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Testimony of
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before the
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

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1:01 PM
State Capitol, Conference Room 229 and Videoconference

Providing Comments on
SB 3360

RELATING TO RENEWABLE FUEL.

Chair DeCoite, Vice Chair Wakai, and Members of the Committees, the Hawai'i State Energy Office (HSEO) provides comments on SB 3360, which 1) updates the Renewable Fuels Production Tax Credit (RFPTC) to incentivize locally grown, produced, generated, or collected renewable fuel; 2) extends the credit period from ten to twenty consecutive years; and 3) increases the total amount of tax credits allowed to \$80,000,000 in any calendar year.

HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

HSEO appreciates the intent of the proposal to expand the RFPTC, which is a significant financial incentive for renewable fuel producers and contributes to achieving greater energy security for Hawai'i. HSEO recommended in the recent HSEO Act 238 Report the following actions to improve the efficacy of the RFPTC: 1) requiring renewable fuel to meet an established lifecycle carbon intensity threshold; 2) lowering the production minimum to allow for smaller renewable fuels producers to take advantage of the tax credit; and 3) removing or extending the 10-year eligibility limit as

desirable means to expand the RFPTC.¹ HSEO appreciates that the recommendations of the Act 238 report are reflected in this bill.

HSEO recommends the following changes SB 3360, distinguished in **bold**.

Rationale for each change is provided below:

Section 2. Item 1 (a)

For each taxpayer producing renewable fuels, the annual dollar amount of the renewable fuels production tax credit during the [~~ten-year~~] credit period shall [~~be~~] include an amount equal to **20 ~~35~~** cents per seventy-six thousand British thermal units of renewable fuels using the lower heating value sold for distribution in the State; provided that the taxpayer's production of renewable fuels is not less than ~~two~~ **one** billion five hundred million British thermal units lower heating value of renewable fuels per calendar year; provided further that there shall be an additional credit value of ~~\$1.00 per gallon-15 cents per seventy-six thousand British thermal units of renewable fuels using the lower heating value~~ for renewable fuels produced from renewable feedstock locally grown or recycled in the State; ~~provided further that there shall be an additional credit of \$1.00 per gallon for renewable fuels produced with lifecycle greenhouse gas emissions at least seventy-five per cent below that of the fossil fuels;~~ provided further that the tax credit shall only be claimed for fuels with lifecycle emissions at least seventy-five per cent below that of fossil fuels in which the renewable fuel is most likely to replace.

HSEO suggests lowering the threshold of the RFPTC to support smaller producers of renewable fuel who may not meet the production threshold of 2.5 billion British thermal units using the lower heating value. This was a recommendation also discussed in the Act 238 report.² While HSEO supports increasing the credit for renewable fuels producers, HSEO believes the current credit amount of 20 cents per

¹ Hawai'i State Energy Office (2023). Hawai'i Pathways to Decarbonization, Act 238 Report to the 2024 Hawai'i State Legislature (Act 238 Report). (Page 11)

² Hawai'i Pathways to Decarbonization Act 238 (SLH 2022) Report to the 2024 Hawai'i State Legislature (p.99). https://energy.hawaii.gov/wp-content/uploads/2024/01/Act-238_HSEO_Decarbonization_Report.pdf

76,000 Btu using lower heating value (LHV) is adequate to incentivize the production of renewable fuels with imported feedstock and the additional credit of 15 cents per 76,000 Btu LHV may be best suited for fuels produced using local feedstock.

Further, HSEO recommends consistent units of energy be used for the tax credit, as gallons may not be the most appropriate for certain fuel types, such as natural gas which is more commonly measured in units of volume. Accordingly, the use of the British thermal unit (btu) derived using the lower heating value is an appropriate metric to compare energy sources, or fuels, on an equal basis, and consistency allows for easier accounting and verification.

Relating to subsection (d) amendments, HSEO recommends the following changes, distinguished in **bold**:

"(d) Within [~~thirty~~] sixty calendar days after the due date of the statement required under subsection (c), the Hawaii state energy office shall:

(1) Acknowledge, in writing, receipt of the statement;

(2) Issue a certificate to the taxpayer reporting the amount of renewable fuels produced and sold, the amount of credit that the taxpayer is entitled to claim for the previous calendar year, and the cumulative amount of the tax credit during the credit period; and

(3) Provide the taxpayer with a determination of whether the lifecycle greenhouse gas emissions for each type of qualified fuel produced is lower than that of fossil fuels[-] and whether the lifecycle greenhouse gas emissions for each type of qualified fuel produced is seventy-five per cent lower than that of the **fossil fuel in which the renewable fuel is most likely to replace.**"

HSEO suggests specifying the comparative fossil fuel be the fossil fuel in which the renewable fuel is most likely to replace. HSEO believes this clarification is needed as different fossil fuels exhibit different carbon intensities.

"Lifecycle greenhouse gas emissions" means the aggregate attributional core lifecycle greenhouse gas emissions values

including upstream emissions, midstream emissions, transportation emissions, and generation or operational emissions. utilizing the most recent version of Argonne National Laboratory's Greenhouse gasses, Regulated Emissions, and Energy use in Technologies (GREET) Model, inclusive of agricultural practices and carbon capture sequestration.

Regarding requiring the use of the GREET model, HSEO advises that while HSEO uses the GREET model to verify the emissions analysis after submittal and has included reference to the model in its guidance documents for the credit, the GREET model may not be the best accounting tool to capture lifecycle emissions in certain circumstances. For example, there are occasions when renewable fuels producers may have completed a more individualized and comprehensive GHG analysis and submitted it to another regulatory agency for fuel contracts to the utility.

Finally, guidance from the Environmental Protection Agency (EPA) renewable fuels program suggests that sequestration activities, unrelated to the production of the fuels, not be included in the lifecycle analysis.³ The lifecycle assessment of fuel production should not include activities that are unrelated to the fuel lifecycle (e.g., offset projects) or emissions associated with physical and organizational infrastructure (e.g., facility construction, employees commuting to the facility). Accordingly, HSEO recommends only onsite sequestration activities directly related to the production of the fuels, e.g. soil amendments and climate-smart agricultural practices be included in the emissions analysis. These activities would automatically be included in the upstream emissions analysis, therefore HSEO recommends removing language referencing carbon capture sequestration to avoid potential misinterpretation.

Thank you for the opportunity to testify.

³ US Environmental Protection Agency (2023). Lifecycle Analysis of Greenhouse Gas Emissions under the Renewable Fuel Standard. Available at: <https://www.epa.gov/renewable-fuel-standard-program/lifecycle-analysis-greenhouse-gas-emissions-under-renewable-fuel#:~:text=The%20EPA's%20assessment%20of%20fuel,employees%20commuting%20to%20the%20facility>).