

118TH CONGRESS
1ST SESSION

H. R. 6871

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 HOUSE OF REPRESENTATIVES

DECEMBER 19, 2023

Ms. PORTER (for herself and Mr. BILIRAKIS) introduced the following bill;
which was referred to the Committee on Science, Space, and Technology

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”.

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

3 (a) DEFINITIONS.—In this section:

4 (1) COMMERCIAL MOTOR VEHICLE.—The term
5 “commercial motor vehicle” means a self-propelled
6 vehicle used on highways in commerce principally to
7 transport passengers or cargo, if the vehicle has a
8 gross vehicle weight rating or gross vehicle weight of
9 at least 26,001 pounds, whichever is greater, or is
10 designed to transport more than 10 passengers, in-
11 cluding the driver.

12 (2) ELIGIBLE ENTITY.—The term “eligible enti-
13 ty” means an entity described in subsection (b)(2).

14 (3) FLEET.—The term “fleet” means the num-
15 ber of commercial motor vehicles owned and oper-
16 ated by an entity.

17 (4) HEAVY-DUTY FUEL CELL VEHICLE.—

18 (A) IN GENERAL.—The term “heavy-duty
19 fuel cell vehicle” means a vehicle that—

20 (i) has a manufacturer gross vehicle
21 weight rating of more than 26,000 pounds,
22 as determined by the Federal Highway Ad-
23 ministration;

24 (ii) is not powered or charged by an
25 internal combustion engine; and

1 (iii) is propelled solely by an electric
2 motor that draws electricity from—

3 (I) a fuel cell; or

4 (II) a combination of a fuel cell
5 and a battery.

6 (B) INCLUSION.—The term “heavy-duty
7 fuel cell vehicle” includes any off-road vehicle,
8 such as a yard truck, that meets the require-
9 ments of subparagraph (A).

10 (5) PROGRAM.—The term “program” means
11 the program established under subsection (b)(1).

12 (6) SECRETARY.—The term “Secretary” means
13 the Secretary of Transportation.

14 (b) ESTABLISHMENT.—

15 (1) IN GENERAL.—The Secretary, in consulta-
16 tion with the Secretary of Energy, shall establish a
17 program under which the Secretary shall provide
18 grants to eligible entities to assist the eligible enti-
19 ties in funding capital projects to purchase heavy-
20 duty fuel cell vehicles and related equipment, includ-
21 ing hydrogen fueling stations.

22 (2) ELIGIBLE ENTITIES.—To be eligible to re-
23 ceive a grant under the program, an entity shall
24 be—

1 (A) a private heavy-duty truck fleet owner
 2 with high duty cycle or long-haul operations;

3 (B) an operator with a “return to base”
 4 mode that requires refueling primarily at a sin-
 5 gle station, including an airport, a delivery
 6 warehouse, and a shipping port;

7 (C) a leasing firm;

8 (D) an independent owner-operator;

9 (E) a public hydrogen fueling station de-
 10 veloper or operator;

11 (F) a Federal, State, or local agency that
 12 owns, operates, leases, or otherwise controls a
 13 fleet of public vehicles; or

14 (G) a partnership of 1 or more entities de-
 15 scribed in subparagraphs (A) through (E).

16 (3) APPLICATIONS.—

17 (A) IN GENERAL.—Subject to subpara-
 18 graph (B), an eligible entity desiring a grant
 19 under the program shall submit to the Sec-
 20 retary an application at such time, in such
 21 manner, and containing such information as the
 22 Secretary, in consultation with the Secretary of
 23 Energy, may require.

24 (B) REQUIREMENT.—If an eligible entity
 25 desiring a grant under the program intends to

1 use the grant for only 1 of the uses described
2 in subparagraphs (A) and (B) of subsection
3 (d)(1), the eligible entity shall include in the
4 application under subparagraph (A) a descrip-
5 tion of—

6 (i) if the grant is to be used only for
7 the use described in subparagraph (A) of
8 subsection (d)(1), the availability of not
9 fewer than 1 hydrogen fueling station that
10 can be used by heavy-duty fuel cell vehi-
11 cles;

12 (ii) if the grant is to be used only for
13 the use described in subparagraph (B) of
14 subsection (d)(1), the availability of not
15 fewer than 7 heavy-duty fuel cell vehicles
16 that—

17 (I) use hydrogen as a fuel source;

18 and

19 (II) will use 1 or more hydrogen
20 fueling stations demonstrated using
21 the grant; and

22 (iii) the means by which the project of
23 the eligible entity will expand the demand
24 for and use of any existing infrastructure.

1 (4) CRITERIA.—In selecting eligible entities to
2 receive grants under the program, the Secretary, in
3 consultation with the Secretary of Energy, shall—

4 (A) take into account whether the eligible
5 entity has the potential to expand the use of hy-
6 drogen demonstrated by the eligible entity using
7 the grant to other applications within the region
8 in which the eligible entity operates; and

9 (B) to the maximum extent practicable—

10 (i) select eligible entities operating in
11 different regions of the United States—

12 (I) to demonstrate different types
13 of fleet operations, such as fleet oper-
14 ations with differing local hydrogen
15 supplies, climate conditions, route
16 lengths and geographies, and sizes of
17 vehicles; and

18 (II) to identify any differences in
19 performance demonstrated by the
20 heavy-duty fuel cell vehicles used by
21 the eligible entity that are due to re-
22 gional characteristics;

23 (ii) select eligible entities that intend
24 to use the grant for both of the uses de-

scribed in subparagraphs (A) and (B) of subsection (d)(1); and

(iii) select projects that will generate the greatest benefit to low-income or disadvantaged communities (including cities, towns, counties, and reasonably isolated and divisible segments of a larger municipality) with an annual median household income that is less than 100 percent of the statewide annual median household income for the State in which the community is located, according to the most recent decennial census.

(5) PRIORITY.—In applying the criteria described in paragraph (4), the Secretary, in consultation with the Secretary of Energy, shall prioritize selecting—

(A) projects that will provide greater net impact in avoiding or reducing emissions of greenhouse gases;

(B) projects for which each applicable hydrogen fueling station is open to the public; and

(C) eligible entities that provide greater than 20 percent cost share.

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

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

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

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

8 (d) USE OF GRANT FUNDS.—

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

12 (A) not fewer than 7 heavy-duty fuel cell
13 vehicles that use hydrogen as fuel source; or

14 (B) 1 or more hydrogen fueling stations
15 for use by heavy-duty fuel cell vehicles.

16 (2) ELIGIBLE COSTS.—An eligible entity that
17 receives a grant under the program may use the
18 grant for the following costs:

19 (A) The capital costs of—

20 (i) the heavy-duty fuel cell vehicles de-
21 scribed in paragraph (1)(A), subject to
22 paragraph (4); or

23 (ii) constructing a station described in
24 paragraph (1)(B).

(B) The costs, such as costs associated with the cost of labor, complying with maintenance requirements, and administration of the program, of operating—

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

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

(C) Overhead expenses.

(D) The costs of training personnel to ensure safety and best practices during construction, fueling and refueling, maintenance, and upkeep, as applicable, of—

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

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

(E) The costs of complying with—

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

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

(3) PROJECT LOCATIONS.—A project carried out with a grant provided under the program may be carried out on any public road or in other pub-

1 licly accessible locations, such as parking facilities at
2 public buildings, public schools, and public parks, or
3 in publicly accessible parking facilities owned or
4 managed by a private entity.

5 (4) OPERATION.—

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

12 (i) allow only private access; or

13 (ii) be open to the public.

14 (B) PUBLIC HYDROGEN FUELING STATION
15 DEVELOPERS AND OPERATORS.—An eligible en-
16 tity described in subsection (b)(2)(E) that re-
17 ceives a grant under the program to be used
18 only for the use described in paragraph (1)(B)
19 shall make each applicable hydrogen fueling
20 station described in that paragraph open to the
21 public.

22 (5) CAPITAL COSTS OF VEHICLES.—With re-
23 spect to the capital costs described in paragraph
24 (2)(A)(i), the amount of grant funds used for those
25 capital costs shall not exceed, with respect to each

1 heavy-duty fuel cell vehicle purchased by the eligible
2 entity and used for the applicable project, the lesser
3 of—

4 (A) an amount equal to the difference be-
5 tween—

6 (i) the cost of the heavy-duty fuel cell
7 vehicle; and

8 (ii) the product obtained by multi-
9 plying—

10 (I) the cost of a comparable
11 gasoline- or diesel-fueled vehicle; and

12 (II) 0.5; and

13 (B) \$500,000.

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

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

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

22 (1) a hydrogen leakage monitoring, reporting,
23 and verification (also known as “MRV”) program;
24 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 fiscal years 2024
2 through 2028.

