

119TH CONGRESS
2D SESSION

S. 4935

To direct the Secretary of Transportation to establish a program to support the research, design, development, demonstration, and deployment of zero-emission vessels and retrofit or replacement of existing vessels with zero-emission vessel technologies and charging infrastructure or fueling infrastructure, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 24, 2026

Mr. VAN HOLLEN (for himself and Mr. BOOKER) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To direct the Secretary of Transportation to establish a program to support the research, design, development, demonstration, and deployment of zero-emission vessels and retrofit or replacement of existing vessels with zero-emission vessel technologies and charging infrastructure or fueling infrastructure, 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 “Next Generation Ship-
5 ping Act”.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) **AUTOMATED.**—The term “automated”
4 means any vessel or cargo handling system that per-
5 forms any or all core functions without human oper-
6 ation.

7 (2) **CHARGING INFRASTRUCTURE.**—The term
8 “charging infrastructure”—

9 (A) means the physical systems, equip-
10 ment, and facilities necessary to supply elec-
11 trical power to vessels for the purpose of re-
12 charging the batteries or energy storage sys-
13 tems of such vessels; and

14 (B) includes, with respect to zero-emission
15 vessel technology, shore power facilities, onshore
16 charging stations, and any associated equip-
17 ment required to support the electrification of
18 maritime transportation.

19 (3) **CLEAN ALTERNATIVE FUEL.**—The term
20 “clean alternative fuel” means a fuel or energy
21 source that results in at least 90 percent fewer
22 greenhouse gas emissions than a baseline of conven-
23 tional marine fossil fuel on a life-cycle (“well-to-
24 wake”) basis, measured in grams of carbon dioxide
25 equivalent emissions per unit of energy, that is prov-

1 en to be safe for people, communities, and the ma-
 2 rine environment.

3 (4) COMMITTEE.—The term “Committee”
 4 means the Next Generation Shipping Advisory Com-
 5 mittee established under section 4.

6 (5) COMMUNITY BENEFITS AGREEMENT.—The
 7 term “community benefits agreement” means an
 8 agreement signed by community groups and an eligi-
 9 ble entity, identifying the community or labor bene-
 10 fits the entity agrees to deliver in return for commu-
 11 nity support or workforce availability for a project.

12 (6) DEPARTMENT.—The term “Department”
 13 means the Department of Transportation.

14 (7) ELIGIBLE ENTITY.—The term “eligible enti-
 15 ty”—

16 (A) means—

17 (i) an owner or operator of a vessel of
 18 the United States, as defined in section
 19 116 of title 46, United States Code;

20 (ii) a United States-based manufac-
 21 turer of vessels;

22 (iii) manufacturers of components,
 23 technologies, or materials that support
 24 zero-emission vessels and clean alternative
 25 fuel vessels;

1 (iv) a port authority;

2 (v) a terminal operator at a port;

3 (vi) an academic institution or non-
4 profit entity in a joint application with an
5 entity listed in any of clauses (i) through
6 (v); or

7 (vii) a nonprofit institution that—

8 (I) is funded, in whole or in part,
9 by a labor-management training fund
10 established pursuant to a collective
11 bargaining agreement;

12 (II) is approved by the Coast
13 Guard to provide training toward the
14 issuance or renewal of a merchant
15 mariner credential under chapter 71
16 of title 46, United States Code; and

17 (III) provides training and edu-
18 cation to individuals with merchant
19 mariner credentials serving in licensed
20 engineering or licensed deck officer
21 occupations; and

22 (B) excludes any entity that is a foreign
23 government.

24 (8) ELIGIBLE PROJECT.—The term “eligible
25 project” means a project to support the research,

design, demonstration, development, and deployment
of—

(A) zero-emission vessels;

(B) clean alternative fuel vessels;

(C) vessel energy efficiency technology
(such as wind assistance and systems that mini-
mize underwater noise emissions);

(D) shore power and corresponding vessel
technology; and

(E) zero-emission and clean alternative
fuel vessel infrastructure, including bunkering
and storage for vessels.

(9) ENVIRONMENTAL CO-BENEFITS.—The term
“environmental co-benefits” means the additional
positive environmental impacts or advantages that
arise as a result of implementing a particular policy,
technology, or initiative.

(10) FUELING INFRASTRUCTURE.—The term
“fueling infrastructure” means the infrastructure
and facilities essential for supplying, storing, han-
dling, and distributing alternative fuels or energy
sources used for powering vessels.

(11) MARITIME DECARBONIZATION.—The term
“maritime decarbonization” means the process of re-
ducing or eliminating carbon dioxide emissions asso-

1 ciated with maritime transportation activities and in-
2 volves implementing a range of strategies, tech-
3 nologies, and policies aimed at mitigating the envi-
4 ronmental impact of vessel operations, including the
5 adoption of alternative fuels, energy efficiency meas-
6 ures, operational improvements, and regulatory
7 measures designed to promote the transition to zero
8 emission vessel technologies.

9 (12) NATIONAL LABORATORY.—The term “Na-
10 tional Laboratory” has the meaning given such term
11 in section 2 of the Energy Policy Act of 2005 (42
12 U.S.C. 15801).

13 (13) PROGRAM.—The term “Program” means
14 the Next Generation Shipping Innovation Program
15 established under section 3.

16 (14) PROJECT LABOR AGREEMENT.—The
17 “project labor agreement” means a pre-hire collec-
18 tive bargaining agreement with 1 or more labor or-
19 ganizations that establishes the terms and conditions
20 of employment for a specific construction project
21 and is described in section 8(f) of the National
22 Labor Relations Act (29 U.S.C. 158(f)).

23 (15) SECRETARY.—The term “Secretary”
24 means the Secretary of Transportation.

1 (16) ZERO-EMISSION.—The term “zero-emis-
2 sion”, with respect to a vessel, means the vessel pro-
3 duces zero emissions of any criteria pollutant, pre-
4 cursor pollutant, or greenhouse gas, other than
5 water vapor during its operation, typically by uti-
6 lizing renewable energy sources, clean alternative
7 fuels, and efficiency technologies.

8 **SEC. 3. NEXT GENERATION SHIPPING INNOVATION PRO-**
9 **GRAM.**

10 (a) IN GENERAL.—The Secretary shall establish a
11 program to be known as the “Next Generation Shipping
12 Innovation Program” to support the research, design, de-
13 velopment, demonstration, and deployment of zero-emis-
14 sion vessels and retrofit or replacement of existing vessels
15 with zero-emission vessel technologies and charging infra-
16 structure or fueling infrastructure.

17 (b) MECHANISMS.—In carrying out the Program, the
18 Secretary may provide eligible entities with finance mecha-
19 nisms to support eligible projects, including grants, low-
20 interest loans, and loan guarantees.

21 (c) PRIORITIZATION.—In carrying out the Program,
22 the Secretary shall prioritize eligible projects that—

23 (1) advance the efficiency and reliability, and
24 reduce the costs, of zero-emission vessel develop-
25 ment;

1 (2) improve the components, controls, manufac-
 2 turing, materials, and infrastructure that support
 3 zero-emission vessels;

4 (3) reduce underwater noise emissions from ves-
 5 sels;

6 (4) emphasize technologies with environmental
 7 co-benefits such as biofouling reduction;

8 (5) advance synergies between offshore renew-
 9 able energy development and maritime
 10 decarbonization and ocean noise, such as through
 11 the deployment of zero-emission and quiet offshore
 12 wind support vessels;

13 (6) utilize a project labor agreement or commu-
 14 nity benefits agreement;

15 (7) advance environmental justice and engage
 16 communities affected by maritime transport in all
 17 phases of the project including the development,
 18 planning, and execution of the project; and

19 (8) support workforce training and development
 20 for the research, design, development, demonstra-
 21 tion, deployment, and maintenance of zero-emission
 22 and clean alternative fuel vessels and charging infra-
 23 structure or fueling infrastructure, including
 24 through—

1 (A) centers of excellence for domestic mari-
2 time workforce training and education des-
3 ignated under section 51706 of title 46, United
4 States Code; and

5 (B) nonprofit institutions described in sec-
6 tion 2(7)(A)(vii), for the purpose of developing,
7 updating, and delivering Coast Guard-approved
8 training curricula, simulation technology, and
9 certification programs for individuals who have,
10 or are obtaining, merchant mariner credentials
11 to operate zero-emission vessels or clean alter-
12 native fuel vessels, consistent with the applica-
13 ble requirements of the International Conven-
14 tion on Standards of Training, Certification
15 and Watchkeeping for Seafarers.

16 (d) TRANSPARENCY.—In carrying out the Program,
17 the Secretary shall make publicly available each year on
18 the website of the Department applications submitted for
19 funding mechanisms under this section, including applica-
20 tions selected and not selected for funding.

21 (e) COORDINATION AND LEVERAGING OF RE-
22 SOURCES.—In carrying out the Program, the Secretary
23 shall, to the maximum extent practicable—

24 (1) coordinate with each relevant office in the
25 Department and any other Federal agency;

1 (2) leverage existing resources and programs of
2 the Department and other relevant Federal agencies;
3 (3) leverage public-private partnerships; and
4 (4) engage and solicit input from environmental
5 justice communities and environmental organizations
6 on project impacts and benefits.

7 (f) ADMINISTRATIVE COSTS.—The Secretary may use
8 up to 10 percent of the amounts made available to carry
9 out this section for the administrative costs of carrying
10 out the Program.

11 (g) WAGES.—All laborers and mechanics employed by
12 a subgrantee of an eligible entity, and any subgrantee
13 thereof at any tier, to perform construction, alteration, in-
14 stallation, or repair work that is assisted, in whole or in
15 part, by funding awarded under this section shall be paid
16 wages at rates not less than those prevailing on similar
17 construction, alteration, installation, or repair work in the
18 locality as determined by the Secretary of Labor in accord-
19 ance with subchapter IV of chapter 31 of title 40, United
20 States Code.

21 (h) FUNDING.—There is authorized to carry out the
22 Program under this section \$1,000,000,000 for each of
23 fiscal years 2027 through 2036.

24 (i) PROHIBITION.—No funds made available to carry
25 out this section shall be spent for the study, design, imple-

1 mentation, or installation of automated vessels, automated
2 vessel operating systems, automated cargo handling sys-
3 tems on a vessel, or automated cargo handling systems
4 for loading or unloading vessels.

5 **SEC. 4. NEXT GENERATION SHIPPING ADVISORY COM-**
6 **MITTEE.**

7 (a) ESTABLISHMENT.—Not later than 180 days after
8 the date of enactment of this Act, the Secretary, in coordi-
9 nation with the Maritime Administrator, shall establish an
10 advisory committee, to be known as the “Next Generation
11 Shipping Advisory Committee”.

12 (b) MEMBERSHIP.—

13 (1) APPOINTMENT.—The Committee shall be
14 composed of not fewer than 15 members, who shall
15 be appointed by the Secretary, in coordination with
16 the Maritime Administrator.

17 (2) REPRESENTATION.—Members appointed
18 pursuant to paragraph (1) shall include—

19 (A) not less than 1 representative of each
20 relevant Federal agency, as determined by the
21 Secretary;

22 (B) not less than 2 representatives of labor
23 groups;

1 (C) not less than 3 representatives of the
2 research community, which shall include aca-
3 demia and National Laboratories;

4 (D) not less than 2 representatives of non-
5 governmental environmental justice organiza-
6 tions;

7 (E) not less than 2 representatives of non-
8 governmental environmental organizations;

9 (F) not less than 2 representatives of the
10 maritime industry;

11 (G) not less than 2 representatives of the
12 zero-emissions fuel industry;

13 (H) not less than 1 representative of a
14 State government;

15 (I) not less than 2 representatives from
16 United States ports; and

17 (J) any other individual whom the Sec-
18 retary, in coordination with the Maritime Ad-
19 ministrator, determines to be necessary to en-
20 sure that the Committee is composed of a di-
21 verse group of representatives of industry, aca-
22 demia, independent researchers, and public and
23 private entities.

24 (3) CHAIR.—The Secretary shall designate a
25 member of the Committee to serve as Chair.

1 (c) DUTIES.—The Committee shall advise the Sec-
2 retary and the Maritime Administrator with respect to the
3 Program by—

4 (1) identifying and evaluating any zero-emission
5 vessel technologies being developed by the private
6 sector or other Federal agencies;

7 (2) identifying technology gaps in the private
8 sector in zero-emissions vessels, and making rec-
9 ommendations to address those gaps through the im-
10 plementation of the Program;

11 (3) surveying and analyzing factors that pre-
12 vent the adoption of zero-emission vessel tech-
13 nologies by the private sector;

14 (4) recommending technology screening criteria
15 for technology supported under the Program; and

16 (5) specifying near-term and long-term quali-
17 tative and quantitative objectives relating to the de-
18 velopment of zero-emissions vessel technologies.

19 (d) MEETINGS.—

20 (1) FREQUENCY.—The Committee shall meet
21 not less frequently than 2 times per year, at the call
22 of the Chair.

23 (2) INITIAL MEETING.—Not later than 30 days
24 after the date on which the members are appointed

1 under subsection (b), the Committee shall hold a
2 first meeting.

3 (e) COMMITTEE REPORT.—

4 (1) IN GENERAL.—Not later than 2 years after
5 the date of enactment of this Act, and not less fre-
6 quently than once every 3 years thereafter, the Com-
7 mittee shall submit to the Secretary a report on the
8 progress of achieving the purposes of the Program
9 described in section 3(a).

10 (2) CONTENTS.—The report under paragraph
11 (1) shall include—

12 (A) a description of any technology innova-
13 tion opportunities identified by the Committee;

14 (B) a description of any technology gaps
15 identified by the Committee;

16 (C) an evaluation of the progress of the
17 Program and the research, development, and
18 demonstration activities funded through the
19 Program;

20 (D) an assessment of the extent to which
21 progress has been made under the Program in
22 developing commercial, cost-competitive zero-
23 emission vessel technologies; and

24 (E) an assessment of the effectiveness of
25 the Program in coordinating efforts within the

1 Department and with other Federal agencies to
2 achieve the purposes of the Program.

3 (f) REPORT TO CONGRESS.—Not later than 60 days
4 after receiving a report from the Committee under sub-
5 section (e), the Secretary shall submit a copy of such re-
6 port to the Committee on Transportation and Infrastruc-
7 ture of the House of Representatives and the Committee
8 on Commerce, Science, and Transportation of the Senate.

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