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January 3, 2017

DEPT. COMM. NO. 150

The Honorable Ronald D. Kouchi,
President and Members
of the Senate
Twenty-Eighth State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Joseph M. Souki,
Speaker and Members of the
House of Representatives
Twenty-Eighth State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Souki, and Members of the Legislature:

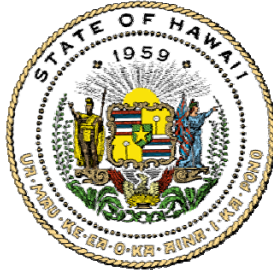
For your information and consideration, I am transmitting a copy of the ***Biennial Report to the Legislature on Facilitation of Permit Processing and Renewable Energy Facilitation Activities***, as required by Sections 201-65 and 201-12.5, Hawaii Revised Statutes. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at:
<http://dbedt.hawaii.gov/overview/annual-reports-reports-to-the-legislature/>.

Sincerely,

Luis P. Salaveria

Enclosure

c: Legislative Reference Bureau



State of Hawaii

**FACILITATION OF PERMIT PROCESSING
AND
RENEWABLE ENERGY FACILITATION ACTIVITIES**

**REPORT TO THE
GOVERNOR AND THE LEGISLATURE
OF THE
STATE OF HAWAII**

Pursuant to

Act 237, Session Laws of Hawaii (1985)

And

Act 208, Session Laws of Hawaii (2008), amended by Act 27, Session Laws of Hawaii (2016)



***Submitted by the State of Hawaii
Department of Business, Economic Development, and Tourism***

December 2016

EXECUTIVE SUMMARY

This report summarizes the permit facilitation activities undertaken by the Department of Business, Economic Development, and Tourism (DBEDT) in accordance with Section 201-65, Hawaii Revised Statutes (HRS), and DBEDT's renewable energy facilitation activities in accordance with Section 201-12.5, HRS.

Facilitation of Permit Processing (HRS 201-61 to HRS 201-65)

In 1985, Act 237 was enacted, which directs DBEDT to serve as the lead agency in the administration of a facilitated application procedure for projects requiring state and county permits. Act 237 also directs DBEDT to operate a permit information and coordination center for public use and maintain a repository of laws, rules, procedures, permit requirements, and criteria of federal, state, and county permitting agencies in Hawaii. DBEDT is also granted authority under Act 237 to monitor the processing of permits to determine process inefficiencies and pursue the implementation of streamlining measures, including the design of forms, applications, and checklists. Act 237 requires DBEDT to submit biennial reports to the Hawaii State Legislature describing the actions taken, problems encountered, and legislative actions that may be needed to further implement Act 237.

DBEDT encompasses a wide variety of agencies, authorities, offices, commission, and departments that serve to support and regulate economic activities in Hawaii. Divisions within DBEDT more focused on supporting industry have taken the lead on permit facilitation as discussed herein; namely the Hawaii Film Office (HFO) and the Hawaii State Energy Office (HSEO).

The State of Hawaii supports Hawaii's film industry by offering competitive tax incentives, the only state-owned and operated film studio in the country and a growing list of production facilities, an experienced pool of crew and talent, a comprehensive local inventory of state-of-the-art equipment, a well-established one-stop process for state film permits, and a film-friendly government and community. HFO helps to support and regulate the industry by processing film permit applications for numerous State properties and facilities in coordination with other Hawaii agencies (e.g., Hawaii Department of Land and Natural Resources).

HSEO permit facilitation activities are discussed in more detail in the Renewable Energy Facilitation Activities section of this Report.

Renewable Energy Facilitation Activities & Renewable Energy Facilitator (HRS 201-12.5)

In 2008, recognizing the complexity of permitting large-scale renewable energy projects and the need to streamline the permitting process to provide predictability and encourage capital investment in Hawaii's renewable energy industry, the Hawaii State Legislature established a full-time, temporary Renewable Energy Facilitator position within DBEDT (Act 208, Session Laws of Hawaii, 2008). Act 208 requires DBEDT to submit periodic reports to the Hawaii State Legislature on renewable energy facilitation activities and the progress of the Renewable Energy

Facility Siting Process (REFSP) established under Act 207, also enacted in 2008. In 2016, the Hawaii State Legislature passed Act 27, which repealed the REFSP and its reporting requirement, leaving the requirement that DBEDT report periodically on renewable energy facilitation activities.

In 2008, 9.4% of Hawaii's electricity was generated by renewable energy sources (2008 Renewable Portfolio Standards Status Reports). In 2015, 23.4% of Hawaii's electricity was generated by renewable energy sources (2015 Renewable Portfolio Standards Status Reports). This commendable progress over the last eight (8) years is attributable to the commitment made by all stakeholders – residents, policymakers, regulators, community groups, and industry professionals – to lower Hawaii's electricity costs and decrease our heavy reliance on imported fossil fuels. Since 2008, HSEO has played a key role in this progress by, among other things, assisting the permitting and siting of renewable energy projects, supporting the development of new clean energy programs and policies, stimulating Hawaii's clean energy economy, and engaging stakeholders in a variety of renewable energy initiatives.

HSEO's current renewable energy permit facilitation activities are guided primarily by its energy policy directive to balance technical, economic, environmental, and cultural considerations. Under this directive, HSEO seeks to provide a measured level of facilitation by offering resources to support the system as a whole, rather than select individual projects. The following is a list of high impact renewable energy facilitation activities developed by HSEO and its partners, each of which is described in greater detail in this report, including targeted audience, usage (how the tool is used), need (the challenges and issues each one seeks to address), and the beneficial impacts:

- Developer & Investor Center
- Project Permitting Assistance and Resources
- Guide to Renewable Energy Facility Permits in the State of Hawaii
- Permit Briefs
- Hawaii Department of Health e-Permitting Portal
- Hawaii Department of Land and Natural Resources Electronic Permitting and Asset Management
- Self-Help Energy Suite
- Renewable Energy Permitting Wizard
- Renewable EnerGIS Mapping Tool
- Hawaii Renewable Energy Projects Directory
- Programmatic Environmental Review

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Facilitation of Permit Processing

Hawaii Film Office

Pursuant to HRS 201-14, DBEDT, through its film industry branch, is responsible for management of the one-stop-shop film permitting program. Film permits are required for all filming activity, commercial or non-commercial, which will take place on State lands and in waters where the State has jurisdiction. As the liaison between government and filmmaker, the Hawaii Film Office (HFO) is the central coordinator for filming use of locations administered by the State of Hawaii, such as parks, beaches, harbors, highways, and state facilities. HFO works closely with other state agencies, the county film offices, federal agencies within the state, and private property owners to help filmmakers determine the permits they need to film in public areas. HFO assists filmmakers with acquiring film permits, and as necessary, directs them to the appropriate county and federal agencies. The county film offices coordinate permits for locations under their respective jurisdictions, such as city streets, parks and buildings. HFO also provides location, tax incentive, and production resource information to filmmakers; manages the Hawaii Film Studio at Diamond Head; promotes Hawaii as a filming destination; and develops the local film, television, and digital media industries in the islands.

State of Hawaii
Hawaii Film Office

Search this site

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Home Filming in Hawaii Film Permitting Incentives & Tax Credits Production Guide Crew & Talent

State of Hawaii Film Office County Film Offices Hawaii Film Studio Current & Recent Productions Filming In Sensitive Locations

Home » Film Permitting

FILM PERMITTING

Film permits are required for all filming activity, commercial or non-commercial, which will take place on public locations. As the liaison between government and filmmaker, the State of Hawaii Film Office works closely with other State agencies, the [county film offices](#), federal agencies within the state, and private property owners to help filmmakers determine the permits they need to film in public areas.

The State of Hawaii Film Office is the central coordinator for filming use of locations administered by the **State** of Hawaii, such as parks, beaches, harbors, highways, and state facilities. The [county film offices](#) coordinate permits for locations under their respective **counties**, such as city streets and buildings. If you are unsure about which entity has jurisdiction over a particular location, please [contact us](#).

State permit applications require your signature before submission and are designed to be faxed directly to the State of Hawaii Film Office at (808) 586-2572. Permits must be submitted **five (5) working days prior** to the first date of usage (prep/shooting). Permits must be filled out completely and submitted with all required documentation. Working days do not include weekends and [state holidays](#).

We recommend the use of a local production coordinator or location manager, which you can find in our [Production Index](#). Given their familiarity with the permitting process and knowledge of Hawaii's unique cultural and environmental sensitivities, their expertise would be invaluable in helping you complete film permit applications and secure approvals.

Click on the "Film Permitting" drop-down menu above to learn more about our filming regulations and permit procedures, and to download film permit applications.

Hawaii Film Office Film Permitting Website (<http://filmoffice.hawaii.gov/film-permitting/>)

HFO began the process of migrating the permit system to an online format in 2011-2012 to: 1) improve accessibility to a permitting network 24/7; and 2) maximize efficiencies and streamline the film permitting process in phases. HFO launched the First Phase of the Online Permit Application system with the “Open and Accessible Sites” (O/A) permit (<https://hfo.ehawaii.gov/film/p/welcome.html>). The O/A ‘ePermit’ process is an easier, more convenient online system that allows applicants to apply for O/A locations for multiple two-week durations at one time, so long as applicant insurance is valid for the duration of the time being requested. An online \$10 convenience fee is assessed.

In partnership with the Hawaii Department of Land and Natural Resources (DLNR), HFO has developed an online permitting tool that enables the entities to obtain permits to film in select, pre-approved state locations under DLNR jurisdiction. This online resource enables the state to immediately confirm an applicant’s insurance requirements prior to issuance of a permit, and enables applicants to create user accounts so they remain in the system once approved. HFO can process and approve permits within hours or days of application, significantly facilitating the success of Hawaii’s entertainment industry. HFO plans to expand the reach of this resource to additional filming sites and permits.



Online Film Permit Application

Online Film Permits Hawaii Film Office My Applications

Hawaii Film Office - Film Permit Application

Aloha! This is the Film Permit Application necessary to request certain State properties for filming locations. This portal is only for State of Hawaii [DLNR Open/Accessible Sites](#), and limited to locations on the [DLNR Open/Accessible Sites list](#) that are the only locations requested for the film production.

The first thing the production will need is a certificate of insurance (COI). Please see: <http://filmoffice.hawaii.gov/film-permitting/certificate-of-insurance/>

The State of Hawaii Risk Management Division is very strict about insurance coverage for our film productions, so the level of insurance coverage and the required wording on the COI must be correct before a film permit application can be processed.

Hawaii Film Office

No.1 Capital District Building
250 S. Hotel Street, 5th Floor
Honolulu, HI 96813

Phone: (808) 586-2570
Fax: (808) 586-2572
Email: info@hawaiifilmoffice.com

Hawaii Film Office, Online Film Permit Application (<https://hfo.ehawaii.gov/film/p/welcome.html>)

HFO continues to look for ways it can effectively service the Hawaii’s film industry, including its smaller, low-impact photography/videography productions.

Facilitation of Permit Processing and Renewable Energy Facilitation Activities

Hawaii State Energy Office

The following provides a brief description of DBEDT's current renewable energy facilitation activities, administered through the Hawaii State Energy Office (HSEO), including targeted audience, need (the challenges and issues energy stakeholders seek to address), usage (what the tool is used for), and the beneficial impacts of each tool:

Developer & Investor Center

<http://energy.hawaii.gov/developer-investor>

The *Center* is a “one-stop” repository of information and resources concerning multiple facets of renewable energy development in Hawaii, including: project permitting, site acquisition, utility interconnection, regulation, Hawaii business registration, project financing and local incentives, local consultants, and a catalogue of existing and proposed large-scale renewable energy projects.

- Target Audience: The *Center* is intended for a wide range of interested stakeholders, including but not limited to: general public, agencies, policymakers, landowners, developers, homeowners, investors, consultants, and non-government organizations.
- Need (Challenges/Issues Addressed): Developing a renewable energy project in Hawaii can be a complex endeavor that requires approvals from multiple public and private entities. In addition, Hawaii has numerous laws and programs specifically tailored for renewable energy, which often require local expertise to identify and understand. The *Center* enables users to remotely conduct, at no cost, initial due diligence in a variety of development areas. In addition, the *Center* consolidates information from a variety of sources that may otherwise be difficult to gather or access, such as permits from multiple jurisdictions or a catalogue of all existing and proposed large-scale renewable energy projects in Hawaii. Finally, the *Center* seeks to identify the local regulatory agencies, stakeholders (e.g., community groups), and processes that need to be considered in the course of developing a larger-scale renewable energy project in Hawaii.
- Usage: While usage of the *Center's* resources can vary by user, it is generally meant to provide energy stakeholders with a robust understanding of the various facets of energy project development so they can make more informed and timely decisions regarding their area of interest and/or responsibility. Users are primarily from the U.S.; however, users from the following continents have accessed the *Center*, demonstrating a global interest in the Hawaii renewable energy industry: Americas, Europe, Asia, Oceania, and Africa. The *Center* recorded 647 pageviews from January 1, 2016, to November 1, 2016 (individual pageviews of tools within the *Center* are recorded separately).
- Beneficial Impact: The *Center* supports early, informed decision-making on many levels, which ultimately saves time and resources of many stakeholders, as appropriate project planning and siting can significantly decrease the effort needed to develop and regulate that particular project.

Project Permitting Assistance and Resources

<http://energy.hawaii.gov/developer-investor/project-permitting-assistance-and-resources>

Housed within the *Center*, HSEO's *Project Permitting Assistance and Resources* website offers detailed information on obtaining individual permits from numerous county, state, and federal permitting agencies in Hawaii, thereby reducing project due diligence costs and timelines by providing a comprehensive central repository of project permitting and siting information.

- **Target Audience:** HSEO's *Project Permitting Assistance and Resources* are intended for a wide range of stakeholders seeking to apply for permits or gain a better understanding of a particular permit or approval process, including but not limited to: general public, agencies, policymakers, landowners, developers, homeowners, investors, consultants, and non-government organizations.
- **Need (Challenges/Issues Addressed):** Project development and financing (investments, tax credits) timelines are significantly impacted by permitting schedules. This resource helps users draft a realistic timeline for the permitting of specific projects, and can speed project development and minimize project impacts by identifying pitfalls and potential mitigation/avoidance strategies specific to developing renewable energy projects in Hawaii. Additionally, these resources help other stakeholders and affected communities understand the permitting requirements a developer may need to satisfy prior to facility construction, including their opportunities for involvement and/or comment. Often times, it can be difficult for stakeholders to obtain a full range of requirements for a given project or renewable energy technology.
- **Usage:** The *Project Permitting Assistance and Resources* can be used in many ways, including but not limited to: sophisticated developers who need information or need to apply for one particular permit or process; start-up companies who need to know all permits required for a project without retaining a consultant; homeowners who need information on their solar installation permits; permitting agencies who are interested in other agency processes; and policymakers and citizens who want a better understanding of cross-jurisdictional permitting regimes and individual permit processes and requirements. The *Project Permitting Assistance and Resources* website recorded 390 pageviews from January 1, 2016, to November 1, 2016.
- **Beneficial Impact:** The *Project Permitting Assistance and Resources* support early, informed decision-making on many levels, which ultimately saves time and resources of many stakeholders, as appropriate project siting can significantly decrease the effort needed to develop and regulate that particular project. These resources also benefit all stakeholders by seeking to provide a complete list of regulatory considerations and requirements for a particular project or renewable energy technology, which can otherwise be difficult to find and gather from diverse sources and agencies.

Guide to Renewable Energy Facility Permits in the State of Hawaii

<http://energy.hawaii.gov/renewable-energy-project-permitting-in-the-state-of-hawaii>

The *Guide* provides insight into developing large-scale projects in Hawaii by describing the regulatory requirements, processes, and siting challenges unique to Hawaii, including the Hawaii environmental review process (Chapter 343, HRS), local cultural and archeological resources, endangered species and habitats in Hawaii, overlaying zoning districts, importance of community engagement, and more.

- **Target Audience:** The *Guide* is intended for a wide range of stakeholders seeking to apply for permits or better understand their permitting requirements, including but not limited to: general public, agencies, policymakers, landowners, developers, investors, consultants, and

non-government organizations. The *Guide* also provides a comprehensive overview of all potentially applicable regulations and review processes, providing a high level picture of the regulatory landscape.

- Need (Challenges/Issues Addressed): Project impacts are most effectively and efficiently mitigated during the early project siting and design phase. The *Guide* supports smart project design location as the only resource that discusses project impacts, mitigation strategies, and regulatory requirements specific to Hawaii's environment and renewable energy industry. The *Guide* also helps other stakeholders better understand the regulatory processes and requirements for a renewable energy technology, which can help identify opportunities for input and participation.
- Usage: The *Guide* has a wide ranging audience and applicability, including but not limited to: sophisticated developers who need information or need to apply for one particular permit or process; start-up companies who need to know all permits required for a project without retaining a consultant; permitting agencies who are interested in other agency processes; and, policymakers and citizens who want a better understanding of cross-jurisdictional permitting regimes and individual permit processes and requirements. The *Guide* was last updated in April 2015.
- Beneficial Impact: Feedback from local consultants specializing in the development of renewable energy projects in Hawaii indicates the *Guide* is most useful during initial project due diligence. Feedback from local regulatory agencies highlights the value of providing a centralized resource that covers, or at least identifies, multiple regulatory process, requirements, and considerations.

Permit Briefs

<http://energy.hawaii.gov/renewable-energy-project-permitting-in-the-state-of-hawaii>

Complementing the *Guide*, the *Briefs* provide processing and general information on over 160 individual county, state, and federal permits required for renewable energy projects in Hawaii, including permit process steps, estimated timelines and costs, agency contacts, relevant laws and references, and best practices to most effectively navigate the process.

- Target Audience: The *Briefs* are intended for a wide range of stakeholders seeking to apply for permits or better understand the potential permitting requirements for a given project, including but not limited to: general public, agencies, policymakers, landowners, developers, homeowners, investors, consultants, and non-government organizations.
- Need (Challenges/Issues Addressed): Understanding the process steps and timelines for individual permits is key to project planning and financing. The *Briefs* support the development of a realistic permit plan and timeline, which can be used in investment packages and dealings with utilities, workforce, and equipment providers. Understanding a permit approval sequence also helps those interested in identifying opportunities for comment on a particular permit.
- Usage: The *Briefs* primarily serve to provide detailed information on individual processes and permits, which can be difficult to access remotely. Like HSEO's other permit resources, the *Briefs* have a wide ranging audience and applicability, including but not limited to: sophisticated developers who need information or need to apply for one particular permit or process; start-up companies who need to know all permits required for a project without retaining a consultant; homeowners who need information on their solar installation permits; permitting agencies who are interested in other agency processes; and policymakers and citizens who want a better understanding of cross-jurisdictional permitting regimes and individual permit processes and requirements.

- **Beneficial Impact:** Feedback from local consultants specializing in the development of renewable energy projects in Hawaii indicates the *Briefs* are most useful during initial project due diligence and during the permit application process. Feedback from local regulatory agencies highlights the value of providing a centralized resource that covers, or at least identifies, multiple regulatory process, requirements, and considerations.

Hawaii Department of Health e-Permitting Portal

<https://eha-cloud.doh.hawaii.gov/epermit/>

Most renewable energy projects require one or more environmental permits from the Hawaii Department of Health Environmental Health Administration (DOH-EHA). *e-Permitting* is an online permitting platform that enables the electronic submission, processing, and management of DOH-EHA permits. Through *e-Permitting*, DOH-EHA can electronically develop, control, and manage many administrative and permitting forms issued by DOH-EHA, including the necessary permit (application) modifications in response to changing state and federal requirements. Permit applicants can apply for DOH-EHA permits online, track their application through to issuance, manage multiple permits at once, and instantaneously and directly interact with DOH staff processing their permit(s). While HSEO provided funding for the initial design and build of *e-Permitting*, DOH, through its designer, Windsor Solutions, continues to evolve and update *e-Permitting* to meet its many regulatory needs and the needs of its applicants.

- **Target Audience:** *e-Permitting's* primary audience is DOH-EHA, and its secondary audience is all applicants required to obtain one or more permits from DOH-EHA.
- **Need (Challenges/Issues Addressed):** Electronic filing and processing provided by *e-Permitting* addresses numerous challenges, including but not limited to: increased efficiency in permit filing, processing, and file management; increased transparency into the permit process; central management and oversight of numerous permits issued by multiple branches within DOH-EHA; and electronic fee acceptance and deposit.
- **Usage:** *e-Permitting* is most applicable to entities who must regularly apply for, obtain, and manage permits under DOH-EHA jurisdiction. *e-Permitting* also benefits DOH-EHA programs with high volumes of permits and renewals. *e-Permitting* also supports those in need of information on, and those who need to apply for, specific DOH-EHA permits or processes. From January 2016 to November 2016, 1,840 permit applications were handled by DOH-EHA online through e-Permitting, totaling \$229,400 in application fees paid online and via mail.
- **Beneficial Impact:** Electronic permit processing has proven to save applicants' time on permit application, issuance, and management. DOH-EHA programs also measured an approximate 30% reduction in time required to process the electronically submitted permit application forms. *e-Permitting* was awarded a 2013 Excellence in Technology Award from the State of Hawaii Office of Information Management and Technology under the "Digital Government: Government to Business" category. *e-Permitting* also won one of three Environmental Council of States (ECOS) 2014 State Program Innovation Awards for innovative customer service initiatives.

Hawaii Department of Land and Natural Resources (DLNR) Electronic Permitting & Asset Management

[Under Development](#)

HSEO partnered with DLNR, DataHouse, and Infor to develop this electronic permitting and asset management tool for select DLNR divisions involved in the regulation of renewable energy facilities in Hawaii: Engineering Division, Geothermal and Dam Safety Programs; and the

Division of Forestry and Wildlife, Native Invertebrates Program. The departments launched this project in April 2015 and began soft launching the completed components in September 2016, with a full release planned for early 2017.

- **Target Audience:** The primary audiences are the three DLNR programs identified above. The secondary audience are all applicants required to obtain one or more permits from these programs. Should these programs experience success with these initial tools, other DLNR programs have expressed interest in the development of similar resources.
- **Need (Challenges/Issues Addressed):** Electronic filing and processing addresses numerous needs, including but not limited to: increased efficiency in permit filing, processing, and file management; increased transparency into the permit process; and central management and oversight of numerous permits issued by multiple branches within DLNR. Allowing users to track their permit progress online will also save DLNR staff time currently needed to respond to inquiries on permit application status.
- **Usage:** DLNR's new tools will be most applicable to developers and consultants who must regularly apply for, obtain, and manage permits under DLNR jurisdiction, and those seeking information on specific individual permits or processes. It will also benefit DLNR in terms of processing efficiency, permit management, and tracking, particularly for those applicants with numerous permits, large attached datasets, and high volumes of permits and renewals.
- **Beneficial Impact:** Generally, electronic permit processing is proven to save applicants time on permit application, issuance, and management, as well as benefit DLNR by providing an electronic platform to manage, route, and process permit applications and attached documentation.

Self-Help Energy Suite

HSEO's *Self-Help Energy Suite* is part of the *Developer & Investor Center* and includes the *Renewable Energy Permitting Wizard*, *Renewable EnerGIS* mapping tool, and the *Hawaii Renewable Energy Projects Directory*, each discussed in more detail below.

Renewable Energy Permitting Wizard

<http://wizard.hawaiicleanenergyinitiative.org/>

The *Wizard* helps to identify the federal, state, and county permits required for larger-scale renewable energy projects at known locations, and produces a 'Permit Plan' with recommended permit sequencing and timing.

- **Target Audience:** The *Wizard* is intended for a wide range of stakeholders seeking to understand the permitting requirements for specific larger-scale renewable energy projects, including but not limited to: general public, agencies, policymakers, landowners, developers, investors, consultants, and non-government organizations.
- **Need (Challenges/Issues Addressed):** Project impacts are most effectively and efficiently mitigated during the project siting and design phase. The *Wizard* supports smart project design and location by enabling users to immediately and remotely identify the permits required for specific projects. The *Wizard* also offers high value in enabling users to identify all potentially required permits for a given project and generating a 'Permit Plan' tailored to that project.
- **Usage:** The *Wizard* allows users to identify and learn more about the potential county, state, and federal permits required for a given project and location. Users can also compare the permit requirements for the same project in different locations to support project siting. The 'Permit Plan' produced by the *Wizard* serves as a rough permitting timeline for the project, which is critical for financing, procuring, contracting, and other aspects of successful project

development. The *Wizard* recorded 1,103 pageviews from January 1, 2016, to July 1, 2016, including users from the U.S., South America (Portugal, Brazil), Mexico, Italy, Japan, England, Spain, and Indonesia.

- **Beneficial Impact:** The *Wizard* has received positive feedback from the U.S. Department of Energy, U.S. Department of Defense, the National Association of State Energy Officials (NASEO), local and federal permitting agencies, local consultants and developers, and other users. While developed for renewable energy projects, the *Wizard* can identify the permits required for any large-scale project, provided the user has sufficient information to answer all questions. The *Wizard* is developed using open source coding that allows for replication in other jurisdictions.

Renewable EnerGIS Mapping Tool

<http://energy.hawaii.gov/resources/renewable-energis-map>

EnerGIS provides information on the renewable energy potential of specific sites identified by the user, as well as site-specific information relevant to permitting requirements for that site (e.g., special zoning, sensitive areas). *EnerGIS* also supports statewide energy planning efforts by using existing geographic information system (GIS) data from the State GIS Program (Hawaii Office of Planning) to help estimate the renewable energy potential of a defined geographic area, such as Oahu.

- **Target Audience:** *EnerGIS* is intended for a wide range of stakeholders seeking to understand the renewable energy development potential of specific sites throughout the state, including but not limited to: general public, agencies, policymakers, landowners, developers, investors, consultants, and non-government organizations. In addition, HSEO uses *EnerGIS* to support energy planning and resource assessments.
- **Need (Challenges/Issues Addressed):** *EnerGIS* helps to address the challenge of finding a site with suitable attributes – island, terrain, resource potential – for a given renewable energy project and technology. It also supports individual site assessments, which contributes to both site-specific and system-wide grid planning. Gathering this information otherwise from different resources can be time-consuming and difficult, particularly for users unfamiliar with Hawaii.
- **Usage:** *EnerGIS* is designed to help those with pre-identified sites better understand the renewable energy potential and potential permitting requirements for those sites. *EnerGIS* can also help those prospecting for sites to develop a renewable energy project. As part of planned upgrades currently under procurement, HSEO seeks to enable *EnerGIS* to allow users to search for all parcels with particular attributes desired by the user. *EnerGIS* recorded 4,494 pageviews from January 1, 2016, to November 1, 2016, including users from the U.S., England, China, Laos, Japan, Germany, Spain, France, and Korea, demonstrating domestic and international interest its ability to support remote site identification and evaluation.
- **Beneficial Impact:** Although this mapping application has functionality similar to applications launched by other agencies for other purposes, *EnerGIS* is the only mapping application focused on presenting information about renewable energy resources development in Hawaii. *EnerGIS* enables users to conduct free and quick desktop due diligence on multiple sites to determine whether or not additional investigation is warranted. *EnerGIS* also benefits HSEO energy systems planning and resource assessment efforts. A product of the partnership between HSEO and the Hawaii Office of Planning, *EnerGIS* was awarded a 2013 Excellence in Technology Award from the State of Hawaii Office of Information Management and Technology under the “Fast Track Solutions” category.

Hawaii Renewable Energy Projects Directory

<https://energy.hawaii.gov/epd/public/energy-projects-map.html>

The interactive *Directory* is an online listing of all existing and proposed renewable energy projects in Hawaii, and is updated frequently as projects are introduced, modified, commissioned, or discontinued.

- **Target Audience:** The *Directory* is intended for a wide range of stakeholders interested in learning about all the renewable energy projects in Hawaii, including but not limited to: general public, agencies, policymakers, landowners, developers, investors, consultants, and non-government organizations.
- **Need (Challenges/Issues Addressed):** The *Directory* is the only public repository identifying both existing and proposed renewable energy projects statewide. Finding information on individual projects can otherwise be difficult and time consuming, as research of various resources is required.
- **Usage:** Identifying existing and proposed projects helps local regulatory agencies better understand the cumulative landscape of renewable energy projects in Hawaii, and informs local communities of projects planned in their area to facilitate community involvement prior to project construction. It also demonstrates Hawaii's market potential to prospective investors and developers. The *Directory* recorded 17,437 pageviews from January 1, 2016, to November 1, 2016, including users from the U.S., Denmark, Germany, Poland, England, Japan, Spain, France, and Canada. These numbers demonstrate domestic and international interest in the development of renewable energy projects in Hawaii.
- **Beneficial Impact:** The *Directory* is an invaluable resource for anyone interested in learning about the renewable energy activity in Hawaii. HSEO recently upgraded the *Directory* to include additional information (e.g., Public Utilities Commission docket number, property tax map key, and project description) and the ability for users to export project lists into a printable Excel spreadsheet.

Programmatic Environmental Review

<http://hawaiiicleanenergypeis.com/>

HSEO served as the lead Hawaii agency in assisting the U.S. Department of Energy (USDOE) in its development and publication of the *Hawaii Clean Energy Programmatic Environmental Impact Statement (PEIS)* in accordance with the National Environmental Policy Act (NEPA), which discusses the potential environmental impacts from a range of clean energy activities and technologies with the potential for near-term development or application in Hawaii in the following categories: (1) Energy Efficiency, (2) Distributed Renewables, (3) Utility-Scale Renewables, (4) Alternative Transportation Fuels and Modes, and (5) Electrical Transmission and Distribution. The *PEIS* also provides information on measures that can be taken to mitigate impacts of a given clean energy technology.

- **Target Audience:** The *PEIS* is intended for a wide range of stakeholders (including but not limited to the general public, agencies, policymakers, landowners, developers, investors, consultants, and non-government organizations) interested in learning about potential environmental impacts from different types of clean energy activities and technologies in Hawaii.
- **Need (Challenges/Issues Addressed):** The *PEIS* serves two of our State energy policy principles, namely, diversifying our energy portfolio and helping to balance technical, economic, environmental and cultural considerations. It's the most comprehensive resource on the potential environmental impacts in Hawaii of the covered clean energy technologies and activities, which offers value to those regulatory agencies, developers, and communities

who may not be familiar with the range of impacts in need of further evaluation. The *PEIS* offers additional value to those local agencies who may not be familiar with the operation and impacts from new or uncommon clean energy technologies.

- Usage: The *PEIS* is useful as a reference document for state, county, and federal government agencies and private project developers when project-specific environmental documents are prepared. It will help identify potential impacts in need of further study and consideration, as well as potential impact mitigation strategies. The *PEIS* will also support the USDOE in future decisions to support renewable energy initiatives in Hawaii. Furthermore, the *PEIS* is a useful reference document for the general public in informing them of potential environmental impacts before any project is proposed or developed in their community.
- Beneficial Impact: The *PEIS* serves as a valuable reference tool across the private and public sectors to more readily identify project-specific environmental impacts, associated mitigations, and best practices, which should ultimately translate into more timely and effective project development. The *PEIS* could be used to support future funding decisions by USDOE to support Hawaii in achieving its clean energy goals. Also, the *PEIS* is a useful reference document for the general public in informing them of potential environmental impacts before any project is proposed or developed in their community so they can be better prepared and more informed when participating in public processes pertaining to specific clean energy projects.

PROBLEMS ENCOUNTERED

DBEDT has encountered problems common to the implementation of most electronic solutions – e.g., software glitches, long-term hosting and maintenance, design, implementation, staff training – but has worked with its contractors and will consult the Office of Enterprise Technology Services (ETS) to resolve these issues. Ongoing support and leadership on the part of the regulatory agencies has been instrumental to the success of these tools.

Another problem can be the lack of publically available information or data for use in GIS and other permitting solutions. HSEO has successfully mitigated this issue by developing partnerships with agencies that have this information, and sharing ownership of solutions developed. HSEO very much appreciates the efforts of the many federal, state, and county agencies, and private sector partners, to support the development and use of these resources.

Finally, ongoing funding is needed to develop, host, maintain, and upgrade these resources to stay current with existing laws, policies, and procedures.

LEGISLATIVE ACTIONS NEEDED TO FURTHER IMPLEMENT HRS 201-61 to -65

DBEDT has not identified any specific legislation needed at this time to further implement HRS 201-61 to -65; however, DBEDT respectfully seeks continued support from the Hawaii State Legislature to continue the development and expansion of its permit facilitation resources.

RECOMMENDATIONS AND CONCLUSION

DBEDT recommends the Hawaii State Legislature continue to consider the entertainment and renewable energy industries as key components of Hawaii's economy.

HSEO has demonstrated the ability to develop high impact online permitting and siting resources since 2008, and has shown the aggressive progression in this area in the last few years. Additional funding towards online self-help tools and resources would allow DBEDT to develop new online tools and resources. It would also allow HSEO to partner with other state and county agencies considering online permit processing, with input and guidance from ETS. Online tools maximize and leverage public resources as they can assist a high volume of users with less need for direct staff interaction. Furthermore, electronic document management can improve agency ability to administer its many permitting duties and functions.