

118TH CONGRESS
1ST SESSION

H. R. 4032

To require the Administrator of the Federal Aviation Administration and the Secretary of Energy to exercise leadership in the creation of Federal and international policies relating to the safe and efficient use of hydrogen to increase aviation decarbonization and reduce air and noise pollution, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 12, 2023

Mr. JOHNSON of Georgia (for himself, Mr. THOMPSON of Mississippi, and Mr. ESPAILLAT) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

A BILL

To require the Administrator of the Federal Aviation Administration and the Secretary of Energy to exercise leadership in the creation of Federal and international policies relating to the safe and efficient use of hydrogen to increase aviation decarbonization and reduce air and noise pollution, 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 “Hydrogen Aviation
5 Strategy Act”.

1 **SEC. 2. FAA AND DEPARTMENT OF ENERGY LEADERSHIP**
2 **ON USING HYDROGEN TO INCREASE AVIA-**
3 **TION DECARBONIZATION.**

4 (a) **IN GENERAL.**—The Secretary of Transportation,
5 acting primarily through the Administrator of the Federal
6 Aviation Administration (in this Act referred to as the
7 “Administrator”), and jointly with the Secretary of En-
8 ergy, shall exercise leadership in the creation of Federal
9 and international policies, and shall conduct studies, relat-
10 ing to the safe and efficient use of hydrogen to increase
11 aviation decarbonization and reduce air and noise pollu-
12 tion.

13 (b) **EXERCISE OF LEADERSHIP.**—In carrying out
14 subsection (a), the Secretary of Transportation, the Ad-
15 ministrator, and the Secretary of Energy shall—

16 (1) establish positions and goals for the use of
17 hydrogen to increase aviation decarbonization;

18 (2) through grant, contract, or interagency
19 agreements, study the contribution the use of hydro-
20 gen would have on aviation decarbonization, includ-
21 ing hydrogen as an input for conventional jet fuel,
22 sustainable aviation fuel, and power to liquids or
23 synthetic fuel, and on air pollution and noise pollu-
24 tion, and study ways of accelerating introduction of
25 hydrogen-powered aircraft;

1 (3) review grant eligibility requirements and
2 other policies and requirements of the Federal Avia-
3 tion Administration and the Department of Energy
4 to identify ways to increase the use of hydrogen;

5 (4) consider the needs of the aerospace indus-
6 try, aviation suppliers, hydrogen producers, airlines,
7 and other stakeholders when creating policies that
8 enable the safe commercial deployment of hydrogen
9 in aviation;

10 (5) obtain input from the National Aeronautics
11 and Space Administration, the aerospace industry,
12 aviation suppliers, hydrogen producers, airlines, air-
13 port sponsors, fixed base operators, and other stake-
14 holders regarding—

15 (A) the efficient use of hydrogen to
16 decarbonize aviation within United States air-
17 space, including—

18 (i) updating or modifying existing
19 policies on such use;

20 (ii) barriers to, and benefits of, the in-
21 troduction of aircraft powered with hydro-
22 gen;

23 (iii) the operational differences be-
24 tween aircraft powered with hydrogen and
25 aircraft powered with other types of fuels;

1 (iv) impacts on aircraft emissions; and
2 (v) public, economic, and noise bene-
3 fits of the operation of aircraft powered
4 with hydrogen and associated aerospace in-
5 dustry activity; and

6 (B) other issues identified by the Secretary
7 of Transportation, the Administrator, the Sec-
8 retary of Energy, or the advisory committee es-
9 tablished under paragraph (6) that must be ad-
10 dressed to enable the safe and expeditious com-
11 mercial deployment and safe and efficient oper-
12 ation of aircraft powered with hydrogen; and

13 (6) establish an advisory committee composed
14 of representatives of the National Aeronautics and
15 Space Administration, the aerospace industry, avia-
16 tion suppliers, hydrogen producers, airlines, airport
17 sponsors, fixed base operators, and other stake-
18 holders to advise the Secretary of Transportation,
19 the Administrator, and the Secretary of Energy on
20 the activities carried out under this section and sec-
21 tion 3.

22 (c) INTERNATIONAL LEADERSHIP.—The Secretary of
23 Transportation, the Administrator, and the Secretary of
24 Energy, in the appropriate international forums, shall
25 take actions that—

1 (1) demonstrate global leadership in carrying
2 out the activities required by subsections (a) and
3 (b);

4 (2) address the needs of the aerospace industry,
5 aviation suppliers, hydrogen producers, airlines, air-
6 port sponsors, fixed base operators, and other stake-
7 holders identified under subsection (b); and

8 (3) preserve the United States aviation competi-
9 tiveness.

10 (d) REPORT TO CONGRESS.—Not later than 1 year
11 after the date of enactment of this section, the Secretary
12 of Transportation, acting primarily through the Adminis-
13 trator, and jointly with the Secretary of Energy, shall sub-
14 mit to the appropriate committees of Congress a report
15 detailing—

16 (1) the Secretary of Transportation’s, Adminis-
17 trator’s, and Secretary of Energy’s actions to exer-
18 cise leadership in the creation of Federal and inter-
19 national policies, and of studies conducted, relating
20 to the safe and efficient use of hydrogen to increase
21 aviation decarbonization and improve air and noise
22 pollution;

23 (2) planned, proposed, and anticipated actions
24 to update or modify existing policies related to hy-
25 drogen in the aviation sector, including those identi-

1 fied as a result of consultation with, and feedback
2 from, the aerospace industry, aviation suppliers, hy-
3 drogen producers, airlines, airport sponsors, fixed
4 base operators, and other stakeholders; and

5 (3) a timeline for any actions to be taken to up-
6 date or modify existing policies related to hydrogen.

7 **SEC. 3. FAA LEADERSHIP ON THE CERTIFICATION OF HY-**
8 **DROGEN-POWERED AIRCRAFT TO INCREASE**
9 **AVIATION DECARBONIZATION.**

10 (a) IN GENERAL.—The Administrator shall exercise
11 leadership in the creation of Federal regulations, stand-
12 ards, and guidance relating to the safe and efficient use
13 of hydrogen to increase aviation decarbonization, and re-
14 duce air and noise pollution.

15 (b) EXERCISE OF LEADERSHIP.—In carrying out
16 subsection (a), the Administrator shall—

17 (1) establish a viable path for the certification
18 of hydrogen-powered aircraft that considers existing
19 frameworks;

20 (2) review certification regulations and other re-
21 quirements of the Federal Aviation Administration
22 to identify ways to facilitate the use of hydrogen;

23 (3) consider the needs of the aerospace indus-
24 try, aviation suppliers, hydrogen producers, airlines,
25 airport sponsors, fixed base operators, and other

1 stakeholders when creating regulations and stand-
2 ards that enable the safe commercial deployment of
3 hydrogen in aviation; and

4 (4) obtain the input of the aerospace industry,
5 aviation suppliers, hydrogen producers, airlines, air-
6 port sponsors, fixed base operators, and other stake-
7 holders regarding—

8 (A) the appropriate regulatory framework
9 and timeline for permitting the safe and effi-
10 cient use of hydrogen within United States air-
11 space, including updating or modifying existing
12 regulations on such use;

13 (B) how to accelerate the resolution of
14 issues related to standards and regulations for
15 the type certification and safe operation of air-
16 craft powered with hydrogen; and

17 (C) other issues identified by the Adminis-
18 trator or the advisory committee established
19 under section 2(b)(6) that must be addressed to
20 enable the safe and expeditious commercial de-
21 ployment and safe and efficient operation of
22 aircraft powered with hydrogen.

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