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DEPT. COMM. NO. 260

January 3, 2018

#### VIA EMAIL & HAND DELIVERY

The Honorable Ronald D. Kouchi Senate President 415 South Beretania Street Hawai'i State Capitol, Room 409 Honolulu, Hawai'i 96813

Re: Audit of the Hawai'i State Energy Office, Report No. 18-01

Dear President Kouchi:

We are attaching copies of our *Audit of the Hawai'i State Energy Office*, Report No. 18-01, and the Auditor's Summary. Our audit assessed how the Energy Office is fulfilling its mission to maximize Hawai'i's energy self-sufficiency and security and to guide the State toward its clean energy goals. We found the Energy Office cannot clearly articulate what it is doing to achieve its statutory mission and how its efforts have contributed to the State's clean energy goals. We also found that the office no longer has the funding to continue its current level of operations, but it has no plans for aligning and re-sizing operations to match its broad responsibilities and current fiscal realities.

The report is accessible through our website at <a href="http://files.hawaii.gov/auditor/Reports/2018/18-01.pdf">http://files.hawaii.gov/auditor/Reports/2018/18-01.pdf</a>

If you have questions about the report, please contact me.

Very truly yours,

Leslie H. Kondo State Auditor

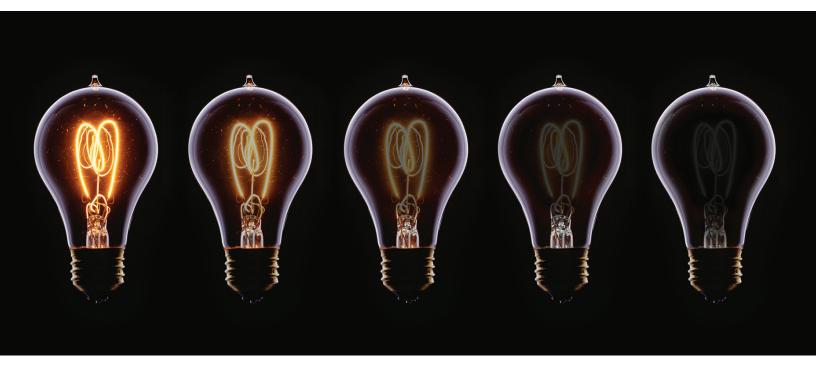
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Attachments

# Audit of the Hawai'i State Energy Office

A Report to the Governor and the Legislature of the State of Hawai'i

Report No. 18-01 January 2018





#### **Constitutional Mandate**

Pursuant to Article VII, Section 10 of the Hawai'i State Constitution, the Office of the Auditor shall conduct post-audits of the transactions, accounts, programs and performance of all departments, offices and agencies of the State and its political subdivisions.

The Auditor's position was established to help eliminate waste and inefficiency in government, provide the Legislature with a check against the powers of the executive branch, and ensure that public funds are expended according to legislative intent.

Hawai'i Revised Statutes, Chapter 23, gives the Auditor broad powers to examine all books, records, files, papers and documents, and financial affairs of every agency. The Auditor also has the authority to summon people to produce records and answer questions under oath.

#### **Our Mission**

To improve government through independent and objective analyses.

We provide independent, objective, and meaningful answers to questions about government performance. Our aim is to hold agencies accountable for their policy implementation, program management and expenditure of public funds.

#### **Our Work**

We conduct performance audits (also called management or operations audits), which examine the efficiency and effectiveness of government programs or agencies, as well as financial audits, which attest to the fairness of financial statements of the State and its agencies.

Additionally, we perform procurement audits, sunrise analyses and sunset evaluations of proposed regulatory programs, analyses of proposals to mandate health insurance benefits, analyses of proposed special and revolving funds, analyses of existing special, revolving and trust funds, and special studies requested by the Legislature.

We report our findings and make recommendations to the Governor and the Legislature to help them make informed decisions.

For more information on the Office of the Auditor, visit our website: <a href="http://auditor.hawaii.gov">http://auditor.hawaii.gov</a>

## **Foreword**

Our audit of the Hawai'i State Energy Office was conducted pursuant to Article VII, Section 10 of the Hawai'i State Constitution and Section 23-4, Hawai'i Revised Statutes, requiring the Auditor to conduct post-audits of the transactions, accounts, programs, and performance of all departments, offices, and agencies of the State and its political subdivisions.

We express our appreciation to the officials and staff of the Hawai'i State Energy Office, and other individuals whom we contacted during the course of our audit, for their cooperation and assistance.

Leslie H. Kondo State Auditor

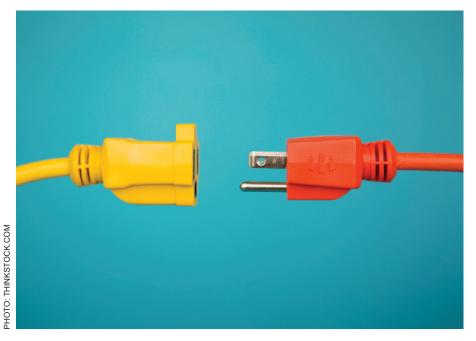
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# Auditor's Summary Audit of the Hawai'i State Energy Office

Report No. 18-01



IN REPORT NO. 18-01, Audit of the Hawai'i State Energy Office, we found that the Energy Office needs to better define its mission, role, and priorities within the State's energy independence effort. For instance, the Energy Office could not provide us with documentation that clearly articulates its projects' expected contributions to these goals, let alone the data that supports such accomplishments. We also found that the Energy Office's strategic plan includes goals and targets that are unrealistic and may be impossible to achieve. Reporting on its more achievable strategic goals, such as "photovoltaic capacity per capita," has been inconsistent.

## Why did these problems occur?

Federal stimulus funding through the American Recovery and Reinvestment Act and ambitious State clean energy goals energized the Energy Office, nearly doubling its staff from 20 in 2009 to 35 in 2012. These also helped remake the office from an organization whose major functions included outreach, information dissemination, and training to one that could pursue a wide variety of clean energy initiatives, including environmental studies, grid improvements, permitting facilitation, and support of alternative vehicles. However, the stimulus funding expired in 2012, and while the Energy Office has made some staffing adjustments, they have not been nearly enough.

## Why do these problems matter?

The Energy Office's personnel costs now account for more than 90 percent of the office's expenses. In FY2016, the Energy Office's expenses

exceeded its revenue by nearly \$600,000 — decreasing the Energy Security Special Fund balance to \$2.2 million. At its current rate of spending, the Energy Office is expected to substantially deplete the fund by FY2019. The Energy Office needs to better define its mission, role, and priorities in the State's energy independence effort, and together with the governor and the Legislature determine if the State can afford to pay for this effort.



## **Upping the Standards**

In October 2008, the State of Hawai'i, the Hawaiian Electric Companies, and the State Consumer Advocate signed an energy agreement committing to Renewable Portfolio Standard goals of 25 percent by 2020, and 40 percent by 2030, as well as the development of an Energy Efficiency Portfolio Standard. By 2015, Hawai'i had greatly exceeded its interim targets for these goals, and the Legislature subsequently extended and updated the clean energy initiative and renewable portfolio standards by setting a goal that by 2045, each utility company that sells electricity for consumption in the State generate 100 percent of that electricity from renewable sources. Hawai'i is the first and only — state in the nation to enact such an ambitious statutory provision.



## **Lights Out?: Audit of the** Hawai'i State Energy Office

HE HAWAI'I STATE ENERGY OFFICE'S mission is to maximize Hawai'i's energy self-sufficiency and security and to guide the State toward its statutory mandate to achieve energy independence. To fulfill this, the Energy Office works toward the deployment of clean energy infrastructure and serves as a catalyst for energy innovation and test bed investments.

In our audit, we encountered an organization at a crossroads: The Energy Office no longer has the funding to continue its current level of operations, it cannot clearly articulate how its efforts have contributed to its stated mandate, and it has no plans for aligning and re-sizing operations to match its broad responsibilities and current fiscal realities. Once an organization that mainly handled outreach, information dissemination, and training, the Energy Office, now nearly twice the size, pursues a wide variety of clean energy initiatives, transformed by the State's ambitious clean energy goals and more than \$37 million of funding from the American Recovery and Reinvestment Act of 2009. In the process, the Energy Office's staff grew from 20 in 2009 to 35 in 2012. Today, the office's personnel costs account for more than



The Energy Office does not have the funding to continue its current level of operations; it cannot clearly articulate how its efforts have contributed to its stated mandate; and it has no plans on how it will align and re-size operations to match its broad responsibilities and current fiscal realities.



#### **Island Energy:** Isolated and Oil-dependent

Hawai'i is the most petroleum-dependent state in the nation, with more than 80 percent of its energy coming from petroleum. Complicating Hawai'i's energy predicament is the fact that it has six separate electrical grids. Since they are not inter-connected. each island must generate its own power, which pushes up costs. The result is a retail electricity rate of 26.17 cents/kWh, the highest in the country and almost triple the national average of 10.41 cents/kWh. But it's not all bad news. For the past 20 years, oil-fueled power plants have supplied more than 75 percent of Hawai'i's net electricity generation; that number dropped to below 70 percent in 2014.

90 percent of its expenses, and at its current rate of spending, the office is expected to substantially deplete the Energy Security Special Fund, its primary source of funding, by FY2019.

Without a formal strategic plan in place until 2012, the Energy Office did not properly plan for this sudden expansion and equally abrupt contraction of activity. While that plan and its 2014 and 2016 updates include ambitious goals, objectives, benchmarks, and targets, the Energy Office could not provide us with evidence of the office's progress toward or achievement of them. The former Energy Office administrator admitted to us that some of those goals and targets were unrealistic and impossible to achieve.

The State may be making progress in transitioning to a clean energy economy, but it is difficult to determine how much — if any — of that progress can be attributable to the Energy Office's efforts. For instance, the Energy Resources Coordinator's Annual Report (annual report) and Act 73, Session Laws of Hawai'i 2010 (Act 73) report showcase Energy Office programs and projects alongside reports of State progress toward its energy efficiency and clean energy goals; however, these publications do not clearly articulate how the Energy Office's efforts are directly or indirectly connected and contribute to these various statewide achievements. More importantly, we found that the office does not report on these causal relationships because it does not clearly establish them in the first place.

The Energy Office must thoroughly document its work and how it manages its resources. As a State agency, it must be accountable for its funding, whether from Federal grants or State appropriations. Without adequate documentation of its work, the office cannot demonstrate that it is effective, that it is working efficiently and responsibly. The Energy Office needs to develop short-term and long-term financial plans to reduce operating expenses and ensure its sustainability. At the same time, it must evaluate not only what role it should play, but what role it can play in the State's energy independence efforts. Without such an evaluation and subsequent plan, it is difficult to determine whether current funding levels are too much, too little, or wholly appropriate.



THE ENERGY OFFICE is the Strategic Industries Division within the Department of Business, Economic Development and Tourism. The office's mission is to lead energy planning, policy, and deployment support in the State, and to coordinate high-impact solutions for energy efficiency and renewable energy among government agencies and the private sector. In 2015, the office was re-organized from two to four program branches. The Energy Office describes the four program branches as follows:

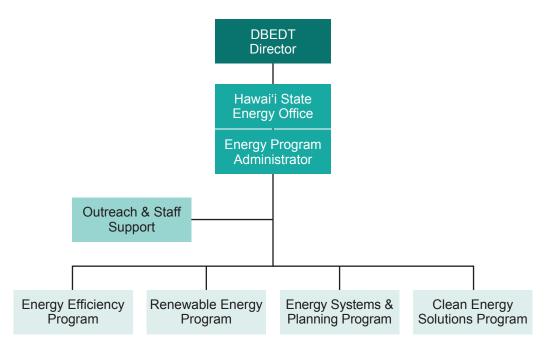
The Clean Energy Solutions Program promotes investment and entrepreneurship in Hawai'i as the world's test bed to drive development of a coordinated, sustainable innovation ecosystem and clean energy economy. The program administers near-term commercial programs and projects to promote the use of innovation in renewable energy technologies and efficiency measures to achieve rapid venture and jobs growth. It attracts talent and capital to Hawai'i to support the clean energy innovation ecosystem and develops strategies and business opportunities for Hawai'i-based firms to export "Made in Hawai'i" innovations to the rest of the world.

The Energy Efficiency Program plans, develops, implements, and evaluates projects, programs, and activities contributing to the State's statutory energy self-sufficiency and efficiency objectives. The program ensures that its energy efficiency, conservation, and renewable energy efforts comport with State energy policy objectives and are consistent with objectives of the State Energy Program funded, supported, and directed by the U.S. Department of Energy.

The Energy Systems and Planning Program is responsible for assisting in the design and implementation of the State's clean energy agenda relating to electricity and gas utility systems, fuels infrastructure, energy assurance and transportation. The program assists the administrator in devising and carrying out statewide clean energy plans, policies, and deployment strategies affecting utilities, refiners, and other large-scale energy producers and consumers; conventional and alternative fuels infrastructure; energy risk and assurance planning; and clean transportation.

The Renewable Energy Program provides resource expertise and facilitates for the development of renewable energy projects and investments. The program develops, directs, and coordinates activities in statewide renewable energy assessments, studies, projects, permit plans, and programs; reviews, evaluates, formulates and recommends policies, plans, and proposals for policy measures, demonstrations, grants, or other programs to facilitate renewable energy projects and reduce Hawai'i's dependence on imported and non-renewable fuels; participates in the development of budget and legislative proposals; and oversees grants, contracts, and cooperative agreements.

#### The Hawai'i State Energy Office Organization Chart



Source: Hawai'i State Energy Office

## **Objectives of the Audit**

- 1. Determine whether the Energy Office management ensures that its resources are used efficiently and effectively.
- 2. Make recommendations as appropriate.

## Scope and Methodology

We conducted the audit of the Energy Office pursuant to Article VII, Section 10 of the Hawai'i State Constitution and Section 23-4, Hawai'i Revised Statutes (HRS), which authorizes the Auditor to conduct post-audits of the transactions, accounts, programs, and performance of all departments, offices, and agencies of the State and its political subdivisions. This is our first audit of the office.

Our audit period covered fiscal years 2014 through 2016. To achieve our audit objectives, we reviewed the statutory roles and responsibilities of the Energy Office, the office's mission and functions, budgets, reports to the Legislature, and other key documents. We interviewed office management and staff, as well as the former and interim administrators. We also interviewed several stakeholders and energy industry representatives.

Our audit was conducted from November 2016 through May 2017, according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence we obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## **Summary of Findings**

- 1. The Energy Office's specific contributions to advancing the State's clean energy initiatives are unclear. It could not provide us with any documentation or other evidence to show a project's expected contributions to the State's clean energy goals, let alone the data that indicates the project's progress toward those goals.
- 2. The Energy Office's strategic plan was developed and adopted in 2012, after the office had rapidly expanded operations and while it was expending a significant but temporary infusion of Federal moneys. The plan and its 2014 and 2016 updates include goals and targets that are unrealistic and may be impossible to achieve.

3. An imminent financial shortfall will significantly impact the Energy Office operations. In FY2016, its expenses exceeded its revenue by nearly \$600,000 – decreasing the Energy Security Special Fund balance to \$2.2 million. At its current rate of spending, the Energy Office is expected to substantially deplete the fund by FY2019.



#### **Progress Report**

ACT 73 REQUIRES that the Department of Business, **Economic Development** and Tourism submit an annual report to the Legislature on the status and progress of new and existing programs funded by the Energy Security Special Fund and all clean energy initiatives. This report must also include:

- 1. The spending plan of the fund;
- 2. All expenditures of the fund moneys; and
- 3. The targeted markets of the expenditures, including the reasons for selecting those markets; the persons to be served; and the specific objectives of the expenditures, including measurable outcomes.

### The Energy Office's specific contributions to advancing clean energy initiatives are unclear.

The State may be making progress in transitioning to a clean energy economy, but it is hard to tell how much of that progress is the result of Energy Office efforts. For instance, its annual and Act 73 reports to the Legislature showcase Energy Office programs and projects alongside information about the State's progress toward its energy efficiency and clean energy goals; however, these publications do not clearly articulate how the Energy Office's efforts are connected and contribute to these various statewide achievements. More importantly, we found that the office does not report on these causal relationships because it does not clearly establish them in the first place. For instance, the Energy Office could not provide us with any documentation or other evidence to show a project's expected contributions to the State's clean energy goals, let alone data that indicate the project's progress toward those goals.

While we acknowledge that the State's clean energy goals are broad and complex and some of the office's work cannot be easily quantified, the Energy Office is a State agency expending public moneys. To be accountable to the Legislature and the public, it must thoroughly document its work to demonstrate that it is using its resources, both human and financial, effectively, efficiently, and responsibly.

#### The Energy Office does not articulate its contribution to various clean energy achievements.

Act 73 includes a requirement that the Department of Business, Economic Development and Tourism submit an annual report to the Legislature on: (1) the status and progress of new and existing programs funded by the Energy Security Special Fund, and (2) the status and progress of all clean energy initiatives. We found that the information presented in the Energy Office's Act 73 reports does not appear to satisfy that requirement. Specifically, the Act 73 reports do not articulate the office's contribution to the various Hawai'i

Clean Energy Initiative achievements. For example, the report lists eight new renewable energy projects that became operational in 2016, but it does not explain the Energy Office's specific involvement in these projects, if any.

The office's level of involvement is even murkier when it collaborates with multiple entities on projects such as the JUMPSmart Maui Net Zero Microgrid<sup>1</sup> and the Kalaeloa Community District Development<sup>2</sup>, both mentioned in the 2016 report. The JUMPSmart project's website lists more than a dozen key partners, including the Department of Business, Economic Development and Tourism. Likewise, the Kalaeloa project also involves the U.S. Department of Energy, Hawai'i Community Development Authority, the U.S. Navy, and Sandia National Laboratories. There is no information in the report describing the Energy Office's assigned tasks in either project.

Prominently featured in its annual and Act 73 reports is the use of energy performance contracts and their projected savings. According to the 2016 Act 73 report, State and County agencies have signed a total of \$442.4 million in energy performance contracts that are estimated to save over \$1.1 billion in energy costs over the life of the contracts. The Energy Office did not include a description of the actual work it did to achieve this outcome, such things as what agencies it provided technical assistance to or how many educational workshops it conducted and in what time period. The annual report's roster of projects does indicate that, between 2014 and 2016, there was only one new contract signed by a State agency or County in coordination with the Energy Office. We found that the office stopped actively promoting energy performance contracting to State agencies years ago. (See sidebar on page 20 for a further discussion on the Energy Efficiency Program and energy performance contracts.)

During our audit, the Energy Office could not clearly articulate, neither through documented evidence nor verbally, how it has contributed to the achievement of the Hawai'i Clean Energy Initiative goals.

#### For the Record

**KEEPING COMPLETE** and accurate records may seem like an obvious, common-sense task for any organization, a best practice for everything from a household to the U.S. House of Representatives. But for government agencies, the retention of complete and accurate documentation of discussions, decision-making, and actions is a foundational

Some of the benefits of proper recordkeeping are practical. According to the National Archives, complete and accurate documentation allows Federal agencies to protect the legal and financial rights of the government and of the individuals directly affected by government activities. Proper recordkeeping also preserves institutional memory so that agency officials and their successors can make decisions informed by past results.

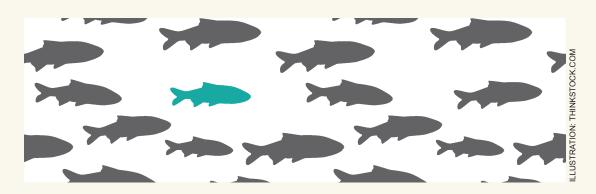
This best practice also serves a higher function. The Legislature recognized that opening governmental processes to public scrutiny protects the public's interest, and specifically directed by State policy that "...the formation and conduct of public policy — the discussions, deliberations, decisions, and action of government agencies - shall be conducted as openly as possible."1 Without records, the public loses its right to scrutinize government and to hold government accountable.

The National Archives concludes that "poor documentation may result in an unresponsive government or a government that cannot account for its actions, or both."

<sup>&</sup>lt;sup>1</sup> This collaborative effort between Japan and the United States aims to improve distributed energy resource integration and prepare the electrical system for widespread adoption of electric vehicles.

<sup>&</sup>lt;sup>2</sup> Government contractor Sandia National Laboratories evaluated the potential of using microgrid technology and renewable energy to provide reliable power in Kalaeloa.

<sup>&</sup>lt;sup>1</sup> Section 92F-2, HRS.



## **Excess Energy?**

The Energy Office's docket work has been costly and not coordinated with other State advocacy efforts.

THE ENERGY OFFICE believes that the Energy Resources Coordinator (director of the Department of Business, Economic Development and Tourism) has a statutory interest in regulatory matters as a consultant to the governor, public agencies, and private industry on matters relating to the acquisition, utilization, and conservation of energy resources. From 2011 to 2016, the Energy Office was involved in 10 regulatory dockets before the Public Utilities Commission, either as a party or intervenor1. To supplement its in-house expertise in energy planning, analysis, policy development, and knowledge of the renewable energy market and technologies, the Energy Office contracted with a Washington, D.C. law firm with regulatory experience. We reviewed three contracts with the law firm executed from 2013 to 2016. The cumulative total of the three contracts, including supplements, was **\$1.1 million**, funded by both the Energy Security Special Fund and Federal formula grants.

Since there are often other intervenors in these dockets, many of whose positions aligned with or often are identical to the Energy Office's, the necessity of the Energy Office's frequent participation in them is questionable. For instance, in a March 24, 2016, supplement to one of those contracts, the office hired the law firm to prepare a Statement of Position in response to the Hawaiian Electric Company Inc.'s application for approval of the merger with NextEra Energy, Inc. The Energy Office was one of 27 intervenors in that particular Public Utilities Commission docket, one of 14 that opposed the merger.

The contract supplement, which included work on two other docket items, cost \$50,000.

Another executive branch agency, the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, is statutorily mandated to represent, protect, and advance the interests of all consumers of utility service and is, ex officio, a party to any proceeding before the Public Utilities Commission. According to the Consumer Advocate, there were instances in which the Energy Office's position appeared to be more focused on "moving the needle" toward clean energy goals even when the impact on utility rates for the consumer was unclear. He believed that the different positions advanced by the Energy Office may have caused additional work for both sides. He was unaware that the Energy Office had contracted with a law firm to provide technical assistance in this work and noted that the office's resources could be better used to conduct studies or technical analysis of the issues, which could then be provided to all parties involved.

After our discussion with the Consumer Advocate, we interviewed the Energy Office's then-interim administrator who told us that he had ceased all further office participation in Public Utilities Commission dockets and withdrew as an intervenor in one open docket. The theninterim administrator told us that he also advised the Public Utilities Commission that the Energy Office will continue to be involved in regulatory proceedings; however, its role would be as a policy and technical consultant.

<sup>&</sup>lt;sup>1</sup> Pursuant to Public Utilities Commission Administrative Rules §6-61-55, a person may make an application to intervene and become a party to a proceeding by filing a timely written motion.

#### Projects' expected contributions to the State's clean energy goals have not been clearly defined.

According to the former administrator and current program managers, internal communication of project initiation and execution has been primarily verbal. For instance, these projects would go through a "pre-scope," during which time the merits of a proposed project would be discussed to ensure that it fell into one of the office's strategic plan priorities and that adequate resources were available. If the proposed project met that criteria, the branch manager would prepare a work plan and an expenditure plan. When selecting proposals, the former administrator would consider the expectations for various proposals and how they might align with the State's overall renewable energy goal, the cost for each proposal, and the Energy Office budget. (See sidebars on pages 12 and 13 for discussion on additional contracts and projects.)

On November 25, 2014, the Energy Office signed a \$500,000 contract with the Pacific International Center for High Technology Research to support activities by Energy Excelerator, a startup program "growing Hawai'i's next generation of innovators and building a strong pipeline of companies, investors and corporates to Hawai'i." The Energy Excelerator, now known as the Elemental Excelerator, received the vast majority of its initial funding from the Federal government, including \$30 million from the U.S. Department of Defense's Office of Naval Research in 2013.

The Energy Office's contract included \$90,000 to send the Energy Excelerator team and partner companies to Silicon Valley for five days of workshops and networking with potential partners and investors. Also included was \$94,000 to develop a training program strategy to help build the next generation of energy innovators; \$85,000 for the installation of metering and instrumentation equipment and efficiency measures at the Energy Excelerator headquarters; \$105,000 to develop a strategic communications strategy that positions Hawai'i as the world's leading location for investment in clean energy innovation and economic growth opportunities; and \$96,000 for a mentor program.

Deliverables for the five programs included such things as agendas from conferences attended and events planned and executed, summaries of "lessons learned," copies of media mentions/articles that the Energy Office could use related to energy innovation, and final summary reports.

We could not find any evidence of a correlation or connection between the \$500,000 contract and the advancement to the State's renewable energy goal in the report and, more importantly, in the contract itself. According to the Clean Energy Solutions Program manager



### Upping the Standards

The Hawai'i Clean Energy **Initiative** is a framework of statutes and regulations supported by a diverse group of stakeholders committed to Hawai'i's clean energy future. The initial goal of the initiative was to transform Hawai'i into a 70 percent clean energy economy by 2030. In October 2008, the State of Hawai'i, the Hawaiian Electric Companies, and the State Consumer Advocate signed an energy agreement committing to Renewable Portfolio Standard goals of 25 percent by 2020 and 40 percent by 2030, as well as the development of an Energy Efficiency Portfolio Standard. By 2015, Hawai'i had greatly exceeded its interim targets for these goals, and the Legislature subsequently extended and updated the clean energy initiative and Renewable Portfolio Standards by setting a goal that, by 2045, each public utility generate 100 percent of the electricity it sells from renewable sources. Hawai'i is the first, and only, state in the nation to enact such an ambitious statutory provision.



#### **HSEO Who?**

The Energy Office's existence and relevance are unclear to clean energy stakeholders.

THE ENERGY OFFICE'S August 2016 contract with Cascadia Consulting Group includes compiling support for the development of a five-year, comprehensive Clean Energy Innovation Strategic Plan. Much of this effort involved interviews of 46 energy industry stakeholders at 33 organizations about their perspectives on the Energy Office. On February 28, 2017, Cascadia submitted its Summary of Research Findings, which reported, among other things: Entrepreneurs and clean energy businesses were generally unfamiliar with the Energy Office and did not generally see it as highly relevant; State government and affiliates described the office as a limited, somewhat deskbound institution that does not interface with other players in the field; and advocates and non-governmental organization groups interviewed indicated that "[t]he role of the Energy Office as the Energy Resource Coordinator is not as well defined as other ecosystem actors, such as the Public Advocate, and no entities are required to collaborate with the Energy Office, so collaboration does not always occur when needed" and "[r]oles and responsibilities between organizations are not always clear, leaving a gap in coordination."

We also spoke to several energy industry representatives who echoed similar views of the Energy Office's existence and relevance. One described the office as an "entity that is not included much in industry matters because they are not out there in the industry."

who administers the contract, her office merely tracks the deliverables and the submitted invoices to ensure contract compliance. When asked about the Energy Office's assessment of the project's achievements toward the State's clean energy goals, she said she would consider the contract a success if the deliverables are consistent with the terms of the contract. Since the contract pre-dated her employment at the Energy Office, she said she was not privy to the circumstances and conditions surrounding the development of the contract and was reluctant to comment further on the matter.

#### The Energy Office needs to better define its mission, role, and priorities within the State's energy independence effort.

The Energy Office did not put a formal strategic plan into place until 2012. The former administrator, who oversaw the development of the plan, told us that it was "organically" derived from statute and regulation and was designed to have a "rigorous" start in guiding the program managers in their activities. Our review of the strategic plan and its 2014 and 2016 implementation updates found a focus on updating and implementing the clean energy objectives of the Hawai'i Clean Energy Initiative roadmap, concentrating on near- and mid-term opportunities to accelerate renewable energy development and energy efficiency. The plan lists various goals and objectives including benchmarks and targets; however, we could not find evidence of the Energy Office's progress toward or achievement of them.

We also note that the 2012 strategic plan was created when there were only two branches in the Energy Office — Renewable Energy Projects and Energy Efficiency — instead of the four it has today. The office reorganized in 2015, but it has not updated its strategic plan to include the roles and functions of the two additional branches: Energy Systems and Planning and Clean Energy Solutions.



## **Build It and They Will Come?**

The Energy Office signed a \$250,000-plus contract to design an energy innovation center and seven months later signed another contract to determine if the State needs one.

ACCORDING TO the Energy Office's 2016 strategic plan update, one of the office's top priorities is the establishment of an energy innovation center, a "green," state-of-the-art facility to be used by energy innovation stakeholders to showcase clean energy innovation and serve a crucial role in the development of policy and initiatives, building an innovation cluster around clean energy.

On January 5, 2016, the Energy Office contracted Perkins+Will, an international architectural firm, to provide conceptual plans and cost estimates for an energy innovation center. This included identifying not only the key energy innovation stakeholders in Hawai'i, but also their technical and nontechnical needs. The \$253,722 contract had an original contract completion date of December 31, 2016. According to the Clean Energy Solutions branch manager, the Energy Office's goal is to build an innovation center that is accepted and used by energy innovation market participants. The conceptual plans and cost estimates are intended to be used when requesting an appropriation for construction.

On August 15, 2016, the Energy Office signed a \$149,100 contract with the Cascadia Consulting Group to support the development of a five-year, comprehensive Clean **Energy Innovation Strategic Plan** for the office, including assessing the need for the development and use of an energy innovation center. Contract tasks include interviewing stakeholders to provide third-party perspectives on the needs and opportunities for advancing clean energy innovation in the State and the potential roles for the Energy Office and an innovation center in this effort. From these interviews and "desktop research." Cascadia will compile an initial needs assessment for clean energy innovation in Hawai'i and a SWOT (strengths, weaknesses, opportunities, and threats) analysis for the office. (See sidebar on page 12 for further discussion on Cascadia's initial findings) The contract ends on August 11, 2018.

On October 18, 2016, the Energy Office extended the end date for the Perkins+Will contract by one year, to December 31, 2017. According to the branch manager, the design contract was put on hold until Cascadia completes the strategic plans for the office and the energy innovation center. Perkins+Will will then prepare conceptual plans for the proposed energy innovation center. It is not clear what will happen if Cascadia's assessment finds no clear need for a new energy innovation center.



#### Internal Controls

ACCORDING TO the U.S. Government Accountability Office's Standards of Internal Control in the Federal Government. internal controls are an integral component of an organization's management that provide reasonable assurance that the following objectives are being achieved: effectiveness and efficiency of operations; reliability of reporting; and compliance with applicable laws and regulations. Internal controls comprise the plans, methods, and procedures used to meet missions, goals, and objectives. Internal controls help government program managers achieve desired results through effective stewardship of public resources.

#### Many strategic plan goals are unrealistic and not consistently reported

Many of the goals and targets listed in the office's strategic plan were unrealistic and unlikely to be achieved. For instance, the 2012 strategic plan includes such midterm goals as "Attract \$100M in project financing for emerging technologies between 2011 and 2015," "Attract \$50 M in federal grants by 2015," and "Displace 50 MGY [million gallons per year] of oil in the transportation sector." However, these goals were drastically altered in the office's 2016 plan update. The \$100 million in project financing for emerging technologies by 2015 was changed to \$50 million with no time horizon. Attracting \$50 million in federal grants was cut to \$5 million with no time horizon. Finally, the goal of displacing 50 MGY of oil in transportation was replaced by an "x," an issue for further study.

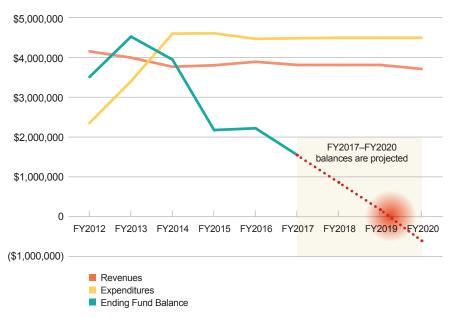
We also found that the Energy Office has not been consistently reporting on its more achievable strategic goals. For example, we reviewed the Energy Office's annual and Act 73 reports from FY2012–FY2016 and found that the Energy Office did not report on its progress toward its goal to "Achieve 'A' ratings on net metering and interconnection policies in national rankings." It did report on "Clean economy job growth" in its 2012 and 2013 annual report and in its 2012 Act 73 report, but it did not do so in succeeding publications. Similarly, the office has not consistently reported on "Photovoltaic capacity per capita" since 2012 and did not report on it at all in 2015 and 2016. When it did report on these and other metrics, the Energy Office did not include any information on specific actions that it undertook that may have directly or indirectly affected change.

### At its current rate of spending, the Energy Office is expected to substantially deplete the Energy Security Special Fund by FY2019.

Our audit found that Federal stimulus funding through the American Recovery and Reinvestment Act (ARRA) and ambitious State clean energy goals energized the Energy Office, nearly doubling its staff from 20 in 2009 to 35 in 2012. It also helped remake the office from an organization whose major functions included outreach, information dissemination, and training to one that could pursue a wide variety of clean energy initiatives, including environmental studies, grid improvements, permitting facilitation, and support of alternative vehicles. However, the stimulus funding expired in 2012, and while the Energy Office has made some staffing adjustments, they have not been nearly enough. The Energy Office's personnel costs now account for more than

90 percent of the office's expenses. In FY2016, its expenses exceeded its revenue by nearly \$600,000, decreasing its special fund balance to \$2.2 million. At its current rate of spending, the Energy Office is expected to substantially deplete the Energy Security Special Fund by FY2019.

#### Revenues, Expenditures, and Fund Balance



Source: Energy Office and Office of the Auditor

#### The Energy Office's source of funding changed with its new mission.

In January 2008, a Memorandum of Understanding between the State of Hawai'i and the U.S. Department of Energy established a long-term partnership to increase energy efficiencies and maximize the use of Hawai'i's abundant renewable energy resources. The State's mission was to become a world leader in clean energy policy, technological innovation, and alliance building. This partnership launched the Hawai'i Clean Energy Initiative and a commitment to leading Hawai'i toward energy independence. The initial goal of the initiative was to transform Hawai'i to a 70 percent clean energy economy by 2030. In October 2008, the State, the Hawaiian Electric Companies, and the State Consumer Advocate signed the Energy Agreement committing to renewable portfolio standards<sup>3</sup> goals of 25 percent by 2020, and 40 percent by 2030.



#### **Why Measures** Matter

All government programs exist to achieve some purpose chosen by the Legislature, and to do so economically and efficiently. Management's job is to establish performance goals in measurable terms, develop appropriate measures, analyze performance, appraise and interpret results, take appropriate action, and communicate the meaning of the measurements and the results to the public.

We note that one of the only Energy Office performance metrics that the office consistently reported during the five-year's worth of reports we reviewed were those associated with the State's decadeslong energy performance contracting effort. All the reports included a listing of the State or County agency contractee, the contract years, the contract amount, and the estimated amount of savings over the life of the contract. As we make clear in "Is the Race Over?" on page 20, we question the Energy Office's recent actions in this effort especially in recent years — and its claims of credit for the energy contracting effort's nation-leading numbers.

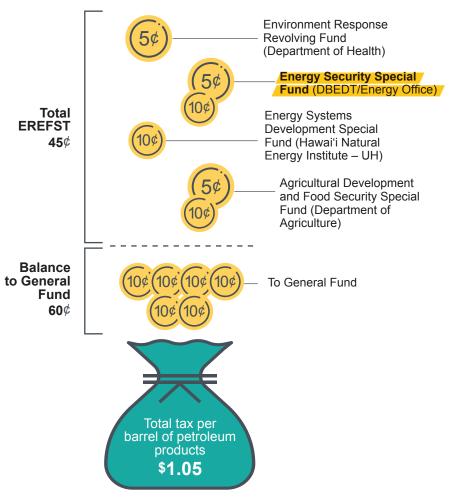
<sup>&</sup>lt;sup>3</sup> These standards require utilities to sell a specified percentage or amount of electricity generated using renewable sources. Twenty-nine states now have renewable portfolio standards.

In July 2015, the renewable portfolio standards were expanded to include a target of 100 percent of electricity generated from renewable sources by 2045.

Historically, in addition to general fund appropriations, the Energy Office also received annual Federal grants and Petroleum Violation Escrow allocations from the U.S. Department of Energy. In July 2008, the Legislature established the Energy Security Special Fund, which now provides the vast majority of the office's funding.

In 2010, the Legislature passed Act 73, which, among other things, increased the Environmental Response Tax from 5 cents to \$1.05 per barrel of petroleum products. The tax was renamed the Environmental Response, Energy, and Food Security Tax, commonly referred to as the "Barrel Tax." The measure allocated the Barrel Tax to several funds, including the Energy Security Special Fund.

#### "Barrel Tax" Allocation



Source: Act 73, Session Laws of Hawai'i 2010, Section 243-3.5, HRS



## A Waste of Energy

Poorly designed and implemented, the Energy Office's processing of solar-water-heater variances wastes time and money.

AS OF JANUARY 1, 2010, all new singlefamily dwellings built in the State of Hawai'i are required to have a solar water heater. Builders can, however, opt for a variance (i.e. exemption) from this requirement by submitting a request to the Energy Office for approval. According to the office, approximately 90 percent of the applications fall under the variance condition of having an instantaneous gas water heater and an additional gas appliance. The next most popular exemption is granted for the installation of a photovoltaic or other alternative energy system. As of April 26, 2017, nearly 5,000 variance requests have been processed by the Energy Office. Fewer than 10 of those requests were denied.

Although the processing of variance requests is limited to a desk review of required documents, one of the office's professional staff, an energy analyst, has been assigned to the job full time since 2010. In addition, we found that the process is poorly designed and inefficient. For instance, while variance requests can be submitted electronically. the energy analyst prints paper copies of all requests. He then codes and batches all the submitted request documents by hand. The process takes about two weeks from receipt of the request to approval of the variance.

We also note that the variance-approval process operates independently of the

Counties, which are responsible for building plan reviews, permit approvals, and the physical inspection of installations and construction. The Energy Office should consider working with the Counties to streamline the permitting process or the Legislature should consider re-assigning the administration of variance requests to each respective County.

During our fieldwork, we were informed that a web-based application is currently in development and is expected to lighten the workload. The implementation of the webbased application is contingent upon the approval of administrative rules, which are currently awaiting a public hearing pursuant to Chapter 91, HRS. One of these rules will allow the State to charge \$25 for each variance request, which only supports the development and maintenance of the web application. We recommend that the Energy Office collect a fee that also offsets the cost of using an energy analyst to process requests.

The sooner the Energy Office can make improvements to the program the better. Requests for solar water heater variances are expected to increase significantly, due in large part to the D.R. Horton Ho'opili development in West O'ahu. The developer is required to request solar water heater variances for each of its 11,000 homes planned for construction.

#### Federal stimulus funding fueled the Energy Office's expansion of operations and staff.

While its legislative mandate broadly expanded the Energy Office's mission, it was the sudden and significant influx of Federal moneys that fueled the office's expansion of staff and operations. Under ARRA, the U.S. Department of Energy invested more than \$31 billion in a wide range of clean energy projects throughout the nation, and, from 2009 through 2011, Hawai'i received more than \$37 million in ARRA stimulus funds, which supported four programs: the State Energy Program (\$25.9 million), the Energy Efficiency and Conservation Block Grant Program (\$10 million), the Efficient Appliance Rebate Program (\$1.2 million), and the Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Program (\$318,000).

In turn, the Energy Office entered into contracts to support its primary initiatives in electricity, energy efficiency, transportation, energy security/energy assurance, and outreach/community involvement. The 37 projects included a \$200,000 contract with the University of Hawai'i to provide a comprehensive written report evaluating the environmental costs and benefits of a district-wide seawater air conditioning system for Waikīkī; a \$581,943 contract with electric car company Better Place to support electric vehicles, chargers, and communication with the public; and a \$500,000 contract with advertising firm Milici Valenti Ng Pack to provide public relations and communications support.

Federal stimulus funding expired in September 2012, and, as a result, the number of active contracts that the Energy Office administered dropped from 41 in December 2011 to just seven the following year. In 2015, the office was administering 14 contracts, which had a maximum value of \$4.6 million. These included four contracts that supported the Department of Business and Economic Development and Tourism's Hawai'i Green Infrastructure Authority or GEMS Financing Program, with a total value of \$1.4 million.<sup>4</sup> Other contracts fulfilled some of the office's core duties, such as a \$320,000 contract with Engineering Economics Inc. to provide technical assistance for State and local governments for advancing energy efficiency in Hawai'i public facilities and a \$99,500 contract with ICF Incorporated, LLC to provide technical assistance to design, develop, and implement emergency energy assurance plans.

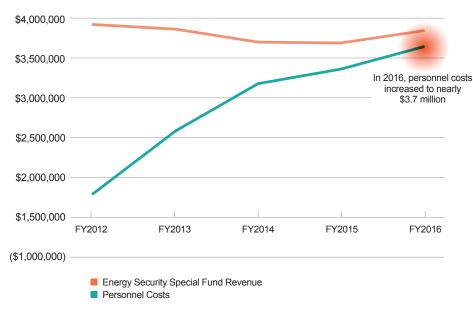
<sup>&</sup>lt;sup>4</sup> The GEMS Financing Program is administered by the Hawai'i Green Infrastructure Authority, another Department of Business, Economic Development and Tourism

#### The Energy Office personnel costs have remained high despite fund depletion.

In FY2016, the Energy Office received \$3.89 million from the Barrel Tax and spent 94 percent of it, \$3.66 million, on payroll and fringe benefits. The office also spent more than \$800,000 on other costs, which resulted in a deficit of approximately \$577,000. At its current rate of spending, the Energy Office is expected to substantially deplete the Energy Security Special Fund by FY2019.

According to the Energy Office's former administrator, prior to the ARRA funding, the Energy Office had 20 staff members whose work mainly focused on promotional and educational activities. By 2012, the Energy Office's staff had nearly doubled to 35. In FY2012, ARRA funding paid for almost half of the Energy Office's personnel costs. Those funds were depleted by FY2014, but personnel costs remained relatively steady. In FY2016, costs increased to nearly \$3.7 million, and in its 2016 Act 73 Report, the Energy Office estimated that FY2017 personnel costs would exceed \$3.9 million. While the number of employees has remained relatively steady, staff salaries have risen.

#### **Energy Security Special Fund Revenue vs. Personnel Costs**



Source: Energy Office

When we asked the Energy Office how it planned to meet these funding challenges, they provided us with a January 2017 sustainability plan with four measures to: (1) reduce one temporary position and funds for the Clean Energy Solutions Branch (\$48,000 in FY2018 and \$96,000 in FY2019); (2) implement criticality reviews for filling of new vacant positions to ensure that positions are described appropriately and can be supported with available funding, and convert five permanent positions to general funds; (3) review all ongoing contracts for essential services to determine the need to retain services and whether stop work orders would be appropriate; and (4) prioritize and limit travel and training approvals to essential events and meetings.

The one-page sustainability plan did not include any start or end dates.

#### Is the Race Over?

**ENERGY PERFORMANCE CONTRACTING** is a form of financing for capital improvements that allows government agencies to pay for energy efficiency upgrades with the savings on their utility bills. For instance, energy savings from such things as upgrades to lighting, plumbing, and air conditioning are used to pay the contractor for the cost of the equipment and its installation. Energy performance contract projects vary widely and include office buildings, community colleges, airports, highways, and prisons.

For a little more than 20 years, the State of Hawai'i and the Counties of Honolulu, Hawai'i and Kaua'i have signed 13 energy performance contracts for a total of \$442.4 million with estimated savings of more than \$1.1 billion in energy costs. During that time, the Energy Office's Energy Efficiency Program has provided technical assistance to agencies considering entering into these contracts and has reported the contracts and

their projected energy savings as office accomplishments in its Act 73 reports. In addition, for the past six years, the State has been awarded the "Race to the Top Award," a national honor that recognizes the country's per capita leader in energy performance contracting. The Energy Office has also included the award among its accomplishments in its reports.

It is unclear how much credit the Energy Office can claim for this decades-long effort. It has provided technical assistance through outside contractors. However, the former Energy Efficiency Program manager told us that her program hasn't hosted an energy performance contracting workshop for State agencies in more than a decade. According to the former manager, her staff stopped "knocking on doors" years ago, since the market for these contracts is mature and "anyone interested in energy performance contracts already knows who to call."

#### Conclusion

What does the Energy Office do and how well does it do it? Surprisingly, we could not answer these seemingly straightforward questions. The office could not provide us with any documentation or other evidence to show a project's expected contributions to the State's clean energy goals, let alone the data that indicates the project's progress toward those goals.

In addition, during an interview on April 27, 2017, the Energy Office's interim administrator described the office as being on "life support." According to him, the Energy Office could not continue its present operations without additional funding, especially since its main source of funding, the Barrel Tax, will almost certainly decrease as the State makes progress toward its goal of reducing petroleum consumption. Our audit found that at its current rate of spending, the Energy Office will substantially deplete the Energy Security Special Fund by FY2019.

The Energy Office needs to better define its mission, role, and priorities in the State's energy independence effort, and together with the governor and the Legislature, determine if the State can afford to pay for this effort. In the meantime, it should establish short-term and long-term financial plans to ensure sustainability while at the same time reducing operating expenses to a sustainable level.

#### Recommendations

- 1. The Energy Office should:
  - a. Establish short-term and long-term financial plans to ensure sustainability;
  - b. Reduce operating expenses to a sustainable level; and
  - Immediately update its strategic plan.
- 2. The Energy Office should also develop and implement robust project management and reporting processes by:
  - Documenting the justification for initiation of each project, measurable goals, budget and staffing requirements, implementation and execution strategies, and project schedule:
  - Establishing performance measures for all programs and activities:

- Monitoring the progress and status of programs and activities; c.
- Ensuring an analysis of achievements and impacts on the State's clean energy goals upon project completion;
- Reporting the resultant achievements and impacts in its annual and Act 73 reports clearly and concisely, so that the Legislature and public can evaluate the office's progress toward its goals; and
- Establishing written policies and procedures that all program staff are required to follow.

## Office of the Auditor's **Comments on the Department** of Business, Economic **Development and Tourism** Response

E PROVIDED A DRAFT OF THIS REPORT to the Department of Business, Economic Development and Tourism (DBEDT) and the Hawai'i State Energy Office (Energy Office) on December 14, 2017, and met with the DBEDT Deputy Director as well as the Energy Office administrator and her branch managers on December 21, to discuss our audit findings and recommendations. DBEDT offered its written response to the draft report dated December 27, which is included as Attachment 1.

In its response, DBEDT agreed with several of our findings and recommendations, including the need to update the Energy Office's strategic plan and to reassess its participation in regulatory proceedings before the Public Utilities Commission. DBEDT reported that the Energy Office is taking steps to address some of these recommendations.

DBEDT, however, disagreed with other statements in the report and represented certain accomplishments presumably to refute those statements. We believe that our audit findings are fully supported by the records and other information provided to us by the Energy Office during the six-month period of our audit. We also note that much of the information provided in DBEDT's response could have, and should have, been — but was not raised during our December 21 meeting or during the course of the audit.

Before addressing DBEDT's specific comments, we suggest that the interview responses of clean energy stakeholders reported by Cascadia Consulting Group serve to confirm our statement questioning the Energy Office's contributions toward the State's clean energy goals. Cascadia Consulting Group, which was hired by the Energy Office, reported that energy industry stakeholders generally did not view the office as being highly relevant or as working collaboratively with other clean energy stakeholders —

in other words, they too did not understand the Energy Office's role in achieving the clean energy goals.

DBEDT, however, cited the Energy Office's work on energy performance contracting as evidence of its contributions to the State's clean energy mandate and referred to some of the accolades the State has received over the course of the past 20 years<sup>1</sup>. We reported about the Energy Office's annual and Act 73 reports that reference the list of decades-old energy performance contracts and recent awards to the State. We also acknowledged the "technical assistance" that the Energy Office offered through an outside contractor; but we noted the absence of any specifics about the work that was performed by the office and for whom. And, according to the former Energy Efficiency Program manager, who is now the current Energy Office administrator, the office hasn't hosted an energy performance contracting workshop for State agencies in more than a decade because the market has "matured"

DBEDT refers to a 2017 sustainability plan to refute our statement that the Energy Office has no plans for aligning and re-sizing operations to match its broad responsibilities and current fiscal realities. DBEDT's response causes us to question whether DBEDT truly understands the need for and the importance of a plan to ensure the Energy Office's future. As we reported in FY2016, the Energy Office's expenditures exceeded its revenues by nearly \$600,000, and at the current level of spending, the Energy Office will substantially deplete the Energy Security Special Fund, its primary source of revenue, by FY2019. The brief, one-page sustainability plan referenced by DBEDT features four cost-saving measures and may save money in the short term. But it does not constitute a plan to address the Energy Office's current or projected fiscal issues; it does not re-define the Energy Office's role in achieving the State's clean energy goals in light of the office's current and projected fiscal realities.

We also do not understand DBEDT's disagreement with our finding that, at its current rate of spending, the Energy Office is expected to substantially deplete the Energy Security Special Fund by FY2019. DBEDT claims that, because the Barrel Tax, which funds the Energy Security Special Fund, has no sunset date, the Energy Security Special Fund will not be substantially depleted by FY2019. Our statement

<sup>&</sup>lt;sup>1</sup> In our report, we stated that between 2014 and 2016, there was only one new contract signed by a State agency or County in coordination with the Energy Office. Three of the contracts in the listing included in the department's response — DOT-Airports, Phase I (2013); DOT-Highways (2015); and DOT-Harbors (2016) — were not included in the Energy Office's 2015 and 2016 annual reports or Act 73 reports to the Legislature. A fourth contract, DOT-Airports, Phase II (2017), was outside of the scope of our audit.

is based on the Energy Office's own data on current revenues and expenditures as well as projections on future funding and spending. The fact that the Energy Office's primary source of revenue, i.e., the Barrel Tax, may be constant does not mean that the Energy Office will have sufficient funds to maintain its current level of spending. At its current rate of spending, the office will be unable to pay its bills by 2019.

Lastly, contrary to DBEDT's apparent understanding, we are not saying that "[the Energy Office's] activities should be based solely on the demonstration of measurable outcomes." We agree and acknowledge that some of the Energy Office's core functions involve facilitation, collaboration, coordination, and other foundational work that is hard to quantify and even harder to audit. However, we reiterate that all government programs exist to achieve some purpose determined by the Legislature, and agencies charged with implementing those programs must be accountable for their work. Management's job is to establish performance goals in measurable terms, develop appropriate measures, analyze performance, appraise and interpret results, take appropriate action, and communicate the meaning of the measurements and the results to the Legislature and the public.

We found that the Energy Office is not performing this job.



## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

DAVID Y. IGE

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MARY ALICE EVANS

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December 27, 2017

Mr. Leslie H. Kondo State Auditor Office of the Auditor 465 S. King Street, Room 500 Honolulu, Hawaii 96813

Dear Mr. Kondo:

Subject: DBEDT's Response to the Audit of the Hawaii State Energy Office

The Department of Business, Economic Development, and Tourism (DBEDT) offers the following comments on the draft Audit Report of the Hawaii State Energy Office (HSEO). The audit was conducted from November 2016 through May 2017 in cooperation with HSEO. DBEDT takes with great seriousness the duties and responsibilities of its role as the State's Energy Resources Coordinator and the need to ensure Hawaii's clean energy future. Therefore, DBEDT agrees and already has taken action related to some of the Auditor's recommendations to improve the operations of HSEO. DBEDT agrees in whole, or in part, and disagrees, with the Auditor's findings and recommendations in the following areas:

- The necessity of the Energy Office's frequent participation in dockets is questionable.
  - DBEDT agrees that the Energy Office should limit its role as an intervenor in future regulatory proceedings before the Public Utilities Commission and has not intervened in any new dockets.
- An update of the Energy Office's strategic plan is needed. DBEDT agrees that a strategic plan that is updated regularly is an essential tool for internal operational planning and has been developing an updated strategic plan.
- The Legislature should consider re-assigning the administration of solar water variance requests to the counties, and improvements are needed to the solar water heater variance process.
  - DBEDT agrees that the Legislature should consider re-assigning the administration of solar water variance requests to the counties and has testified in support of a number of

> Legislative bills proposing this change. HSEO also has made improvements to the solar water heater variance process.

HSEO cannot clearly articulate how its efforts have contributed to its stated mandate. Energy Office could not provide us with evidence of the Office's progress toward or achievement of them.

DBEDT disagrees. The Auditor's Office has not acknowledged the HSEO's contributions nor requested information specific to the Energy Office's contributions to its stated mandate. DBEDT is disappointed that the numerous documents provided to the Auditor were not reflected in its report. In addition, HSEO submits regular reports to the U.S. Department of Energy (USDOE) regarding its expenditure of federal funds. To date, USDOE has expressed complete satisfaction with HSEO's reporting.

Examples of contributions by HSEO are as follows:

Performance Contracting: HSEO made available contract files to the Auditor which showed that HSEO has provided technical assistance on performance contracting to the following agencies:

Agency	Date of Contract	Contract amount
DOT-Airports Phase I	12/19/2013	\$163,724,310
DOT-Highways	7/8/2015	\$68,076,191
DOT-Harbors	9/15/2015	\$26,232,664
Honolulu Board Water Supply	3/11/2016	\$33,125,398
DOT-Airports Phase II	3/30/2017	\$51,473,427
riidse II		

The type of technical assistance provided by HSEO has varied, depending on the request from the agency. Assistance has included analyses for measurement and verification review of energy savings, review of proposed energy measures, and review of audits. The Auditor also states that HSEO is claiming credit and notes that "it is unclear how much credit the Energy Office can claim." HSEO would like to clarify that any statements regarding any recognition or credit have noted the credit as the State

> of Hawaii and not HSEO. In reports, HSEO is noted as providing technical assistance. For example, data show that state and county agencies have implemented performance contracting and HSEO has reported these achievements which show that:

- 1. Hawaii is ranked No. 1 in the nation for energy performance contracting on a per capita basis for government buildings and facilities. Hawaii has won this distinction for six consecutive years since 2012.
- 2. In 2017, the US Department of Energy recognized Hawaii as the state that met the highest goal under its Performance Contracting Accelerator Program.
- 3. In 2016 and 2017, Hawaii received the Energy Services Coalition's Energy Stewardship Champion "for outstanding accomplishments leveraging performance contracting to achieve infrastructure modernization, environmental stewardship, and economic development."

<u>Updating and Adoption of the Energy Building Code:</u> Under the leadership of HSEO, the State Building Code Council (SBCC) completed the challenging task of amending and adopting the International Energy Conservation Code of 2015 for new construction in Hawaii. This is significant as buildings account for an estimated 40 percent of total U.S. energy consumption and carbon dioxide emissions. DBEDT is a voting member of the SBCC and HSEO chairs the SBCC's Investigative Committee on the Energy Code. The updated energy code will provide an estimated 30 to 40 percent savings in the operations of new buildings. Through the efforts of the HSEO, the IECC 2015 was ultimately enacted as a Hawaii Administrative Rule in March 2017, making the 2015 IECC a requirement of buildings built by the State using State funds.

#### Renewable Energy Programs and Projects:

- 1. HSEO provided the auditor with all requested contract files which included specific deliverables and an evaluation of whether the deliverables were met and any follow-on recommended initiatives.
- 2. The HSEO website provides a rich compendium of information highlighting the positive impact of HSEO's programs. The website also has numerous project permitting assistance and resources that assist and inform project developers and the general public in the development of renewable energy projects. For example, the Renewable Energy Permitting Wizard identifies approximately 200 permits to inform project planning, which reduces project development

> timelines, costs, and impacts. Wizard website users viewed 845 pages from June 2016 to June 2017.

The value of HSEO's activities should be based solely on the demonstration of measurable outcomes.

DBEDT disagrees. While collaboration might not always be measurable, many of HSEO's activities are designed to yield long-term results. HSEO sees tremendous value in the collaboration it facilitates among private and public sector stakeholders in Hawaii's energy community. Supporting the transition to a clean energy economy requires that HSEO address the concerns affecting the State economy. Focusing conversations around various issues that need to be resolved do not necessarily lend themselves to direct measurement, yet do achieve long-term results.

It has no plans for aligning and re-sizing operations to match its broad responsibilities and current fiscal realities.

DBEDT disagrees. Contrary to the Auditor's statement, HSEO's plan for reducing expenditures was provided to the Auditor's Office in writing during the course of the audit. Additionally, prior to the Auditor's review, HSEO had taken steps on the following:

- 1. Delayed filling vacant positions to reserve funds.
- 2. Established practices to hire new personnel for general program management expertise and energy analysts rather than specialized technical subject matter experts. Also, HSEO adjusted salary offerings lower than had previously been offered.
- 3. Evaluated existing contracts to determine the need to retain services and, if appropriate, closed out contracts to reserve funds.
- 4. Reviewed and limited travel and training approvals to essential events and meetings or if federal funding allowed.

Independent to, and concurrent with, the audit, HSEO initiated the following actions:

1. Repositioned its role in intervening in Public Utilities Commission dockets to its new focus of developing policy strategies and conducting analyses to identify opportunities and the need to expedite reaching Hawaii's clean energy goals.

- 2. Initiated development of a strategic plan to address the stated goals of 100 percent RPS by 2045 and 30 percent EEPs by 2030 and to evaluate clean transportation opportunities.
- The Energy Office is expected to "substantially deplete" the Energy Security Special Fund (ESSF) by 2019.

DBEDT disagrees. This is an inaccurate statement because the Environmental Response, Energy and Food Security Tax (known as the Barrel Tax), which provides revenue to the ESSF, has no sunset date (Act 185, SLH 2015). The ESSF will not be substantially depleted by FY2019 given it will continue to receive revenue every month from the Barrel Tax.

HSEO presently receives \$0.15 from the Environmental Response, Energy, and Food Security Tax of \$1.05 per barrel which is deposited into the Energy Security Special Fund. HSEO has remained at \$0.15 per barrel of tax revenues of petroleum products since 2011, while there will have been six collective bargaining increases as of July 1, 2018, that HSEO has had to absorb without any adjustments to funding.

DBEDT fully appreciates and understands the responsibilities of the State's Energy Resources Coordinator and recognizes the urgency for action to address the harmful impacts of Hawaii's historical over-reliance on imported fossil fuels. DBEDT and its delegate, HSEO, have a statutory responsibility to foster and facilitate Hawaii's clean energy transformation. As such, DBEDT and HSEO are continually evaluating their effectiveness in fulfilling this objective.

HSEO would like to thank the Auditor's Office for its patience and professionalism in the conducting of the audit and for recognizing the need to adequately fund HSEO in order to achieve Hawaii's clean energy goals.

Mary Alia Evans
Luis P. Salaveria