

118TH CONGRESS
1ST SESSION

H. R. 2747

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

IN THE HOUSE OF REPRESENTATIVES

APRIL 20, 2023

Ms. BROWNLEY (for herself and Mr. SCHNEIDER) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Transportation and Infrastructure, Armed Services, Science, Space, and Technology, and Ways and Means, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

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

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

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

6 **SEC. 2. NATIONAL GOAL.**

7 It is hereby declared that it is the national goal for
8 the United States to reach—

1 (1) a net 35-percent reduction in greenhouse
2 gas emissions for United States domestic and inter-
3 national aviation flights by 2035, as compared to
4 2005; and

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

8 **SEC. 3. DEFINITIONS.**

9 In this Act:

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

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

17 (B) is derived from qualified feedstock;
18 and

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

21 (i) either—

22 (I) conforms to the standards,
23 recommended practices, requirements
24 and criteria, supporting documents,
25 implementation elements, and any

1 other technical guidance for sustain-
2 able aviation fuels that are adopted by
3 the International Civil Aviation Orga-
4 nization with the agreement of the
5 United States; or

6 (II) meets the definition of “ad-
7 vanced biofuel” under section
8 211(o)(1) of the Clean Air Act (42
9 U.S.C. 7545(o)(1)), as demonstrated
10 by compliance with Environmental
11 Protection Agency implementing regu-
12 lations under subpart M of part 80 of
13 title 40, Code of Federal Regulations;
14 and

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

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

22 (3) LIFECYCLE GREENHOUSE GAS EMIS-
23 SIONS.—The term “lifecycle greenhouse gas emis-
24 sions” means the combined greenhouse gas emis-
25 sions from feedstock production, collection of feed-

1 stock, transportation of feedstock to fuel production
2 facilities, conversion of feedstock to fuel, transpor-
3 tation and distribution of fuel, and fuel combustion
4 in an aircraft engine, as well as from induced land-
5 use change emissions, as calculated using appro-
6 priate modeling techniques approved by a regulating
7 authority.

8 (4) INDUCED LAND-USE CHANGE EMISSIONS.—
9 The term “induced land-use change emissions”
10 means the greenhouse gas emissions resulting from
11 the conversion of land to the production of feed-
12 stocks and from the conversion of other land due to
13 the displacement of crops or animals for which the
14 original land was previously used, as calculated
15 using appropriate modeling techniques approved by
16 a regulating authority.

17 (5) CONVENTIONAL JET FUEL.—The term
18 “conventional jet fuel” means liquid hydrocarbon
19 fuel used for aviation that is derived or refined from
20 petrochemicals.

21 **SEC. 4. GRANT PROGRAM.**

22 (a) IN GENERAL.—The Secretary of Transportation,
23 in consultation with the Administrator of the Environ-
24 mental Protection Agency, shall carry out a competitive
25 grant and cost-sharing agreement program for eligible en-

1 tities to carry out projects located in the United States
2 to produce, transport, blend, or store sustainable aviation
3 fuel.

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

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

9 (2) the potential to increase the domestic pro-
10 duction and deployment of sustainable aviation fuel;

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

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

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

21 (6) the proposed utilization of non-Federal con-
22 tributions by the eligible entity.

23 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated \$200,000,000 for each of
25 fiscal years 2024 through 2028 to carry out this section.

1 (d) REPORT.—Not later than October 1, 2029, the
2 Secretary shall submit to the Committee on Commerce,
3 Science, and Transportation and the Committee on Envi-
4 ronment and Public Works of the Senate and the Com-
5 mittee on Transportation and Infrastructure and the
6 Committee on Energy and Commerce of the House of
7 Representatives a report describing the results of the
8 grant program under this section. The report shall include
9 the following:

10 (1) A description of the entities and projects
11 that received grants or other cost-sharing agree-
12 ments under this section.

13 (2) A detailed explanation for why each entity
14 received the type of funding disbursement such enti-
15 ty did.

16 (3) A description of whether the program is
17 leading to an increase in the production and deploy-
18 ment of sustainable aviation fuels and whether that
19 increase is enough to keep the United States on
20 track to achieve the goals described in section 2 of
21 this Act.

22 (4) A description of the economic impacts re-
23 sulting from the funding to and operation of the
24 project.

1 (e) ELIGIBLE ENTITY DEFINED.—In this section, the
2 term “eligible entity” means—

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

5 (2) an air carrier;

6 (3) an airport sponsor; and

7 (4) a person or entity engaged in the produc-
8 tion, transportation, blending or storage of sustain-
9 able aviation fuel in the United States or feedstocks
10 in the United States that could be used to produce
11 sustainable aviation fuel.

12 **SEC. 5. LOW CARBON AVIATION FUEL STANDARD.**

13 (a) ESTABLISHMENT OF LOW CARBON AVIATION
14 FUEL STANDARD.—Section 211 of the Clean Air Act (42
15 U.S.C. 7545) is amended by adding at the end the fol-
16 lowing:

17 “(w) LOW CARBON AVIATION FUEL STANDARD.—

18 “(1) DEFINITIONS.—In this subsection:

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

23 “(B) CARBON INTENSITY.—The term ‘car-
24 bon intensity’ means the quantity of lifecycle

1 greenhouse gas emissions per unit of fuel en-
2 ergy.

3 “(C) CREDIT EXCHANGE.—The term ‘cred-
4 it exchange’ means a central marketplace with
5 established rules and regulations where buyers
6 and sellers meet to conduct trades.

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

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

21 “(3) TARGETS.—In promulgating regulations
22 under paragraph (2), the Administrator shall set a
23 target of a reduction of at least 20 percent in the
24 average carbon intensity of all aviation fuel used an-
25 nually in the United States by 2030, and of at least

1 50 percent by 2050, as compared to the average car-
2 bon intensity of all aviation fuel used in the United
3 States in 2005.

4 “(4) REQUIREMENTS.—In promulgating regula-
5 tions under paragraph (2), the Administrator
6 shall—

7 “(A) establish a benchmark for the average
8 carbon intensity of aviation fuels for each cal-
9 endar year, beginning with the first full cal-
10 endar year that begins 2 years after the date of
11 enactment of this subsection, suitable to achiev-
12 ing the targets specified in paragraph (3);

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

15 “(C) establish procedures for calculating
16 the carbon intensity of an aviation fuel, ex-
17 pressed in grams of carbon dioxide equivalent
18 per megajoule, in accordance with—

19 “(i) the standards, recommended
20 practices, requirements and criteria, sup-
21 porting documents, implementation ele-
22 ments, and any other technical guidance
23 for sustainable aviation fuels that are
24 adopted by the International Civil Aviation

1 Organization with the agreement of the
2 United States; and

3 “(ii) any other more stringent ac-
4 counting practices determined by the Ad-
5 ministrator to be the best lifecycle green-
6 house gas emission accounting practices,
7 provided that such practices account for
8 the aggregate quantity of greenhouse gas
9 emissions (including direct emissions and
10 significant indirect emissions such as sig-
11 nificant emissions from land use changes),
12 as determined by the Administrator, re-
13 lated to the full fuel lifecycle, including all
14 stages of fuel and feedstock production and
15 distribution, from feedstock generation or
16 extraction through the distribution and de-
17 livery and use of the finished fuel to the
18 ultimate consumer, where the mass values
19 for all greenhouse gases are adjusted to ac-
20 count for their relative global warming po-
21 tential;

22 “(D) determine how long the calculation of
23 the carbon intensity of an aviation fuel (pursu-
24 ant to the procedures established under sub-

1 paragraph (C)), will remain in effect before
2 needing to be reevaluated;

3 “(E) allow a person described in subpara-
4 graph (B), who, for a calendar year, produces
5 or imports aviation fuel—

6 “(i) that has an average carbon inten-
7 sity that is less than the benchmark for av-
8 erage carbon intensity for that calendar
9 year to, except as provided in paragraph
10 (8), generate credits, to be used, or trans-
11 ferred to another person, to demonstrate
12 compliance with this subsection; and

13 “(ii) that has an average carbon in-
14 tensity that is greater than the benchmark
15 for average carbon intensity for that cal-
16 endar year to purchase credits to be used
17 to demonstrate compliance with this sub-
18 section;

19 “(F) determine the—

20 “(i) appropriate amount of credits
21 generated and used to demonstrate compli-
22 ance pursuant to subparagraph (E);

23 “(ii) appropriate conditions, if any,
24 on—

1 “(I) the duration of such credits;

2 and

3 “(II) the transfer of such credits

4 through a credit exchange; and

5 “(G) consult with all relevant stakeholders,

6 including aviation industry groups, renewable

7 fuel industry groups, researchers at institutions

8 of higher education, labor unions, consumer ad-

9 vocates, and any other stakeholders the Admin-

10 istrator determines to be appropriate.

11 “(5) CONSULTATION.—In carrying out this sub-

12 section, the Administrator shall consult with the Ad-

13 ministrator of the Federal Aviation Administration,

14 the Secretary of Energy, and the Secretary of Agri-

15 culture.

16 “(6) COORDINATION WITH STATES.—The Ad-

17 ministrator shall, after notice and opportunity for

18 public hearing, waive application of the fuel stand-

19 ard in any State that has adopted a standard for

20 aviation fuels that the Administrator determines is

21 at least as stringent as the fuel standard.

22 “(7) REVISION.—If Congress enacts a standard

23 or similar law that the Administrator, in consulta-

24 tion with the Administrator of the Federal Aviation

25 Administration, determines accomplishes the pur-

1 poses of the fuel standard for sectors of the economy
2 that include the aviation sector, the Administrator
3 may revoke the fuel standard in favor of the other
4 standard or law.

5 “(8) RELATIONSHIP TO RENEWABLE FUEL PRO-
6 GRAM.—No credit may be generated under this sub-
7 section with respect to renewable fuel for which a
8 credit is generated under subsection (o).

9 “(9) REPORT.—Not later than 180 days after
10 the date of enactment of this subsection, the Admin-
11 istrator shall submit to Congress and make publicly
12 available a report describing—

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

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

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

19 (1) in paragraph (1)—

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

23 (B) by striking “or (o) of this section or
24 who fails” and inserting “(o), or (w) of this sec-
25 tion or who fails”; and

1 (C) by striking “or (o) of this section
2 which establishes” and inserting “(o), or (w) of
3 this section which establishes”; and

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

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

9 (a) IN GENERAL.—Effective October 1, 2025, the
10 Secretary of Defense shall make a bulk purchase of an
11 amount of sustainable aviation fuel that is not less than
12 10 percent of the total amount of aviation fuel procured
13 for operational purposes (as defined in section 2922h of
14 title 10, United States Code) if—

15 (1) the cost of sustainable aviation fuel is com-
16 petitive with the fully burdened cost of conventional
17 jet fuel available for the same purpose; and

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

20 (b) BLENDED FUEL.—If the Secretary of Defense
21 purchases sustainable aviation fuel that is blended with
22 conventional jet fuel, the percentage of sustainable avia-
23 tion fuel in such blend will be counted towards the per-
24 centage described in subsection (a).

1 (c) CERTIFICATION.—Before making a purchase
2 under subsection (a), the Secretary of Defense or the Sec-
3 retary concerned (as defined in section 101(a)(9) of title
4 10, United States Code) shall certify that the sustainable
5 aviation fuel is suitable for use in aircrafts of the Depart-
6 ment of Defense.

7 (d) WAIVER.—

8 (1) IN GENERAL.—Subject to the requirements
9 of paragraph (2), the Secretary of Defense may
10 waive the requirement under subsection (a) for rea-
11 sons of national security, including the lack of avail-
12 able, qualifying sustainable aviation fuel.

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

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

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

23 (e) DEFINITIONS.—The terms “fully burdened cost”
24 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 (a) IN GENERAL.—Section 911(a) of the FAA Mod-
5 ernization and Reform Act of 2012 (49 U.S.C. 44504
6 note) is amended—

7 (1) by striking “assist in the development” and
8 inserting the following:

9 “(1) assist in the development”;

10 (2) by striking “and other” and inserting “,
11 other”;

12 (3) by striking the period and inserting “, and
13 sustainable fuel that can be used without the need
14 to blend with any other type of aviation fuel;”; and

15 (4) by adding at the end the following:

16 “(2) promote the efforts of the aviation sector
17 to become a net-zero greenhouse gas emitting sector;

18 “(3) study the climate impacts of non-carbon
19 dioxide greenhouse gas emissions, water vapor, and
20 contrails and ways to minimize such impacts; and

21 “(4) develop a methodology for quantifying the
22 non-carbon dioxide climate impacts of aviation in a
23 lifecycle analysis, including the benefits of sustain-
24 able aviation fuel other than the reduction in carbon
25 dioxide emissions.”.

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

3 “(e) DEFINITIONS.—In this section:

4 “(1) SUSTAINABLE AVIATION FUEL.—The term
5 ‘sustainable aviation fuel’ means liquid fuel con-
6 sisting of synthesized hydrocarbons that—

7 “(A) is derived from a qualified feedstock;
8 and

9 “(B) conforms to the standards, rec-
10 ommended practices, requirements and criteria,
11 supporting documents, implementation ele-
12 ments, and any other technical guidance for
13 sustainable aviation fuels that are adopted by
14 the International Civil Aviation Organization
15 with the agreement of the United States.

16 “(2) QUALIFIED FEEDSTOCK.—The term ‘quali-
17 fied feedstock’ means sources of hydrogen and car-
18 bon not originating from unrefined or refined petro-
19 chemicals.

20 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
21 is authorized to be appropriated to the Administrator of
22 the Federal Aviation Administration \$35,000,000 for each
23 of fiscal years 2024 through 2028 to carry out this sec-
24 tion.”.

1 **SEC. 8. DEPARTMENT OF ENERGY RESEARCH.**

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

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

10 (c) DEFINITIONS.—In this section:

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

14 (A) is derived from a qualified feedstock;
15 and

16 (B) conforms to the standards, rec-
17 ommended practices, requirements and criteria,
18 supporting documents, implementation ele-
19 ments, and any other technical guidance for
20 sustainable aviation fuels that are adopted by
21 the International Civil Aviation Organization
22 with the agreement of the United States.

23 (2) NATIONAL LABORATORY.—The term “na-
24 tional laboratory” has the meaning given the term in
25 section 2(3) of the Energy Policy Act of 2005 (42
26 U.S.C. 15801(3)).

1 (d) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated such sums as may be
3 necessary to carry out this section.

4 **SEC. 9. EXTENSION OF CLEAN FUEL PRODUCTION CREDIT**
5 **FOR SUSTAINABLE AVIATION FUEL.**

6 (a) IN GENERAL.—Section 45Z(g) of the Internal
7 Revenue Code of 1986 is amended to read as follows:

8 “(g) TERMINATION.—This section shall not apply—

9 “(1) in the case of transportation fuel which is
10 not sustainable aviation fuel, to fuel sold after De-
11 cember 31, 2027, and

12 “(2) in the case of sustainable aviation fuel, to
13 fuel sold after December 31, 2032.”.

14 (b) EFFECTIVE DATE.—The amendments made by
15 this section shall apply to fuel produced after December
16 31, 2027.

17 **SEC. 10. SUSTAINABLE AVIATION FUEL PRODUCTION PROP-**
18 **ERTY ADDED TO ENERGY CREDIT.**

19 (a) IN GENERAL.—Section 48 of the Internal Rev-
20 enue Code of 1986 is amended—

21 (1) in subsection (a)—

22 (A) in paragraph (2)(A)(i)—

23 (i) in subclause (VIII), by striking

24 “and”, and

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

3 “(X) sustainable aviation fuel
4 production property, and”,

5 (B) in paragraph (3)(A), by striking “or”
6 at the end of clause (x), inserting “or” at the
7 end of clause (xi), and by adding at the end the
8 following new clause:

9 “(xii) sustainable aviation fuel produc-
10 tion property,”, and

11 (C) by redesignating paragraph (16) as
12 paragraph (17) and by inserting after para-
13 graph (15) the following new paragraph:

14 “(16) PHASEOUT FOR SUSTAINABLE AVIATION
15 FUEL PRODUCTION PROPERTY.—In the case of any
16 energy property described in paragraph (3)(A)(xii)
17 the construction of which begins before January 1,
18 2037, the energy percentage determined under para-
19 graph (2) shall be equal to—

20 “(A) in the case of any property the con-
21 struction of which begins after December 31,
22 2028, and before January 1, 2030, 24 percent,

23 “(B) in the case of any property the con-
24 struction of which begins after December 31,

1 2029, and before January 1, 2031, 18 percent,
2 and

3 “(C) in the case of any property the con-
4 struction of which begins after December 31,
5 2030, and before January 1, 2037, 12 per-
6 cent.”, and

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

9 “(9) SUSTAINABLE AVIATION FUEL PRODUC-
10 TION PROPERTY.—

11 “(A) IN GENERAL.—The term ‘sustainable
12 aviation fuel production property’ means—

13 “(i) property which produces sustain-
14 able aviation fuel (as defined in section
15 40B(d)), or

16 “(ii) property directly related to ena-
17 bling the production or distribution of sus-
18 tainable aviation fuel.

19 “(B) RECAPTURE OF CREDIT.—The Sec-
20 retary shall, by regulations, provide for recap-
21 turing the benefit of any credit allowable under
22 subsection (a)(3)(A)(xii) with respect to any
23 sustainable aviation fuel production property if
24 the sustainable aviation fuel production of such
25 property comprises less than 80 percent of the

1 total fuel production of such property in any of
2 the 5 taxable years immediately following the
3 taxable year in which such property was placed
4 in service.”.

5 (b) EFFECTIVE DATE.—The amendments made by
6 this section shall apply to fuel produced after December
7 31, 2023.

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