodiesel is assumed to be 100% plant-based and to not include any fossil fuels. Disclosures are aligned with regulatory reporting.	

GHG EMISSIONS ASSOCIATED WITH POWER DELIVERIES IN METRIC TONS CO <sub>2</sub> E <sup>2</sup>				
Emissions Source	2015 Base Year	2022	2023	2024 Preliminary
Hawaiian Electric Generation (metric tons)	4,086,070	4,092,365	4,407,204	4,351,192
Hawaiian Electric Transmission and Distribution (metric tons)	6,019	13,062	6,393	5,096
IPP (metric tons)	3,012,770	1,920,392	1,297,365	1,235,816
Total GHG Emissions in metric tons	7,104,859	6,025,819	5,710,962	5,592,104

Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	IF-EU-110a.3
See discussion of Hawaiian Electric's Climate Change Action Plan on page 4 of HEI's Annual Report on Form 10-K, available <a href="#">here</a> .	

1 Calculated as the total amount of gross global Scope 1 GHG emissions (CO<sub>2</sub>e) that are covered under emissions reporting-based regulations divided by the total amount of gross global Scope 1 GHG emissions (CO<sub>2</sub>e).

2 Final data for 2024 for IPPs are not yet available at EPA FLIGHT. 2024 emissions data for IPPs are estimated using 2023 emissions intensity from emissions data published in EPA FLIGHT.





## Air Quality

The Environmental Division monitors and reports emissions in accordance with applicable environmental regulations, which include certain emissions from stationary sources covered under Hawaiian Electric's Covered Source Permits. The following air quality data does not include emissions from IPPs.

Air emissions from NO <sub>x</sub> , excluding N <sub>2</sub> OIF-EU-120a.1				
TOTAL NO <sub>x</sub> EMISSIONS FROM HAWAIIAN ELECTRIC GENERATING FACILITIES FOR 2015, 2022 THROUGH 2024				
NO <sub>x</sub>	2015 Base Year	2022	2023	2024
Metric tons	13,780	9,833	10,614	10,640
Short tons	15,190	10,839	11,700	11,729

Air emissions from SO <sub>x</sub> IF-EU-120a.1	
The emissions of SO <sub>x</sub> from conventional combustion systems are predominantly in the form of sulfur dioxide (SO <sub>2</sub> ). According to the EPA, SO <sub>2</sub> is the component of greatest concern and is used as the indicator for the larger group of gaseous sulfur oxides (SO <sub>x</sub> ).	
Hawaiian Electric monitors and reports SO <sub>2</sub> as required by the company's covered source permits and applicable regulations. We conservatively calculate SO <sub>2</sub> emissions with the assumption that 100% of sulfur in fuel converts into SO <sub>2</sub> using mass balance. Consistent with EPA's statement, SO <sub>2</sub> emissions alone are sufficient to demonstrate the level of SO <sub>x</sub> emissions from company-wide facilities.	
SO <sub>2</sub> emissions are calculated based on fuel consumption and sulfur content in fuel. SO <sub>2</sub> emissions generated from the company's covered source facilities are calculated and reported to the DOH to meet the annual emissions fees requirement.	

TOTAL SO <sub>2</sub> EMISSIONS FROM HAWAIIAN ELECTRIC GENERATING FACILITIES FOR 2015, 2022 THROUGH 2024				
SO <sub>2</sub>	2015 Base Year	2022	2023	2024
Metric tons	12,149	12,586	12,576	11,484
Short tons	13,392	13,874	13,863	12,659

Air emissions from Particulate Matter (PM <sub>10</sub> )IF-EU 120a.1				
TOTAL PM <sub>10</sub> EMISSIONS FROM HAWAIIAN ELECTRIC GENERATING FACILITIES FOR 2015, 2022 THROUGH 2024				
PM <sub>10</sub>	2015 Base Year	2022	2023	2024
Metric tons	1,005	757	829	763
Short tons	1,108	834	913	841

The PM<sub>10</sub> emissions presented above are consolidated PM<sub>10</sub> emissions for all of the company's covered source facilities. Historically, more than half of the company's PM<sub>10</sub> emissions come from Kahe and Waiau generating stations on O'ahu. Emissions from Kahe and Waiau are measured using a combination of source testing and PM Continuous Emissions Monitoring System ("CEMS"). In 2020-2024, the PM<sub>10</sub> emission rates recorded from Kahe and Waiau boilers were generally lower than 2015 due to better quality fuel, containing lower carbon residue. The boilers at the two plants are the only generating units subject to a PM limit (MATS) and the company has been demonstrating compliance with the MATS PM limit. PM<sub>10</sub> emissions generated from other facilities are calculated and reported to the DOH to comply with the annual emissions fees requirement.

Air emissions from Lead (Pb)IF-EU-120a.1				
TOTAL LEAD EMISSIONS FROM HAWAIIAN ELECTRIC GENERATING FACILITIES				
Lead	2015 Base Year	2022	2023	2024
Metric tons	0.29	0.32	0.34	0.36
Short tons	0.32	0.35	0.37	0.39
The lead emissions presented above are consolidated for all the company's covered source facilities. Lead emissions trend in proportion to fuel consumption and electric generation. Lead emissions are calculated and reported to the DOH to comply with the annual emissions fees requirement.				

Air emissions from Mercury (Hg)IF-EU-120a.1				
TOTAL MERCURY EMISSIONS FROM HAWAIIAN ELECTRIC GENERATING FACILITIES				
Measure	2015 Base Year	2022	2023	2024
TRI (lbs) <sup>1</sup>	15.7	15.4	15.8	N/A
DOH CAB (lbs) <sup>2</sup>	45.04	47.07	49.92	49.00
DOH CAB (Metric tons) <sup>3</sup>	0.0204	0.0214	0.0226	0.0222

Percentage of each pollutant (NO <sub>x</sub> , SO <sub>x</sub> , PM <sub>10</sub> , Pb, Hg) in or near areas of dense populationIF-EU-120a.1	
SASB defines an "area of dense population" as "an area with a densely settled core and contiguous territory that together have a minimum population of 50,000." It considers a facility to be "near" such an area if it is within 49 km of the area of dense population. Hawaiian Electric's facilities on O'ahu, Maui, and Lāna'i meet the criteria of facilities that are within 49 km of an area with a minimum population of 50,000 persons. The assessment of population follows the list of urbanized areas based on U.S. Census results from 2020, available in Federal Register, Vol. 87, No. 249.	
The data in the table below represents the percentage of pollutants generated from Hawaiian Electric facilities on O'ahu, Maui County and Hawai'i Island that were released in or near densely populated areas.	
Hawaiian Electric operates in compliance with the requirements of multiple federal and state environmental regulations, including numerous rules under the Clean Air Act.	

PERCENTAGE OF POLLUTANTS IN OR NEAR DENSE POPULATION				
Pollutant	2015 Base Year	2022	2023	2024
NO <sub>x</sub>	93	89	91	90
SO <sub>2</sub>	83	83	87	88
PM <sub>10</sub>	91	87	90	86
Pb (Lead)	87	87	90	80
Hg (Mercury)	87	86	89	86

1 As reported to the EPA in the Toxics Release Inventory (TRI) report, and only includes facilities that exceed the TRI reporting threshold. Since 2014, only Kahe triggered the reporting threshold. 2024 data is not yet available.

2 As reported in the annual emission fees report to the DOH Clean Air Branch (CAB) for the purpose of assessing emission fees. Mercury is not used in the fees assessment, but the mercury emissions are reported to the DOH as part of the emissions fees report.

3 The mercury emissions presented above are consolidated for all of the company's covered source facilities. Mercury emissions are proportional to fuel consumption and electric generation. Mercury emissions are calculated and reported to the DOH annually as required to meet the emissions reporting requirement.



## Water Management

Total water withdrawn from all sources				IF-EU-140a.1
HAWAIIAN ELECTRIC WATER WITHDRAWAL IN THOUSAND CUBIC METERS (M³ X 10³)				
	2015 Base Year	2022	2023	2024
Fresh Water	155,252	82,126	78,177	71,805
Brackish Water	37,529	69,832	66,287	68,468
Sea Water	1,372,688	1,261,598	1,374,430	1,257,958
Reclaimed Water <sup>1</sup>	230	326	340	357

Total water consumed				IF-EU-140a.1
HAWAIIAN ELECTRIC WATER CONSUMPTION IN THOUSAND CUBIC METERS (M³ X 10³)				
	2015 Base Year	2022	2023	2024
Brackish Water Consumption	No Data Available	155	146	140
Fresh Water Consumption	No Data Available	70.43	70.67	64.43
Sea Water Consumption	0	0	0	0
Reclaimed Water <sup>1</sup>	230	326	340	357

Percentage of (i) water withdrawn and (ii) water consumed in regions with high or extremely high baseline water stress	IF-EU-140a.1
Degree of water stress is defined using the World Resources Institute’s Aqueduct Water Risk Atlas tool, Aqueduct.	
Hawaiian Electric does not operate facilities in high or extremely high baseline water risk regions, according to Aqueduct. Thus, based on Aqueduct, the percentage of water withdrawn and water consumed in regions with high or extremely high baseline water stress is zero.	

Number of incidents of non-compliance associated with water quantity and/or quality permits, standards and regulations	IF-EU-140a.2
In 2024, there were no water related incidents of non-compliance that resulted in a formal enforcement action by the State of Hawaii Department of Health, the U.S. EPA, or other regulatory agency.	
The company operates five facilities with Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits (Kahe, Waiau, Honolulu, Kahului and Mā‘ālaea).	
The company operates five facilities with Safe Drinking Water Act, Underground Injection Control (UIC) Permits for industrial discharges (CIP, Mā‘ālaea, Keāhole, Hill and Puna).	
The company’s Compliance Task Manager (CTM) program is utilized for management and tracking compliance with permit requirements and associated associated activities.	

Description of water management risks and discussion of strategies and practices to mitigate those risks	IF-EU-140a.3
Hawaiian Electric uses mainly non-potable water sources for generation operations and complies with regulations to manage water withdrawals and discharges through applicable permits, such as the National Pollutant Discharge Elimination System (NPDES) and Underground Injection Controls (UIC).	
In general, approximately 95% of the water used came from non-potable sources such as the ocean and brackish water wells. At Kahe Power Plant and Campbell Industrial Park Generating Station in West O‘ahu, reclaimed water from sewage treatment plants was used. The use of these non-potable water sources offsets the demand for higher-quality water and reduces water supply risk.	
Over 99% of the water used at our facilities (in once through cooling systems) is later returned to groundwater or surface water. The less than 1% of the water consumed during power generation is primarily used in air emissions control systems and is not from fresh water or sea water sources.	
One way we continue to mitigate water management risk while also replacing fossil fuel generation is to seek renewable energy projects, (e.g., solar-plus-storage and stand-alone storage), that do not need water resources to operate.	

## Coal Ash Management

Amount of coal combustion residuals (CCR) generated, percentage recycled	IF-EU-150a.1
Hawaiian Electric does not operate any coal-fired power plants and therefore we do not generate any hazardous coal ash.	

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<sup>1</sup> Reclaimed water is used for NO<sub>x</sub> emissions control and make-up water for the CIP and Kahe generating units. Reclaimed water used for emissions control is lost through evaporation and the majority of the reclaimed water withdrawn is returned to the ocean or groundwater.



Energy Affordability

Average electric rate for residential, (i) commercial and (ii) industrial customers					IF-EU-240a.1
2024 AVERAGE RATES IN CENTS / PER KWH FOR RESIDENTIAL, COMMERCIAL AND INDUSTRIAL CUSTOMERS					
Customer	O’ahu	Hawai’i Island	Maui	Moloka’i	Lāna’i
Residential	42.87	48.31	43.59	50.60	50.39
Commercial					
"Small Power Use" Business	42.68	52.79	48.05	59.47	54.46
"Medium Power Use" Business	36.02	43.83	41.16	50.14	52.19
Industrial	33.75	39.73	38.13	39.54	48.48

Typical monthly electric bill for residential customers for the first 500 kWh of electricity delivered / month				IF-EU-240a.2
2022, 2023, AND 2024 SCHEDULE R, 500 kWh				
Avg. 500 kWh	2022	2023	2024	
O’ahu	\$197.73	\$209.23	\$210.61	
Hawai’i Island	\$234.93	\$222.36	\$235.44	
Maui	\$211.37	\$210.75	\$208.38	
Moloka’i	\$255.99	\$246.86	\$246.61	
Lāna’i	\$271.11	\$255.10	\$252.29	

Typical monthly electric bill for residential customers for the first 1000 kWh of electricity delivered / month				IF-EU-240a.2
2022, 2023, AND 2024 SCHEDULE R, 1000 kWh				
Avg. 1000 kWh	2022	2023	2024	
O’ahu	\$386.81	\$409.06	\$410.67	
Hawai’i Island	\$467.20	\$441.95	\$467.97	
Maui	\$417.93	\$416.43	\$411.19	
Moloka’i	\$508.75	\$490.33	\$489.50	
Lāna’i	\$537.50	\$505.22	\$499.10	

Number of residential customer electric disconnections for non-payment and percentage reconnected within 30 days								IF-EU-240a.3
2024 RESIDENTIAL NON-PAY RECONNECTS								
Days To Reconnect	O’ahu	% of Total	Hawai’i Island	% of Total	Maui County	% of Total	Grand Total	% of Total by Days to Reconnect
Less Than 30 Days	8,948	89%	3,028	91%	105	76%	12,081	90%
More Than 30 Days	566	6%	146	4%	4	3%	716	5%
Not Reconnected	497	5%	165	5%	29	21%	691	5%
Grand Total	10,011	100%	3,339	100%	138	100%	13,488	100%

Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	IF-EU-240a.4
The affordability of energy is critical to Hawai’i’s sustainable, clean energy future. While Hawaiian Electric is making significant progress towards integrating renewable energy resources, Hawai’i generates a significant portion of its electricity from petroleum, which must be imported, making it vulnerable to fluctuations in global oil prices. In addition, each island in Hawaiian Electric’s service territory has an independent electric grid, meaning that there is no neighboring utility to draw power from in case there is a problem on the grid. This necessitates building additional infrastructure, generation capacity, electricity distribution routes, and backup capabilities, which results in higher costs than are typically incurred by electric utilities in other jurisdictions. We’re committed to providing affordable electricity for all of our customers and to assist customers in obtaining available financial assistance resources to help reduce their energy burden. As one of our initiatives, we’ve continued updating a list of financial assistance resources provided by nonprofit organizations and government agencies, which can be found on our website under Payment Arrangement Options. These programs offer funding for customers in need in an effort to reduce their energy burden. This list is a living document, which was created and continuously edited in collaboration with administrating groups. We’ve also conducted financial assistance outreach campaigns including a financial assistance list email to targeted customers in need and a Hawaii Home Energy Assistance Program (H-HEAP) campaign to non-H-HEAP customers during the program’s Energy Credit application period in June, 2024.	

Workforce Health & Safety

(1) Total recordable incident rate (TRIR), (2) fatality rate and (3) near miss frequency rate (NMFR)	IF-EU-320a.1		
	2022	2023	2024
Total Case Incident Rate (Excluding Covid Cases)	1.61	1.20	1.68
Total Case Incident Rate	2.85	1.40	1.68
Fatalities	0	0	0
Near miss frequency rate <sup>1</sup>	N/A	N/A	N/A

1 Hawaiian Electric does not currently track “near miss” data.





## End-Use Efficiency & Demand

Percentage of electric load served by smart grid technology	IF-EU-420a.2
In 2019, we launched Phase 1 of our grid modernization effort, which included a critical implementation piece — the installation of advanced meters at homes and businesses. Through the end of 2024, Hawaiian Electric has deployed about 450,000 advanced meters across O’ahu, Maui, and Hawai’i Island, representing 95% of all customers. Advanced meters will aid in allowing more renewables to be added to the grid and enable customers to participate in energy programs such as private rooftop solar, demand response, and time-of-use rates. Additional technical upgrades will help build a more reliable and resilient grid.	

Customer electricity savings from efficiency measures, by market	IF-EU-420a.3
By Hawai’i law, since 2009, the energy efficiency programs for the state are managed by a third-party administrator known as Hawai’i Energy and selected by the Hawai’i Public Utilities Commission. For more information about Hawai’i Energy, visit <a href="http://www.hawaiienergy.com">www.hawaiienergy.com</a> .	

## Nuclear Safety and Emergency Management

Hawaiian Electric does not have any nuclear facilities.

## Grid Resilience

Number of incidents of non-compliance with physical or cybersecurity standards or regulations	IF-EU-550a.1
To date, there have been no material incidents, violations, or fines due to non-compliance with physical or cybersecurity standards or regulations.	

System Average Interruption Duration Index (SAIDI)					IF-EU-550a.2
SAIDI — GENERATION, TRANSMISSION, AND DISTRIBUTION INTERRUPTIONS (MINUTES)					
Operating Area	Normalized/Unnormalized	2022 <sup>1</sup>	2023 <sup>1</sup>	2024 <sup>1</sup>	
O’ahu	Normalized	99.65	132.38	181.49	
	Unnormalized	132.75	190.55	309.23	
Hawai’i Island	Normalized	193.60	209.55	364.52	
	Unnormalized	299.29	245.90	539.75	
Maui County	Normalized	134.85	213.44	287.28	
	Unnormalized	490.26	2,507.53	387.48	

System Average Interruption Frequency Index (SAIFI)					IF-EU-550a.2
SAIFI — GENERATION, TRANSMISSION, AND DISTRIBUTION INTERRUPTIONS					
Operating Area	Normalized/Unnormalized	2022 <sup>1</sup>	2023 <sup>1</sup>	2024 <sup>1</sup>	
O’ahu	Normalized	0.900	1.175	1.812	
	Unnormalized	1.003	1.451	2.696	
Hawai’i Island	Normalized	3.197	2.412	3.839	
	Unnormalized	3.580	2.614	4.413	
Maui County	Normalized	1.293	1.885	2.228	
	Unnormalized	2.796	2.564	2.611	

Customer Average Interruption Duration Index (CAIDI)					IF-EU-550a.2
CAIDI — GENERATION, TRANSMISSION, AND DISTRIBUTION INTERRUPTIONS (MINUTES)					
Operating Area	Normalized/Unnormalized	2022 <sup>1</sup>	2023 <sup>1</sup>	2024 <sup>1</sup>	
O’ahu	Normalized	110.67	112.67	100.14	
	Unnormalized	132.41	131.32	114.71	
Hawai’i Island	Normalized	60.55	86.86	94.95	
	Unnormalized	83.59	94.08	122.30	
Maui County	Normalized	104.32	113.21	128.92	
	Unnormalized	175.36	978.10	148.43	

<sup>1</sup> For the period prior to and including March 31, 2021, reliability indices were calculated using the Institute of Electrical and Electronics Engineers (IEEE) Standard 1366™-2022 methodology. For the period April 1, 2021, and forward, reliability indices are calculated using an adjusted\* IEEE 1366 methodology.

For service reliability indices, current outage event data is used to calculate the indices. Outage event data for previously reported periods may change as new information becomes available.

\*As approved in [Docket No. 2019-0110](#), [Decision and Order No. 37600](#), issued on February 2, 2021.

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Discuss notable service interruptions such as those that affected a significant number of customers or disruptions of extended duration	IF-EU-550a.2
Below is a summary of major event days (MEDs) <sup>1</sup> and events that significantly impacted normalized System Average Interruption Duration Index (SAIDI) and/or System Average Interruption Frequency Index (SAIFI) in 2024 for each of O’ahu, Hawai’i Island and Maui County. Contributions from MEDs are excluded from normalized results.	
The following were determined to be MEDs on O’ahu in 2024:	
<div><div></div><div><div>1. January 8: Various unknown-caused and vegetation-related interruptions during rain; manual load shed due to insufficient generation.</div><div>2. January 16: Various weather-related interruptions.</div><div>3. January 19: Overgrown vegetation around sub-transmission conductors.</div><div>4. April 14: Sub-transmission conductors fell during rain.</div><div>5. May 18: Tree fell on sub-transmission conductors while circuits were in an alternate configuration during rain.</div><div>6. June 17: Cable fault in the Downtown and Chinatown areas.</div><div>7. August 25: Various equipment-related and unknown-caused interruptions during high winds.</div><div>8. October 17: Flashovers in multiple distribution equipment.</div></div></div>	
Events that significantly impacted normalized 2024 SAIDI and/or SAIFI results for O’ahu:	
<div><div></div><div><div>1. January 29: Unknown cause affected multiple sub-transmission lines while in an alternate configuration. Sustained interruption to 6,496 customers for up to six hours and 20 minutes. Contributed 0.021 interruptions to the annual SAIFI.</div><div>2. March 7: Motor vehicle accident caused a pole to break. Sustained interruption to 3,120 customers for up to six hours and 33 minutes. Contributed 2.46 minutes to the annual SAIDI.</div><div>3. June 19: Forced interruption due to cable fault while circuits were in an alternate configuration. Sustained interruption to 2,815 customers for up to nine hours and one minute. Contributed 4.21 minutes to the annual SAIDI.</div><div>4. July 12: Cable fault and faulty equipment operation. Sustained interruption to 1,596 customers for up to 13 hours and one minute. Contributed 3.34 minutes to the annual SAIDI.</div><div>5. July 24: Unknown cause affected multiple sub-transmission lines while in an alternate configuration. Sustained interruption to 4,827 customers for up to 59 minutes. Contributed 0.016 interruptions to the annual SAIFI.</div><div>6. July 30: Unknown cause affected a sub-transmission line. Sustained interruption to 9,673 customers for up to one hour and 26 minutes. Contributed 0.031 interruptions to the annual SAIFI.</div></div></div>	
The following were determined to be MEDs on Hawai’i Island in 2024:	
<div><div></div><div><div>1. August 23: Various weather-related interruptions during Tropical Storm Hone.</div><div>2. August 24: Various weather and vegetation-related interruptions during Tropical Storm Hone.</div><div>3. August 25: Various outages affecting multiple transmission lines during Tropical Storm Hone.</div></div></div>	
Events that significantly impacted normalized 2024 SAIDI and/or SAIFI results for Hawai’i Island:	
<div><div></div><div><div>1. January 29: Auto underfrequency load shed due to loss of generation. Sustained interruption to 20,281 customers for up to 28 minutes. Contributed 0.226 interruptions to the annual SAIFI.</div><div>2. January 30: Auto underfrequency and manual load shed due to loss of generation and generation shortfall. Sustained interruption to 25,438 customers for up to one hour and nine minutes. Contributed 15.59 minutes to the annual SAIDI and 0.283 interruptions to the annual SAIFI.</div><div>3. April 14: Manual load shed due to generation shortfall. Sustained interruption to 21,859 customers for up to 34 minutes. Contributed 0.243 interruptions to the annual SAIFI.</div><div>4. September 20: Motor vehicle accident caused a sub-transmission pole to break. Sustained interruption to 2,030 customers for up to nine hours and 50 minutes. Contributed 13.29 minutes to the annual SAIDI.</div><div>5. December 11: Transmission equipment failed during high winds. Sustained interruption to 2,889 customers for up to 17 hours and 45 minutes. Contributed 15.28 minutes to the annual SAIDI.</div></div></div>	

<sup>1</sup> For the period prior to and including March 31, 2021, reliability indices were determined using the Institute of Electrical and Electronics Engineers (IEEE) Standard 1366™-2022 methodology. For the period April 1, 2021, and forward, reliability indices are determined using an adjusted\* IEEE 1366 methodology. Contributions from MEDs are excluded from normalized results.

\*As approved in [Docket No. 2019-0110](#), [Decision and Order No. 37600](#), issued on February 2, 2021.

The following were determined to be MEDs in Maui County in 2024:

1. January 16: Various vegetation and weather-related interruptions (Maui).

2. February 9: Underfrequency load shed when a generator tripped offline (Lāna‘i).

3. March 7: Tree fell onto and downed conductors (Maui).

4. May 8: Overgrown vegetation contacted conductors within a gulch (Maui).

5. May 16: Deteriorated distribution equipment failed (Maui).

6. August 25: Various vegetation, public, and weather-related interruptions during high winds (Maui).

7. September 15: Deteriorated distribution equipment failed (Moloka‘i).

Events that significantly impacted normalized 2024 SAIDI and/or SAIFI results for Maui County:

1. March 12: Auto underfrequency load shed due to loss of generation on Maui. Sustained interruption to 6,240 customers for up to 47 minutes. Contributed 0.087 interruptions to the annual SAIFI.

2. March 15: Unknown cause affected a transmission line on Maui. Sustained interruption to 6,724 customers for up to three hours and 47 minutes. Contributed 13.64 minutes to the annual SAIDI and 0.094 interruptions to the annual SAIFI.

3. July 28: Unknown cause affected a distribution circuit on Maui. Sustained interruption to 1,259 customers for up to 15 hours and nine minutes. Contributed 8.83 minutes to the annual SAIDI.

4. August 7: Unknown cause affected a distribution circuit on Maui. Sustained interruption to 2,839 customers for up to 23 hours and 39 minutes. Contributed 7.72 minutes to the annual SAIDI.

5. September 10: Switching error affected a transmission line on Maui. Sustained interruption to 4,120 customers for up to 40 minutes. Contributed 0.057 interruptions to the annual SAIFI.

For the Hawaiian Electric Companies, the most recent main causes of interruptions are:

- Cable faults: Failure of underground cable system equipment

• Vegetation: Includes downed trees and tree branches in power lines, and overgrown vegetation, some of which falls outside of the Companies’ scope of clearance

• Unknown: Definitive cause cannot be determined after investigation

# EEI ESG Metrics

## Hawaiian Electric

The Hawaiian Electric data in this section is reported in alignment with the Edison Electric Institute (EEI) Environmental, Social, Governance / Sustainability (ESG) reporting template. The charts in this section have been modified as appropriate to reflect the specific activities of Hawaiian Electric.

### Portfolio

Total electricity generated for the data year (MWh) <sup>1</sup>						
TOTAL SYSTEM GENERATION — BY SOURCE						
	2010 BASE YEAR	2020	2021	2022	2023	2024
CONVENTIONAL						
Coal <sup>2</sup>	1,520,166	1,183,187	1,105,070	665,589	0	0
Natural Gas	0	0	0	0	0	0
Nuclear	0	0	0	0	0	0
Petroleum <sup>3</sup>	7,735,339	5,867,139	5,793,779	6,350,933	6,797,126	6,616,553
Total Conventional	9,255,505	7,050,326	6,898,849	7,016,522	6,797,126	6,616,553
RENEWABLE						
Biomass/Biogas						
Biodiesel	3,160	74,507	71,780	63,114	82,844	58,798
Waste-to-Energy (Biomass)	358,852	369,239	366,365	370,668	327,545	339,257
Geothermal <sup>3</sup>	201,587	9,640	183,391	208,346	192,587	258,940
Hydroelectric	35,890	28,594	43,050	27,409	26,557	34,714
Solar						
Utility-Scale	1,787	398,376	390,353	450,769	528,449	645,704
Customer-Sited	48,508	1,325,750	1,418,036	1,522,444	1,585,545	1,691,196
Wind	261,206	594,569	701,124	625,916	648,502	666,170
Other	0	0	0	0	0	0
Total Renewable	910,990	2,800,675	3,174,100	3,268,667	3,392,029	3,694,780
Total MWh Generated	10,166,495	9,851,001	10,072,948	10,285,189	10,189,155	10,311,332

1 For total system generation reported by source, customer-sited generation is included as part of SASB and EEI ESG metrics in this report but was not included in HEI's Annual Report on Form 10-K for year ended 2024. Minor methodology differences regarding renewable components of certain generators and timing of underlying reporting account for additional differences between the SASB and EEI ESG reported metrics and the Form 10-K.

2 2023 amounts reflect the closure of Hawai'i's last remaining coal plant (IPP-owned) in late 2022.

3 2020 generation amounts reflect the fact that the Puna Geothermal Venture (PGV) plant was out of service from May 2018 until late 2020. The loss of firm power from PGV generation was offset by firm generation from petroleum. PGV returned to service with firm capacity of 13 MW in the first quarter of 2021 and has continued to ramp up production since that time.

Investing in the future: capital expenditures, energy efficiency (EE), and smart meters					
	2020	2021	2022	2023	2024
Total Annual Capital Expenditures <sup>1</sup> (nominal dollars)	\$335M	\$302M	\$357M	\$434M	\$347M
Incremental Annual Electricity Savings from EE Measures (MWh)	Hawai'i Energy, a third-party adminstrator, is responsible for the state's energy efficiency programs <sup>2</sup>				
Incremental Annual Investment in Electric EE Programs (nominal dollars)					
Percent of Total Electric Customers with Smart Meters (at end of year)	1.5	10.3	41.0	77.4	94.8

Retail electric customer count (at end of year)					
	2020	2021	2022	2023	2024
Residential	412,484	414,713	413,744	416,072	417,253
Commercial	54,861	55,201	55,228	54,831	54,571
Industrial	694	698	696	702	712
Total	468,039	470,612	469,668	471,605	472,536

1 Capital expenditures shown on an accrual basis and are net of contributions in aid of construction.

2 Source: [Hawai'i Energy](#).





Emissions

See [pages 6-7](#) for detailed information on our GHG emissions inventory.

GHG emissions: carbon dioxide (CO <sub>2</sub> ) and carbon dioxide equivalent (CO <sub>2</sub> e)				
	2015 BASE YEAR	2022	2023	2024 PRELIMINARY
Owned Generation + Purchased Power + Customer-Sited Solar + Non-Generation <sup>1</sup>				
Carbon Dioxide (CO <sub>2</sub> )				
CO <sub>2</sub> Emissions (MT)	7,070,026	5,977,290	5,674,122	5,556,971
CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.702	0.581	0.557	0.539
Carbon Dioxide Equivalent (CO <sub>2</sub> e)				
CO <sub>2</sub> e Emissions (MT)	7,104,859	6,025,819	5,710,962	5,592,104
CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.705	0.586	0.560	0.542
Carbon Dioxide Equivalent (CO <sub>2</sub> e) Intensity by Island				
Hawai'i Island CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.439	0.416	0.373	0.349
O'ahu CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.781	0.630	0.605	0.590
Maui County CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.510	0.500	0.497	0.466
Owned Generation + Purchased Power <sup>2</sup>				
Carbon Dioxide (CO <sub>2</sub> )				
CO <sub>2</sub> Emissions (MT)	7,070,026	5,977,290	5,674,122	5,556,971
CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.750	0.682	0.660	0.645
Carbon Dioxide Equivalent (CO <sub>2</sub> e)				
CO <sub>2</sub> e Emissions (MT)	7,098,840	6,012,757	5,704,568	5,587,008
CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.753	0.686	0.663	0.648
Owned Generation <sup>3</sup>				
Carbon Dioxide (CO <sub>2</sub> )				
CO <sub>2</sub> Emissions (MT)	4,072,497	4,078,378	4,392,268	4,337,150
CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.795	0.814	0.822	0.826
Carbon Dioxide Equivalent (CO <sub>2</sub> e)				
CO <sub>2</sub> e Emissions (MT)	4,086,070	4,092,365	4,407,204	4,351,192
CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.798	0.817	0.825	0.829
Purchased Power <sup>4</sup>				
Carbon Dioxide (CO <sub>2</sub> )				
CO <sub>2</sub> Emissions (MT)	2,997,529	1,898,912	1,281,854	1,219,821
CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.696	0.506	0.393	0.362
Carbon Dioxide Equivalent (CO <sub>2</sub> e)				
CO <sub>2</sub> e Emissions (MT)	3,012,770	1,920,392	1,297,365	1,235,816
CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.699	0.512	0.398	0.367

1 Equal to Scope 1 Owned Generation + Scope 3 Purchased Power + non-generation (T&D SF<sub>6</sub> emissions). No CO<sub>2</sub> emissions from customer-sited solar. Intensities in MT/Net MWh are calculated by dividing emissions by net generation from owned generation, purchased power and customer-sited solar.

2 Equal to Scope 1 Owned Generation + Scope 3 Purchased Power. Intensities in MT/Net MWh are calculated by dividing emissions by net generation from owned generation and purchased power.

3 Equal to Scope 1 Owned Generation. Intensities in MT/Net MWh are calculated by dividing emissions by net generation from owned generation. Increase in owned generation emissions since 2015 baseline reflects increased output in company-owned fossil fuel generation to offset decreases in IPP-owned fuel combustion generation (see [page 15](#)).

4 Equal to Scope 3 Purchased Power. Intensities in MT/Net MWh are calculated by dividing emissions by net generation from purchased power.

GHG emissions: carbon dioxide (CO <sub>2</sub> ) and carbon dioxide equivalent (CO <sub>2</sub> e)				
	2015 BASE YEAR	2022	2023	2024
Non-Generation CO <sub>2</sub> e Emissions				
Fugitive CO <sub>2</sub> e emissions of sulfur hexafluoride (MT)	6,019	13,062	6,393	5,096
Fugitive CO <sub>2</sub> e emissions from natural gas distribution (MT)	0	0	0	0

Nitrogen oxide (NO <sub>x</sub> ), sulfur dioxide (SO <sub>2</sub> ), mercury (Hg) <sup>1</sup>				
	2015 BASE YEAR	2022	2023	2024
Generation basis for calculation				
Fossil				
Nitrogen Oxide (NO <sub>x</sub> )				
Total NO <sub>x</sub> Emissions (MT)	13,780	9,833	10,614	10,640
Total NO <sub>x</sub> Emissions Intensity (MT/Net MWh)	2.73E-03	1.99E-03	2.01E-03	2.05E-03
Sulfur Dioxide (SO <sub>2</sub> )				
Total SO <sub>2</sub> Emissions (MT)	12,149	12,586	12,576	11,484
Total SO <sub>2</sub> Emissions Intensity (MT/Net MWh)	2.41E-03	2.54E-03	2.38E-03	2.21E-0.3
Mercury (Hg)				
Total Hg Emissions (kg)	20	21	23	22
Total Hg Emissions Intensity (kg/Net MWh)	4.05E-06	4.23E-06	4.29E-06	4.21E-06

1 The air quality data does not include emissions from IPPs.



Resources

Human resources			
	2022	2023	2024
Total Number of Employees <sup>1</sup>	2,605	2,654	2,533
Total Number on Board of Directors/Trustees <sup>2</sup>	10	7	7
Total of Women on Board of Directors/Trustees <sup>2</sup>	4	3	3
Total of Racially Diverse Members of Board of Directors/Trustees <sup>2</sup>	4	3	3
Women Executives <sup>3</sup>	37.50%	28.57%	28.57%
Women Leaders <sup>4</sup>	28.90%	29.21%	29.21%
Women All Workforce <sup>5</sup>	28.80%	29.24%	29.41%
Racially Diverse Executives <sup>3</sup>	56.30%	57.14%	57.14%
Racially Diverse Leaders <sup>4</sup>	85.00%	83.66%	83.66%
Racially Diverse All Workforce <sup>5</sup>	89.90%	89.75%	90.01%
Employee Safety Metrics			
Recordable Incident Rate	2.85	1.40	1.68
Severity Rate <sup>6</sup>	51.42	16.26	20.03
Days Away, Restricted, and Transfer (DART) Rate	2.65	0.97	1.44
Work-related Fatalities	0	0	0

Introduction

Sustainability Data

- GHG Emissions Inventory
- SASB Index

EEI ESG Metrics

Appendix



1 Total number of utility employees as of December 31.

2 Refers to board members of HEI, the parent company of Hawaiian Electric.

3 Executives includes EEO-1 category 1.1 - Executive/Sr. Level Officials.

4 Leaders includes EEO-1 category 1.2 - First/Mid-Level Officials.

5 All Workforce includes EEO-1 categories 1.1 - Executive/Sr. Level Officials, 1.2 - First/Mid-Level Officials, 2 - Professionals, 3 - Technicians, 4 - Sales Workers, 5 - Administrative Support Workers, 6 - Craft Workers, 7 - Operatives, 8 - Laborers and Helpers, 9 - Service Workers.

6 The company discloses severity rate data in alignment with EEI definitions. In prior reports this EEI template category was labeled as lost-time case rate. The label has been corrected to refer to severity rate.

Fresh water resources <sup>1</sup>				
	2015 BASE YEAR	2022	2023	2024
Water Withdrawals - Consumptive (Millions of Gallons)	No Data Available	19	19	17
Water Withdrawals - Non-Consumptive (Millions of Gallons)	No Data Available	21,677	20,634	18,952
Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	No Data Available	0	0	0
Water Withdrawals - Non-Consumptive (Millions of Gallons/Net MWh)	No Data Available	4.33E-03	3.86E-03	3.61E-03

Waste products				
	2015 BASE YEAR	2022	2023	2024
Amount of Hazardous Waste Manifested for Disposal (MT) <sup>2</sup>	9	2	6	2
Percent of Coal Combustion Products Beneficially Used <sup>3</sup>	0%	0%	0%	0%

Emissions Reduction Goals

Utility Emissions Reduction Goals (Climate Change Action Plan)			
	BASELINE YEAR	TARGET YEAR	REDUCTION GOAL DESCRIPTION (SHORT)
Electric generation	2005	2045	<p>Net zero GHG emissions from power generation. Emissions covered by this goal include stack emissions from generation owned by Hawaiian Electric (Scope 1) and independent power producers who sell electricity to the utility (Scope 3).</p> <p>See <a href="#">page 7</a> for more information on our GHG emissions reduction goal, including the status of our interim goal of 70% emissions reduction on the path to net zero.</p>

1 Fresh water resource uses are for company-owned thermal and hydroelectric generation.

2 2023 figure revised after recalculation.

3 Hawaiian Electric does not operate any coal-fired power plants and therefore does not generate any coal combustion products.

# Appendix

## GHG Inventory Methodology

Scope	Categories	
1	Stationary Combustion	For all power plant fuel combustion, associated emissions were estimated using factors including fuel carbon content, measured/default heating values, and default emissions factors.
1	Mobile Combustion	Fuel consumption and vehicle mileage data were used to estimate CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O emissions.
3	Purchased Electricity for Resale	Supplier-specific approach using site-specific data and Environmental Protection Agency (EPA) Facility Level Information on GreenHouse gases Tool (FLIGHT) database. Assumes all purchased electricity was re-sold.
3	Stationary Fuel	Supplier-specific method; includes upstream, midstream & transportation emissions for all fuel types with exception of propane.
3	Mobile Fuel	Supplier-specific method; includes upstream & midstream emissions for biodiesel and clear diesel.

2024 CO<sub>2</sub>e figures have been primarily calculated using global warming potentials (GWPs) from the UN IPCC 5th Assessment Report (AR5), consistent with environmental regulatory reporting. Figures for earlier years were primarily calculated using GWPs from AR4, consistent with environmental regulatory reporting guidelines at that time.

Sources of emissions factors used in analysis include:

- UN IPCC AR5 and AR4
  - EPA Center for Corporate Climate Leadership
  - EPA eGRID
  - EPA Inventory of US Greenhouse Gas Emissions
- EPA US Environmentally-Extended Input-Output Models
  - The Climate Registry
  - Analysis from Par Refinery, Pacific Biodiesel, and ecoinvent

## Forward-Looking Statements

Certain statements contained in this report are forward-looking statements, including statements regarding our sustainability targets, goals, commitments and programs and other business plans, initiatives and objectives, and other statements that are not purely historical. These statements are typically accompanied by words such as “aim,” “anticipate,” “hope,” “believe,” “could,” “expect,” “estimate,” “plan,” “will,” “would,” or similar expressions. All such statements are intended to be protected by the safe harbor for forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended.

Forward-looking statements are based on current expectations and projections about future events and are subject to risks, uncertainties and the accuracy of assumptions concerning HEI and its subsidiaries, the performance of the industries in which they do business and economic, political and market factors, among other things. These forward-looking statements are not guarantees of future performance. Our actual future results, including the achievement of our targets, goals or commitments, could differ materially from those reflected or implied in the forward-looking statements, which involve risks, uncertainties and other important factors. Such risks, uncertainties and factors include the risk factors discussed in our most recent Annual Report on Form 10-K and subsequent quarterly reports on Form 10-Q and other reports filed with the SEC.

With respect to our sustainability targets, goals, and commitments outlined in this report or elsewhere, certain challenges, assumptions, risks, uncertainties and factors are identified in this report. We urge you to carefully consider all of the risks, uncertainties and factors discussed in such reports in evaluating the forward-looking statements in this report. We cannot assure you that the results reflected or implied by any forward-looking statement will be realized or, even if substantially realized, that those results will have the forecasted or expected consequences and effects. The forward-looking statements in this report are made as of the date of this report, unless otherwise indicated, and we undertake no obligation to update these forward-looking statements to reflect subsequent events or circumstances.





