

118TH CONGRESS
1ST SESSION

S. 944

To promote low-carbon, high-octane fuels, to protect public health, and to improve vehicle efficiency and performance, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 22, 2023

Mr. GRASSLEY (for himself, Ms. KLOBUCHAR, Ms. ERNST, and Ms. DUCKWORTH) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To promote low-carbon, high-octane fuels, to protect public health, and to improve vehicle efficiency and performance, 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 Fuels
5 Act of 2023”.

6 SEC. 2. FINDINGS.

7 Congress finds that—

- 1 (1) continued increases in new automobile effi-
2 ciency are needed to improve consumer welfare and
3 reduce carbon emissions;
- 4 (2) the widespread availability of low-carbon,
5 high-octane fuel will allow continued cost-effective
6 improvements in automobile efficiency by enabling
7 increased engine compression ratios;
- 8 (3) high-octane automobiles and low-carbon
9 fuels are readily available to consumers at little in-
10 cremental cost;
- 11 (4) ethanol is a cost-effective and low-carbon
12 octane enhancer;
- 13 (5) the widespread adoption of climate-smart
14 practices and precision technologies by United
15 States corn producers over the past decade have fur-
16 ther reduced the carbon intensity of conventional
17 ethanol;
- 18 (6) on average, ethanol has been estimated to
19 have lifecycle greenhouse gas emissions that are 46
20 percent lower than average gasoline, with some corn
21 ethanol achieving a 61-percent reduction compared
22 to gasoline; and
- 23 (7) ethanol has one of the highest blending oc-
24 tane values available in the marketplace.

1 **SEC. 3. HIGH-OCTANE VEHICLES.**

2 Title II of the Clean Air Act (42 U.S.C. 7521 et seq.)

3 is amended by adding at the end the following:

4 **“PART D—HIGH-OCTANE VEHICLES**

5 **“SEC. 261. DEFINITIONS; APPLICABILITY.**

6 “(a) DEFINITIONS.—In this part:

7 “(1) AUTOMOBILE.—The term ‘automobile’ has
8 the meaning given to the term in section
9 32901(a)(3) of title 49, United States Code.

10 “(2) MANUFACTURER.—The term ‘manufacturer’ has the meaning given the term in section
11 216.

13 “(3) RESEARCH OCTANE NUMBER.—The term
14 ‘research octane number’ has the meaning given the
15 term in section 201 of the Petroleum Marketing
16 Practices Act (15 U.S.C. 2821).

17 “(b) APPLICABILITY.—This part applies with respect
18 to any motor vehicle that is introduced into commerce
19 that—

20 “(1) is an automobile;

21 “(2) uses gasoline for propulsion or any other
22 operation of the motor vehicle, including the engine
23 thereof; and

24 “(3) is a model year 2028 or later motor vehicle.

1 **“SEC. 262. HIGH-OCTANE TEST FUELS.**

2 “(a) E20 CERTIFICATION FUEL.—Except as pro-
3 vided in subsections (b) and (c), manufacturers producing
4 motor vehicles described in section 261(b) shall use a test
5 fuel consisting of gasoline and 19.4 to 20 volume percent
6 ethanol with a minimum 95 research octane number in—

7 “(1) emissions testing and certification under
8 section 206(a); and

9 “(2) fuel economy testing and calculation proce-
10 dures under section 32904(c) of title 49, United
11 States Code.

12 “(b) E25 TO E30 CERTIFICATION FUEL.—As an al-
13 ternative to the test fuel described in subsection (a), man-
14 ufacturers producing motor vehicles described in section
15 261(b) may use a test fuel consisting of gasoline and 24.3
16 to 30 volume percent ethanol with a minimum 98 research
17 octane number in—

18 “(1) emissions testing and certification under
19 section 206(a); and

20 “(2) fuel economy testing and calculation proce-
21 dures under section 32904(c) of title 49, United
22 States Code.

23 “(c) MODEL YEAR 2033 AND LATER MODEL
24 YEARS.—Notwithstanding subsections (a) and (b), begin-
25 ning in model year 2033, manufacturers of motor vehicles

1 described in section 261(b) shall use the gasoline test fuel

2 described in subsection (b) in—

3 “(1) emissions testing and certification under

4 section 206(a); and

5 “(2) fuel economy testing and calculation proce-

6 dures under section 32904(e) of title 49, United

7 States Code.

8 “(d) FORMULATION.—The test fuels described in

9 subsections (a) and (b) shall be produced by adding neat

10 or denatured fuel ethanol to the gasoline criteria emissions

11 test fuel required for use in model year 2022 and later

12 motor vehicles.

13 “(e) TEST FUEL EQUATIONS.—For purposes of—

14 “(1) testing and calculation procedures under

15 section 206(a), the emissions of motor vehicles using

16 the test fuels described in subsection (a) or (b) shall

17 be based exclusively on actual measured emissions;

18 and

19 “(2) fuel economy testing and calculation proce-

20 dures under section 32904(e) of title 49, United

21 States Code, the fuel economy of motor vehicles

22 using the test fuels described in subsection (a) or (b)

23 shall be determined on an energy-equivalent basis,

24 which shall be equal to the product obtained by mul-

25 tiplying—

1 “(A) the measured fuel economy; and
2 “(B) the quotient obtained by dividing—
3 “(i) 114,086 British thermal units per
4 gallon; by
5 “(ii) the volumetric energy density of
6 the test fuel.

7 **“SEC. 263. HIGH-OCTANE VEHICLES.**

8 “(a) WARRANTY REQUIREMENTS.—Manufacturers of
9 motor vehicles described in section 261(b) shall warrant
10 to the ultimate purchaser and each subsequent purchaser
11 that each such motor vehicle is designed—
12 “(1) for model years 2028 through 2032—
13 “(A) to operate with gasoline containing
14 10 and up to and including 25 percent ethanol
15 by volume; and
16 “(B) to meet the design requirements
17 under subsection (b)(1); and
18 “(2) for model year 2033 and later model
19 years—
20 “(A) to operate with gasoline containing
21 10 and up to and including 30 percent ethanol
22 by volume; and
23 “(B) to meet the design requirements
24 under subsections (b)(1) and (c)(1).

1 “(b) DESIGN REQUIREMENTS BEFORE MODEL YEAR
2 2033.—

3 “(1) MANUFACTURERS.—The manufacturer of
4 a motor vehicle described in section 261(b) shall de-
5 sign each such motor vehicle—

6 “(A) to use gasoline with a 95 research oc-
7 tane number or higher; and

8 “(B) to incorporate such devices or ele-
9 ments of design (including physical or other
10 barriers, devices, or technological systems) as
11 are determined by the Administrator to be—

12 “(i) necessary to prevent the introduc-
13 tion of gasoline with a research octane
14 number that is lower than 95 into that
15 motor vehicle; and

16 “(ii) technically and economically fea-
17 sible.

18 “(2) FUEL RETAILERS.—Any fuel retailer sell-
19 ing gasoline for use in a motor vehicle described in
20 section 261(b) shall incorporate into the dispensing
21 equipment of the fuel retailer such devices or ele-
22 ments of design (including physical or other barriers,
23 devices, or technological systems) as are determined
24 by the Administrator to be—

1 “(A) necessary to ensure compatibility with
2 the motor vehicle design requirements under
3 paragraph (1); and
4 “(B) technically and economically feasible.

5 “(c) DESIGN REQUIREMENTS FOR MODEL YEAR
6 2033.—

7 “(1) MANUFACTURERS.—Subject to paragraph
8 (3)(B), beginning in model year 2033, the manufac-
9 turer of a motor vehicle described in section 261(b)
10 shall design each such motor vehicle—

11 “(A) to use gasoline with a 98 research octane number or higher; and

13 “(B) to incorporate such devices or elements of design (including physical or other barriers, devices, or technological systems) as
14 are determined by the Administrator to be—

17 “(i) necessary to prevent the introduction of gasoline with a research octane number that is lower than 98 into that
18 motor vehicle; and

21 “(ii) technically and economically feasible.

23 “(2) FUEL RETAILER.—Subject to paragraph
24 (3)(B), any fuel retailer selling gasoline for use in a
25 motor vehicle described in section 261(b) that is

1 model year 2033 or later shall incorporate into the
2 dispensing equipment of the fuel retailer such de-
3 vices or elements of design (including physical or
4 other barriers, devices, or technological systems) as
5 are determined by the Administrator to be—

6 “(A) necessary to ensure compatibility with
7 the motor vehicle design requirements under
8 paragraph (1); and

9 “(B) technically and economically feasible.

10 “(3) EPA DETERMINATION OF NATIONWIDE
11 AVAILABILITY.—

12 “(A) DETERMINATION REQUIRED.—Not
13 later than December 31, 2031, and not later
14 than each December 31 thereafter until the Ad-
15 ministrator determines that 98 research octane
16 number gasoline can be made readily available
17 nationwide, the Administrator shall—

18 “(i) determine whether 98 research
19 octane number gasoline can be made read-
20 ily available nationwide; and

21 “(ii) publish that determination in the
22 Federal Register.

23 “(B) EFFECT.—The requirements of this
24 subsection shall not take effect until the date
25 on which the Administrator—

1 “(i) determines under subparagraph
2 (A)(i) that 98 research octane number gas-
3 oline can be made readily available nation-
4 wide; and

5 “(ii) publishes that determination
6 under subparagraph (A)(ii).

7 “(C) FAILURE TO MAKE DETERMINA-
8 TION.—If the Administrator fails to make a de-
9 termination under subparagraph (A) by the ap-
10 plicable date under that subparagraph, the Ad-
11 ministrator shall be deemed to have determined
12 that 98 research octane number gasoline can be
13 made readily available nationwide for purposes
14 of subparagraph (B).

15 “(d) VIOLATIONS.—

16 “(1) MANUFACTURERS.—

17 “(A) IN GENERAL.—Any manufacturer
18 who violates subsection (b)(1) or (c)(1) shall be
19 subject to a civil penalty of not more than
20 \$5,000 for each offense.

21 “(B) SEPARATE OFFENSES.—Any violation
22 described in subparagraph (A) shall constitute
23 a separate offense with respect to each motor
24 vehicle.

25 “(2) FUEL RETAILER.—

1 “(A) IN GENERAL.—Any fuel retailer who
2 violates subsection (b)(2) or (c)(2) shall be sub-
3 ject to a civil penalty of not more than \$2,500
4 for each offense.

5 “(B) SEPARATE OFFENSE.—Any violation
6 described in subparagraph (A) with respect to
7 dispensing equipment shall constitute a sepa-
8 rate offense with respect to each unit of dis-
9 pensing equipment in violation of the applicable
10 subsection described in that subparagraph.

11 **“SEC. 264. MISFUELING.**

12 “(a) PROHIBITIONS AGAINST TAMPERING AND DE-
13 FEAT DEVICES FOR MOTOR VEHICLES.—In lieu of apply-
14 ing section 203(a)(3) with respect to the requirements of
15 this part, the following shall apply:

16 “(1) No person shall—

17 “(A) remove or render inoperative any de-
18 vice or element of design installed on or in a
19 motor vehicle pursuant to subsection (b)(1) or
20 (c)(1) of section 263 prior to its sale and deliv-
21 ery to the ultimate purchaser; or

22 “(B) knowingly remove or render inoper-
23 ative any such device or element of design after
24 such sale and delivery to the ultimate pur-
25 chaser.

1 “(2) No person shall manufacture or sell, or
2 offer to sell, or install, any part or component in-
3 tended for use with, or as part of, any motor vehicle,
4 where—

5 “(A) a principal effect of the part or com-
6 ponent is to bypass, defeat, or render inoper-
7 ative any device or element of design installed
8 on or in a motor vehicle pursuant to subsection
9 (b)(1) or (c)(1) of section 263; and

10 “(B) the person knows or should know
11 that such part or component is being offered
12 for sale or installed for such use or put to such
13 use.

14 “(b) PROHIBITIONS AGAINST TAMPERING AND DE-
15 FEAT DEVICES FOR DISPENSING EQUIPMENT.—No per-
16 son shall—

17 “(1) remove or render inoperative any device or
18 element of design installed pursuant to subsection
19 (b)(2) or (c)(2) of section 263; or

20 “(2) sell, or offer to sell, or incorporate into,
21 any part or component intended for use with, or as
22 part of, any dispensing equipment, where—

23 “(A) a principal effect of the part or com-
24 ponent is to bypass, defeat, or render inoper-
25 ative any device or element of design incor-

1 porated into dispensing equipment pursuant to
2 subsection (b)(2) or (c)(2) of section 263; and

3 “(B) the person knows or should know
4 that such part or component is being offered
5 for sale or incorporated for such use or put to
6 such use.

7 “(c) VIOLATIONS.—

8 “(1) IN GENERAL.—Any person who violates
9 this section shall be subject to a civil penalty of not
10 more than \$2,500.

11 “(2) SEPARATE OFFENSES.—Any violation de-
12 scribed in paragraph (1) shall constitute a separate
13 offense with respect to—

14 “(A) each motor vehicle or unit of dis-
15 pensing equipment, for purposes of subsections
16 (a)(1) and (b)(1); and

17 “(B) each part or component, for purposes
18 of subsections (a)(2) and (b)(2).

19 **“SEC. 265. OCTANE STANDARD.**

20 “(a) OCTANE STANDARD.—

21 “(1) PROHIBITION.—

22 “(A) 95 RESEARCH OCTANE NUMBER MAR-
23 KETING.—No person shall sell motor vehicle
24 gasoline marketed as 95 research octane num-

1 ber unless that gasoline has a research octane
2 number of 95 or greater.

3 “(B) 98 RESEARCH OCTANE NUMBER MAR-
4 KETING.—No person shall sell motor vehicle
5 gasoline marketed as 98 research octane num-
6 ber unless that gasoline has a research octane
7 number of 98 or greater.

8 “(C) DEEMED COMPLIANCE.—A person,
9 including any distributor, blender, marketer, re-
10 seller, carrier, retailer, or wholesaler, shall be
11 deemed to be in full compliance with this para-
12 graph if the person can demonstrate, through
13 evidence deemed acceptable by the Adminis-
14 trator, that the person had reason to believe in
15 good faith that the motor vehicle gasoline com-
16 plied with subparagraph (A) or (B).

17 “(2) CONTROLS.—

18 “(A) 95 RESEARCH OCTANE NUMBER
19 AVAILABILITY.—Effective January 1, 2027, any
20 person that owns, leases, operates, controls, or
21 supervises—

22 “(i) a retail outlet at which 200,000
23 or more gallons of gasoline were sold dur-
24 ing calendar year 2024 or any subsequent
25 calendar year, shall offer for sale motor ve-

1 hicle gasoline of not less than 95 research
2 octane number at that retail outlet; or

3 “(ii) 6 or more retail outlets offering
4 motor vehicle gasoline for sale, shall offer
5 for sale motor vehicle gasoline of not less
6 than 95 research octane number at not
7 fewer than 60 percent of those retail out-
8 lets.

9 “(B) 98 RESEARCH OCTANE NUMBER
10 AVAILABILITY.—Effective January 1, 2032, any
11 person that owns, leases, operates, controls, or
12 supervises—

13 “(i) a retail outlet at which 200,000
14 or more gallons of gasoline were sold dur-
15 ing calendar year 2030 or any subsequent
16 calendar year, shall offer for sale motor ve-
17 hicle gasoline of not less than 98 research
18 octane number at that retail outlet; or

19 “(ii) 6 or more retail outlets offering
20 motor vehicle fuel for sale, shall offer for
21 sale motor vehicle gasoline of not less than
22 98 research octane number at no fewer
23 than 60 percent of those retail outlets.

24 “(b) VIOLATIONS.—Any person that violates—

1 “(1) subsection (a)(1), (a)(2)(A)(i), or
2 (a)(2)(B)(i) shall be subject to a civil penalty of not
3 more than \$25,000 for each day on which the viola-
4 tion continues; and
5 “(2) subsection (a)(2)(A)(ii) or (a)(2)(B)(ii)
6 shall be subject to a civil penalty of not more than
7 \$2,500 per day for each retail outlet owned, leased,
8 operated, controlled, or supervised by that person.

9 **“SEC. 266. REGULATIONS.**

10 “The Administrator shall—
11 “(1) not later than 1 year after the date of en-
12 actment of the Next Generation Fuels Act of 2023,
13 propose regulations to carry out this part; and
14 “(2) not later than 2 years after that date of
15 enactment, finalize regulations to carry out this
16 part.

17 **“SEC. 267. LIABILITY LIMITATION AND PREEMPTION.**

18 “(a) LIMITATION OF LIABILITY.—A manufacturer of
19 a motor vehicle, or a gasoline retailer, that is in compli-
20 ance with the requirements of this part and the require-
21 ments of sections 203(e) and 206 of the Petroleum Mar-
22 keting Practices Act, shall not be liable under any provi-
23 sion of this Act or any other Federal, State, or local law,
24 including common law, for damages—

1 “(1) to or caused by a motor vehicle described
2 in section 261(b); and

3 “(2) that would not have occurred but for the
4 introduction of gasoline with a research octane num-
5 ber required by this part.

6 “(b) PREEMPTION.—No State or any political sub-
7 division of a State may adopt, continue in effect, or en-
8 force, any provision of law or regulation—

9 “(1) requiring motor vehicles to operate using
10 gasoline with a certain octane content, or the cor-
11 responding design of equipment for dispensing such
12 gasoline into such motor vehicles, unless the provi-
13 sion of that law or regulation is the same as the cor-
14 responding provision under this part; or

15 “(2) limiting the concentration of ethanol in
16 motor vehicle gasoline.

17 **“SEC. 268. CIVIL ACTIONS; ADMINISTRATIVE ASSESSMENT**

18 **OF CERTAIN PENALTIES.**

19 “The provisions of subsections (b) and (c) of section
20 205 shall apply with respect to a violation of section 263
21 or 264 to the same extent and in the same manner as
22 such provisions apply with respect to a violation of section
23 203(a)(3).”.

1 **SEC. 4. OCTANE DISCLOSURE.**

2 (a) HIGH-EFFICIENCY FUELS.—Title II of the Petro-
3 leum Marketing Practices Act (15 U.S.C. 2821 et seq.)
4 is amended by adding at the end the following:

5 **“SEC. 206. HIGH-EFFICIENCY FUEL AND VEHICLE MAR-**

6 **KETING REQUIREMENTS.**

7 “(a) RULE.—The Federal Trade Commission shall,
8 by rule, and in consultation with persons to be regulated
9 under this section, consumer advocates, and other stake-
10 holders, as appropriate—

11 “(1) prescribe or revise requirements under this
12 title relating to the certification, display, and rep-
13 resentation of the automotive fuel rating of an auto-
14 motive fuel as necessary to carry out—

15 “(A) the requirement under subsection (b);
16 and

17 “(B) any determination made under sub-
18 section (c);

19 “(2) make the determination required under
20 subsection (c); and

21 “(3) prescribe requirements under subsection
22 (d).

23 “(b) REQUIREMENT.—The Federal Trade Commis-
24 sion shall require that, for purposes of this title, beginning
25 on the date that is 180 days after the date on which the
26 Federal Trade Commission issues a final rule under sub-

1 section (a), the automotive fuel rating of an automotive
2 fuel with a research octane number of 95 or higher be
3 determined only by the research octane number of such
4 automotive fuel.

5 “(c) LABELING.—

6 “(1) IN GENERAL.—The Federal Trade Com-
7 mission shall prescribe requirements—

8 “(A) as the Federal Trade Commission de-
9 termines necessary with respect to a display at
10 the point of sale to ultimate purchasers of auto-
11 motive fuel and a display on a motor vehicle
12 to—

13 “(i) inform such ultimate purchaser of
14 such automotive fuel and any purchaser or
15 user of such motor vehicle that—

16 “(I) a model year 2028 or later
17 motor vehicle is only warrantied to
18 use automotive fuel with a research
19 octane number of 95 or higher; and

20 “(II) a model year 2033 or later
21 motor vehicle is only warrantied to
22 use automotive fuel with a research
23 octane number of 98 or higher;

24 “(ii) provide a warning to such ulti-
25 mate purchaser of such automotive fuel

1 and any such purchaser or user of such
2 motor vehicle, that the use of automotive
3 fuel with a research octane number that—

4 “(I) is lower than 95 in a model
5 year 2028 or later motor vehicle will
6 result in reduced fuel economy, in-
7 creased exhaust emissions, and pos-
8 sibly engine damage; and

9 “(II) is lower than 98 in a model
10 year 2033 or later motor vehicle will
11 result in reduced fuel economy, in-
12 creased exhaust emissions, and pos-
13 sibly engine damage; and

14 “(iii) inform such ultimate purchaser
15 of such automotive fuel and any purchaser
16 or user of such motor vehicle that—

17 “(I) a model year 2028 or later
18 motor vehicle is warrantied to use
19 gasoline containing up to and includ-
20 ing 25 percent ethanol by volume; and

21 “(II) a model year 2033 or later
22 motor vehicle is warrantied to use
23 gasoline containing up to and includ-
24 ing 30 percent ethanol by volume; and

25 “(B) that are applicable to—

1 “(i) a manufacturer of a new motor
2 vehicle (or an entity making a representa-
3 tion in connection with the sale of such
4 motor vehicle) with respect to a display on
5 such motor vehicle; and

6 “(ii) an automotive fuel retailer, with
7 respect to a display at the point of sale to
8 an ultimate purchaser of automotive fuel.

9 “(2) CONSIDERATIONS.—In prescribing require-
10 ments under paragraph (1), the Federal Trade Com-
11 mission shall ensure that such requirements are de-
12 signed to be—

13 “(A) understandable to—

14 “(i) the ultimate purchaser of auto-
15 motive fuel; and

16 “(ii) any purchaser or user of a model
17 year 2028 or later motor vehicle; and

18 “(B) cost effective for automotive fuel re-
19 tailers.

20 “(d) DEADLINES.—The Federal Trade Commission
21 shall—

22 “(1) not later than January 1, 2026, issue a
23 proposed rule under subsection (a); and

24 “(2) not later than July 1, 2027, issue a final
25 rule under subsection (a).”.

1 (b) ENFORCEMENT.—Section 203(e) of the Petro-
2 leum Marketing Practices Act (15 U.S.C. 2823(e)) is
3 amended—

4 (1) by striking “or a rule prescribed” and in-
5 serting “a rule prescribed”; and

6 (2) by striking “of such section.” and inserting
7 “of section 202, or a rule prescribed under section
8 206.”.

9 (c) TABLE OF CONTENTS AMENDMENT.—The table
10 of contents for the Petroleum Marketing Practices Act (15
11 U.S.C. 2801 et seq.) is amended by inserting after the
12 item relating to section 205 the following:

“Sec. 206. High-efficiency fuel and vehicle marketing requirements.”.

13 **SEC. 5. ADVERTISEMENT OF PRICE OF HIGH-OCTANE
14 AUTOMOTIVE FUEL.**

15 (a) IN GENERAL.—It shall be unlawful for any per-
16 son to sell or offer for sale, at retail, automotive fuel with
17 a research octane number (as such terms are defined in
18 section 201 of the Petroleum Marketing Practices Act (15
19 U.S.C. 2821)) of 95 or greater unless such person dis-
20 plays, in a manner specified in the rules promulgated
21 under subsection (b), the total price per gallon of such
22 fuel on any sign on which such person displays the price
23 of the most-sold grade of automotive fuel of such person.

24 (b) RULEMAKING.—

1 (1) IN GENERAL.—Not later than 24 months
2 after the date of enactment of this Act, the Federal
3 Trade Commission shall promulgate, in accordance
4 with section 553 of title 5, United States Code, any
5 rules necessary for the implementation and enforce-
6 ment of this section.

7 (2) CONTENTS.—Such rules—

8 (A) shall define “retail” and “most-sold”
9 for the purposes of this section;

10 (B) shall specify the manner in which the
11 price of automotive fuel with a research octane
12 number of 95 or greater must be displayed in
13 order to comply with subsection (a); and

14 (C) shall be consistent with the require-
15 ments for declaring unfair acts or practices in
16 section 5(n) of the Federal Trade Commission
17 Act (15 U.S.C. 45(n)).

18 (c) ENFORCEMENT.—A violation of subsection (a)
19 shall be treated as a violation of a rule defining an unfair
20 or deceptive act or practice prescribed under section
21 18(a)(1)(B) of the Federal Trade Commission Act (15
22 U.S.C. 57a(a)(1)(B)). The Federal Trade Commission
23 shall enforce this section in the same manner, by the same
24 means, and with the same jurisdiction, powers, and duties
25 as though all applicable terms and provisions of the Fed-

1 eral Trade Commission Act (15 U.S.C. 41 et seq.) were
2 incorporated into and made part of this section.

3 **SEC. 6. E40 RETAIL INFRASTRUCTURE STANDARD.**

4 Section 9003 of the Solid Waste Disposal Act (42
5 U.S.C. 6991b) is amended by adding at the end the fol-
6 lowing:

7 “(k) E40-COMPATIBLE RETAIL INFRASTRUCTURE
8 SYSTEMS.—

9 “(1) DEFINITIONS.—In this subsection:

10 “(A) AUTOMOTIVE FUEL.—The term
11 ‘automotive fuel’ has the meaning given the
12 term in section 201 of the Petroleum Marketing
13 Practices Act (15 U.S.C. 2821).

14 “(B) COMPATIBLE.—The term ‘compat-
15 ible’ means, to the extent feasible, certified by
16 a nationally recognized testing laboratory recog-
17 nized by the Occupational Safety and Health
18 Administration in accordance with section
19 1910.7 of title 29, Code of Federal Regulations
20 (or any successor regulations) to maintain sys-
21 tem performance throughout the operational life
22 of the dispenser system.

23 “(C) DISPENSER SYSTEM.—The term ‘dis-
24 penser system’ has the meaning given the term
25 in section 280.12 of title 40, Code of Federal

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

3 “(2) PERFORMANCE STANDARDS.—The Admin-
4 istrator shall, not later than January 1, 2026, issue
5 or revise, as necessary, performance standards for
6 underground storage tank systems and dispenser
7 systems that are brought into use on or after Janu-
8 ary 1, 2026, to require that those systems be com-
9 patible with automotive fuel consisting of gasoline
10 and at least 40 percent ethanol by volume.

11 “(3) COMPATIBILITY.—An owner or operator
12 may demonstrate the compatibility of an under-
13 ground storage tank system with automotive fuel
14 containing any concentration of ethanol through the
15 use of a secondary containment system that is
16 able—

17 “(A) to contain regulated substances
18 leaked from the primary containment system
19 until the regulated substances are detected and
20 removed; and

21 “(B) to prevent the release of regulated
22 substances to the environment at any time dur-
23 ing the operational life of the underground stor-
24 age tank system.”.

1 **SEC. 7. REGISTRATION TESTING, REID VAPOR PRESSURE,**

2 **AND SUBSTANTIALLY SIMILAR WAIVERS.**

3 (a) REGISTRATION TESTING WAIVER.—Section
4 211(e) of the Clean Air Act (42 U.S.C. 7545(e)) is amend-
5 ed by adding at the end the following:

6 “(4) Fuels consisting of gasoline and no more than
7 30 percent ethanol by volume that meet the requirements
8 of subsection (f)(3) shall be deemed—

9 “(A) to have satisfied any testing regulations
10 promulgated under this subsection; and

11 “(B) to be immediately eligible for registration
12 under subsection (b) without further testing.”.

13 (b) REID VAPOR PRESSURE WAIVER.—

14 (1) EXISTING WAIVERS.—Section 211(f)(4) of
15 the Clean Air Act (42 U.S.C. 7545(f)(4)) is amend-
16 ed—

17 (A) by striking “(4) The Administrator,
18 upon” and inserting the following:

19 “(4) WAIVERS.—

20 “(A) IN GENERAL.—The Administrator,
21 on”;

22 (B) in subparagraph (A) (as so des-
23 ignated)—

24 (i) in the first sentence—

25 (I) by striking “of this sub-
26 section” each place it appears; and

1 (II) by striking “if he deter-
2 mines” and inserting “if the Adminis-
3 trator determines”; and

4 (ii) in the second sentence—

5 (I) by striking “such an applica-
6 tion” and inserting “an application
7 described in subparagraph (A)”;
and

8 (II) by striking “The Adminis-
9 trator” and inserting the following:

10 “(B) FINAL ACTION.—The Adminis-
11 trator”; and

12 (C) by adding at the end the following:

13 “(C) REID VAPOR PRESSURE.—A fuel or
14 fuel additive may be introduced into commerce
15 if—

16 “(i)(I) the Administrator determines
17 that the fuel or fuel additive is substan-
18 tially similar to a fuel or fuel additive uti-
19 lized in the certification of any model year
20 vehicle pursuant to paragraph (1)(A); or

21 “(II) the fuel or fuel additive has
22 been granted a waiver under subpara-
23 graph (A) and meets all of the condi-
24 tions of that waiver other than any
25 limitation of the waiver with respect

1 to the Reid Vapor Pressure of the fuel
2 or fuel additive; and

3 “(ii) the fuel or fuel additive meets all
4 other applicable Reid Vapor Pressure re-
5 quirements under subsection (h).”.

6 (2) REID VAPOR PRESSURE LIMITATION.—Sec-
7 tion 211(h) of the Clean Air Act (42 U.S.C.
8 7545(h)) is amended—

9 (A) by striking “vapor pressure” each
10 place it appears and inserting “Vapor Pres-
11 sure”;

12 (B) in paragraph (4), in the matter pre-
13 ceding subparagraph (A), by inserting “or
14 more” after “10 percent”; and

15 (C) in paragraph (5)(A)—

16 (i) by striking “Upon notification, ac-
17 companied by” and inserting “On receipt
18 of a notification that is submitted before
19 January 1, 2022, or after the date of en-
20 actment of the Next Generation Fuels Act
21 of 2023, and is accompanied by appro-
22 priate”; and

23 (ii) by inserting “or more” after “10
24 percent”.

1 (c) SUBSTANTIALLY SIMILAR WAIVER.—Section
2 211(f) of the Clean Air Act (42 U.S.C. 7545(f)) is amend-
3 ed—

4 (1) by striking the subsection designation and
5 all that follows through “Effective upon” in sub-
6 paragraph (B) and inserting the following:

7 “(f)(1) Effective upon”;

8 (2) by striking paragraph (3) and inserting the
9 following:

10 “(3) Fuels consisting of gasoline and ethanol may be
11 introduced into commerce under this subsection for use
12 in motor vehicles described in section 261(b), provided
13 that the finished fuel—

14 “(A) does not exceed the warranted ethanol lev-
15 els described in section 263(a);

16 “(B) meets the physical and chemical criteria
17 specified by ASTM International Standard D4814–
18 20 for gasoline with 15 percent ethanol; and

19 “(C) consists solely of carbon, hydrogen, oxy-
20 gen, and sulfur, excepting any impurities present at
21 trace levels that are gaseous upon combustion.”; and

22 (3) in subparagraph (A) of paragraph (4) (as
23 designated by subsection (b)(1)(A)), in the first sen-
24 tence, by striking “or (3)”.

1 SEC. 8. CLEAN OCTANE STANDARD.

2 Section 211 of the Clean Air Act (42 U.S.C. 7545)

3 is amended—

4 (1) in subsection (d)—

5 (A) in paragraph (1), by striking “or (o)”
6 each place it appears and inserting “(o), or
7 (w)”;
and

8 (B) in paragraph (2), by striking “and
9 (o)” each place it appears and inserting “(o),
10 and (w)”;
and

11 (2) by adding at the end the following:

12 “(w) CLEAN OCTANE STANDARD.—

13 “(1) DEFINITIONS.—In this subsection:

14 “(A) BASELINE LIFECYCLE GREENHOUSE
15 GAS EMISSIONS.—The term ‘baseline lifecycle
16 greenhouse gas emissions’ means the average
17 lifecycle greenhouse gas emissions, as deter-
18 mined by the Administrator, in consulta-
19 tion with the Director of the Argonne National Lab-
20 oratory, for unblended gasoline sold or distrib-
21 uted as transportation fuel in 2023.

22 “(B) LIFECYCLE GREENHOUSE GAS EMIS-
23 SIONS.—The term ‘lifecycle greenhouse gas
24 emissions’ means the aggregate quantity of
25 greenhouse gas emissions as determined by the
26 Secretary of Energy using the most recent

1 version of the Argonne National Laboratory
2 Greenhouse gases, Regulated Emissions, and
3 Energy use in Technologies (GREET) model.

4 “(C) RESEARCH OCTANE NUMBER.—The
5 term ‘research octane number’ has the meaning
6 given the term in section 201 of the Petroleum
7 Marketing Practices Act (15 U.S.C. 2821).

8 “(2) AROMATICS.—

9 “(A) ANNUAL AVERAGE LIMITATION.—Ef-
10 fective beginning on January 1, 2027, it shall
11 be unlawful for refiners or importers to sell
12 motor vehicle gasoline that contains, on an av-
13 erage annual basis, an aromatic hydrocarbon
14 concentration in excess of 17.5 percent by vol-
15 ume.

16 “(B) 2027 CAP.—Effective beginning on
17 January 1, 2027, it shall be unlawful for refin-
18 ers or importers to sell motor vehicle gasoline
19 that contains an aromatic hydrocarbon con-
20 centration in excess of 30 percent by volume.

21 “(C) 2032 CAP.—Effective beginning on
22 January 1, 2032, it shall be unlawful for refin-
23 ers or importers to sell motor vehicle gasoline
24 that contains an aromatic hydrocarbon content
25 in excess of 25 percent by volume.

1 “(D) OXYGENATE ADJUSTMENT FOR GASO-
2 LINE BLENDSTOCK.—

3 “(i) IN GENERAL.—For purposes of
4 compliance with this paragraph, the aro-
5 matics volume of motor vehicle gasoline
6 produced as blendstock for oxygenate
7 blending may be adjusted based on the
8 specified type and amount of oxygenate re-
9 quired to be added downstream.

10 “(ii) REQUIREMENTS.—Any adjust-
11 ment under clause (i) shall be made
12 through—

13 “(I) the preparation of a hand
14 blend containing oxygenate; or

15 “(II) any other method deemed
16 acceptable to the Administrator.

17 “(E) REGULATIONS.—

18 “(i) IN GENERAL.—The Administrator
19 shall promulgate regulations to implement
20 this paragraph.

21 “(ii) CONTENTS.—Regulations pro-
22 mulgated under clause (i) shall allow for
23 the generation of tradeable credits to meet
24 the requirement of subparagraph (A), but

1 any credits shall expire after not more
2 than 5 years.

3 “(iii) INITIAL REGULATIONS.—Not
4 later than January 1, 2027, the Adminis-
5 trator shall promulgate final regulations
6 under clause (i).

7 “(3) LOW-CARBON OCTANE.—

8 “(A) PROHIBITION.—Effective beginning
9 on January 1, 2027, no refiner or importer
10 shall introduce into commerce motor vehicle
11 gasoline with a research octane number of 95
12 or higher except through the use of a fuel addi-
13 tive that has average lifecycle greenhouse gas
14 emissions that (as determined by the Secretary
15 of Energy using the most recent version of the
16 Argonne National Laboratory Greenhouse
17 gases, Regulated Emissions, and Energy use in
18 Technologies (GREET) model) are at least 40
19 percent less than baseline lifecycle greenhouse
20 gas emissions.

21 “(B) REGULATIONS.—

22 “(i) IN GENERAL.—The Administrator
23 shall promulgate regulations to implement
24 this paragraph.

1 “(ii) CONTENTS.—Regulations pro-
2 mulgated under clause (i) shall—
3 “(I) determine the baseline
4 lifecycle greenhouse gas emissions for
5 purposes of this paragraph;
6 “(II) determine the average
7 lifecycle greenhouse gas emissions of
8 sources of octane value for purposes
9 of this paragraph; and
10 “(III) ensure that the require-
11 ments of this paragraph are met.
12 “(iii) INITIAL REGULATIONS.—Not
13 later than January 1, 2026, the Adminis-
14 trator shall promulgate final regulations
15 under clause (i).”.

16 **SEC. 9. NEW FUEL EFFECTS STUDY.**

17 (a) FUEL EFFECTS STUDY.—
18 (1) STUDY REQUIRED.—Subject to subsection
19 (b), the Administrator of the Environmental Protec-
20 tion Agency (referred to in this section as the “Ad-
21 ministrator”) shall carry out a study of the emis-
22 sions effects of ethanol-blended fuels in light-duty
23 vehicles and light-duty trucks, for the purpose of up-
24 dating the Motor Vehicle Emission Simulator mod-
25 eling system.

1 (2) REQUIREMENTS.—In designing and con-
2 ducting the study under paragraph (1), the Adminis-
3 trator shall—

4 (A) select test fuels that—

5 (i) reflect a range of ethanol con-
6 centrations between 0 and at least 25 per-

7 cent by volume; and

8 (ii) are representative of fuels that are
9 widely available on the date of enactment
10 of this Act or reasonably could be available
11 regionally or nationally, taking into ac-
12 count fuel refinery operations and econom-
13 ics, including the cost of reformate;

14 (B) select test vehicles that are representa-
15 tive of vehicles of recent model years as of the
16 date of enactment of this Act that include rel-
17 evant technologies that are, or reasonably may
18 come to be, in widespread use;

19 (C) measure emission products of combus-
20 tion including, at a minimum—

21 (i) particulate matter of 2.5 microm-
22 eters in diameter or less;

23 (ii) ultrafine particulate matter of 0.1
24 micrometers in diameter or less;

25 (iii) nitrogen oxides;

1 (iv) total hydrocarbons;

2 (v) nonmethane organic gas;

3 (vi) carbon monoxide;

4 (vii) benzene;

5 (viii) toluene;

6 (ix) ethylbenzene;

7 (x) xylene;

8 (xi) 1,3-butadiene;

9 (xii) ethanol; and

10 (xiii) polycyclic aromatic hydro-

11 carbons, including at a minimum

12 benzo(a)pyrene;

13 (D) measure the tendency of measured

14 emissions to form secondary organic aerosols

15 and any other relevant secondary air pollution;

16 and

17 (E) consult with the Secretary of Energy,

18 the Secretary of Agriculture, and the Secretary

19 of Transportation (or their delegates).

20 (b) CERTIFICATION BY SECRETARY OF ENERGY.—

21 The Administrator shall—

22 (1) provide the proposed design of the study

23 under subsection (a) to the Secretary of Energy for

24 review; and

1 (2) not commence the study under subsection
2 (a) until the Secretary of Energy certifies in writing
3 that the design of the study complies with the re-
4 quirements of subsection (a).

5 **SEC. 10. DUAL-FUELED AUTOMOBILE DEFAULT UTILIZA-**
6 **TION FACTOR.**

7 (a) IN GENERAL.—Section 32905 of title 49, United
8 States Code, is amended by striking subsection (b) and
9 inserting the following:

10 “(b) DUAL-FUELED AUTOMOBILES.—

11 “(1) FUEL ECONOMY.—Except as provided in
12 subsection (d) or section 32904(a)(2)—

13 “(A) for any model of dual-fueled auto-
14 mobile manufactured by a manufacturer in
15 model years 1993 through 2020, the Adminis-
16 trator of the Environmental Protection Agency
17 shall measure the fuel economy for that model
18 by dividing 1.0 by the sum of—

19 “(i) 0.5 divided by the fuel economy
20 measured under section 32904(e) when op-
21 erating the model on gasoline or diesel
22 fuel; and

23 “(ii) 0.5 divided by the fuel econ-
24 omy—

1 “(I) measured under subsection
2 (a) when operating the model on al-
3 ternative fuel; or
4 “(II) measured based on the fuel
5 content of B20 when operating the
6 model on B20, which is deemed to
7 contain 0.15 gallon of fuel; and
8 “(B) subject to paragraph (3), for any
9 model of dual-fueled automobile manufactured
10 by a manufacturer in model year 2023 or later,
11 the Administrator of the Environmental Protec-
12 tion Agency shall measure the fuel economy for
13 that model by dividing 1.0 by the sum of—
14 “(i) 0.79 divided by the fuel economy
15 measured under section 32904(c) when op-
16 erating the model on gasoline or diesel
17 fuel; and
18 “(ii) 0.21 divided by the fuel economy
19 measured under subsection (a) when oper-
20 ating the model on alternative fuel, which
21 is deemed to contain 0.15 gallon of fuel.
22 “(2) GREENHOUSE GAS EMISSIONS.—For any
23 model of dual-fueled automobile manufactured by a
24 manufacturer in model year 2023 or later, the Ad-
25 ministrator of the Environmental Protection Agency

1 shall measure the greenhouse gas emissions for that
2 model, which shall be the sum obtained by adding—

3 “(A) the product obtained by multi-
4 plying—

5 “(i) the measured greenhouse gas
6 emissions on the alternative fuel;

7 “(ii) the fuel content of the alternative
8 fuel, which is deemed to be 0.15; and

9 “(iii) 0.21; and

10 “(B) the product obtained by multiplying
11 0.79 and the measured greenhouse gas emis-
12 sions on gasoline or diesel fuel, as applicable.

13 “(3) HIGHER UTILIZATION FACTOR FOR NEW
14 MODELS.—A manufacturer may demonstrate that a
15 higher utilization factor applies to any model of
16 dual-fueled automobile manufactured by the manu-
17 facturer in model year 2025 or later.”.

18 (b) TESTING PROCEDURES.—Section 206 of the
19 Clean Air Act (42 U.S.C. 7525) is amended by adding
20 at the end the following:

21 “(i) REQUIREMENT TO UPDATE TEST PROCE-
22 DURES.—Not later than July 1, 2024, the Administrator
23 shall amend the test procedures promulgated under this
24 section to be in accordance with section 32905(b)(1)(B)
25 of title 49, United States Code.”.

1 SEC. 11. TRANSFERS OF CREDITS FOR EXCEEDING AVER-

2 **AGE FUEL ECONOMY STANDARDS.**

3 Section 32903(g) of title 49, United States Code, is
4 amended by striking paragraph (3) and inserting the fol-
5 lowing:

6 “(3) MAXIMUM INCREASE.—The maximum in-
7 crease in any compliance category attributable to
8 transferred credits is—

9 “(A) for model year 2023, 4.0 miles per
10 gallon; and

11 “(B) for model year 2024 and subsequent
12 model years, 6.0 miles per gallon.”.

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