

HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of SCOTT J. GLENN, Chief Energy Officer

before the

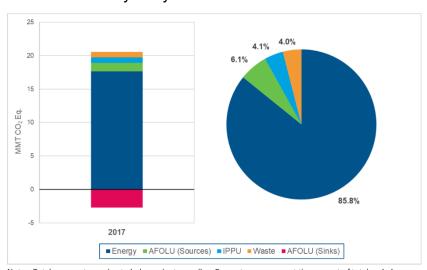
SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND AGRICULTURE AND ENVIRONMENT

Monday, February 14, 2022 3:00 PM State Capitol, Conference Room 224 & Videoconference

SUPPORT SB 3163 RELATING TO RELATING TO THE STATE ENERGY OFFICE.

Chairs Wakai and Gabbard, Vice Chairs Misalucha and Nishihara, and Members of the Committees, the Hawai'i State Energy Office (HSEO) supports SB 3163, which directs the State Energy Office to develop and submit a plan for construction of an atmospheric carbon capture plant in the State by the year 2030.

Most of Hawai'i's carbon emissions are from the energy sector, and emissions from all sectors far exceed the removal capacity of local carbon sinks provided by the agricultural, forestry, and land use sectors.¹



Notes: Totals may not sum due to independent rounding. Percentages represent the percent of total emissions excluding sinks.

¹ State of Hawai'i. Department of Health. Hawai'i Greenhouse Gas Program, Emissions Report for 2017. https://health.hawaii.gov/cab/files/2021/04/2017-Inventory Final-Report April-2021.pdf

To carry out its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy the HSEO notes the vital interconnection between policies, including the <u>renewable portfolio standard</u>, <u>energy efficiency portfolio standard</u>, and the <u>zero emissions clean economy target</u>, which aims to locally sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as practicable, but no later than 2045.

Renewable energy deployment alone will not achieve Hawai'i's goal of a netnegative carbon economy. Carbon capture technologies are needed for the world and for Hawai'i to sequester atmospheric carbon long-term, an action that is necessary to keep the global temperature from exceeding 1.5 degree Celsius, pursuant to Hawai'i and the federal government's commitment to the Paris Climate Agreement.²

The United States Department of Energy, and others in the energy sector, are funding and developing carbon capture technologies. One of the technologies is referenced in SECTION 1 of the bill. If enacted, the passage of SB 3163 will indicate Hawai'i's support for such efforts and may assist Hawai'i in competing for and obtaining Federal funds.³

Hawai'i has attributes and assets that can contribute meaningfully to the deployment and demonstration of carbon removal, especially when paired with long-term sequestration technologies such as <u>carbon mineralization</u>. Carbon dioxide removal using renewable energy could also create a long-term supply of carbon dioxide for business activities that require it while contributing to Hawai'i's economic diversification.

Recognizing the level of effort involved, the rapid progression of federal funding activities and technology, and the likelihood of private parties conducting their own analyses, HSEO proposes three amendments to the bill that would assist with creating a development space for these technologies while still setting the table for at least one such plant to be built:

² Act 32, Sessions Law of Hawai'i 2017. https://www.capitol.hawaii.gov/session2017/bills/GM1132 .PDF

³ https://www.energy.gov/articles/doe-seeks-information-deployment-ready-carbon-reduction-and-removal-technologies

https://www.gsa.gov/about-us/newsroom/news-releases/gsa-doe-issue-rfi-for-technologies-that-reduce-greenhouse-gas-emissions-10132021

1. Revise SECTION 2 of the bill, beginning on page 2, line 9, to read:

SECTION 2. The state energy office shall develop a [plan] strategy for the construction of an atmospheric carbon capture plant in the State to be constructed by 2030. The [plan shall] strategy may detail the type of construction, proposed location, estimated costs, staffing requirements, and estimated annual carbon dioxide capture rate of potential facilities.

2. Revise SECTION 3 of the bill, beginning on page 2, line 15, to read:

SECTION 3. The state energy office shall submit its [plan] strategy for the construction of an atmospheric carbon capture plant in the State by 2030, including any proposed legislation, to the legislature no later than forty days prior to the convening of the regular session of [2023] 2024, with an interim report on progress to be included in the annual report provided to the legislature prior to the convening of the regular session of 2023 in accordance with section 196-71(d), Hawai'i Revised Statutes.

3. Provide adequate funding for HSEO to carry out the required additional activities and provide matching funds that may be required for federal competitive grant applications.

HSEO supports this bill with these changes and additions, and provided that its passage does not replace or adversely impact priorities indicated in the Executive Supplemental Budget.

Thank you for the opportunity to testify.