



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DEPT. COMM. NO. 400

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GOVERNOR
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January 22, 2020

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

The Honorable Scott K. Saiki,
Speaker and Members of the
House of Representatives
Thirtieth State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Subject: Senate Concurrent Resolution 119, SD1

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

On June 12, 2019, certified copies of SCR119, SD1, Session Laws of Hawaii (SLH) 2019, were sent to the Administrator of the Hawaii State Energy Office (HSEO) and the Chairperson of the Board of Agriculture.

The resolution requests that the HSEO, in collaboration with the Department of Agriculture (DOA), "...create and implement a strategic plan that encompasses increasing renewable energy and local food production in a symbiotic relationship" and "...create an economic impact report based on the successful implementation of the strategic plan."

SCR119, SD1 also requests that the HSEO "...submit a report of its findings and recommendations, including any proposed legislation and the strategic plan" no later than twenty days prior to the convening of the Regular Session of 2020 and "...submit a report of its findings and recommendations, including any proposed legislation and the economic impact report" no later than twenty days prior to the convening of the Regular Session of 2021.

No funding was appropriated to support the resolution's implementation.

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Discussion and Actions Regarding SCR119, SD1

Shortly after receipt of SCR119, SD1, Governor Ige signed House Bill 852 as Act 122 on June 21, 2019, which took effect on July 1, 2019. Act 122 transformed the HSEO from a subunit of the Department of Business, Economic Development, and Tourism (DBEDT) into an attached agency to be led by a political appointee serving as the Chief Energy Officer (CEO). From the time of the transmittal on June 12, 2019, until October 15, 2019, the prior Administrator served as the interim CEO of the newly constituted office. From October 16, 2019, Governor Ige appointed Scott Glenn to serve as the CEO.

Act 122 also changed the funding of the HSEO so that personnel and operations are general funded; the portion of the State Environmental Response, Energy, and Food Security Tax (the "barrel tax") deposited in the Energy Security Special Fund (ESSF) was reduced from \$0.15 to \$0.05; and the spending ceiling for the ESSF removed, requiring the HSEO to propose uses of the funds in the ESSF for legislative appropriation. Prior to Act 122, the HSEO could have expended the ESSF to undertake such a study at the resolution of the Legislature. Currently, however, ESSF expenditures require legislative appropriation.

Although no funding was provided in SCR119, SD1, the Director of the DBEDT; the Chairperson of the Board of Agriculture; the Deputy Director of the Department of Agriculture; the Administrator of the HSEO; and others met to discuss the requirements of SCR119, SD1, available and required resources, and their respective ongoing related efforts and baseline studies. The group concluded that it may be possible to bring together the various studies, analyses, and discussions to develop a baseline for managing the complementary – and sometimes contentious – technologies, economic realities, and issues.

Many current projects will be useful to contribute to and shape the development of a strategic plan. However, it was not possible to develop a strategic plan prior to the 2020 legislative session as requested in SCR119, SD1. If appropriate resources were made available, we anticipate that a strategic plan could be developed for the 2022 legislative session.

Examples of current ongoing efforts that will contribute to a more robust and integrated strategy include the following:

Department of Agriculture (DOA)

The DOA's Agribusiness Development Corporation (ADC) presently has two projects which, if provided time to develop, would provide a more robust report in 2021:

1. Under the policy of “protected agriculture,” the ADC received an appropriation to build the “next-generation greenhouse” and is in the initial phase of project development. The greenhouse will be built near Whitmore Village in central Oahu. Additional funding may be required at a later date to purchase and install appropriate technologies within the greenhouse.
2. Under the policy of “agricultural technology,” the second project is a “prototype irrigation water treatment system to help small farms meet Food Safety Modernization Act rules” and involves ADC in partnership with the Hawaii Farm Bureau Federation. This project already has been funded and a full report of the outcome would benefit from a year’s activities in the 2021 report to the Legislature.

The DOA recommends that government and/or private entities research, cost out, and undertake proofs-of-concept for “protected agriculture” and “agricultural technology” production systems to provide the information needed by farmers to determine whether they are able to adopt either system and do so profitably.

Hawaii State Energy Office (HSEO)

The HSEO presently has three projects which are capable of informing a foundation for a more considered analysis. These include the following:

1. The HSEO, in partnership with the U.S Department of Energy, University of Hawaii Laboratory for Advanced Visualization and Application, and the Hawaiian Electric Company, is developing a visualization model named HAVEN (Hawaii Advanced Visualization Energy Nexus) to assist with understanding the land use implications for Hawaii’s Renewable Portfolio Standard goals. HAVEN models the potential footprint over time of renewable energy technologies as Hawaii converts to more solar, wind, and other energy uses. While still in development, this tool also potentially allows for the examination of other land uses such as food production and housing in the context of our energy goals.
2. The HSEO, in partnership with the Hawaii Department of Health (DOH) and the Hawaii Statewide GIS Program in the Office of Planning (OP), recently released the “Hawaii Brightfields Initiative” online mapping tool, to assist in identifying appropriate sites and the re-use of previously developed, disturbed or contaminated lands.

3. The HSEO is upgrading its Renewable EnerGIS tool, which provides information to assist with siting of new renewable energy projects based on criteria selected by the user, including resource (solar radiation and wind flow) availability, land characteristics, zoning, as well as a variety of agricultural attributes of individual sites in Hawaii -- Land Study Bureau Soil Rating, Important Agricultural Lands, Agricultural Lands of Importance to the State of Hawaii (ALISH), and Agricultural Use -- which can help identify the sites that may be appropriate or inappropriate for energy development.

Other Parties

In addition to the DOA and HSEO, other parties have initiated activities relevant to the issues identified in SCR119, SD1, and these activities would be more fully developed by 2022. These activities include the following:

1. The counties are identifying Important Agricultural Lands (IAL) in accordance with Hawaii Revised Statutes (HRS) Section 205-47. The identification and designation of IAL by the counties and individual landowners will heavily influence any strategic plans related to agricultural planning in Hawaii and, therefore, are highly relevant.
2. The Hawaiian Electric Companies (Hawaiian Electric Company, Maui Electric Company, and Hawaii Electric Light Company), in their latest Phase 2 request for proposals for large renewable energy projects, are requiring bidders to “provide evidence of Proposer’s verification with the appropriate government agency that the project complies with HRS Sections 205-2 and Section 205-4.5, relating to solar energy facilities placed on agricultural land...” This instruction will alert potential project developers to the additional requirements and potential limitations and may prompt the developers to consider areas with different soil classifications. HRS Sections 205-2 and 205-4.5 prohibit solar energy facilities on lands with soils rated “A” by the Land Study Bureau soil classification and regulate them on lands with LSB “B” and “C” rated soils. Conversely, lands with soils rated “D” and “E” are not subject to such limitations. Early notification alerting developers of state concerns could mitigate impacts of future renewable energy development on agricultural lands.

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3. Several projects are under development that will involve both energy and agricultural components. Information from these projects may be available to inform the development of the Strategic Plan.

Recommendations Regarding SCR119, SD1

SCR119, SD1 raises an important and timely question; namely, the nexus between land use for renewable solar energy developments and growing the State's agricultural industry. Based on the above discussion, we believe that a legislative appropriation from the State Environmental Response, Energy, and Food Security Tax and a revised timeline could support greater collaboration between the parties to develop and begin to implement a strategic plan.

Further, if the strategic plan includes recommendations and a timeline, those recommendations and the timeline should inform the time necessary for the successful implementation of the strategic plan; likewise, the strategic plan itself should inform the time period that would be expected for measurable results to be available, prior to the completion of an economic impact report.

Thank you for your consideration of this message.

Sincerely,



Scott J. Glenn
Chief Energy Officer



Phyllis Shimabukuro-Geiser
Chairperson, Board of Agriculture

c: Legislative Reference Bureau
Mike McCartney, DBEDT Director