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(Original Signature of Member)

116TH CONGRESS
2D SESSION

H. R. _____

To establish a national network of electric vehicle charging stations, and
for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. LEVIN of Michigan introduced the following bill; which was referred to
the Committee on _____

A BILL

To establish a national network of electric vehicle charging
stations, 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 “Electric Vehicle Free-
5 dom Act” or the “EV Freedom Act”.

6 **SEC. 2. FINDINGS; PURPOSE.**

7 (a) FINDINGS.—Congress finds the following:

8 (1) Electric vehicles will play an important role
9 in transitioning to a cleaner transportation system

1 that protects Americans’ health and our planet. Ac-
2 cording to the United States Department of Energy,
3 electric vehicles “produce fewer emissions that con-
4 tribute to climate change and smog than conven-
5 tional vehicles.”

6 (2) Electric vehicles are becoming more popular
7 among American consumers. United States sales of
8 electric vehicles increased 27 percent between 2016
9 and 2017, and 81 percent between 2017 and 2018.

10 (3) Access to electric vehicle charging stations
11 is currently insufficient to meet consumer demand.
12 According to the National Renewable Energy Lab-
13 oratory, “two key areas of needed improvement in
14 actual vehicle charging are speed (reducing battery
15 charging times) and coverage (having adequate and
16 accessible charging stations)”.

17 (4) Demand for publicly accessible electric vehi-
18 cle chargers is projected to grow. At the end of
19 2017, there were an estimated 17,000 electric vehi-
20 cle direct current fast charging stations with 55,000
21 electric vehicle direct current fast charging plugs
22 available in the United States. Estimates by the Na-
23 tional Renewable Energy Laboratory suggest that,
24 by 2050, between 106,000 and 138,000 stations

1 with 343,000 and 447,000 plugs could be needed to
2 meet consumer demand.

3 (5) Failure to expand access to publicly acces-
4 sible electric vehicle chargers will prevent the wider
5 adoption of electric vehicles and, therefore, hinder
6 progress towards a more sustainable transportation
7 system. According to a study produced by the Michi-
8 gan Energy Office and Michigan State University,
9 “limited charging infrastructure for electric vehicles
10 has been one of the main barriers in adopting these
11 vehicles”.

12 (6) Expediting the wider adoption of electric ve-
13 hicles will require considerable changes to consumer
14 behavior, which will not be possible without the cre-
15 ation of necessary infrastructure. According to a
16 study produced by the Transportation Research
17 Board and National Research Council, “adoption
18 and diffusion of new innovations can be a long-term,
19 complicated process that is especially slow for prod-
20 ucts that cost tens of thousands of dollars and where
21 consumers have questions about infrastructure avail-
22 ability, resale value, and other variables”, and “a
23 perception of a lack of public charging infrastructure
24 might hinder [plug-in electric vehicle] deployment.”
25 Thus, greatly expanding access to publicly accessible

1 electric vehicle chargers will be essential to changing
2 consumer behavior radically and, accordingly, accel-
3 erating the wider adoption of electric vehicles.

4 (b) PURPOSE.—The purpose of this Act is to estab-
5 lish a network of electric vehicle charging stations along
6 eligible roads so that the United States may lead the world
7 in protecting the environment while improving consumer
8 experiences. The implementation of this Act will encourage
9 the widespread adoption of light-, medium-, and heavy-
10 duty electric vehicles by—

11 (1) eliminating “range anxiety”;

12 (2) allowing drivers to charge vehicles more
13 quickly; and

14 (3) ensuring that vehicle charging is equitably
15 accessible and reasonably priced, enabling long-dis-
16 tance travel along interstate highways.

17 (c) DEFINITIONS.—In this Act:

18 (1) ELIGIBLE ROAD.—The term “eligible road”
19 means a road that—

20 (A) is part of the National Highway Sys-
21 tem (as such term is defined in section 101 of
22 title 23, United States Code); and

23 (B) is a public road (as such term is de-
24 fined in section 101 of title 23, United States
25 Code).

1 (2) PUBLICLY AVAILABLE EVSE.—

2 (A) IN GENERAL.—The term “publicly
3 available EVSE” means electric vehicle supply
4 equipment and any associated parking spaces
5 designated by the property owner or lessee to be
6 available to, and accessible by, the public for
7 any period of time, including electric vehicle
8 supply equipment and associated parking spaces
9 located in garages or gated facilities if any
10 member of the public can obtain vehicular ac-
11 cess to the facility for free or through payment
12 of a fee.

13 (B) EXCLUSION.—The term “publicly
14 available EVSE” does not include electric vehi-
15 cle supply equipment and any associated park-
16 ing spaces in a workplace if the electric vehicle
17 supply equipment and associated parking spaces
18 are clearly marked and operated as available ex-
19 clusively to employees or contracted drivers.

20 (3) RENEWABLE ENERGY SOURCE.—The term
21 “renewable energy source” means a renewable
22 source of generated energy, including the following:

23 (A) Solar, including electricity.

24 (B) Wind.

1 (C) Ocean, including tidal, wave, current,
2 and thermal.

3 (D) Geothermal, including electricity and
4 heat pumps.

5 (E) New hydroelectric generation capacity
6 achieved from increased efficiency or additions
7 of new capacity at an existing hydroelectric
8 project after January 1, 1999.

9 **SEC. 3. NATIONAL NETWORK OF ELECTRIC VEHICLE**
10 **CHARGING STATIONS ALONG ELIGIBLE**
11 **ROADS.**

12 (a) PLAN.—The Secretary of Transportation, in co-
13 ordination with the Secretary of Energy, shall devise a
14 plan to create a network of publicly available EVSE along
15 eligible roads.

16 (b) SUBMISSION.—Not later than 3 years after the
17 date of enactment of this Act, the Secretary of Transpor-
18 tation and the Secretary of Energy shall submit the plan
19 to the Speaker of the House of Representatives, the Mi-
20 nority Leader of the House of Representatives, the Major-
21 ity Leader of the Senate, the Minority Leader of the Sen-
22 ate, and the Chairs and Ranking Members of—

23 (1) the Committee on Transportation and In-
24 frastructure of the House of Representatives;

1 (2) the Committee on Environment and Public
2 Works of the Senate;

3 (3) the Committee on Energy and Commerce of
4 the House of Representatives;

5 (4) the Committee on Energy and Natural Re-
6 sources of the Senate;

7 (5) the Subcommittee on Transportation, Hous-
8 ing and Urban Development, and Related Agencies
9 of the Committee on Appropriations of the House of
10 Representatives;

11 (6) the Subcommittee on Transportation, Hous-
12 ing and Urban Development, and Related Agencies
13 of the Committee on Appropriations of the Senate;

14 (7) the Subcommittee on Energy and Water
15 Development, and Related Agencies of the Com-
16 mittee on Appropriations of the House of Represent-
17 atives; and

18 (8) the Subcommittee on Energy and Water
19 Development of the Committee on Appropriations of
20 the Senate.

21 (c) CONSIDERATIONS.—The Secretary of Transpor-
22 tation and the Secretary of Energy shall consider the fol-
23 lowing in developing the plan:

24 (1) The distance between publicly available
25 EVSE locations.

1 (2) Connections to the electric grid, including
2 electric distribution upgrades that account for charg-
3 ing during peaking periods, and plans for the use of
4 renewable energy sources to power charging and en-
5 ergy storage.

6 (3) The ability to incorporate technologies not
7 yet invented or technically feasible, or infrastructure
8 that can allow the addition of new capabilities and
9 functionalities as they become available.

10 (4) The number of charging stations at each
11 publicly available EVSE location, accounting for
12 dense corridors where multiple stations or a greater
13 number of charging ports at the location are nec-
14 essary and for rural corridors where special consid-
15 erations will need to be made for less dense corridors
16 that will still require publicly available EVSE place-
17 ment.

18 (5) The placement of publicly available EVSE
19 within parking facilities and other locations, includ-
20 ing recommendations for promoting efficient dwell
21 times based on best practices.

22 (6) The availability of onsite amenities for vehi-
23 cle operators, including restrooms or food facilities.

24 (7) The long-term operation and maintenance
25 of publicly available EVSE, including consideration

1 of the need for expanded capacity resulting from in-
2 creasing demand into the future, to avoid stranded
3 assets and protect the investment of public funds in
4 that infrastructure.

5 (8) A maximum distance for publicly available
6 EVSE placement off of eligible roads.

7 (9) Existing private as well as national, State,
8 local, Tribal, and territorial government electric
9 charging infrastructure incentives and programs, in-
10 cluding alternative fueling corridor networks.

11 (10) Pricing guidelines that enable operators of
12 publicly available EVSE to allow free charging or
13 impose a fee for charging, promoting a consistent,
14 reliable consumer charging and payment experience.

15 (11) Publicly available EVSE placement and
16 construction in communities in which climate
17 change, pollution, or environmental destruction have
18 exacerbated systemic racial, regional, social, environ-
19 mental, and economic injustices by disproportion-
20 ately affecting indigenous peoples, communities of
21 color, migrant communities, deindustrialized commu-
22 nities, depopulated rural communities, the poor, low-
23 income workers, women, the elderly, the unhoused,
24 people with disabilities, or youth.

1 (d) CONSULTATIONS.—In developing the plan, the
2 Secretary of Transportation and the Secretary of Energy
3 shall consult with stakeholders, including the following:

4 (1) Federal partners, including the Secretary of
5 the Interior and the Administrator of the Environ-
6 mental Protection Agency.

7 (2) State, local, Tribal, and territorial govern-
8 ments, including State air quality and utility regu-
9 lators.

10 (3) Metropolitan planning organizations.

11 (4) Unionized labor groups.

12 (5) Environmental and environmental justice
13 organizations.

14 (6) Automobile and truck manufacturers.

15 (7) Electric utilities.

16 (8) Infrastructure providers.

17 (9) Technology providers.

18 (10) Software and network services providers.

19 (11) Infrastructure construction and component
20 parts suppliers.

21 (12) Multi-State and regional entities.

22 (13) Fuel station owners and operators.

23 (14) Fleet owners.

24 (15) Fleet managers.

1 **SEC. 4. TRANSPORTATION RESEARCH BOARD REPORT ON**
2 **FINANCING THE PLACEMENT OF ELECTRIC**
3 **VEHICLE CHARGERS.**

4 (a) IN GENERAL.—The Secretary of Transportation
5 shall commission the Transportation Research Board of
6 the National Academy of Sciences to conduct a study on
7 options for financing the placement of publicly available
8 EVSE along eligible roads that includes consideration of
9 financial instruments and optimization of public-private
10 partnerships.

11 (b) DEADLINE.—The Secretary shall submit to Con-
12 gress the study commissioned under subsection (a) not
13 later than 2 years after the date of enactment of this Act.

14 **SEC. 5. ESTABLISHMENT OF NETWORK OF ELECTRIC VEHI-**
15 **CLE CHARGERS ALONG ELIGIBLE ROADS.**

16 (a) PLAN IMPLEMENTATION.—Not later than 5 years
17 after the date of enactment of this Act, using the plan
18 developed pursuant to section 3 and the recommendations
19 in the report described in section 4, the Secretary of
20 Transportation and the Secretary of Energy shall com-
21 plete the establishment of a national network of publicly
22 available EVSE.

23 (b) GRANT PROGRAM.—

24 (1) ESTABLISHMENT.—Not later than 3 years
25 after the date of enactment of this Act, the Sec-
26 retary of Transportation in coordination with the

1 Secretary of Energy shall establish a competitive
2 grant program to award grants to eligible entities to
3 implement the plan developed in section 3 of this
4 Act.

5 (2) APPLICATIONS.—To be eligible to receive a
6 grant under this subsection, an eligible entity shall
7 submit to the Secretary of Transportation and the
8 Secretary of Energy an application at such time, in
9 such manner, and containing such information as
10 the Secretary of Transportation and the Secretary of
11 Energy shall require.

12 (3) PRIORITY.—In selecting grant recipients,
13 the Secretary of Transportation and the Secretary of
14 Energy shall give priority to applications consistent
15 with the plan developed pursuant to section 3 of this
16 Act.

17 (4) USE OF FUNDS.—An entity receiving a
18 grant under this subsection shall only use the funds
19 in accordance with this paragraph to contract with
20 a private entity for acquisition and installation of
21 publicly available EVSE that is directly related to
22 the charging of light-, medium-, and heavy-duty ve-
23 hicles.

24 (5) ELIGIBLE ENTITY DEFINED.—In this sub-
25 section, the term “eligible entity” means—

- 1 (A) a State;
- 2 (B) a unit of local government;
- 3 (C) a transit agency;
- 4 (D) a port authority;
- 5 (E) an Indian tribe (as such term is de-
- 6 fined in section 4 of the Indian Self-Determina-
- 7 tion and Education Assistance Act (25 U.S.C.
- 8 5304));
- 9 (F) a for-profit business enterprise or non-
- 10 profit organization; and
- 11 (G) a group of entities described in sub-
- 12 paragraphs (A) through (F).

13 (c) REQUIREMENTS.—The following requirements
14 apply with respect to the construction of new publicly
15 available EVSE along eligible roads:

16 (1) CHARGING INFRASTRUCTURE PLACE-
17 MENT.—The distance between publicly available
18 EVSE shall be such that—

19 (A) a driver starting at any point along the
20 Interstate Highway System in the continental
21 United States can drive to any other point
22 along the Interstate Highway System within the
23 continental United States without running out
24 of charging power; and

1 (B) a driver starting at any point along
2 the Interstate Highway System within Hawaii,
3 Alaska, or Puerto Rico can drive to any other
4 point along the Interstate Highway System
5 within that same State or territory without run-
6 ning out of charging power.

7 (2) CHARGING SPEED.—

8 (A) IN GENERAL.—Charging speed min-
9 imum standards shall be set by the Secretary of
10 Transportation and the Secretary of Energy
11 and evaluated every 2 years until the feasible
12 speed of charging standard meets or exceeds
13 the equivalency of average internal combustion
14 vehicle refueling times.

15 (B) UPDATE.—The Secretary of Transpor-
16 tation and the Secretary of Energy may update
17 the minimum standards set under subpara-
18 graph (1) after an evaluation described in such
19 subparagraph.

20 (3) INTEROPERABILITY.—Federal funds pro-
21 vided by this Act may not be used to construct any
22 publicly available EVSE that has the ability to serve
23 vehicle produced by only one vehicle manufacturer.

24 (4) PAYMENT METHODS.—Payment methods
25 are implemented that ensure secure, convenient, fair,

1 and equal access, including with credit card readers
2 and the display of toll-free calling information for
3 credit card payment or support, as well as the pro-
4 tection of personal privacy and cybersecurity.

5 (5) PROVISION OF INFORMATION.—Information
6 on publicly available EVSE location, station operator
7 contact information, number of simultaneous refuel-
8 ing positions, and real-time availability shall be
9 made publicly available and easily accessible.

10 (6) ADA.—Publicly available EVSE shall be ac-
11 cessible in compliance with the Americans with Dis-
12 abilities Act of 1990 (42 U.S.C. 12101 et seq.).

13 (7) BUY AMERICA AND WAGE REQUIRE-
14 MENTS.—

15 (A) BUY AMERICA.—The construction of
16 publicly available EVSE shall prioritize the
17 need for high domestic content by observing the
18 following Buy America provisions:

19 (i) None of the funds appropriated or
20 otherwise made available by this Act may
21 be used for a project for the construction,
22 alteration, maintenance, or repair of pub-
23 licly available EVSE unless all of the iron,
24 steel, and manufactured goods used in the
25 project are produced in the United States.

1 (ii) Clause (i) shall not apply in any
2 case or category of cases in which the head
3 of the Federal department or agency in-
4 volved finds that—

5 (I) applying clause (i) would be
6 inconsistent with the public interest;

7 (II) iron, steel, and the relevant
8 manufactured goods are not produced
9 in the United States in sufficient and
10 reasonably available quantities and of
11 a satisfactory quality; or

12 (III) inclusion of iron, steel, and
13 manufactured goods produced in the
14 United States will increase the cost of
15 an overall project by more than 25
16 percent.

17 (iii) If the head of a Federal depart-
18 ment or agency determines that it is nec-
19 essary to waive the application of this sub-
20 paragraph based on a finding under sub-
21 paragraph (B), the head of the department
22 or agency shall publish in the Federal Reg-
23 ister a detailed written justification as to
24 why the provision is being waived.

1 (iv) This paragraph shall be applied in
2 a manner consistent with United States
3 obligations under international agreements.

4 (B) WAGE RATE REQUIREMENT.—The
5 Secretary of Transportation and the Secretary
6 of Energy shall require that each recipient of
7 support under this section provide reasonable
8 assurance that all laborers and mechanics em-
9 ployed in the performance of the project for
10 which the assistance is provided, including
11 those employed by contractors or subcontrac-
12 tors, will be paid wages at rates not less than
13 those prevailing on similar work in the locality
14 as determined by the Secretary of Labor in ac-
15 cordance with subchapter IV of chapter 31 of
16 part A of subtitle II of title 40, United States
17 Code (commonly referred to as the “Davis-
18 Bacon Act”).

19 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

20 There is authorized to be appropriated—

- 21 (1) for carrying out section 3, such sums as
22 may be necessary, to be available until expended;
23 (2) for carrying out section 4, such sums as
24 may be necessary, to be available until expended;
25 and

- 1 (3) for carrying out section 5, such sums as
- 2 may be necessary, to be available until expended.