
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 (IPCC) 2018 report concludes that Hawai'i
6 has less than fifteen years to address permanent climate change
7 and sea level rise and their associated high level of disruption
8 to 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12 reduction task force, now repealed, and create a year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 (Act 234, Session
14 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 (2019);
- 3 (3) Consider greenhouse gas impacts in government
4 decisions and orders (e.g., environmental assessments,
5 environmental impact statements, and decisions from
6 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 the year 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 (ICAO)
12 Carbon Offset and Reduction Scheme for International
13 Aviation (CORSIA) to reduce their aviation greenhouse
14 gas emission to fifty per cent below 2005 levels by
15 2050;

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

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



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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 (ASTM) approved and Federal
5 Aviation Administration (FAA) certified ways from
6 agricultural, animal, municipal, and construction
7 wastes as well as purpose-grown crops and forest
8 materials;

9 (7) The ICAO CORSIA mandate is a significant requirement
10 on airlines serving Hawai'i, for which the State should
11 establish a task force and "flight plan" to map out
12 public and private actions to cost-effectively reduce
13 greenhouse gas emissions;

14 (8) The ICAO CORSIA, United States' federal Renewable Fuel
15 Standard (RFS), State of California's Low-Carbon Fuel
16 Standard (LCFS), and State of Oregon's Clean Fuels
17 Program (CFP) are all market-based measures to
18 quantify, incentivize, and monetize industry action to
19 reduce greenhouse gas emissions by the transportation
20 sector. These measures are also flexible and
21 effective ways to quantify and monetize the benefits



1 of renewable fuels, carbon offsets, hydrogen and fuel
2 cells, and transportation electrification based upon
3 lifecycle greenhouse gas emissions performance; and
4 (9) Market-based policy measures more directly stimulate
5 innovation, economic growth, and meaningful behavioral
6 change than the state-level policies Hawai'i has in
7 place today (barrel tax, carbon tax, environmental
8 permitting/impact statements, and incentives which
9 require annual appropriation). The federal RFS which
10 Hawai'i opted in to has directly led to a reduction of
11 greenhouse gas in the ground transportation sector by
12 thousands of barrels per day. California's LCFS has
13 reduced greenhouse gases emissions in California over
14 fifty million metric tons through just second quarter
15 of 2019. Seventy-five per cent of venture capital
16 investment in clean transportation in the United
17 States has been directed to California. LCFS has
18 helped investors to justify one hundred and three
19 hundred dollar million investments to build new
20 renewable fuel production plants. LCFS-stimulated
21 economic development currently at over three hundred



1 companies and twenty thousand workers and decreased
2 greenhouse gas emissions per GDP by forty percent.

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

11 The purpose of this Act is to establish a task force to
12 develop a state action plan to reduce the greenhouse gas
13 emissions generated by international air transportation from
14 Hawai'i.

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

20 (1) Prepare a work plan and regulatory scheme for
21 implementing the maximum practically and technically



1 feasible and cost-effective reductions in greenhouse
2 gas emissions from transportation sources or
3 categories of sources of greenhouse gases to help
4 commercial airlines serving Hawaii meet the mandate
5 set for international commercial aviation by the
6 International Civil Aviation Organization (ICAO),
7 specifically the Carbon Offset and Reduction Scheme
8 for International Aviation (CORSIA), to reduce
9 aviation greenhouse gas emission to fifty per cent
10 below 2005 levels by 2050;

11 (2) Further the development of sustainable aviation fuel
12 as a productive industry in Hawaii, using as a
13 foundation the results from the Hawaii Aviation and
14 Climate Action Summit held in December 2019 and the
15 best practices shared by the federal Aviation
16 Administration's Aviation Sustainability Center and
17 Commercial Aviation Alternative Fuel Initiative;

18 (3) Facilitate communication and coordination among
19 sustainable aviation fuel stakeholders;

20 (4) Provide a forum for discussion and problem-solving
21 regarding potential and current barriers related to



1 technology development, production, distribution,
2 supply chain development, and commercialization of
3 sustainable aviation fuel;

4 (5) Provide recommendations to the legislature on
5 potential legislation that will facilitate the
6 technology development, production, distribution, and
7 commercialization of sustainable aviation fuel;
8 facilitate and streamline the permitting process for
9 new facilities and the expansion of existing
10 facilities; and provide access to low-cost financing
11 through the issuance of revenue bonds and matching
12 funds through the Hawaii Technology Development
13 Corporation; and

14 (6) Evaluate the prospect of Hawaii joining the Pacific
15 Coast Collaborative of the States of California,
16 Oregon, and Washington, and British Columbia to
17 harmonize local carbon fuel and greenhouse gas
18 reduction policy and market-based measures and share
19 best practices.

20 (c) The Hawaii state energy office shall designate task
21 force members that represent sectors involved in sustainable



1 aviation fuel research, development, production, and
2 utilization. The task force shall include but not be limited to
3 representatives of the following, or their designees:

- 4 (1) The Federal Aviation Administration;
- 5 (2) The United States Department of Agriculture;
- 6 (3) The Hawaii focal of the United States Commercial
7 Aviation Alternative Fuel Initiative;
- 8 (4) The senate;
- 9 (5) The house of representatives;
- 10 (6) The department of agriculture;
- 11 (7) The department of health;
- 12 (8) The department of land and natural resources;
- 13 (9) The department of transportation;
- 14 (10) The Hawaii tourism authority;
- 15 (11) The Hawaii state energy office;
- 16 (12) The University of Hawaii;
- 17 (13) The Hawaii natural energy institute;
- 18 (14) A bioeconomy advocacy organization;
- 19 (15) International airline operator;
- 20 (16) A fuel refiner;
- 21 (17) Biofuels feedstock producers;



- 1 (18) Sustainable transportation fuel producers;
- 2 (19) A sustainable energy advocacy organization; and
- 3 (20) A carbon offset project practitioner.

4 The task force shall choose a chair from among its
5 membership.

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

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

- 9 (1) Consultation with state and county agencies
- 10 (2) Consultation and best practice sharing with
11 international and national organizations, and other
12 states to identify cost-effective policies and
13 methods;
- 14 (3) Harmonization of market-based measures and their
15 supporting technical and quantification methods with
16 ICAO CORSIA, national, and other state peer-reviewed
17 methods, and avoidance of a unique Hawaii method or
18 standard wherever practicable;
- 19 (4) Development of measures of effectiveness of varying
20 techniques for greenhouse gas emissions reduction for
21 commercial aviation;



1 (5) Framework to evaluate the relative contribution of
2 each method or project, relative to its cost,
3 projected technical maturity between the years 2020
4 and 2050, and contributions toward other
5 sustainability objectives such as skilled job
6 creation, economic development, waste re-use, invasive
7 species removal, and landscape restoration.

8 (f) The task force shall submit an interim report of its
9 findings and recommendations to the legislature no later than
10 forty days prior to the convening of the regular session of
11 2022, and a final report of its findings and recommendations to
12 the legislature no later than forty days prior to the convening
13 of the regular session of 2023.

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

18 (h) The Hawaii state energy office shall submit a report
19 of its findings and recommendations, and data on clean
20 transportation related to aviation transportation including:



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

4 (2) Sustainable aviation fuel and carbon offset projects
5 and investments, infrastructure and financing needs,
6 supply chain development, and other opportunities and
7 challenges to reducing the greenhouse gas impacts from
8 international commercial aviation,

9 to the legislature no later than twenty days prior to the
10 convening of each regular session.

11 SECTION 3. This Act shall take effect upon its approval.

12

INTRODUCED BY: *Lina Morten*
JAN 22 2021



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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.

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