117TH CONGRESS
1ST SESSION

H. R. _____

To support the sustainable aviation fuel market, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Ms. Brownley of California introduced the following bill; which was referred to the Committee on ________

A BILL

To support the sustainable aviation fuel market, and for other purposes.

1 Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

2 SECTION 1. SHORT TITLE.

3 This Act may be cited as the “Sustainable Aviation Fuel Act”.

4 SEC. 2. NATIONAL GOAL.

5 It is hereby declared that it is the national goal for

6 the United States to reach—
(1) a net 35-percent reduction in greenhouse
gas emissions for United States domestic and international aviation flights by 2035, as compared to
2005; and

(2) net zero greenhouse gas emissions for
United States domestic and international aviation
flights by 2050.

SEC. 3. DEFINITIONS.

In this Act:

(1) SUSTAINABLE AVIATION FUEL.—The term
“sustainable aviation fuel” means liquid fuel con-
sisting of synthesized hydrocarbons that—

(A) meets the requirements of a Depart-
ment of Defense specification for military jet
fuel or an American Society of Testing and Ma-
terials specification for aviation turbine fuel;

(B) is derived from qualified feedstock;

(C) is certified by the Environmental Pro-
tection Agency Administrator that such fuel—

(i) either—

(I) conforms to the standards,

recommended practices, requirements
and criteria, supporting documents,
implementation elements, and any
other technical guidance for sustain-
able aviation fuels that are adopted by
the International Civil Aviation Orga-
nization with the agreement of the
United States; or

(II) meets the definition of “ad-
canced biofuel” under section
211(o)(1) of the Clean Air Act (42
U.S.C. 7545(o)(1)), as demonstrated
by compliance with Environmental
Protection Agency implementing regu-
lations under subpart M of part 80 of
title 40, Code of Federal Regulations;
and

(ii) achieves at least a 50-percent re-
duction in lifecycle greenhouse gas emis-
sions compared to conventional jet fuel.

(2) QUALIFIED FEEDSTOCK.—The term “quali-
fied feedstock” means sources of hydrogen and car-on not originating from unrefined or refined petro-
chemicals.

(3) LIFECYCLE GREENHOUSE GAS EMI-
sIONS.—The term “lifecycle greenhouse gas emis-
sions” means the combined greenhouse gas emis-
sions from feedstock production, collection of feed-
stock, transportation of feedstock to fuel production
facilities, conversion of feedstock to fuel, transportation and distribution of fuel, and fuel combustion in an aircraft engine, as well as from induced land-use change emissions, as calculated using appropriate modeling techniques approved by a regulating authority.

(4) Induced Land-Use Change Emissions.—
The term “induced land-use change emissions” means the greenhouse gas emissions resulting from the conversion of land to the production of feedstocks and from the conversion of other land due to the displacement of crops or animals for which the original land was previously used, as calculated using appropriate modeling techniques approved by a regulating authority.

(5) Conventional Jet Fuel.—The term “conventional jet fuel” means liquid hydrocarbon fuel used for aviation that is derived or refined from petrochemicals.

SEC. 4. GRANT PROGRAM.

(a) In General.—The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall carry out a competitive grant and cost-sharing agreement program for eligible entities to carry out projects located in the United States
to produce, transport, blend, or store sustainable aviation fuel.

(b) SELECTION.—In selecting an eligible entity to receive a grant or cost-share agreement under subsection (a), the Secretary shall consider—

(1) the anticipated public benefits of a project proposed by the eligible entity;

(2) the potential to increase the domestic production and deployment of sustainable aviation fuel;

(3) the potential greenhouse gas emissions from such project;

(4) the potential for creating new jobs in the United States;

(5) the potential net greenhouse gas emissions impact of different feedstocks to produce sustainable aviation fuel on a lifecycle basis, which shall include potential direct and indirect greenhouse gas emissions (including resulting from changes in land use); and

(6) the proposed utilization of non-Federal contributions by the eligible entity.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $200,000,000 for each of fiscal years 2022 through 2026 to carry out this section.
(d) REPORT.—Not later than October 1, 2027, the Secretary shall submit to the Committee on Commerce, Science, and Transportation and the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure and the Committee on Energy and Commerce of the House of Representatives a report describing the results of the grant program under this section. The report shall include the following:

(1) A description of the entities and projects that received grants or other cost-sharing agreements under this section.

(2) A detailed explanation for why each entity received the type of funding disbursement such entity did.

(3) A description of whether the program is leading to an increase in the production and deployment of sustainable aviation fuels and whether that increase is enough to keep the United States on track to achieve the goals described in section 2 of this Act.

(4) A description of the economic impacts resulting from the funding to and operation of the project.
(e) ELIGIBLE ENTITY DEFINED.—In this section, the term “eligible entity” means—

(1) a State or local government other than an airport sponsor;

(2) an air carrier;

(3) an airport sponsor; and

(4) a person or entity engaged in the production, transportation, blending or storage of sustainable aviation fuel in the United States or feedstocks in the United States that could be used to produce sustainable aviation fuel.

SEC. 5. LOW CARBON AVIATION FUEL STANDARD.

(a) ESTABLISHMENT OF LOW CARBON AVIATION FUEL STANDARD.—Section 211 of the Clean Air Act (42 U.S.C. 7545) is amended by adding at the end the following:

“(w) LOW CARBON AVIATION FUEL STANDARD.—

“(1) DEFINITIONS.—In this subsection:

“(A) AVIATION FUEL.—The term ‘aviation fuel’ means fuel that is produced, sold, or dispensed in the United States, for civil or military purposes, for turbine-powered aviation.

“(B) CARBON INTENSITY.—The term ‘carbon intensity’ means the quantity of lifecycle
greenhouse gas emissions per unit of fuel energy.

“(C) CREDIT EXCHANGE.—The term ‘credit exchange’ means a central marketplace with established rules and regulations where buyers and sellers meet to conduct trades.

“(D) FUEL STANDARD.—The term ‘fuel standard’ means the low carbon fuel standard established under paragraph (2).

“(2) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this subsection, the Administrator shall promulgate regulations to establish a low carbon fuel standard for aviation fuels that requires a reduction in carbon intensity for aviation fuels each calendar year such that by 2050, and thereafter, the average carbon intensity of all aviation fuel used annually in the United States is reduced by at least 50 percent, as compared to the average carbon intensity of all aviation fuel used in the United States in 2005.

“(3) TARGETS.—In promulgating regulations under paragraph (2), the Administrator shall set a target of a reduction of at least 20 percent in the average carbon intensity of all aviation fuel used annually in the United States by 2030, and of at least
50 percent by 2050, as compared to the average carbon intensity of all aviation fuel used in the United States in 2005.

“(4) REQUIREMENTS.—In promulgating regulations under paragraph (2), the Administrator shall—

“(A) establish a benchmark for the average carbon intensity of aviation fuels for each calendar year, beginning with the first full calendar year that begins 2 years after the date of enactment of this subsection, suitable to achieving the targets specified in paragraph (3);

“(B) apply the fuel standard to persons who produce or import aviation fuel;

“(C) establish procedures for calculating the carbon intensity of an aviation fuel, expressed in grams of carbon dioxide equivalent per megajoule, in accordance with—

“(i) the standards, recommended practices, requirements and criteria, supporting documents, implementation elements, and any other technical guidance for sustainable aviation fuels that are adopted by the International Civil Aviation
Organization with the agreement of the United States; and

“(ii) any other more stringent accounting practices determined by the Administrator to be the best lifecycle greenhouse gas emission accounting practices, provided that such practices account for the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Administrator, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential;

“(D) determine how long the calculation of the carbon intensity of an aviation fuel (pursuant to the procedures established under sub-
paragraph (C)), will remain in effect before needing to be reevaluated;

“(E) allow a person described in subparagraph (B), who, for a calendar year, produces or imports aviation fuel—

“(i) that has an average carbon intensity that is less than the benchmark for average carbon intensity for that calendar year to, except as provided in paragraph (8), generate credits, to be used, or transferred to another person, to demonstrate compliance with this subsection; and

“(ii) that has an average carbon intensity that is greater than the benchmark for average carbon intensity for that calendar year to purchase credits to be used to demonstrate compliance with this subsection;

“(F) determine the—

“(i) appropriate amount of credits generated and used to demonstrate compliance pursuant to subparagraph (E);

“(ii) appropriate conditions, if any, on—
“(I) the duration of such credits; and

“(II) the transfer of such credits through a credit exchange; and

“(G) consult with all relevant stakeholders, including aviation industry groups, renewable fuel industry groups, researchers at institutions of higher education, labor unions, consumer advocates, and any other stakeholders the Administrator determines to be appropriate.

“(5) CONSULTATION.—In carrying out this subsection, the Administrator shall consult with the Administrator of the Federal Aviation Administration, the Secretary of Energy, and the Secretary of Agriculture.

“(6) COORDINATION WITH STATES.—The Administrator shall, after notice and opportunity for public hearing, waive application of the fuel standard in any State that has adopted a standard for aviation fuels that the Administrator determines is at least as stringent as the fuel standard.

“(7) REVISION.—If Congress enacts a standard or similar law that the Administrator, in consultation with the Administrator of the Federal Aviation Administration, determines accomplishes the pur-
poses of the fuel standard for sectors of the economy that include the aviation sector, the Administrator may revoke the fuel standard in favor of the other standard or law.

“(8) Relationship to Renewable Fuel Program.—No credit may be generated under this subsection with respect to renewable fuel for which a credit is generated under subsection (o).

“(9) Report.—Not later than 180 days after the date of enactment of this subsection, the Administrator shall submit to Congress and make publicly available a report describing—

“(A) the status of the development of the fuel standard; and

“(B) the considerations the Administrator is using in developing the fuel standard.”.

(b) Enforcement.—Section 211(d) of the Clean Air Act (42 U.S.C. 7545(d)) is amended—

(1) in paragraph (1)—

(A) by striking “or (o) of this section or the regulations” and inserting “(o), or (w) of this section or the regulations”; and

(B) by striking “or (o) of this section or who fails” and inserting “(o), or (w) of this section or who fails”; and
(C) by striking “or (o) of this section which establishes” and inserting “(o), or (w) of this section which establishes”; and

(2) in paragraph (2), by striking “and (o) of this section” each place it appears and inserting “(o), and (w) of this section”.

SEC. 6. PROCUREMENT OF SUSTAINABLE AVIATION FUEL BY THE DEPARTMENT OF DEFENSE.

(a) IN GENERAL.—Effective October 1, 2023, the Secretary of Defense shall make a bulk purchase of an amount of sustainable aviation fuel that is not less than 10 percent of the total amount of aviation fuel procured for operational purposes (as defined in section 2922h of title 10, United States Code) if—

(1) the cost of sustainable aviation fuel is competitive with the fully burdened cost of conventional jet fuel available for the same purpose; and

(2) the sustainable aviation fuel is refined or produced in the United States.

(b) BLENDED FUEL.—If the Secretary of Defense purchases sustainable aviation fuel that is blended with conventional jet fuel, the percentage of sustainable aviation fuel in such blend will be counted towards the percentage described in subsection (a).
(c) CERTIFICATION.—Before making a purchase under subsection (a), the Secretary of Defense or the Secretary concerned (as defined in section 101(a)(9) of title 10, United States Code) shall certify that the sustainable aviation fuel is suitable for use in aircrafts of the Department of Defense.

(d) WAIVER.—

(1) IN GENERAL.—Subject to the requirements of paragraph (2), the Secretary of Defense may waive the requirement under subsection (a) for reasons of national security, including the lack of available, qualifying sustainable aviation fuel.

(2) NOTICE.—Not later than 30 days after issuing a waiver under this subsection, the Secretary shall submit to the congressional defense committees (as defined in section 101(a)(16) of title 10, United States Code) notice of the waiver. Any such notice shall include each of the following:

(A) The rationale of the Secretary for issuing the waiver.

(B) A certification that the waiver is in the national security interest of the United States.

(e) DEFINITIONS.—The terms “fully burdened cost” and “operational purposes” have the meanings given such
1 terms, respectively, in section 2922h of title 10, United
2 States Code.

3 **SEC. 7. FEDERAL AVIATION ADMINISTRATION RESEARCH.**
4
5 (a) IN GENERAL.—Section 911(a) of the FAA Modern-
6 ization and Reform Act of 2012 (49 U.S.C. 44504
7 note) is amended—
8
9 (1) by striking “assist in the development” and
10 inserting the following:
11
12 “(1) assist in the development”;
13
14 (2) by striking “and other” and inserting “, other”;
15
16 (3) by striking the period and inserting “, and
17 sustainable fuel that can be used without the need
18 to blend with any other type of aviation fuel;”;
19
20 (4) by adding at the end the following:
21
22 “(2) promote the efforts of the aviation sector
23 to become a net-zero greenhouse gas emitting sector;
24
25 “(3) study the climate impacts of non-carbon
dioxide greenhouse gas emissions, water vapor, and
contrails and ways to minimize such impacts; and

26 “(4) develop a methodology for quantifying the
27 non-carbon dioxide climate impacts of aviation in a
lifecyle analysis, including the benefits of sustain-
able aviation fuel other than the reduction in carbon

dioxide emissions.”.
(b) DEFINITIONS.—Section 911 of such Act is amended by adding at the end the following:

“(e) DEFINITIONS.—In this section:

“(1) SUSTAINABLE AVIATION FUEL.—The term ‘sustainable aviation fuel’ means liquid fuel consisting of synthesized hydrocarbons that—

“(A) is derived from a qualified feedstock;

and

“(B) conforms to the standards, recommended practices, requirements and criteria, supporting documents, implementation elements, and any other technical guidance for sustainable aviation fuels that are adopted by the International Civil Aviation Organization with the agreement of the United States.

“(2) QUALIFIED FEEDSTOCK.—The term ‘qualified feedstock’ means sources of hydrogen and carbon not originating from unrefined or refined petrochemicals.

“(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator of the Federal Aviation Administration $35,000,000 for each of fiscal years 2022 through 2026 to carry out this section.”.
SEC. 8. DEPARTMENT OF ENERGY RESEARCH.

(a) In General.—The Secretary of Energy shall carry out a program to research the use of cover crops or other crops grown for conservation purposes rather than for sale in the production of sustainable aviation fuel.

(b) Collaboration.—In carrying out the program under subsection (a), the Secretary shall collaborate with the national laboratories, the Department of Agriculture, and industry partners.

(c) Definitions.—In this section:

(1) Sustainable Aviation Fuel.—The term “sustainable aviation fuel” means liquid fuel consisting of synthesized hydrocarbons that—

(A) is derived from a qualified feedstock;

and

(B) conforms to the standards, recommended practices, requirements and criteria, supporting documents, implementation elements, and any other technical guidance for sustainable aviation fuels that are adopted by the International Civil Aviation Organization with the agreement of the United States.

(2) National Laboratory.—The term “national laboratory” has the meaning given the term in section 2(3) of the Energy Policy Act of 2005 (42 U.S.C. 15801(3)).
(d) Authorization of Appropriations.—There are authorized to be appropriated such sums as may be necessary to carry out this section.

SECTION 9. SUSTAINABLE AVIATION FUEL CREDIT.

(a) In General.—Subpart D of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by inserting after section 40A the following new section:

“SECTION 40B. SUSTAINABLE AVIATION FUEL CREDIT.

“(a) In General.—For purposes of section 38, the sustainable aviation fuel credit for the taxable year is, with respect to each gallon of neat sustainable aviation fuel blending component used by the taxpayer in the production of a qualified mixture—

“(1) $1.50, plus

“(2) the applicable supplementary credit amount.

“(b) Applicable Supplementary Credit Amount.—

“(1) In General.—For purposes of subsection (a), the applicable supplementary credit amount is $0.25, reduced (but not below zero) by the emissions reduction certification amount.

“(2) Emissions Reduction Certification Amount.—For purposes of paragraph (1), the emis-
sions reduction certification amount is $0.01 for
every 2 percentage points below 100 percent for
which the neat sustainable aviation fuel blending
component is certified to reduce emissions in com-
parison with conventional fuel under section 10 of
the Sustainable Aviation Fuel Act.

“(c) NEAT SUSTAINABLE AVIATION FUEL BLENDING
COMPONENT.—For purposes of this section, the term
‘neat sustainable aviation fuel blending component’ means
unblended liquid fuel—

“(1) that consists of synthesized hydrocarbons,

and

“(2) that—

“(A) meets the requirements of a Depart-
ment of Defense specification for military jet
fuel or an American Society of Testing and Ma-
terials specification for aviation turbine fuel,

“(B) is derived from qualified feedstock,

and

“(C) is certified by the Environmental Pro-
tection Agency to—

“(i) either—

“(I) comply with such standards

of the International Civil Aviation Or-
ganization for sustainable aviation
fuels as have been adopted by the United States, or

“(II) meet the definition of advanced biofuel under section 211(o)(1)(B) of the Clean Air Act (42 U.S.C. 7545(o)(1)(B)), and

“(ii) achieve at least a 50-percent reduction in lifecycle greenhouse gas emissions in comparison with conventional jet fuel.

“(d) QUALIFIED MIXTURE.—For purposes of this section, the term ‘qualified mixture’ means a mixture of neat sustainable aviation fuel blending component and kerosene, which—

“(1) is used by the taxpayer as aircraft fuel in a trade or business, or

“(2) is sold by the taxpayer to any person for use as aircraft fuel.

“(e) DEFINITIONS.—For purposes of this section, the terms ‘qualified feedstock’, ‘lifecycle greenhouse gas emissions’, and ‘induced land-use change emissions’ have the meanings given such terms in section 3 of the Sustainable Aviation Fuel Act.

“(f) SALE OR USE MUST BE IN TRADE OR BUSINESS, ETC.—Neat sustainable aviation fuel blending com-
ponent used in the production of a qualified mixture shall be taken into account—

“(1) only if the sale or use described in subsection (d) is in a trade or business of the taxpayer or other person, and

“(2) for the taxable year in which such sale or use occurs.

“(g) APPLICATION OF SECTION.—This section shall only apply to fuel produced before January 1, 2032.”.

(b) CREDIT MADE PART OF GENERAL BUSINESS CREDIT.—Section 38(b) (relating to current year business credit) is amended by striking “plus” at the end of paragraph (32), by striking the period at the end of paragraph (33) and inserting “, plus”, and by inserting after paragraph (33) the following new paragraph:

“(34) the sustainable aviation fuel credit determined under section 40B.”.

(c) CONFORMING AMENDMENT.—Section 40A(f) of such Code is amended by striking paragraph (4).

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to fuel produced after December 31, 2021.
SEC. 10. EPA CERTIFICATION OF NEAT SUSTAINABLE AVIATION FUEL BLENDING COMPONENT.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Administrator of the Environmental Protection Agency shall promulgate regulations, for purposes of section 40B of the Internal Revenue Code of 1986, to certify—

(1) whether a liquid fuel produced by a fuel producer qualifies as a neat sustainable aviation fuel blending component under subsection (c)(2)(C) of such section; and

(2) the percent reduction of greenhouse gas emissions from a gallon of neat sustainable aviation fuel blending component produced by a fuel producer in comparison to the greenhouse gas emissions from a gallon of conventional jet fuel.

(b) CONSIDERATIONS AND INCLUSIONS.—In promulgating regulations under subsection (a), the Administrator of the Environmental Protection Agency shall—

(1) establish procedures for fuel producers to apply to, and receive from, the Environmental Protection Agency—

(A) a certification, with respect to liquid fuel produced by such fuel producer, that such fuel qualifies as a neat sustainable aviation fuel
blending component under section 40B(e)(2)(C)
of the Internal Revenue Code of 1986; and

(B) if the fuel described in (A) so qualifies,
a certification of the percent reduction of greenhouse gas emissions from a gallon of such fuel in comparison to the greenhouse gas emissions from a gallon of conventional jet fuel;

(2) determine methods for calculating greenhouse gas emissions from a gallon of conventional jet fuel, and for reviewing and updating such calculations every three years;

(3) for purposes of calculating the greenhouse gas emissions from a liquid fuel that does or may qualify as a neat sustainable aviation fuel blending component, determine whether to use—

(A) the Sustainability Certification Schemes approved by the International Civil Aviation Organization with agreement by the United States; or

(B) other methods that take into account lifecycle greenhouse gas emissions from the applicable fuel pathway;

(4) require different certifications for each fuel pathway used by a fuel producer;
(5) determine how long a certification under subsection (a)(1) or (a)(2) will be in effect for a fuel producer; and

(6) include procedures for—

(A) notifying a fuel producer and the Internal Revenue Service that a certification under subsection (a) will expire, at least 180 days before such expiration;

(B) expedited review and recertification under subsection (a), during the 180-day period described in subparagraph (A), of the greenhouse gas emissions from a neat sustainable aviation fuel blending component produced by a fuel producer; and

(C) submission of a certification under subsection (a) to the Internal Revenue Service.

(c) DEFINITIONS.—For purposes of this section—

(1) FUEL PATHWAY.—The term “fuel pathway” means the production process through which feedstock is converted into neat sustainable aviation fuel blending component, and includes the type of feedstock, the region in which such feedstock is located, the harvesting and collection method of such feedstock, the transportation of such feedstock to a fuel producing facility, and the method by which such
feedstock is converted into neat sustainable aviation fuel blending component.

(2) **FUEL PRODUCER.**—The term “fuel producer” means a person or entity engaged in the production of neat sustainable aviation fuel blending component.

**SEC. 11. SUSTAINABLE AVIATION FUEL PRODUCTION PROPERTY ADDED TO ENERGY CREDIT.**

(a) In General.—Section 48 of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)—

(A) in paragraph (2)(A)(i)—

(i) in subclause (III), by striking “and”, and

(ii) by adding at the end the following new subclause:

“(V) sustainable aviation fuel production property, and”,

(B) in paragraph (3)(A), by striking “or” at the end of clause (vi), inserting “or” at the end of clause (vii), and by adding at the end the following new clause:

“(viii) sustainable aviation fuel production property,”, and
(C) by adding at the end the following new paragraph:

“(8) PHASEOUT FOR SUSTAINABLE AVIATION FUEL PRODUCTION PROPERTY.—In the case of any energy property described in paragraph (3)(A)(viii) the construction of which begins before January 1, 2035, the energy percentage determined under paragraph (2) shall be equal to—

“(A) in the case of any property the construction of which begins after December 31, 2026, and before January 1, 2028, 24 percent,

“(B) in the case of any property the construction of which begins after December 31, 2027, and before January 1, 2029, 18 percent,

“(C) in the case of any property the construction of which begins after December 31, 2028, and before January 1, 2035, 12 percent.”, and

(2) in subsection (c), by adding at the end the following new paragraph:

“(5) SUSTAINABLE AVIATION FUEL PRODUCTION PROPERTY.—

“(A) IN GENERAL.—The term ‘sustainable aviation fuel production property’ means—
“(i) property which produces sustainable aviation fuel (as defined in section 40B(b)) from qualified feedstock (as defined in section 40B(d)), or

“(ii) property directly related to enabling the production or distribution of sustainable aviation fuel.

“(B) Recapture of credit.—The Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a)(3)(viii) with respect to any sustainable aviation fuel production property if the sustainable aviation fuel production of such property comprises less than 80 percent of the total fuel production of such property in any of the 5 taxable years immediately following the taxable year in which such property was placed in service.”.

(b) Effective date.—The amendments made by this section shall apply to fuel produced after December 31, 2021.