



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Energy, Economic Development, and Tourism
and
Senate Committee on Transportation
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By
Richard Rocheleau, Director
Hawai'i Natural Energy Institute
And
Michael Bruno, PhD
Provost
University of Hawai'i at Mānoa

SB 2721 – RELATING TO ENERGY TAX

Chairs Wakai and Lee, Vice Chairs Misalucha and Inouye, and members of the committees:

The Hawai'i Natural Energy Institute (HNEI) **supports** SB 2721 to subject aviation fuel to the Environmental Response, Energy, and Food Security Tax with the recommendation that any additional tax collected be used to support the development of sustainable aviation for Hawai'i.

Imported aviation fuel products and/or production of aviation fuels from imported crude oil account for a significant fraction of Hawaii's fossil fuel usage with a corresponding contribution to Hawaii's greenhouse gas emissions. Sustainable aviation will also require additional reduction of GHG emissions from ground-based operations such as airport vehicles and ground support equipment and auxiliary power units.

While measurable progress is being made to reduce fossil fuel usage in the power sector and plans for reduction in the ground transportation are moving forward, reduction of fossil fuel usage in the aviation sector is progressing more slowly, attributable at least in part, to the difficulty of the problem.

This Bill, in its current form, allocates a portion of this additional tax to the Hawai'i Natural Energy Institute. Should HNEI receive funds attributable to a tax on aviation fuel we are committed to expending it solely for the purpose of development of a more sustainable aviation industry. Since 2016, HNEI has, with funding from the Federal Aviation Administration and cost share from its current barrel tax allocation, participated in collaborative research with other universities and stakeholders to further the development of sustainable aviation fuels. Preliminary analysis of the technical potential for development of sustainable aviation fuels in Hawai'i indicates that

dedication of a significant fraction of the agricultural land use district and utilization of urban wastes would provide a modest fraction (< 20%) of Hawaii's current aviation fuel consumption but have wider impacts.

Current methods for production of sustainable aviation fuels (i.e., ASTM International Standard D4054 approved) provide a slate of coproducts that include renewable diesel, naphtha, and in some cases, propane. These coproducts would also contribute to renewable energy and sustainability goals elsewhere in the Hawai'i aviation sector, including airport ground support services and upstream components of the renewable fuel value chain.

The impact on Hawaii's agricultural community and energy independence could be significant. Transition of this potential to the development of a Hawai'i fuels industry will require coordination among the many stakeholders, additional planning including detailed assessment of needed infrastructure, and when appropriate, field trials to identify optimal mixes of crops and fuel production technologies. Guidance from life cycle-based analyses of greenhouse gas emissions and energy productivity would also be necessary.

Sustainable aviation is a high priority of the US Departments of Transportation, Energy, and Agriculture as illustrated by their memorandum of understanding on the sustainable aviation fuel grand challenge (https://www.energy.gov/sites/default/files/2021-09/S1-Signed-SAF-MOU-9-08-21_0.pdf). To the extent possible, any dollars expended from SB2721 funds would be leveraged with federal dollars. Federal funding and partnerships will be needed to identify and implement solutions for increasing the sustainability of Hawaii's aviation industry.

Thank you for the opportunity to provide this testimony on SB 2721.