

117TH CONGRESS  
1ST SESSION

# S. 432

To direct the Administrator of the Environmental Protection Agency to carry out a pilot program to award grants for the electrification of certain refrigerated vehicles, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

FEBRUARY 24, 2021

Mr. MARKEY introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To direct the Administrator of the Environmental Protection Agency to carry out a pilot program to award grants for the electrification of certain refrigerated vehicles, 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 “Fostering and Real-  
5        izing Electrification by Encouraging Zero Emission Re-  
6        frigeration Trucks Act of 2021” or the “FREEZER  
7        Trucks Act of 2021”.

1 **SEC. 2. PILOT PROGRAM FOR THE ELECTRIFICATION OF**  
2 **CERTAIN REFRIGERATED VEHICLES.**

3 (a) DEFINITIONS.—In this section:

4 (1) ADMINISTRATOR.—The term “Adminis-  
5 trator” means the Administrator of the Environ-  
6 mental Protection Agency.

7 (2) DIESEL-POWERED TRANSPORT REFRIGERA-  
8 TION UNIT.—The term “diesel-powered transport re-  
9 frigeration unit” means a transport refrigeration  
10 unit that is powered by an independent diesel inter-  
11 nal combustion engine.

12 (3) ELECTRIC TRANSPORT REFRIGERATION  
13 UNIT.—The term “electric transport refrigeration  
14 unit” means a transport refrigeration unit in which  
15 the refrigeration or climate-control system is driven  
16 by an electric motor when connected to shore power  
17 infrastructure or other equipment that enables  
18 transport refrigeration units to connect to electric  
19 power, including all-electric transport refrigeration  
20 units, hybrid electric transport refrigeration units,  
21 and standby electric transport refrigeration units.

22 (4) ELIGIBLE ENTITY.—The term “eligible enti-  
23 ty” means—

24 (A) a regional, State, local, or Tribal agen-  
25 cy, or a port authority, with jurisdiction over  
26 transportation or air quality;

1 (B) a nonprofit organization or institution  
2 that—

3 (i) represents, or provides pollution  
4 reduction or educational services to, indi-  
5 viduals or organizations that own or oper-  
6 ate heavy-duty vehicles or fleets of heavy-  
7 duty vehicles; or

8 (ii) has, as the principal purpose of  
9 the organization or institution, the pro-  
10 motion of air quality;

11 (C) an individual or entity that is the  
12 owner of record of a heavy-duty vehicle or a  
13 fleet of heavy-duty vehicles that operates for the  
14 transportation and delivery of perishable goods  
15 or other goods requiring climate-controlled con-  
16 ditions;

17 (D) an individual or entity that is the  
18 owner of record of a facility that operates as a  
19 warehouse or storage facility for perishable  
20 goods or other goods requiring climate-con-  
21 trolled conditions; and

22 (E) a hospital or public health institution  
23 that utilizes refrigeration for storage of perish-  
24 able goods or other goods requiring climate-con-  
25 trolled conditions.

1           (5) HEAVY-DUTY VEHICLE.—The term “heavy-  
2 duty vehicle” means—

3           (A) a commercial truck or van—

4                 (i) used for the primary purpose of  
5 transporting perishable goods or other  
6 goods requiring climate-controlled condi-  
7 tions; and

8                 (ii) with a gross vehicle weight rating  
9 greater than 6,000 pounds; and

10           (B) an insulated cargo trailer used in  
11 transporting perishable goods or other goods re-  
12 quiring climate-controlled conditions when  
13 mounted on a semitrailer.

14           (6) PILOT PROGRAM.—The term “pilot pro-  
15 gram” means the pilot program established under  
16 subsection (b).

17           (7) SHORE POWER INFRASTRUCTURE.—The  
18 term “shore power infrastructure” means electrical  
19 infrastructure that provides power to the electric  
20 transport refrigeration unit of a heavy-duty vehicle  
21 when the heavy-duty vehicle is stationary on a prop-  
22 erty where the heavy-duty vehicle is parked or load-  
23 ed, including a food distribution center or other loca-  
24 tion where heavy-duty vehicles congregate.

1           (8) TRANSPORT REFRIGERATION UNIT.—The  
2           term “transport refrigeration unit” means a climate-  
3           control system installed on a heavy-duty vehicle for  
4           the purpose of maintaining the quality of perishable  
5           goods or other goods requiring climate-controlled  
6           conditions.

7           (b) ESTABLISHMENT OF PILOT PROGRAM.—The Ad-  
8           ministrators shall establish a pilot program to award funds,  
9           in the form of grants, rebates, and low-cost revolving  
10          loans, as determined appropriate by the Administrator, on  
11          a competitive basis, to eligible entities to carry out projects  
12          described in subsection (c).

13          (c) PROJECTS.—An eligible entity receiving an award  
14          of funds under the pilot program may use those funds only  
15          for 1 or more of the following projects:

16               (1) TRANSPORT REFRIGERATION UNIT RE-  
17               PLACEMENT.—A project to retrofit a heavy-duty ve-  
18               hicle by—

19                       (A) replacing or retrofitting an existing  
20                       diesel-powered transport refrigeration unit in  
21                       the heavy-duty vehicle with an electric transport  
22                       refrigeration unit; and

23                       (B) retiring the replaced diesel-powered  
24                       transport refrigeration unit for scrappage.

1           (2) SHORE POWER INFRASTRUCTURE.—A  
2 project to purchase and install shore power infra-  
3 structure or other equipment that enables transport  
4 refrigeration units to connect to electric power and  
5 operate without using diesel fuel.

6           (d) MAXIMUM AMOUNTS.—The amount of an award  
7 of funds under the pilot program to an eligible entity shall  
8 not exceed—

9           (1) with respect to the costs of a project de-  
10 scribed in subsection (c)(1), 75 percent of those  
11 costs; and

12           (2) with respect to the costs of a project de-  
13 scribed in subsection (c)(2), 55 percent of those  
14 costs.

15           (e) APPLICATIONS.—To be eligible to receive an  
16 award of funds under the pilot program, an eligible entity  
17 shall submit to the Administrator an application at such  
18 time, in such manner, and containing such information as  
19 the Administrator may require, including—

20           (1) a description of the air quality in the area  
21 served by the eligible entity, including a description  
22 of how the air quality is affected by diesel emissions  
23 from heavy-duty vehicles;

24           (2) a description of the project proposed to be  
25 carried out by the eligible entity, including—

1 (A) any technology to be used or funded by  
2 the eligible entity; and

3 (B) a description of the heavy-duty vehicle  
4 or vehicles of the eligible entity that will be ret-  
5 rofitted, if any, including—

6 (i) the number of those heavy-duty ve-  
7 hicles;

8 (ii) the uses of those heavy-duty vehi-  
9 cles;

10 (iii) the locations where those heavy-  
11 duty vehicles dock for the purpose of load-  
12 ing or unloading; and

13 (iv) the routes driven by those heavy-  
14 duty vehicles, including the times at which  
15 those heavy-duty vehicles are driven;

16 (3) an estimate of the cost of the project pro-  
17 posed to be carried out by the eligible entity;

18 (4) a description of the age and expected life-  
19 time control of the equipment used or funded by the  
20 eligible entity; and

21 (5) a description of the provisions for the moni-  
22 toring and verification of the project proposed to be  
23 carried out by the eligible entity, including to verify  
24 the scrappage of any replaced diesel-powered trans-  
25 port refrigeration units.

1 (f) PRIORITY.—In awarding funds under the pilot  
2 program, the Administrator shall give priority to proposed  
3 projects that, as determined by the Administrator—

4 (1) maximize public health benefits;

5 (2) are the most cost-effective; and

6 (3) will serve the communities that are most  
7 polluted by diesel motor emissions, including com-  
8 munities that the Administrator identifies as being  
9 in either nonattainment or maintenance of the na-  
10 tional ambient air quality standards for a criteria  
11 pollutant under section 109 of the Clean Air Act (42  
12 U.S.C. 7409), particularly for—

13 (A) ozone; and

14 (B) particulate matter.

15 (g) DATA RELEASE.—Not later than 120 days after  
16 the date on which an award of funds is made under the  
17 pilot program, the Administrator shall publish on the  
18 website of the Environmental Protection Agency, in a  
19 downloadable electronic database, information with re-  
20 spect to that award of funds, including—

21 (1) the name and location of the recipient;

22 (2) the total amount of funds awarded;

23 (3) the intended use or uses of the awarded  
24 funds;



1           (4) the date on which the award of funds was  
2 approved;

3           (5) if applicable, an estimate of any air pollu-  
4 tion or greenhouse gas emissions avoided as a result  
5 of the project funded by the award; and

6           (6) any other data the Administrator deter-  
7 mines to be necessary for an evaluation of the use  
8 and effect of awarded funds provided under the pilot  
9 program.

10 (h) REPORTS TO CONGRESS.—

11           (1) ANNUAL REPORT TO CONGRESS.—Not later  
12 than 1 year after the date of the establishment of  
13 the pilot program, and annually thereafter until the  
14 amounts made available to carry out this section are  
15 fully expended, the Administrator shall submit to  
16 Congress and make available to the public a report  
17 that describes, with respect to the applicable year—

18           (A) the number of applications for awards  
19 of funds received under the pilot program;

20           (B) all awards of funds made under the  
21 pilot program, including a summary of the data  
22 described in subsection (g);

23           (C) the estimated reduction of annual  
24 emissions of air pollutants regulated under sec-  
25 tion 109 of the Clean Air Act (42 U.S.C. 7409)

1 and greenhouse gas emissions that is associated  
2 with the awards of funds made under the pilot  
3 program;

4 (D) the number of awards of funds made  
5 under the pilot program for projects that serve  
6 communities described in subsection (f)(3); and

7 (E) any other data the Administrator de-  
8 termines to be necessary to describe the imple-  
9 mentation, outcomes, or effectiveness of the  
10 pilot program.

11 (2) FINAL REPORT.—

12 (A) IN GENERAL.—The Administrator  
13 shall submit to Congress and make available to  
14 the public a report containing the information  
15 described in subparagraph (B) on the date that  
16 is the earlier of—

17 (i) the date that is 1 year after the  
18 date on which the amounts made available  
19 to carry out this section are fully ex-  
20 pended; and

21 (ii) the date that is 5 years after the  
22 date on which the pilot program is estab-  
23 lished.

24 (B) INFORMATION DESCRIBED.—The in-  
25 formation referred to in subparagraph (A) is—

- 1 (i) all of the information collected for  
2 the annual reports under paragraph (1);
- 3 (ii) any benefits to the environment or  
4 human health that could result from the  
5 widespread application of electric transport  
6 refrigeration units for short-haul transpor-  
7 tation and delivery of perishable goods or  
8 other goods requiring climate-controlled  
9 conditions, including in low-income com-  
10 munities and communities of color;
- 11 (iii) any challenges or benefits that re-  
12 cipients of awards of funds under the pilot  
13 program reported with respect to the inte-  
14 gration or use of electric transport refrig-  
15 eration units and associated technologies;
- 16 (iv) an assessment of the national  
17 market potential for electric transport re-  
18 frigeration units;
- 19 (v) an assessment of the challenges  
20 and opportunities for widespread deploy-  
21 ment of electric transport refrigeration  
22 units, including in urban areas; and
- 23 (vi) recommendations for how future  
24 Federal, State, and local programs can  
25 best support the adoption and widespread

1 deployment of electric transport refrigera-  
2 tion units.

3 (i) AUTHORIZATION OF APPROPRIATIONS.—

4 (1) IN GENERAL.—There is authorized to be  
5 appropriated to carry out this section \$30,000,000,  
6 to remain available until expended.

7 (2) ADMINISTRATIVE EXPENSES.—The Admin-  
8 istrator may use not more than 1 percent of the  
9 amounts made available under paragraph (1) for ad-  
10 ministrative expenses to carry out this section.

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