

JAN 27 2021

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) Establish the greenhouse gas sequestration task force
11 and require a plan to evaluate the feasibility and
12 implications of establishing a carbon offset program
13 for Hawai'i (Act 15, Session Laws of Hawaii, 2018);

14 (2) Consider greenhouse gas impacts in government
15 decisions and orders (e.g., environmental assessments,
16 environmental impact statements, and decisions from
17 the public utilities commission);



- (3) Establish the Hawai'i climate change mitigation and adaptation commission;
- (4) Achieve a net-zero greenhouse gas emissions economy by the year 2050;
- (5) Establish a one hundred per cent renewable electricity portfolio standard by 2045; and
- (6) Resolve to integrate food, fuel, and waste reduction and re-use activities toward greater economic viability and environmental sustainability highlighted in S.C.R. No. 121, Regular Session of 2017.

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

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

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



- 1 (2) Over one-third of the flights are to and from
2 international destinations;
- 3 (3) International flights to and from Hawai'i will start to
4 come under the mandate established by the
5 International Civil Aviation Organization's (ICAO)
6 Carbon Offset and Reduction Scheme for International
7 Aviation (CORSIA) to reduce their aviation greenhouse
8 gas emission to fifty per cent below 2005 levels by
9 2050;
- 10 (4) Transportation is the single largest producer of
11 greenhouse gas emissions in Hawai'i;
- 12 (5) Renewable fuels must be part of a balanced portfolio
13 and state action plan to effect certified greenhouse
14 gas reduction in the near term, in addition to carbon
15 offsets;
- 16 (6) Sustainable aviation fuels have been demonstrated at
17 commercial scale in the continental United States and
18 can be manufactured in six different American Society
19 for Testing Manuals (ASTM) approved and Federal
20 Aviation Administration (FAA) certified ways from
21 agricultural, animal, municipal, and construction



1 wastes as well as purpose-grown crops and forest
2 materials;

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

8 (8) The ICAO CORSIA, United States' federal Renewable Fuel
9 Standard (RFS), State of California's Low-Carbon Fuel
10 Standard (LCFS), and State of Oregon's Clean Fuels
11 Program (CFP) are all market-based measures to
12 quantify, incentivize, and monetize industry action to
13 reduce greenhouse gas emissions by the transportation
14 sector. These measures are also flexible and
15 effective ways to quantify and monetize the benefits
16 of renewable fuels, carbon offsets, hydrogen and fuel
17 cells, and transportation electrification based upon
18 lifecycle greenhouse gas emissions performance; and

19 (9) Market-based policy measures more directly stimulate
20 innovation, economic growth, and meaningful behavioral
21 change than the state-level policies Hawai'i has in



1 place today (barrel tax, carbon tax, environmental
2 permitting/impact statements, and incentives which
3 require annual appropriation). The federal RFS which
4 Hawai'i opted in to has directly led to a reduction of
5 greenhouse gas in the ground transportation sector by
6 thousands of barrels per day. California's LCFS has
7 reduced greenhouse gases emissions in California by
8 over fifty million metric tons through just the second
9 quarter of 2019. Seventy-five per cent of venture
10 capital investment in clean transportation in the
11 United States has been directed to California. LCFS
12 has helped investors to justify one hundred and three
13 hundred dollar million investments to build new
14 renewable fuel production plants. LCFS-stimulated
15 economic development already includes over three
16 hundred companies and twenty thousand workers and has
17 decreased greenhouse gas emissions per GDP by forty
18 percent.

19 Therefore, the legislature concludes that the development
20 of sustainable aviation fuel capability in Hawai'i continues to
21 exercise leadership in global greenhouse gas emission reduction



1 actions, and also has the potential to reduce dependence on
2 foreign sources of fossil fuels, promote economic development,
3 and overall improve environmental sustainability in Hawai'i.

4 The purpose of this Act is to establish a task force to
5 develop a state action plan to reduce the greenhouse gas
6 emissions generated by air transportation in and from Hawai'i.

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

- 12 (1) Prepare a work plan and regulatory scheme for
13 implementing the maximum practically and technically
14 feasible and cost-effective reductions in greenhouse
15 gas emissions from transportation sources or
16 categories of sources of greenhouse gases to help
17 commercial airlines serving Hawaii meet the mandate
18 set for international commercial aviation by the
19 International Civil Aviation Organization (ICAO),
20 specifically the Carbon Offset and Reduction Scheme
21 for International Aviation (CORSIA), to reduce



aviation greenhouse gas emission to fifty per cent
below 2005 levels by 2050;

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

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

(4) Provide a forum for discussion and problem-solving
regarding potential and current barriers related to
technology development, production, distribution,
supply chain development, and commercialization of
sustainable aviation fuel;

(5) Provide recommendations to the legislature on
potential legislation that will facilitate the
technology development, production, distribution, and
commercialization of sustainable aviation fuel;
facilitate and streamline the permitting process for



1 new facilities and the expansion of existing
2 facilities; and provide access to low-cost financing
3 through the issuance of revenue bonds and matching
4 funds through the Hawaii Technology Development
5 Corporation; and

6 (6) Evaluate the prospect of Hawaii joining the Pacific
7 Coast Collaborative of the States of California,
8 Oregon, and Washington, and British Columbia to
9 harmonize local carbon fuel and greenhouse gas
10 reduction policy and market-based measures and share
11 best practices.

12 (c) The Hawaii state energy office shall designate task
13 force members that represent sectors involved in sustainable
14 aviation fuel research, development, production, and
15 utilization. The task force shall include but not be limited to
16 representatives of the following, or their designees:

17 (1) The Federal Aviation Administration;

18 (2) The United States Department of Agriculture;

19 (3) The Hawaii focal of the United States Commercial

20 Aviation Alternative Fuel Initiative;

21 (4) The senate;



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

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

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

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



- 1 (1) Consultation with state and county agencies
- 2 (2) Consultation and best practice sharing with
- 3 international and national organizations, and other
- 4 states to identify cost-effective policies and
- 5 methods;
- 6 (3) Harmonization of market-based measures and their
- 7 supporting technical and quantification methods with
- 8 ICAO CORSIA, national, and other state peer-reviewed
- 9 methods, and avoidance of a unique Hawaii method or
- 10 standard wherever practicable;
- 11 (4) Development of measures of effectiveness of varying
- 12 techniques for greenhouse gas emissions reduction for
- 13 commercial aviation;
- 14 (5) Framework to evaluate the relative contribution of
- 15 each method or project, relative to its cost,
- 16 projected technical maturity between the years 2020
- 17 and 2050, and contributions toward other
- 18 sustainability objectives such as skilled job
- 19 creation, economic development, waste re-use, invasive
- 20 species removal, and landscape restoration.



1 (f) The task force shall submit an interim report of its
2 findings and recommendations to the legislature no later than
3 forty days prior to the convening of the regular session of
4 2022, and a final report of its findings and recommendations to
5 the legislature no later than forty days prior to the convening
6 of the regular session of 2023.

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

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

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

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



1 to the legislature no later than twenty days prior to the
2 convening of each regular session.

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

4

INTRODUCED BY:





S.B. NO. 987

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.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

