2025

Solar and Storage in Hawaii

OPPORTUNITIES IN THE PURSUIT OF 100% RENEWABLE ENERGY

HAWAII RESOURCE STRATEGY GROUP

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Preface

As the first state to establish a 100 percent renewable portfolio standard ("RPS") for electricity, Hawaii has a unique legal mandate to achieve a clean energy economy. In recent years, this transition has been driven by the widescale adaptation of solar power in Hawaii, augmented by battery storage.

After a period of slow growth following the adoption of the RPS in 2001, Hawaii's solar industry experienced a strong, fifteen-year long growth phase from 2007 to 2022, which put Hawaii, long a leader in the use of solar thermal technology for residential hot water applications, among the leading domestic markets for customer-sited solar photovoltaic (PV) installations.

In 2015, however, net metering incentives changed in Hawaii and installations of these distributed energy resources (DER) slowed. Utility-scale projects began to reach critical mass in Hawaii around that time, which sustained overall market growth trends, but soon other, more attractive markets emerged for leading utility scale developers. Installations on the mainland began to reach hundreds of megawatts in scale, attracting both investors and many of Hawaii's renewable energy industry leaders, who left the islands to ply their trades elsewhere.

Today, some industry insiders describe Hawaii's solar market as "floundering." They point to a slower-than-expected post-pandemic recovery of development activity, which is at least partially attributable to stalled utility procurement programs, relatively high interest rates, uncertainty about the long-term impact of the 2023 Lahaina wildfires on Hawaiian Electric as a counterparty, threatened federal changes to import tariff regimes and tax credit incentives, and a complicated new set of utility DER interconnection programs.

Despite these headwinds, the RPS remains law in Hawaii.

As the state strives to meet the interim milestones of the RPS—40% renewable by 2030 and 70% renewable by 2040—we caution that Hawaii's leaders cannot simply assume that all of today's renewable assets will continue to operate into perpetuity. Hawaii Resource Strategy Group's (HIRSG) research indicates that many of the commercial and utility systems currently in service will require significant investment to continue meeting operational and financial performance expectations.

In this paper, we explore the forces that got us here, current market opportunities for owners, operators and hosts of existing solar photovoltaic systems in Hawaii, and the market trends that will define the future of Hawaii's solar marketplace.

Executive Summary

Hawaii's journey towards achieving its 100% renewable portfolio standard (RPS) for electricity has been marked by significant milestones and challenges. The state's commitment to renewable energy, particularly solar photovoltaics (PV), has driven substantial growth in the industry over the past two decades.

This document examines the current state of Hawaii's PV market, highlighting relevant historical milestones, key developments, market outcomes, and future projections. It provides insights into the historical growth phases of the solar industry in Hawaii, from its origins in 2001 to a period of booming growth between 2007 and 2012, and through a maturation and expansion phase from 2012 to the present.

The analysis underscores the importance of continued investment in renewable energy infrastructure to meet the state's ambitious RPS targets and ensure the long-term performance of existing and new solar photovoltaic systems.

Road Ahead and Opportunities

HIRSG cautions against the assumption that all of today's renewable assets will continue to operate in support of the RPS goal. Research indicates that many commercial and utility systems currently in service will require material upgrades and incremental financial investments to meet evolving operational and financial performance expectations.

Although conditions for new, large-scale solar development remain challenging, DER projects continue to make financial sense in Hawaii. Further, HIRSG believes a compelling opportunity exists for owners, operators, and hosts of existing commercial and industrial (C&I) solar photovoltaic systems to invest in repowering their existing systems, and to reposition offtake and interconnection agreements such that those assets continue contributing to achieving the statewide RPS long past their original design lives.

HIRSG stands ready to help asset owners evaluate their options in this regard.

A Brief History of Solar Power in Hawaii Since RPS

Enacted in 2001, Hawaii's RPS law (Hawaii Revised Statutes sections 269-91 through 95) seeks to "transition the State away from imported fuels and toward renewable local resources that provide a secure source of affordable energy," and requires Hawaii to generate 100% of its electricity from renewable sources by 2045. (SLH2022)

Galvanized by this mandate and drawn to the attractive combination of an abundant solar resource, high grid electricity costs, and favorable tax incentives, the solar industry surged in Hawaii—creating jobs, scaling renewable power generation, and inspiring billions in statewide investment over the past quarter century. (SEIA)

Viewed retrospectively, three distinct phases of the solar market's development in Hawaii emerge:

Nascent Period (2001-2006)

The early years of Hawaii's solar industry were marked by slow growth. In 2001, only seven new solar energy systems were connected to the grid, totaling 28 kilowatts[1] of customer-sited generating capacity.

The industry grew slowly for the next several years, with incremental increases that brought the total number of systems in the state to 99 and the total generating capacity to 367 kilowatts by the end of 2005.

From this standing start, though, a leap forward: 2006 saw a doubling in both total statewide solar generating capacity and the total number of distributed solar arrays. (State of Hawaii)

This doubling trend would continue for the next six years, a period which was also important for the establishment of technical protocols and a formal approval process for grid-connected photovoltaics in the islands.

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[1] PV modules generate direct current (DC) energy, which is converted by inverters to alternating current (AC) for use on the grid. A PV system's generating capacity can be expressed in terms of the aggregated DC capacity of all its individual PV modules, as measured in Watts (Wdc), or more commonly, in kilowatts (equivalent to 1,000 Watts and written as kWdc) or megawatts (equivalent to 1 million Watts and written as MWdc). A system's generating capacity can also be expressed as the aggregated AC capacity of all its inverters in kWac or MWac, as applicable. Owing to energy losses in the conversion from photon to direct current to alternating current, and to system losses from resistance and heat, a given system's AC capacity may be as much as 80% lower than its DC capacity. Unless stated otherwise, all figures here are given in terms of AC generating capacity. Where discrepancies exist in the various data sources, we will defer to monthly data published by the U.S. Energy Information Administration.

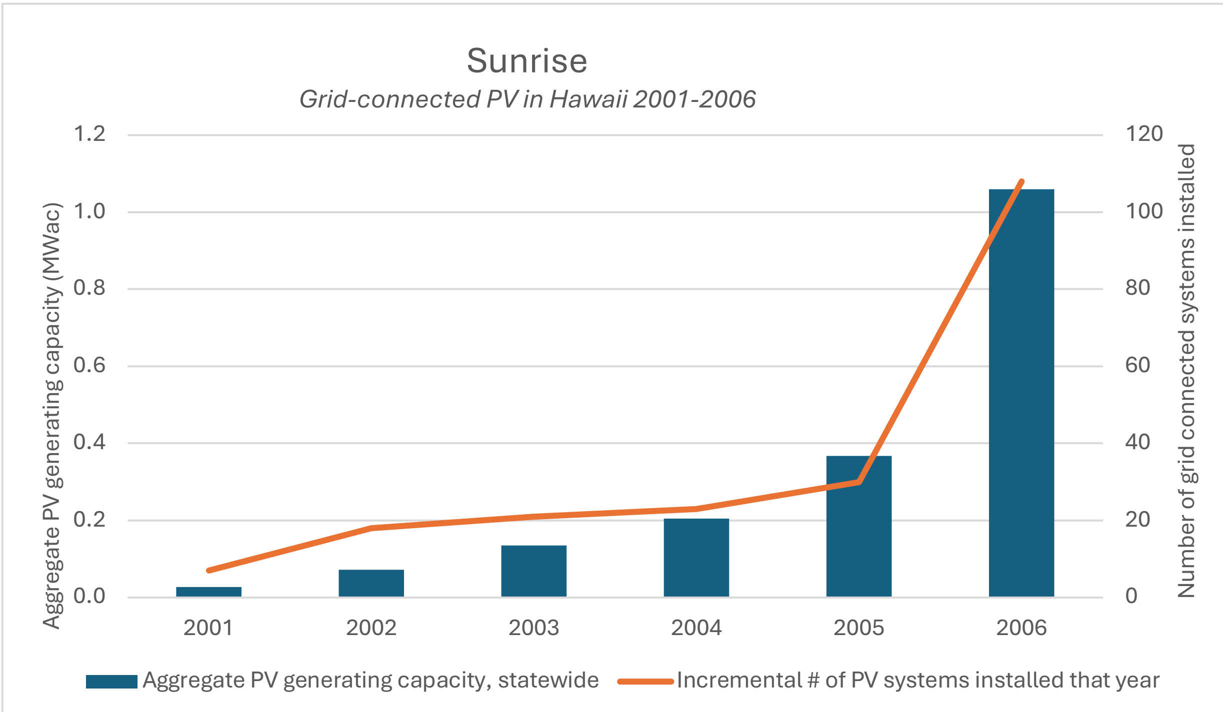

Figure 1 – The early years of solar in Hawaii. (Source: Hawaii State Energy Office, PUC Net Energy Metering status reports)

Boomtown (2007-2012)

On December 20, 2007, the Hawaii Public Utilities Commission (PUC) issued Decision and Order No. 23912 and Framework for Renewable Portfolio Standards, which required annual reporting on progress toward the RPS by the state's regulated electric utilities. (State of Hawaii Public Utilities Commission) This formalized the RPS and, in many ways, marked the beginning of a period of rapid growth and significant transformation for Hawaii's solar industry.

This phase was characterized by a surge in the number of customer-sited solar projects connected under Net Energy Metering (NEM) agreements. NEM allowed customers to offset their electricity bills by feeding excess solar energy back into the grid at retail pricing. This policy was instrumental in encouraging the adoption of solar energy among residential and commercial customers.

The number of solar power systems effectively doubled every year from 2007 to 2012, with nearly 20,000 systems installed and nearly 140 megawatts of rooftop generating capacity in place by the end of that period. (Murphy)

However, this rapid growth was not without its challenges. The clash of interests between the fledgling solar industry and the regulated utilities created a dynamic and sometimes contentious marketplace, presaging many of the battles to come over integrating ever-higher percentages of solar generating assets into the existing grid.

Despite these challenges, the boomtown era laid the foundation for the continued growth and development of Hawaii's solar industry. The lessons learned during this period helped to shape the policies and practices that would guide the industry in the years to come.

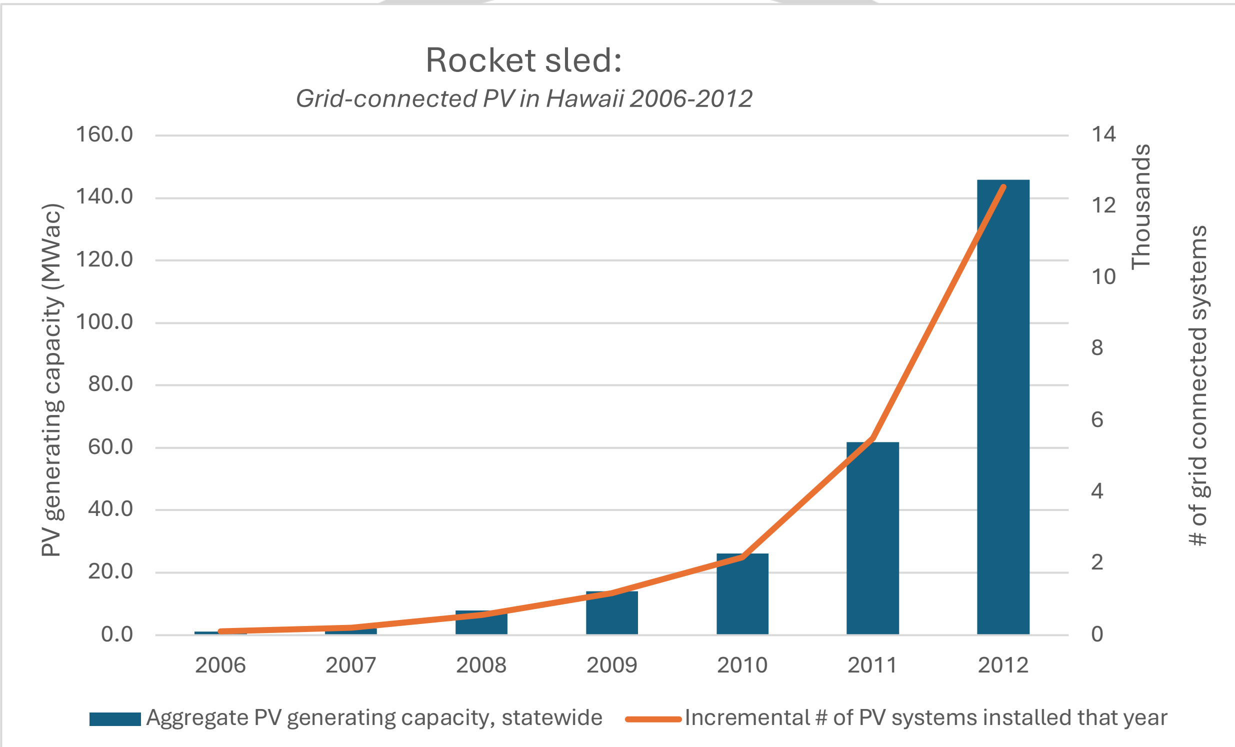

Figure 2 - PV reaches escape velocity. (Source: Hawaii State Energy Office, PUC Net Energy Metering status reports)

Maturation & Expansion Phase (2012-2022)

The maturation phase saw continued growth, albeit at a slower pace.

The end of the NEM program saw demand taper for customer-sited rooftop systems, but utility-scale facilities proliferated, and battery energy storage systems were introduced at scale.

Market shocks, including international supply chain tariffs, changing interconnection and tax incentive programs, and the COVID-19 pandemic interrupted project development cycles, triggered industry bankruptcies and altered the competitive landscape.

Despite these challenges, the installed price of solar power in Hawaii continued to decrease and the state continued to make progress towards its RPS goals. This period saw the successful commissioning of more than 25 utility scale projects (>1 MW nameplate capacity), which represented over 300 megawatts of generating capacity, coupled with nearly 400 MWh of associated battery storage capacity. Individual utility scale projects ballooned from 6 megawatts to nearly 50 megawatts in size.

Utility scale solar projects (2012-2022)	**Nameplate capacity (MW)**	**Associated battery storage capacity (MWh)**
AES Kekaha Solar, LLC Hybrid	14.0	70.0
AES Lawai Solar Hybrid	20.0	100.0
Aloha Solar Energy Fund 1 & 2	5.0 + 5.0	
BYU – Hawaii	3.1	1.9
EE Waianae Solar Project	27.6	
H Power	2.9	
Kalaeloa Renewable Energy Park	5.0	
Kalaeloa Solar Two	5.0	
Kapaa Solar	1.0	
Kapolei Solar Energy Park	1.0	
Kawailoa Solar	49.0	
Kihei Solar Farm (South Maui Renewable)	2.9	
KIUC Kapaia PV & BA Storage Project Hy (Tesla)	13.0	52.0
KRS I Anahola Solar Hybrid	12.0	
KRS II Koloa Solar	12.0	
Ku'ia Solar	2.9	
Lanai Sustainability Research	1.2	
Lanikuhana Solar LLC	14.7	
Mauka FIT One	3.5	
Mililani I Solar Farm	39.0	156.0
Pearl City Peninsula Solar Park	1.0	
Port Allen Solar	6.0	
Waihonu North Solar	5.0	
Waihonu South Solar	1.5	
Waipio Peninsula	11.0	
Waipio Solar	45.9	
West Loch Solar One	20.0	
Total	**330.2**	**379.9**

Table 1 - Utility scale solar projects >1MW in size, operational in Hawaii as of 2022.

Statewide, market participants saw an increase in annual incremental PV capacity from an average of 16 megawatts of new capacity brought into service each year during the boom years (2007-2012), to nearly 145 megawatts per year in the expansion phase (2012-2022).

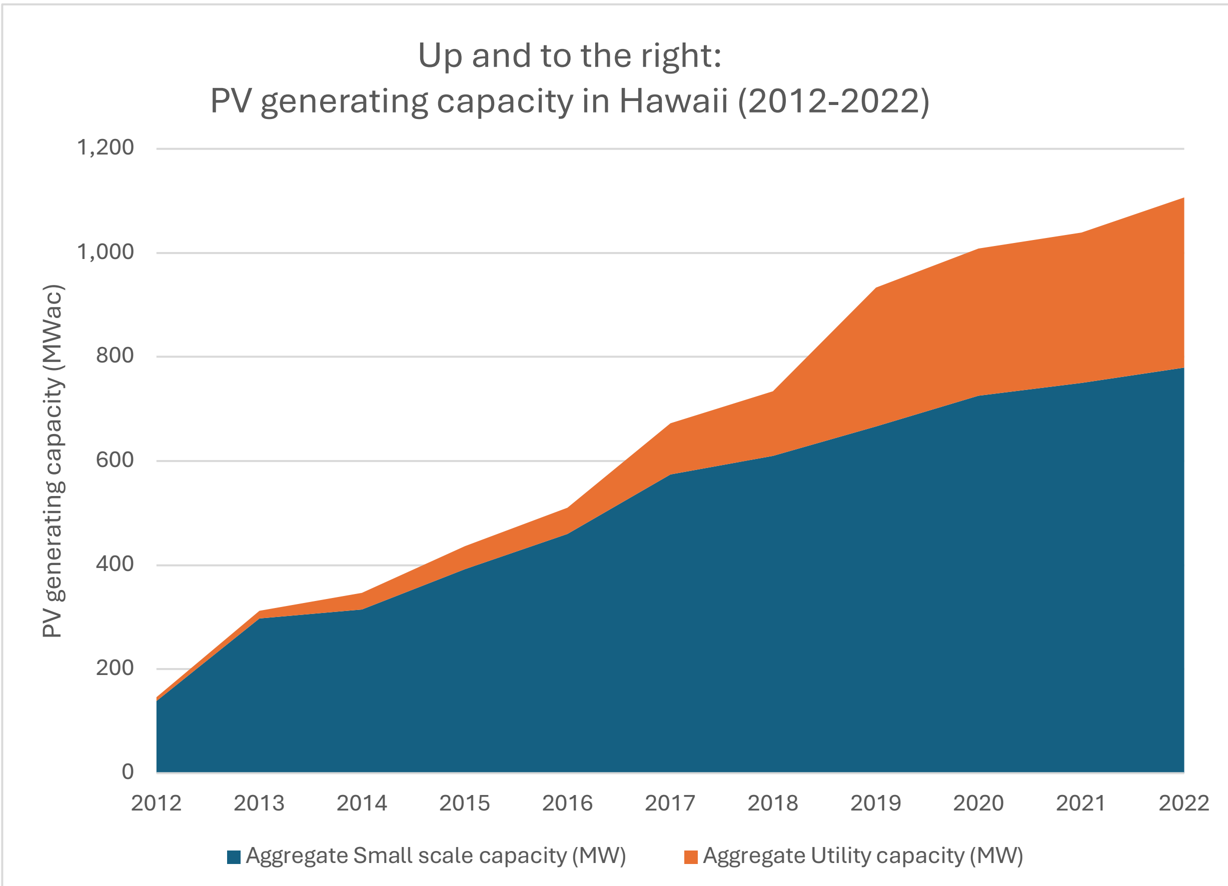

Figure 3 – Growth upon growth (U.S. Energy Information Administration)

Figure 4 (following page) illustrates the growth over time of solar (utility-scale, plus DER) as an electric power source in Hawaii. (U.S. Energy Information Administration)

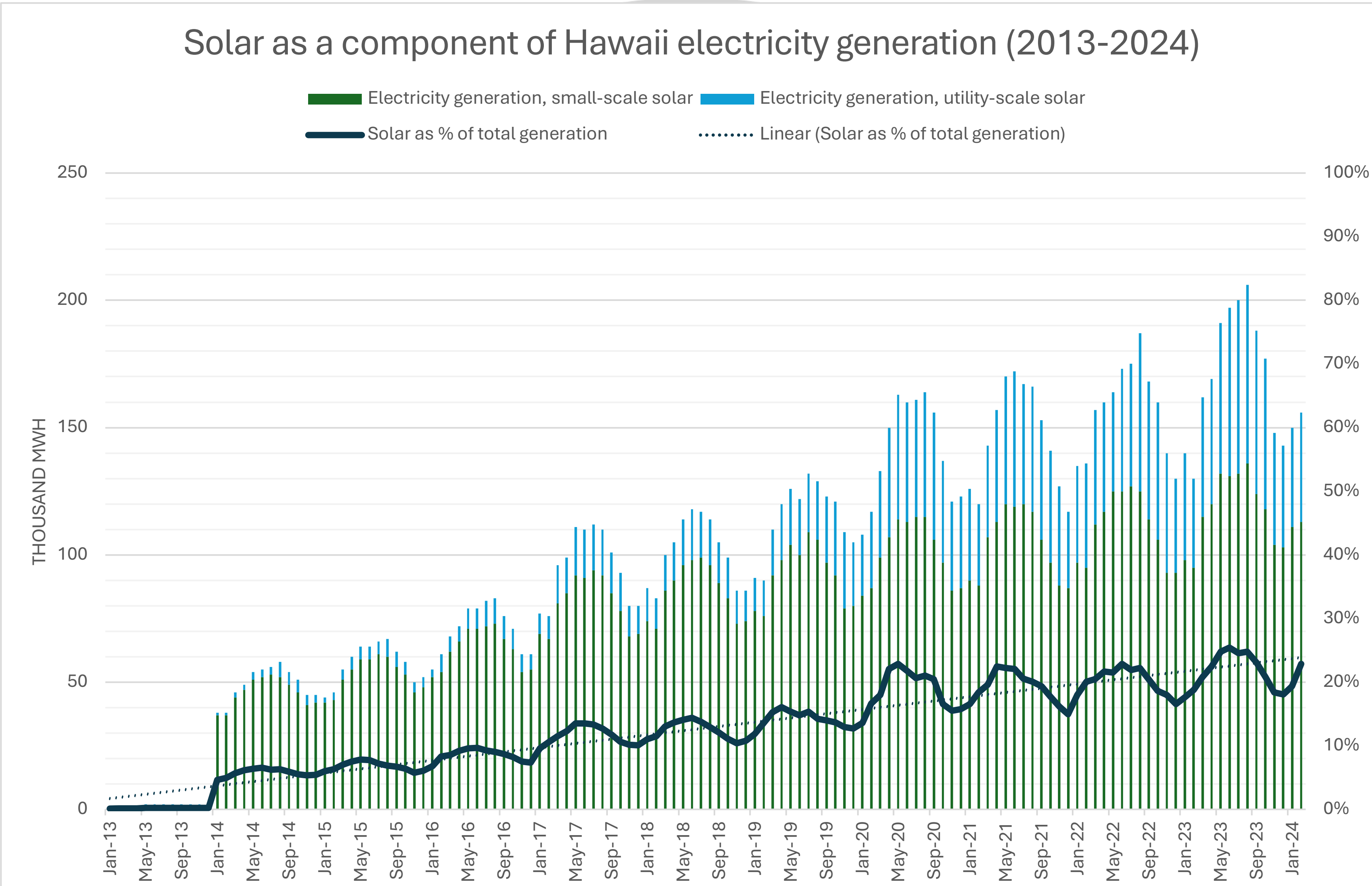

Figure 4- Solar contribution to electricity generation in Hawaii (EIA)

Table 2, below, summarizes the key market developments from the two active growth phases described above.

Boomtown (2007-2012)	Expansion (2012-2022)
Utility develops preliminary rules for interconnecting solar and industry begins following a standard process.	Utility scale achieved. Projects scale up to tens of megawatts in size.
Net energy metering (NEM) proves highly favorable to consumers and drives frothy market expansion, particularly in residential segment.	NEM interconnections become rare as utility-set limits reached. Other, less favorable rate options introduced.
Technology risk still perceived by marketplace, uncertainty exists about real-world performance over time and lifecycle costs.	Performance data begins to be statistically significant; confidence grows in the technology. Operations and maintenance cost assumptions confirmed.
PUC approves first few power purchase agreements, which establishes a public “reference” price for solar-generated electricity.	More sophisticated utility procurement mechanisms introduced, including a feed-in-tariff that is pre-approved by the PUC.
Investors (and their counsel) pioneer tax investment vehicles to make incentives liquid and fungible.	Battery technology introduced at scale to firm solar power.
Ostensibly concerned about grid stability, utility companies begin to control solar growth by setting circuit penetration limits.	Kauai Island Utility Cooperative pushes through notional penetration limits; reaches 100% renewable power at certain times of the day.
State establishes partnership with Department of Energy and National Renewable Energy Laboratory. Launches Hawaii Clean Energy Initiative.	“Safe harbor” provisions established in response to sudden introduction of import tariffs.
Peak per-kW PV costs reached.	Costs decrease as panel efficiency increases and as fragmented equipment marketplace consolidates, achieves economies of scale.

Table 2 - Key outcomes from the first two phases of growth in Hawaii's solar marketplace.

The Solar Market in Hawaii Today

Hawaii remains a small and idiosyncratic energy market. With relatively low industrial demand, island-specific transmission and distribution systems, and no current ability to "wheel" power, Hawaii's market opportunity is limited in scale and constrained by geography.

The state has the third-lowest total energy use in the nation and ranks lowest in per capita energy consumption. Petroleum products are used to generate most of Hawaii's electricity, fueling 67% of the state's total electricity generation in 2023. This continued reliance on petroleum for generating electricity contributes to Hawaii having the highest average electricity price of any state—more than triple the U.S. average. (EIA)

Hawaii is keeping faith with its landmark RPS, however. In 2023, the state achieved 35% of its electrical generation from renewable sources, a key milestone, since the RPS mandates 40% clean energy by 2030, 70% by 2040, and 100% by 2045.

The largest contributing renewable technology was distributed solar PV, with 15% of the state's needs being supplied from DER systems. Wind contributed 6% of the state's total energy needs and was the next largest component of the state's renewable energy mix. The balance of renewable energy came from a mix of utility-scale PV, hydroelectric, geothermal, biofueled powered traditional generation facilities and combustion biomass operations. (Hawaii Energy Office)

About 124 megawatts of petroleum-fired generating capacity has been retired since 2014. Hawaii utilities plan to retire more petroleum-fired generating units, including 32 megawatts of capacity at the end of 2028. (EIA)

Solar industry association market projections over the next five years predict an additional 1,055 MW of PV being installed in Hawaii. (SEIA) If this projected growth were straight-lined, the state would see 211 MW of incremental capacity added per year, representing approximately $350 million of project investment annually, or $1.75 billion over the full five-year period. Worth noting, though, these estimates represent a more than doubling of the rate of growth in Hawaii's solar generating capacity, as the 12-year average total of annual, incremental solar capacity is just 100 MW per year. (EIA) See figure 5, below.

Today, total grid-connected solar capacity in Hawaii is approximately 2 gigawatts, distributed across approximately 120,000 individual sites. Of this, utility-scale facilities make up approximately 510 MW (26%), and 1,475 MW (74%) are rooftop systems. (SEIA) (U.S. Energy Information Administration)

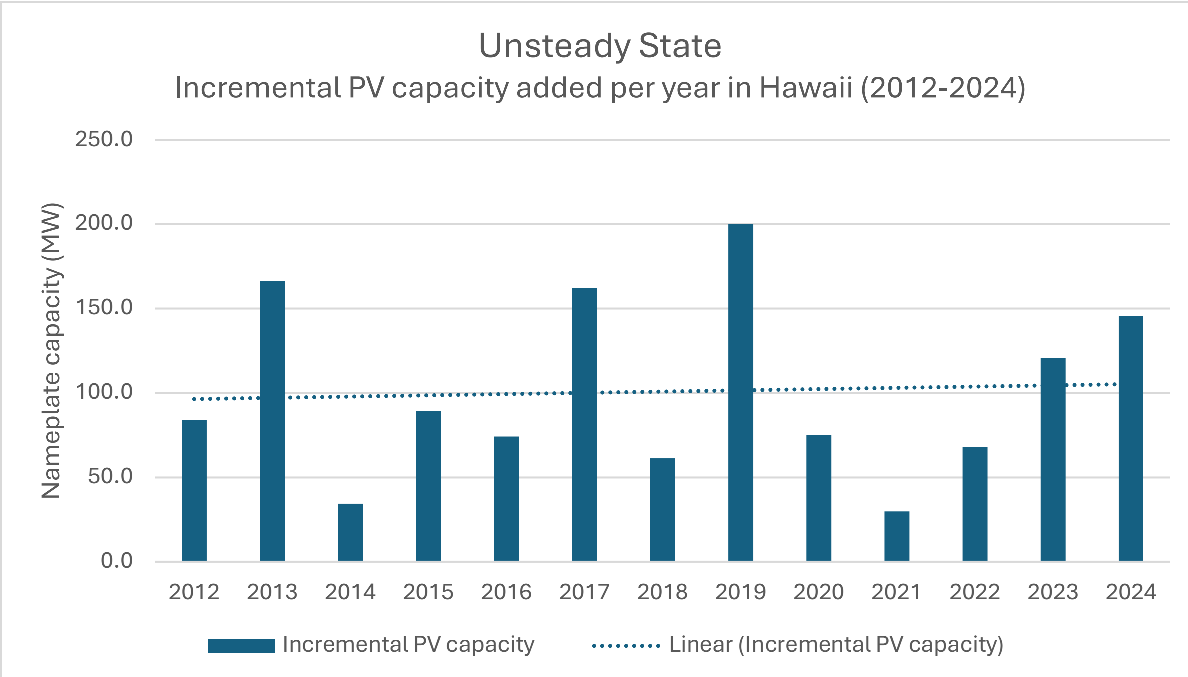

Figure 5 - Annual, incremental PV generating capacity additions in Hawaii, 2012 thru Nov 2024 (EIA)

Utility-published data reveals that, based on total number of customer-sited PV systems connected to the grid, 96% are residential projects, and just 4% are C&I projects. Viewed in terms of total generating capacity, though, the split is more even, with 56% of total rooftop PV capacity coming from commercial systems averaging 180 kW in size, and 44% of total generating capacity coming from residential systems. (Hawaiian Electric)

Some of the most significant growth in recent years has come in the utility-scale segment of the market. Battery storage, which was first deployed in Hawaii over a decade ago, has also made important inroads over the past two years. The 185 MWh Kapolei Battery Energy Storage facility began operating in late 2023, and all new utility scale facilities brought online since 2023 have an associated BESS. (SEIA) (Hawaiian Electric) (EIA)

Utility-scale projects placed in service in Hawaii (2023-24)	PV nameplate capacity (MW)	Battery storage capacity (MWh)
AES Maui Kuihelani Solar Hybrid	60.0	240.0
AES Waikoloa Solar Hybrid	30.0	120.0
AES West Oahu Solar Hybrid	12.5	50.0
Ameresco Kupono Solar	42.0	168.0
Kapolei Energy Storage		185.0
Waiawa Solar Power Hybrid	36.0	144.0
Total	**180.5**	**907.0**

Table 3 - Utility scale PV projects placed online in Hawaii in 2023 &2024 (EIA)

Unfortunately, persistent procurement challenges and other headwinds have also caused some developers to abandon their Hawaii projects, including the following:

Utility-scale solar projects canceled in 2024	PV nameplate capacity (MW)	Battery storage capacity (MWh)
Clearway Makana La Solar (Oahu)	80.0	480.0
Clearway Puako Solar (Hawaii Isl.)	60.0	240.0
Clearway Kaiwiki (Hawaii Island)	55.0	220.0
AES Puu Hao Solar (Maui)	20.0	80.0
Total	**215.0**	**1,020.0**

Table 4 - Utility scale PV projects abandoned in 2024 (State Energy Office)

Looking ahead, the pipeline remains relatively robust, but the path to completion remains muddled. Known projects include an additional 159 MW of utility-scale PV generating capacity and an additional 763 MWh of battery storage capacity expected to be placed online over the next two years.

Proposed facilities in the early stages of development include 272.4 MW of utility-scale generating capacity with an additional 1,094 MWh of BESS. These projects would come online in 2026 or beyond.

Pipeline utility scale PV projects	Expected in-service date	Nameplate generating capacity (MW)	Battery storage capacity (MWh)	Island
AES Mountain View Solar	2025	7	35	Oahu
AES Waiawa Phase 2 Solar	2025	30	240	Oahu
Hale Kuawehi Solar Hybrid	2025	30	120	Hawaii
Ho'Ohana Solar 1	2024*	52	208	Oahu
Waena Solar	2026	40	160	Maui
KRS I Anahola Solar Hybrid	2025	-	12	Kauai
KRS II Koloa Solar	2025	-	12	Kauai
Puuloa Solar	2026	6.4	30	Oahu
Mahi Solar	2026	120	480	Hawaii
Kuihelani Phase 2	2027	40	160	Maui
Pulehu Solar	2027	20	80	Maui
Keamuku	2030	86	344	Hawaii
Total	**-**	**431.4**	**1,857**	**-**

*Table 5 - Utility scale PV + BESS proposed and/or under development in Hawaii (EIA, State Energy Office, * as of Dec 2024)*

The Road Ahead for PV in Hawaii

What lies ahead? With the RPS standing at 35%, how should current and potential market participants think about the solar opportunity in Hawaii? Let us first review the trends:

- Storage is increasingly important, and it is being installed in every segment of the market, including DER residential systems, C&I arrays, and utility-scale projects.
  - 96% of all new residential systems being installed today in Hawaii include onsite distributed BESS (DBESS) units. 88% of all C&I systems being installed today in Hawaii include onsite DBESS. (HSEA)
  - 100% of all new utility-scale projects are being installed with a BESS component. (State Energy Office)
- All this storage capacity should be leveraged by the utility for grid services.
  - The utility's current incentive for grid services (unhelpfully named "Bring Your Own Device Phase 1") is not attracting subscribers, so the utility has a very limited opportunity to benefit from grid connected DBESS assets.
  - The PUC issued an order on December 31, 2024, directing the utility to specifically examine other markets with successful grid services incentives, referencing the Massachusetts "Connected Services" program, in particular.
  - Technology is improving (smart inverters, grid-forming inverters, dispatchable BESS capacity, etc.), and is beginning to address grid management challenges and transmission and distribution (T&D) limitations.
- The utility's procurement methodology is challenged.
  - Numerous projects selected in previous utility RFP rounds have stalled out. As detailed above, in 2024 alone, developers abandoned over 200 megawatts of solar under development.
  - Financial uncertainty at HEI is weighing heavily on project developers and financiers – it is no longer considered as creditworthy a counterparty as it was prior to the Maui fires, leading investors to seek higher returns to compensate for the higher risk.
  - Some developers have begun exploring additional direct government subsidized funding (beyond traditional tax equity investments by private investors) to augment traditional private capital sources, though it is unlikely that such funding would be expanded in a Trump-led administration.
  - Disappointingly, for developers with new projects to propose, the planned fourth round RFP set forth in the utility's Integrated Grid Plan has been delayed by an estimated twelve months owing to a contested case hearing.
- There is some risk of backsliding on Hawaii's RPS.

- Previous assumptions about reaching RPS milestones relied on flat or declining statewide electrical demand forecasts. However, new load forecasts have been forced to consider potential baseline load growth from customer adoption of technologies, including electric vehicles, that are not fully offset by DER, energy efficiency efforts, and time of use rates. Additional load growth could result from data-intensive users, and the utility is increasingly concerned that these trends may lead to higher statewide demand for electricity on a year-over-year basis. This would, effectively, increase the denominator and erode the RPS renewable percentage metric.
- Further, an unstated assumption in tracking the state's progress toward the RPS seems to be that all current renewable generating assets will continue to perform over time, and thus that all new projects are accretive to the baseline.
- For this to be true, all renewable generating facility owners will have to properly invest in the maintenance and upkeep of their arrays. Some have proven to be (and will continue to be) unwilling to do this, which could potentially put additional downward pressure on the RPS percentages.
- Importantly, though, this also means that the state and the utility companies, in their long-term power supply plans, are biased toward keeping existing renewable assets connected and operational. This is helpful for those asset owners who are looking to extend their system's service life but should not be interpreted to suggest that the utility will renew power purchase agreements (PPAs) at original, or even current, pricing. Solar is cheaper now.

- As we begin to see the average age of PV arrays begin to approach 10 years and more, asset owners will face a series of decisions about their investment in solar.
    - Some will be required to perform deferred O&M to restore and/or maintain the designed energy output of their system.
    - Others will seek to extend asset service life and enhance the returns on their investment by repowering the array with new, more efficient panels and expanded inverter capacity. This may require negotiating a new offtake and interconnection agreement, and/or site lease extensions.
- DER PV will remain important, especially on land-constrained Oahu, but other sources will be required.
    - Total rooftop solar capacity on Oahu has been estimated at approximately 3,900 megawatts, if 100% of rooftops were utilized. (State Energy Office)
    - DER PV totals just over 1,000 megawatts on Oahu today. (Hawaiian Electric)

- Oahu's demand in 2045 is expected to require between 4,500 MW and 6,500 MW of generating capacity, under the most favorable energy efficiency scenarios. (State Energy Office)
- T&D limitations will need to be overcome, as well as technical challenges related to integrating distributed generation and storage assets. Microgrids should emerge as a viable alternative, if the current tariff can be enhanced.

Evaluating these trends, HIRSG sees a range of opportunities, considerations and trends to watch, depending on the type of market participant.

1. For developers and financiers seeking to bring new projects online, HIRSG would summarize the near-term opportunity as ***challenging***:

Opportunities	Considerations	Trends to watch
• The mandate remains unchanged: Hawaii's RPS demands the replacement of inefficient and aging powerplants. • Neighbor islands continue to offer some large-scale, greenfield opportunities, but the best sites in the State's largest market (Oahu) have likely been optioned or have been trapped in the utility's procurement cycle.	• Capital costs remain high. • Lahaina fire obligations create meaningful financial overhang at HEI. • Utility procurement has been slowed by market headwinds (RFP round 3) and procedural delays due to litigation (RFP round 4). • Uncertainty exists about the new federal administration's ultimate approach to tariffs and renewable incentives. Early signals are not promising, though offshore wind appears to be the primary target of Trump's ire. • Lengthy renewable energy project approval and development times continue to average ~five years. • Permit processing remains slow at state and county levels. • There has been no real improvement on the slow and costly utility interconnection processes. • Land use constraints and competition for land continues to fuel community concerns and project opposition.	• The PUC will continue to press the utilities to better utilize all the BESS assets that are coming online. Keep an eye out for enhanced incentives for grid services. • Asset owners will look for support in repowering existing assets. Project financing opportunities may emerge as a result. • Expect the state's focus to remain on Oahu, which presents the thorniest challenges related to the RPS. Among other challenges, Oahu is land constrained and its load is 19x bigger than Kauai's (as an example). • The PUC may turn its attention to the microgrid tariff which has, thus far, attracted little uptake. This would unlock a significant opportunity for customers seeking more control over their energy supplies.

2. For individual or corporate entities with available rooftop or other space to install new DER and DBESS assets, HIRSG would summarize the opportunity as ***neutral***:

Opportunities	Considerations	Trends to watch
• Federal and State tax incentives remain robust and favorable. • Grid power costs are increasing. • Solar and storage costs remain inexpensive.	• The new grid utility interconnection regimes are somewhat clumsy and nowhere near as favorable as NEM (now closed), but they do provide acceptable process clarity. • Tariffs may affect pricing more rapidly than installers and distributors can mitigate with safe harbor, or other strategies. • Interest rates remain elevated.	• The state has an expanded focus on providing PV to previously underserved market segments (multi-family, condo, etc.) This may result in new incentives or procurement mechanisms. • HEI and the subsidiary utilities can be expected to aggressively deploy wildfire-risk protocols, which will lead to more frequent outages. This increases the relative value of onsite generation and storage capacity.

3. For owners of existing DER or utility-scale systems, HIRSG would summarize the opportunity as ***favorable***:

Opportunities	Considerations	Trends to watch
• Federal and State tax incentives can be accessed when reinvesting in existing PV assets. • Consider retrofitting an existing array with storage to provide uninterrupted onsite power, and to benefit from future DBESS incentives for grid services. • Consider repowering existing project with higher efficiency modules. • Consider increasing the number of inverters on existing project to produce and sell more energy. • Repowering investments can be structured to take advantage of tax equity, sponsor equity and debt.	• Not all system owners have appetite to invest in upgrading existing systems. • Some have neglected basic operations and maintenance service, so the arrays may be significantly underperforming design capacity.	• The RPS mandate and its underlying assumption that existing assets will continue to operate through 2045 creates a bias that is favorable to system owners. • This assumption and bias should provide support for any negotiations to extend offtake agreements or site leases, as well as any discussions with the utility about interconnection, so long as price expectations are rational. • Some asset owners will look to sell their PV systems, rather than invest in them further.

Whether you are seeking to invest in a new system, repower an old system, or you're considering the sale of your portfolio of generating assets HIRSG is available to assist in evaluating and executing these various strategies. Please don't hesitate to reach out if we can be of assistance to you.

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