

117TH CONGRESS
2D SESSION

S. _____

To require the Secretary of Transportation, in consultation with the Secretary of Energy, to establish a grant program to demonstrate the performance and reliability of heavy-duty fuel cell vehicles that use hydrogen as a fuel source, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. COONS (for himself and Mr. CORNYN) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To require the Secretary of Transportation, in consultation with the Secretary of Energy, to establish a grant program to demonstrate the performance and reliability of heavy-duty fuel cell vehicles that use hydrogen as a fuel source, 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 for Trucks
5 Act of 2022”.

1 **SEC. 2. HEAVY-DUTY FUEL CELL VEHICLE DEMONSTRATION PROGRAM.**
2

3 (a) DEFINITIONS.—In this section:

4 (1) ELIGIBLE ENTITY.—The term “eligible entity” means an entity described in subsection (b)(2).
5

6 (2) HEAVY-DUTY FUEL CELL VEHICLE.—The
7 term “heavy-duty fuel cell vehicle” means a vehicle
8 that—

9 (A) has a manufacturer gross vehicle
10 weight rating of more than 26,000 pounds, as
11 determined by the Federal Highway Administration;
12

13 (B) is not powered or charged by an internal combustion engine; and
14

15 (C) is propelled solely by an electric motor
16 that draws electricity from—

17 (i) a fuel cell; or

18 (ii) a combination of a fuel cell and a
19 battery.

20 (3) PROGRAM.—The term “program” means
21 the program established under subsection (b)(1).

22 (4) SECRETARY.—The term “Secretary” means
23 the Secretary of Transportation.

24 (b) ESTABLISHMENT.—

25 (1) IN GENERAL.—Not later than 1 year after
26 the date of enactment of this Act, the Secretary, in

1 consultation with the Secretary of Energy, shall es-
2 tablish a grant program under which the Secretary
3 shall provide grants to eligible entities to assist the
4 eligible entities in funding capital projects to pur-
5 chase heavy-duty fuel cell vehicles and related equip-
6 ment, including hydrogen fueling stations.

7 (2) ELIGIBLE ENTITIES.—To be eligible to re-
8 ceive a grant under the program, an entity shall
9 be—

10 (A) a private heavy-duty truck fleet owner
11 with high duty cycle operations;

12 (B) an operator with a “return to base”
13 mode that requires refueling primarily at a sin-
14 gle station, including an airport, a delivery
15 warehouse, and a shipping port;

16 (C) an independent owner-operator;

17 (D) a public hydrogen fueling station de-
18 veloper or operator;

19 (E) a Federal, State, or local agency that
20 owns, operates, leases, or otherwise controls a
21 fleet of public vehicles; or

22 (F) a partnership of 1 or more entities de-
23 scribed in subparagraphs (A) through (E).

24 (3) APPLICATIONS.—

1 (A) IN GENERAL.—Subject to subpara-
2 graph (B), an eligible entity desiring a grant
3 under the program shall submit to the Sec-
4 retary an application at such time, in such
5 manner, and containing such information as the
6 Secretary, in consultation with the Secretary of
7 Energy, may require.

8 (B) REQUIREMENT.—If an eligible entity
9 desiring a grant under the program intends to
10 use the grant for only 1 of the uses described
11 in subparagraphs (A) and (B) of subsection
12 (d)(1), the eligible entity shall include in the
13 application under subparagraph (A) a descrip-
14 tion of—

15 (i) if the grant is to be used only for
16 the use described in subparagraph (A) of
17 subsection (d)(1), the availability of not
18 fewer than 1 hydrogen fueling station that
19 can be used by heavy-duty fuel cell vehi-
20 cles;

21 (ii) if the grant is to be used only for
22 the use described in subparagraph (B) of
23 subsection (d)(1), the availability of not
24 fewer than 10 heavy-duty fuel cell vehicles
25 that—

1 (I) use hydrogen as a fuel source;

2 and

3 (II) will use 1 or more hydrogen

4 fueling stations demonstrated using

5 the grant; and

6 (iii) the means by which the project of

7 the eligible entity will expand the demand

8 for and use of any existing infrastructure.

9 (4) CONSIDERATIONS.—In selecting eligible en-
10 tities to receive a grant under the program, the Sec-
11 retary, in consultation with the Secretary of Energy,
12 shall—

13 (A) take into account whether the eligible
14 entity has the potential to expand the use of hy-
15 drogen demonstrated by the eligible entity using
16 the grant to other applications within the region
17 in which the eligible entity operates; and

18 (B) to the maximum extent practicable—

19 (i) select eligible entities operating in
20 different regions of the United States—

21 (I) to demonstrate different types
22 of fleet operations, such as fleet oper-
23 ations with differing local hydrogen
24 supplies, climate conditions, route

1 lengths and geographies, and sizes of
2 vehicles; and

3 (II) to identify any differences in
4 performance demonstrated by the
5 heavy-duty fuel cell vehicles used by
6 the eligible entity that are due to re-
7 gional characteristics;

8 (ii) select eligible entities that intend
9 to use the grant for both of the uses de-
10 scribed in subparagraphs (A) and (B) of
11 subsection (d)(1); and

12 (iii) select projects that will generate
13 the greatest benefit to low-income or dis-
14 advantaged communities (including cities,
15 towns, counties, and reasonably isolated
16 and divisible segments of a larger munici-
17 pality) with an annual median household
18 income that is less than 100 percent of the
19 statewide annual median household income
20 for the State in which the community is lo-
21 cated, according to the most recent decen-
22 nial census.

23 (5) PRIORITY.—In selecting eligible entities to
24 receive a grant under the program, the Secretary, in
25 consultation with the Secretary of Energy, shall give

1 priority to projects that will provide greater net im-
2 pact in avoiding or reducing emissions of greenhouse
3 gases.

4 (6) SPECIAL CONSIDERATION.—In selecting eli-
5 gible entities to receive a grant under the program,
6 the Secretary, in consultation with the Secretary of
7 Energy, shall give special consideration to—

8 (A) if the grant is to be used for the use
9 described in subsection (d)(1)(B), projects in
10 which each applicable hydrogen fueling station
11 is open to the public; or

12 (B) eligible entities that provide greater
13 than 20 percent cost share.

14 (c) GOALS.—The goals of the program shall be—

15 (1) to demonstrate the performance and reli-
16 ability of heavy-duty fuel cell vehicles in different re-
17 gions of the United States;

18 (2) to provide a basis for relevant cost evalua-
19 tions and cost reductions; and

20 (3) to accelerate the market deployment of
21 heavy-duty fuel cell vehicles.

22 (d) USE OF GRANT FUNDS.—

23 (1) IN GENERAL.—An eligible entity that re-
24 ceives a grant under the program shall use the grant
25 to demonstrate the performance of—

1 (A) not fewer than 10 heavy-duty fuel cell
2 vehicles that use hydrogen as fuel source; or

3 (B) not fewer than 1 hydrogen fueling sta-
4 tion for use by heavy-duty fuel cell vehicles.

5 (2) ELIGIBLE COSTS.—An eligible entity that
6 receives a grant under the program may use the
7 grant for the following costs:

8 (A) The capital costs of—

9 (i) the heavy-duty fuel cell vehicles de-
10 scribed in paragraph (1)(A), subject to
11 paragraph (4); or

12 (ii) a station described in paragraph
13 (1)(B).

14 (B) The costs of operating—

15 (i) the heavy-duty fuel cell vehicles de-
16 scribed in paragraph (1)(A); or

17 (ii) a station described in paragraph
18 (1)(B).

19 (C) Fuel costs.

20 (D) Overhead costs.

21 (E) The costs of training personnel to en-
22 sure safety and best practices during construc-
23 tion, fueling and refueling, maintenance, and
24 upkeep, as applicable, of—

1 (i) the heavy-duty fuel cell vehicles de-
2 scribed in paragraph (1)(A); or

3 (ii) a station described in paragraph
4 (1)(B).

5 (F) The costs of complying with—

6 (i) the requirements of subsection (g);

7 and

8 (ii) any reporting requirements under
9 subsection (h).

10 (3) OPERATION.—

11 (A) IN GENERAL.—Except as provided in
12 subparagraph (B), an eligible entity that re-
13 ceives a grant under the program for a use de-
14 scribed in subparagraph (A) or (B) of para-
15 graph (1) may determine whether each applica-
16 ble hydrogen fueling station shall—

17 (i) allow only private access; or

18 (ii) be open to the public.

19 (B) PUBLIC HYDROGEN FUELING STATION
20 DEVELOPERS AND OPERATORS.—An eligible en-
21 tity described in subsection (b)(2)(D) that re-
22 ceives a grant under the program to be used
23 only for the use described in paragraph (1)(B)
24 shall make each applicable hydrogen fueling

1 station described in that paragraph open to the
2 public.

3 (4) CAPITAL COSTS OF VEHICLES.—With re-
4 spect to the capital costs described in paragraph
5 (2)(A)(i), the amount of grant funds used for those
6 capital costs shall not exceed, with respect to each
7 heavy-duty fuel cell vehicle purchased by the eligible
8 entity and used for the applicable project, the lesser
9 of—

10 (A) the amount by which the cost of the
11 heavy-duty fuel cell vehicle exceeds 50 percent
12 of the cost of a comparable gasoline or diesel
13 fueled vehicle; and

14 (B) \$500,000.

15 (e) AMOUNT OF A GRANT.—The amount of a grant
16 provided by the Secretary under the program shall be not
17 more than \$20,000,000.

18 (f) COST SHARING.—The non-Federal share of the
19 cost of a project carried out using a grant under the pro-
20 gram shall be not less than 20 percent.

21 (g) LEAK DETECTION.—Each eligible entity that re-
22 ceives a grant under the program shall conduct—

23 (1) a hydrogen leakage monitoring, reporting,
24 and verification (also known as “MRV”) program;
25 and

1 (2) a hydrogen leak detection and repair (also
2 known as “LDAR”) program.

3 (h) REPORTING.—

4 (1) IN GENERAL.—An eligible entity that re-
5 ceives a grant under the program shall submit to the
6 Secretary such operational data relating to eligible
7 costs described in subsection (d)(2) as the Secretary,
8 in consultation with the Secretary of Energy, may
9 require to accelerate market deployment of heavy-
10 duty fuel cell vehicles that use hydrogen as a fuel
11 source.

12 (2) REQUIREMENT.—The operational data re-
13 quired by the Secretary under paragraph (1) shall
14 include, at a minimum, data relating to—

15 (A) operational expenses;

16 (B) fuel use; and

17 (C) reliability.

18 (3) SYSTEM.—The Secretary, in consultation
19 with the Secretary of Energy, shall develop a system
20 for data reporting and data sharing that allows simi-
21 lar fleet and fueling station operators to evaluate the
22 performance of the program.

23 (i) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated to the Secretary to carry

1 out the program \$200,000,000 for the period of fiscal
2 years 2023 through 2027.