

MAR 07 2025

SENATE RESOLUTION

REQUESTING THE OFFICE OF PLANNING AND SUSTAINABLE DEVELOPMENT TO COMMISSION A STUDY OF THE DIFFERENT ENERGY CONSUMPTION SECTORS TO DETERMINE WHICH SECTOR CAN BE MOST QUICKLY AND COST-EFFECTIVELY DECARBONIZED THROUGH ADDITIONAL PUBLIC INVESTMENT IN COMBUSTION-FREE ALTERNATIVES.

1 WHEREAS, it is important to use Hawaii taxpayer funds
2 wisely to create the most benefit for the State without
3 speculative investments, unnecessary subsidies, or promotion of
4 energy technologies or fuels that conflict with the State's
5 climate change goals or the peoples' constitutional right to a
6 clean and healthful environment under article XI, section 9 of
7 the Hawaii State Constitution; and

8
9 WHEREAS, the settlement to *Navahine F. v. Hawaii Department*
10 *of Transportation*, Civ. No. 1CCV-22-0000631 requires that the
11 State establish a Greenhouse Gas Reduction Plan that can achieve
12 a goal of zero greenhouse gas emissions across all
13 transportation modes within the State, including ground
14 transportation and sea and air interisland transportation no
15 later than 2045; and

16
17 WHEREAS, combustion of hydrocarbons of any sort, even if
18 derived from biomass or waste, releases greenhouse gases and
19 cannot be considered zero emissions; and

20
21 WHEREAS, the goal of the Greenhouse Gas Reduction Plan can
22 only be accomplished by electrifying all transportation modes
23 and by ensuring that the State's electric grid is also zero
24 greenhouse gas emissions (i.e. combustion-free); and

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26 WHEREAS, there are three sectors of energy use as tracked
27 by the United States Energy Information Administration:
28 electricity, transportation, and heating, with heating further
29 broken down into industrial, commercial, and residential
30 sectors; and

31
32 WHEREAS, technology exists today to fully meet the needs of
33 the electricity sector using conservation, energy efficient



1 appliances, and solar, wind, and energy storage, which can be
2 made as firm as needed through decentralization and adequate
3 storage capacity; and
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5 WHEREAS, residential and commercial cooking, and space and
6 water heating needs are easily electrified with existing
7 technology, such as ground- and air-source heat pumps and hybrid
8 electric water heaters; and
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10 WHEREAS, it is possible to fully electrify land-based
11 transportation, including heavy trucking, so that trucks and
12 other land-based transportation modes can be powered by clean,
13 non-burn, electricity sources; and
14

15 WHEREAS, it is possible to fully electrify ocean-based
16 transportation, including international cargo ships, with
17 batteries and even stationary wind masts; and
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19 WHEREAS, inter-island air-travel can be accomplished with
20 electric sea gliders, as Hawaiian Airlines is already exploring;
21 and
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23 WHEREAS, inter-continental air travel remains the one
24 sector that is hardest to convert to clean energy, though Airbus
25 aims to bring to market the world's first hydrogen-powered
26 commercial aircraft by 2035; and
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28 WHEREAS, combustible carbon-based fuels release greenhouse
29 gases as well as other harmful air pollutants, and the
30 production of burnable fuels has many other environmental
31 implications, including the use of precious land for fuel
32 instead of food, depletion of water and soils, spread of
33 genetically modified organisms, and, if using waste streams to
34 make fuel, release of toxic chemicals and solid waste
35 byproducts; and
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37 WHEREAS, hydrogen energy production and use contains many
38 of the same production problems unless green hydrogen is
39 produced through the electrolysis of water using wind and solar
40 power; however, the energy losses in converting water to green
41 hydrogen are so significant that it makes no sense to use clean
42 energy to produce green hydrogen until the electric grid is



1 running almost entirely on clean energy and there is excess of
2 wind and solar energy to spare, which can be stored as green
3 hydrogen when not needed directly; and
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5 WHEREAS, Hawaii's renewable portfolio standard law requires
6 electric utilities in the State to provide one hundred percent
7 renewable energy by 2045, and the State was close to reaching a
8 renewable portfolio standard of thirty-five percent in 2023; and
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10 WHEREAS, technologies that turn waste into fuels are highly
11 speculative, controversial, and polluting, and typically fail to
12 operate at a commercial scale, usually falling apart
13 technically, economically, or both; and
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15 WHEREAS, when all carbon releases are properly accounted
16 for, the climate impacts of biomass and waste-based biofuels are
17 close to, or greater than the climate impacts of the petroleum
18 products they would replace; and
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20 WHEREAS, investing in infrastructure intended to transition
21 to cleaner options in later years is an investment dead end that
22 makes it more difficult politically and economically to progress
23 into replacing combustion-based fuels that are currently
24 marketed as clean or sustainable fuels; and
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26 WHEREAS, it is wise to allocate limited public funding
27 first on existing, clean, combustion-free solutions, focusing on
28 energy sectors where those solutions are not yet fully
29 implemented; now, therefore,
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31 BE IT RESOLVED by the Senate of the Thirty-third
32 Legislature of the State of Hawaii, Regular Session of 2025,
33 that the Office of Planning and Sustainable Development is
34 requested to commission a study of the different energy
35 consumption sectors to determine which sector can be most
36 quickly and cost-effectively decarbonized through additional
37 public investment in combustion-free alternatives; and
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39



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1 BE IT FURTHER RESOLVED that certified copies of this
2 Resolution be transmitted to the Governor and Director of the
3 Office of Planning and Sustainable Development.
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OFFERED BY:

A handwritten signature in black ink, appearing to read "Mike Hubbard", is written over a horizontal line.