
A BILL FOR AN ACT

RELATING TO GREENHOUSE GAS EMISSIONS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that there is a need for
2 a holistic plan of action for Hawai'i regarding policy,
3 technology, funding, and facilitation of public and private
4 actions on climate change mitigation. The Intergovernmental
5 Panel on Climate Change 2018 report concludes that Hawai'i has
6 less than fifteen years to address permanent climate change and
7 sea level rise and their associated high level of disruption to
8 the islands of Hawai'i.

9 The legislature has established requirements to:

- 10 (1) Reduce greenhouse gas emissions from the state economy
11 to 1990 levels; establish a greenhouse gas emissions
12 reduction task force, now repealed; and create a year
13 2020 statewide framework of action pursuant to Act
14 234, Session Laws of Hawaii 2007;
- 15 (2) Sequester greenhouse gases with carbon offsets on
16 state lands and require a plan to evaluate the



- 1 feasibility and implications of establishing a carbon
2 offset program for Hawai'i;
- 3 (3) Consider greenhouse gas impacts in government
4 decisions and orders, such as environmental
5 assessments, environmental impact statements, and
6 decisions from the public utilities commission;
- 7 (4) Establish the Hawai'i climate change mitigation and
8 adaptation commission;
- 9 (5) Achieve a net-zero greenhouse gas emissions economy by
10 2050;
- 11 (6) Establish a one hundred per cent renewable electricity
12 portfolio standard by 2045; and
- 13 (7) Resolve to integrate food, fuel, and waste reduction
14 and re-use activities toward greater economic
15 viability and environmental sustainability highlighted
16 in S.C.R. No. 121, Regular Session of 2017.

17 However, up to this point, these requirements and goals
18 have been focused on the electricity and ground transportation
19 sectors and on group and point sources of greenhouse emissions.
20 These requirements do not regard the emissions from other forms
21 of transportation or other major economic drivers.



1 The legislature further finds that the Hawai'i Aviation and
2 Climate Action Summit held in December 2019 issued the following
3 findings:

4 (1) Nearly a third of the energy consumed in the State is
5 for jet fuel, a higher proportion of energy
6 consumption than for any other energy sector;

7 (2) Over one-third of the flights are to and from
8 international destinations;

9 (3) International flights to and from Hawai'i will start to
10 come under the mandate established by the
11 International Civil Aviation Organization's Carbon
12 Offset and Reduction Scheme for International Aviation
13 to reduce their aviation greenhouse gas emission to
14 fifty per cent below 2005 levels by 2050;

15 (4) Transportation is the single largest producer of
16 greenhouse gas emissions in Hawai'i;

17 (5) Renewable fuels must be part of a balanced portfolio
18 and state action plan to effect certified greenhouse
19 gas reduction in the near term, in addition to carbon
20 offsets;



- 1 (6) Sustainable aviation fuels have been demonstrated at
2 commercial scale in the continental United States and
3 can be manufactured in six different American Society
4 for Testing Manuals approved and Federal Aviation
5 Administration certified ways from agricultural,
6 animal, municipal, and construction wastes as well as
7 purpose-grown crops and forest materials;
- 8 (7) The International Civil Aviation Organization's Carbon
9 Offset and Reduction Scheme for International Aviation
10 mandate is a significant requirement on airlines
11 serving Hawai'i, for which the State should establish a
12 task force and "flight plan" to map out public and
13 private actions to cost-effectively reduce greenhouse
14 gas emissions;
- 15 (8) The International Civil Aviation Organization's Carbon
16 Offset and Reduction Scheme for International
17 Aviation, United States' federal Renewable Fuel
18 Standard, State of California's Low-Carbon Fuel
19 Standard, and State of Oregon's Clean Fuels Program
20 are all market-based measures to quantify,
21 incentivize, and monetize industry action to reduce



1 greenhouse gas emissions by the transportation sector.
2 These measures are also flexible and effective ways to
3 quantify and monetize the benefits of renewable fuels,
4 carbon offsets, hydrogen and fuel cells, and
5 transportation electrification based upon lifecycle
6 greenhouse gas emissions performance; and
7 (9) Market-based policy measures more directly stimulate
8 innovation, economic growth, and meaningful behavioral
9 change than the state-level policies Hawai'i has in
10 place today (barrel tax, carbon tax, environmental
11 permitting/impact statements, and incentives which
12 require annual appropriation). The federal Renewable
13 Fuel Standard that Hawai'i opted in to has directly led
14 to a reduction of greenhouse gas in the ground
15 transportation sector by thousands of barrels per day.
16 California's Low-Carbon Fuel Standard has reduced
17 greenhouse gases emissions in California over fifty
18 million metric tons through just second quarter of
19 2019. Seventy-five per cent of venture capital
20 investment in clean transportation in the United
21 States has been directed to California. California's



1 Low-Carbon Fuel Standard has also helped investors to
2 justify one hundred and three hundred dollar million
3 investments to build new renewable fuel production
4 plants. Low-Carbon Fuel Standard-stimulated economic
5 development currently at over three hundred companies
6 and twenty thousand workers and decreased greenhouse
7 gas emissions per gross domestic product by forty per
8 cent.

9 Therefore, the legislature concludes that the development
10 of sustainable aviation fuel capability in Hawai'i continues to
11 exercise leadership in global greenhouse gas emission reduction
12 actions and also has the potential to reduce dependence on
13 foreign sources of fossil fuels, promote economic development,
14 increase the limited options for waste disposal and re-use,
15 facilitate invasive species removal and landscape restoration,
16 and overall improve environmental sustainability in Hawai'i.

17 The purpose of this Act is to establish a task force to
18 develop a state action plan to reduce the greenhouse gas
19 emissions generated by international air transportation from
20 Hawai'i.



1 SECTION 2. (a) There is established a sustainable
2 aviation fuel task force within the department of business,
3 economic development, and tourism's Hawaii state energy office
4 for administrative purposes. The purpose of the sustainable
5 aviation fuel task force is to:

6 (1) Prepare a work plan and regulatory scheme for
7 implementing the maximum practically and technically
8 feasible and cost-effective reductions in greenhouse
9 gas emissions from transportation sources or
10 categories of sources of greenhouse gases to help
11 commercial airlines serving Hawaii meet the mandate
12 set for international commercial aviation by the
13 International Civil Aviation Organization,
14 specifically the Carbon Offset and Reduction Scheme
15 for International Aviation to reduce aviation
16 greenhouse gas emission to fifty per cent below 2005
17 levels by 2050;

18 (2) Further the development of sustainable aviation fuel
19 as a productive industry in Hawaii, using as a
20 foundation the results from the Hawaii Aviation and
21 Climate Action Summit held in December 2019 and the



1 best practices shared by the federal Aviation
2 Administration's Aviation Sustainability Center and
3 Commercial Aviation Alternative Fuel Initiative;
4 (3) Facilitate communication and coordination among
5 sustainable aviation fuel stakeholders;
6 (4) Provide a forum for discussion and problem-solving
7 regarding potential and current barriers related to
8 technology development, production, distribution,
9 supply chain development, and commercialization of
10 sustainable aviation fuel;
11 (5) Provide recommendations to the legislature on
12 potential legislation that will facilitate the
13 technology development, production, distribution, and
14 commercialization of sustainable aviation fuel;
15 facilitate and streamline the permitting process for
16 new facilities and the expansion of existing
17 facilities; and provide access to low-cost financing
18 through the issuance of revenue bonds and matching
19 funds through the Hawaii technology development
20 corporation; and



- 1 (6) Evaluate the prospect of Hawaii joining the Pacific
2 Coast Collaborative of the states of California,
3 Oregon, and Washington, and British Columbia to
4 harmonize local carbon fuel and greenhouse gas
5 reduction policy and market-based measures and share
6 best practices.
- 7 (c) The Hawaii state energy office shall designate task
8 force members that represent sectors involved in sustainable
9 aviation fuel research, development, production, and
10 utilization. The task force shall include but not be limited to
11 representatives of the following, or their designees:
- 12 (1) The Federal Aviation Administration;
13 (2) The United States Department of Agriculture;
14 (3) The Hawaii local of the United States Commercial
15 Aviation Alternative Fuel Initiative;
16 (4) The Hawaii state senate appointed by the president of
17 the senate;
18 (5) The Hawaii state house of representatives appointed by
19 the speaker of the house of representatives;
20 (6) The department of agriculture;
21 (7) The department of health;



- 1 (8) The department of land and natural resources;
- 2 (9) The department of transportation;
- 3 (10) The Hawaii tourism authority;
- 4 (11) The Hawaii state energy office;
- 5 (12) The University of Hawaii;
- 6 (13) The Hawaii natural energy institute;
- 7 (14) A bioeconomy advocacy organization;
- 8 (15) An international airline operator;
- 9 (16) A fuel refiner;
- 10 (17) Biofuels feedstock producers;
- 11 (18) Sustainable transportation fuel producers;
- 12 (19) A sustainable energy advocacy organization; and
- 13 (20) A carbon offset project practitioner.

14 The task force shall choose a chair from among its
15 membership.

16 (d) The task force shall hold at least two public meetings
17 a year.

18 (e) The work plan of the task force shall include:

- 19 (1) Consultation with state and county agencies;
- 20 (2) Consultation and best practice sharing with
- 21 international and national organizations and other



- 1 states to identify cost-effective policies and
2 methods;
- 3 (3) Harmonization of market-based measures and their
4 supporting technical and quantification methods with
5 the International Civil Aviation Organization's Carbon
6 Offset and Reduction Scheme for International
7 Aviation, national, and other state peer-reviewed
8 methods and avoidance of a unique Hawaii method or
9 standard wherever practicable;
- 10 (4) Development of measures of effectiveness of varying
11 techniques for greenhouse gas emissions reduction for
12 commercial aviation; and
- 13 (5) Framework to evaluate the relative contribution of
14 each method or project, relative to its cost,
15 projected technical maturity between the years 2020
16 and 2050, and contributions toward other
17 sustainability objectives such as skilled job
18 creation, economic development, waste re-use, invasive
19 species removal, and landscape restoration.
- 20 (f) The task force shall submit an interim report of its
21 findings and recommendations to the legislature no later than



1 forty days prior to the convening of the regular session of
2 2022, and a final report of its findings and recommendations to
3 the legislature no later than forty days prior to the convening
4 of the regular session of 2023.

5 (g) The task force shall cease to exist on June 30, 2023;
6 provided that the Hawaii state energy office may continue the
7 work of the task force without the effect of this Act should the
8 Hawaii state energy office deem necessary.

9 (h) The Hawaii state energy office shall submit a report
10 of its findings and recommendations and data on clean
11 transportation related to aviation transportation including:

12 (1) Jet fuel consumption, imports, and local refining and
13 the greenhouse gas benchmark for jet fuel and other
14 transportation fuels; and

15 (2) Sustainable aviation fuel and carbon offset projects
16 and investments, infrastructure and financing needs,
17 supply chain development, and other opportunities and
18 challenges to reducing the greenhouse gas impacts from
19 international commercial aviation,

20 to the legislature no later than twenty days prior to the
21 convening of each regular session.



1 SECTION 3. This Act shall take effect on July 1, 2050.



H.B. NO. 327 H.D. 1

Report Title:

Greenhouse Gas Emissions; Sustainable Aviation Fuel Task Force

Description:

Convenes a Sustainable Aviation Fuel Task Force within the Hawaii State Energy Office to develop a state action plan to reduce the greenhouse gas intensity of international air transportation from Hawaii. Effective 7/1/2050. (HD1)

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