

117TH CONGRESS
1ST SESSION

S. 3125

To establish an alternative fuel and low-emission aviation technology program,
and for other purposes.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 1, 2021

Mr. WARNOCK (for himself, Ms. CANTWELL, Mr. PETERS, and Mr. PADILLA)
introduced the following bill; which was read twice and referred to the
Committee on Commerce, Science, and Transportation

A BILL

To establish an alternative fuel and low-emission aviation
technology program, 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 “Aviation Emissions
5 Reduction Opportunity Act” or the “AERO Act”.

6 **SEC. 2. ALTERNATIVE FUEL AND LOW-EMISSION AVIATION**
7 **TECHNOLOGY PROGRAM.**

8 (a) ESTABLISHMENT.—The Secretary shall establish
9 a competitive grant program to provide grants to eligible
10 entities to carry out projects located in the United States

1 that produce, transport, blend, or store sustainable avia-
2 tion fuel, or develop, demonstrate, or apply low-emission
3 aviation technologies.

4 (b) CONSIDERATIONS.—In carrying out subsection
5 (a), the Secretary shall consider, with respect to a pro-
6 posed project—

7 (1) the capacity for the eligible entity to in-
8 crease the domestic production and deployment of
9 sustainable aviation fuel or the use of low-emission
10 aviation technologies among the United States com-
11 mercial aviation and aerospace industry;

12 (2) the projected greenhouse gas emissions
13 from such project, including emissions resulting
14 from the development of the project, and the poten-
15 tial the project has to reduce or displace, on a
16 lifecycle basis, United States greenhouse gas emis-
17 sions associated with air travel;

18 (3) the capacity to create new jobs and develop
19 supply chain partnerships in the United States;

20 (4) for projects related to the production of sus-
21 tainable aviation fuel, the projected lifecycle green-
22 house gas emissions benefits from the proposed
23 project, which shall include feedstock and fuel pro-
24 duction and potential direct and indirect greenhouse

1 gas emissions (including resulting from changes in
2 land use); and

3 (5) the benefits of ensuring a diversity of feed-
4 stocks for sustainable aviation fuel, including the use
5 of waste carbon oxides and direct air capture.

6 (c) COST SHARE.—The Federal share of the cost of
7 a project carried out using grant funds under subsection
8 (a) shall be a maximum of 90 percent of the proposed total
9 cost of the project, and the Secretary shall consider the
10 extent to which a proposed project meets the consider-
11 ations described in subsection (b) in determining the Fed-
12 eral share under this subsection.

13 (d) FUEL EMISSIONS REDUCTION TEST.—For pur-
14 poses of clause (ii) of subsection (f)(7)(E), the Secretary
15 shall, not later than 2 years after the date of enactment
16 of this section, adopt at least 1 methodology for testing
17 lifecycle greenhouse gas emissions that meets the require-
18 ments of such clause.

19 (e) FUNDING.—

20 (1) AUTHORIZATION OF APPROPRIATIONS.—Out
21 of any money in the Treasury not otherwise appro-
22 priated, there are authorized to be appropriated for
23 each of fiscal years 2022 through 2026,
24 \$200,000,000 to carry out the purposes of this Act,
25 to remain available until expended.

1 (2) FUNDING DISTRIBUTION.—Subject to para-
2 graph (3), of any amount made available under
3 paragraph (1)—

4 (A) 30 percent of such amount shall be
5 awarded for projects that develop, demonstrate,
6 or apply low-emission aviation technologies; and

7 (B) 70 percent of such amount shall be
8 awarded for projects that produce, transport,
9 blend, or store sustainable aviation fuel.

10 (3) ADMINISTRATION.—The Secretary may re-
11 serve not more than 2 percent of the amount appro-
12 priated under paragraph (1) for expenses related to
13 administering this section.

14 (f) DEFINITIONS.—In this section:

15 (1) ELIGIBLE ENTITY.—The term “eligible enti-
16 ty” means—

17 (A) a State or local government, including
18 the District of Columbia, other than an airport
19 sponsor;

20 (B) an air carrier;

21 (C) an airport sponsor;

22 (D) an accredited institution of higher edu-
23 cation;

24 (E) a research institution;

1 (F) a person or entity engaged in the pro-
2 duction, transportation, blending, or storage of
3 sustainable aviation fuel in the United States or
4 feedstocks in the United States that could be
5 used to produce sustainable aviation fuel;

6 (G) a person or entity engaged in the de-
7 velopment, demonstration, or application of low-
8 emission aviation technologies; or

9 (H) nonprofit entities or nonprofit con-
10 sortia with experience in sustainable aviation
11 fuels, low-emission aviation technologies, or
12 other clean transportation research programs.

13 (2) FEEDSTOCK.—The term “feedstock” means
14 sources of hydrogen and carbon not originating from
15 unrefined or refined petrochemicals.

16 (3) INDUCED LAND-USE CHANGE VALUES.—
17 The term “induced land-use change values” means
18 the greenhouse gas emissions resulting from the con-
19 version of land to the production of feedstocks and
20 from the conversion of other land due to the dis-
21 placement of crops or animals for which the original
22 land was previously used.

23 (4) LIFECYCLE GREENHOUSE GAS EMIS-
24 SIONS.—The term “lifecycle greenhouse gas emis-
25 sions” means the combined greenhouse gas emis-

1 sions from feedstock production, collection of feed-
2 stock, transportation of feedstock to fuel production
3 facilities, conversion of feedstock to fuel, transpor-
4 tation and distribution of fuel, and fuel combustion
5 in an aircraft engine, as well as from induced land-
6 use change values.

7 (5) LOW-EMISSION AVIATION TECHNOLOGIES.—
8 The term “low-emission aviation technologies”
9 means technologies, produced in the United States,
10 that significantly—

11 (A) improve aircraft fuel efficiency;

12 (B) increase utilization of sustainable avia-
13 tion fuel; or

14 (C) reduce greenhouse gas emissions pro-
15 duced during operation of civil aircraft.

16 (6) SECRETARY.—The term “Secretary” means
17 the Secretary of Transportation.

18 (7) SUSTAINABLE AVIATION FUEL.—The term
19 “sustainable aviation fuel” means liquid fuel, pro-
20 duced in the United States, that—

21 (A) consists of synthesized hydrocarbons;

22 (B) meets the requirements of—

23 (i) ASTM International Standard
24 D7566; or

1 (ii) the co-processing provisions of
2 ASTM International Standard D1655,
3 Annex A1 (or such successor standard);

4 (C) is derived from biomass (in a similar
5 manner as such term is defined in section
6 45K(c)(3) of the Internal Revenue Code of
7 1986), waste streams, renewable energy
8 sources, or gaseous carbon oxides;

9 (D) is not derived from palm fatty acid
10 distillates; and

11 (E) achieves at least a 50-percent lifecycle
12 greenhouse gas emissions reduction in compari-
13 son with petroleum-based jet fuel, as deter-
14 mined by a test that shows—

15 (i) the fuel production pathway
16 achieves at least a 50-percent reduction of
17 the aggregate attributional core lifecycle
18 emissions and the induced land use change
19 values under a lifecycle methodology for
20 sustainable aviation fuels similar to that
21 adopted by the International Civil Aviation
22 Organization with the agreement of the
23 United States; or

24 (ii) the fuel production pathway
25 achieves at least a 50-percent reduction of

1 the aggregate attributional core lifecycle
2 greenhouse gas emissions values and the
3 induced land-use change values under an-
4 other methodology that the Secretary de-
5 termines is—

6 (I) reflective of the latest sci-
7 entific understanding of lifecycle
8 greenhouse gas emissions; and

9 (II) as stringent as the require-
10 ment under clause (i).

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