

118TH CONGRESS
1ST SESSION

S. _____

To amend the Clean Air Act to provide for the establishment of standards to limit the carbon intensity of the fuel used by certain vessels, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. PADILLA introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To amend the Clean Air Act to provide for the establishment of standards to limit the carbon intensity of the fuel used by certain vessels, 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 “Clean Shipping Act
5 of 2023”.

6 **SEC. 2. MARINE ZERO GREENHOUSE GAS FUEL STANDARD.**

7 The Clean Air Act is amended by inserting after sec-
8 tion 212 (42 U.S.C. 7546) the following:

1 **“SEC. 212A. MARINE ZERO GREENHOUSE GAS FUEL STAND-**
2 **ARD.**

3 “(a) MARINE VESSEL FUEL CARBON INTENSITY
4 STANDARDS.—

5 “(1) STANDARDS.—The Administrator shall, by
6 regulation and except as provided in paragraph (3),
7 require each vessel on a covered voyage to comply
8 with standards for the carbon intensity of the fuel
9 used by that vessel so that the carbon intensity is—

10 “(A) in each of calendar years 2027
11 through 2029, at least 20 percent less than the
12 carbon intensity baseline;

13 “(B) in each of calendar years 2030
14 through 2034, at least 45 percent less than the
15 carbon intensity baseline;

16 “(C) in each of calendar years 2035
17 through 2039, at least 80 percent less than the
18 carbon intensity baseline; and

19 “(D) in calendar year 2040 and each cal-
20 endar year thereafter, 100 percent less than the
21 carbon intensity baseline.

22 “(2) PROMULGATION OF STANDARDS.—The Ad-
23 ministrator shall finalize—

24 “(A) the standard required by paragraph
25 (1)(A) by not later than January 1, 2026; and

1 “(B) the standards required by each of
2 subparagraphs (B) through (D) of paragraph
3 (1) by not later than 2 years before the respec-
4 tive standard goes into effect.

5 “(3) TECHNOLOGICAL OR ECONOMIC FEASI-
6 BILITY.—

7 “(A) IN GENERAL.—If the Administrator
8 determines that a reduction in carbon intensity
9 required under paragraph (1) is not techno-
10 logically or economically feasible by the applica-
11 ble deadline under that paragraph, the Admin-
12 istrator, in lieu of promulgating the standard
13 otherwise required by that paragraph, shall pro-
14 mulgate a standard that will achieve the max-
15 imum reduction in the carbon intensity of the
16 fuel used by vessels on covered voyages that is
17 technologically and economically feasible by the
18 applicable deadline.

19 “(B) CONSIDERATIONS.—In determining
20 technological and economic feasibility for pur-
21 poses of subparagraph (A), the Administrator
22 shall take into account the net reduction of
23 emissions of greenhouse gases and potential ad-
24 verse impacts on public health, safety, and the
25 environment, including with respect to air qual-

1 ity, water quality, and the generation and dis-
2 posal of solid waste.

3 “(4) HARMONIZATION WITH INTERNATIONAL
4 STANDARDS.—If the Administrator determines that
5 standards mandated by the International Maritime
6 Organization for reduction of the carbon intensity of
7 fuel used by vessels for a calendar year are equal to
8 or more stringent than the standards under para-
9 graph (1) for that calendar year, the Administrator
10 may adopt those standards.

11 “(5) EXEMPTION.—Any vessel that is on cov-
12 ered voyages for 30 days or fewer during a calendar
13 year shall be exempt from the standards promul-
14 gated under this subsection for that year.

15 “(6) COMMON OWNERSHIP OR CONTROL.—For
16 purposes of determining compliance with any stand-
17 ard established under this subsection, the Adminis-
18 trator may allow the carbon intensity of the fuels
19 used by vessels under common ownership or control
20 to be averaged.

21 “(7) OVERCOMPLIANCE.—The Administrator
22 may allow vessels to credit overcompliance with any
23 standard established under this subsection towards
24 demonstrating compliance with any future standard
25 under this subsection.

1 “(b) MONITORING AND REPORTING.—

2 “(1) LIST OF METHODS.—

3 “(A) IN GENERAL.—The Administrator
4 shall develop a list of acceptable methods for
5 monitoring and reporting compliance with the
6 standards established under subsection (a).

7 “(B) CONSISTENCY OF METHODS.—The
8 Administrator, to the maximum extent prac-
9 ticable, shall ensure the consistency of the
10 methods included in the list required under sub-
11 paragraph (A) with similar reporting schemes
12 developed by the European Union and the
13 International Maritime Organization.

14 “(2) ANNUAL REPORTING REQUIREMENTS.—
15 For each calendar year, a vessel shall report to the
16 Administrator—

17 “(A) the carbon intensity of the fuel used
18 for each covered voyage;

19 “(B) the amount of fuel used for each cov-
20 ered voyage; and

21 “(C) the total greenhouse gas emissions
22 measured in carbon dioxide equivalent for all
23 covered voyages.

24 “(3) ANNUAL REPORT.—Not later than 180
25 days after the end of each annual reporting period

1 under paragraph (2), the Administrator, in consulta-
2 tion with the Secretary of Transportation and the
3 Commandant of the Coast Guard, shall publish a re-
4 port that—

5 “(A) compiles the data reported under
6 paragraph (2); and

7 “(B) includes an explanation intended to
8 facilitate public understanding of—

9 “(i) the carbon dioxide equivalent
10 emissions of vessels on covered voyages;
11 and

12 “(ii) the carbon intensity of fuels used
13 by those vessels.

14 “(c) ENFORCEMENT.—The standards established
15 under subsection (a) and the annual reporting require-
16 ments of subsection (b)(2) shall be considered an emission
17 standard or limitation for purposes of section 304(a)(1).

18 “(d) DEFINITIONS.—In this section:

19 “(1) CARBON DIOXIDE EQUIVALENT.—The
20 term ‘carbon dioxide equivalent’ means the number
21 of metric tons of carbon dioxide emissions with the
22 same global warming potential as 1 metric ton of
23 another greenhouse gas, as calculated using Equa-
24 tion A–1 in section 98.2(b) of title 40, Code of Fed-

1 eral Regulations (as in effect on the date of enact-
2 ment of this section).

3 “(2) CARBON INTENSITY.—The term ‘carbon
4 intensity’ means the quantity of lifecycle greenhouse
5 gas emissions per unit of fuel energy, expressed in
6 grams of carbon dioxide equivalent per megajoule.

7 “(3) CARBON INTENSITY BASELINE.—The term
8 ‘carbon intensity baseline’ means the average carbon
9 intensity of the fuel used by all vessels on covered
10 voyages in calendar year 2024.

11 “(4) COVERED VOYAGE.—The term ‘covered
12 voyage’ means any voyage of a vessel for the purpose
13 of transporting passengers or cargo for commercial
14 purposes—

15 “(A) that is between any ports of call
16 under the jurisdiction of the United States; or

17 “(B) that is between a port of call under
18 the jurisdiction of the United States and a port
19 of call under the jurisdiction of a foreign coun-
20 try.

21 “(5) GREENHOUSE GAS.—The term ‘greenhouse
22 gas’ means carbon dioxide, methane, nitrous oxide,
23 hydrofluorocarbons, perfluorocarbons, and sulfur
24 hexafluoride.

1 “(6) LIFECYCLE GREENHOUSE GAS EMIS-
2 SIONS.—The term ‘lifecycle greenhouse gas emis-
3 sions’ has the meaning given the term in section
4 211(o)(1).

5 “(7) PORT OF CALL.—The term ‘port of call’
6 means the port where a vessel stops to load or un-
7 load cargo or to embark or disembark passengers.

8 “(8) VESSEL.—The term ‘vessel’ means a vessel
9 of 400 gross tonnage or more.”.

10 **SEC. 3. IN-PORT MARINE VESSEL ZERO EMISSION STAND-**
11 **ARDS.**

12 Section 213 of the Clean Air Act (42 U.S.C. 7547)
13 is amended by adding at the end the following:

14 “(e) IN-PORT MARINE VESSEL ZERO EMISSION
15 STANDARDS.—

16 “(1) STANDARDS.—Except as provided in para-
17 graph (2) and not later than January 1, 2026, the
18 Administrator shall promulgate (and from time to
19 time revise) standards to eliminate, by not later than
20 January 1, 2030, emissions of greenhouse gases and
21 air pollutants for which air quality criteria have been
22 issued under section 108 from vessels at anchorage
23 or at berth in the contiguous zone of the United
24 States (as described in Presidential Proclamation

1 7219 (43 U.S.C. 1331 note; 64 Fed. Reg. 48701,
2 49844)).

3 “(2) EXCEPTION.—If the Administrator deter-
4 mines that standards required by paragraph (1) are
5 not technologically or economically feasible, the Ad-
6 ministrators shall promulgate standards that achieve
7 the maximum reduction of the emissions described
8 in that paragraph from the vessels described in that
9 paragraph that is technologically and economically
10 feasible.

11 “(3) CONSIDERATIONS.—In determining tech-
12 nological and economic feasibility under paragraph
13 (2), the Administrator shall take into account the
14 net reduction of emissions of greenhouse gases, the
15 net reduction of emissions of air pollutants for which
16 air quality criteria have been issued under section
17 108, and potential adverse impacts on public health,
18 safety, and the environment, including with respect
19 to air quality, water quality, and the generation and
20 disposal of solid waste.”.