

ASSEMBLY, No. 3645

STATE OF NEW JERSEY

221st LEGISLATURE

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SYNOPSIS

Establishes low-carbon transportation fuel standard program in DEP.

CURRENT VERSION OF TEXT

As introduced.



(Sponsorship Updated As Of: 4/4/2024)

1 **AN ACT** concerning greenhouse gas emissions from transportation
2 fuel and supplementing Title 26 of the Revised Statutes.

3
4 **BE IT ENACTED** *by the Senate and General Assembly of the State*
5 *of New Jersey:*

6
7 1. The Legislature finds and declares that:

8 a. A low-carbon transportation fuel standard is central to
9 reducing the State’s greenhouse gas emissions and that, without
10 policies specific to the transportation sector, reductions in
11 greenhouse gas emissions will not be achieved in a timeframe
12 consistent with the goals of the State’s Energy Master Plan;

13 b. A low-carbon transportation fuel standard that is technology-
14 neutral and science-based is an effective policy to reduce
15 greenhouse gas emissions in the transportation sector, and
16 associated subsectors that may be difficult to electrify, while also
17 achieving other co-benefits such as improving public health due to a
18 reduction in air pollution emissions;

19 c. By creating a low-carbon transportation fuel standard that
20 rewards environmental performance, the State will incentivize the
21 creation of jobs in a wide variety of sectors including construction,
22 agriculture, forestry, and transportation;

23 d. A low-carbon transportation fuel standard will induce the
24 creation of new markets for what would normally be considered
25 waste, including municipal solid waste, manure, agricultural and
26 forestry residuals, and industrial emissions;

27 e. The demand created for alternative fuels and cleaner forms of
28 mobility under a low-carbon transportation fuel standard will not
29 only help reduce GHG emissions, but will also have the co-benefit
30 of reducing air pollution, thereby helping to improve the health of
31 citizens of the State, especially those with the most exposure or
32 sensitivity to motor vehicle emissions;

33 f. To help prompt the use of low-carbon fuels and zero emission
34 vehicles, other states, such as California, Oregon, and Washington
35 have successfully implemented programs that reduce the carbon
36 intensity of their transportation fuel without disruption to their fuel
37 markets; and

38 g. It is fitting, proper, and in the public interest to support the
39 deployment of low-carbon transportation fuel technologies through
40 a carefully designed program that reduces the carbon intensity of
41 transportation fuel used in the State, and that permits New Jersey to
42 link its program to those enacted by other states now and in the
43 future.

44
45 2. As used in this act:

46 “Alternative fuel” means any fuel that is not gasoline or diesel
47 and is used for transportation purposes, including, but not limited
48 to, ethanol, biomass-based diesel, renewable diesel, sustainable

1 aviation fuel, electricity, biomethane, biogasoline, renewable
2 natural gas, fuels from carbon capture and utilization, electrofuels,
3 and hydrogen.

4 "Argonne National Laboratory" means the science and
5 engineering research laboratory located in Lemont, Illinois, and
6 operated by the University of Chicago on behalf of the United
7 States Department of Energy.

8 "ASTM" means ASTM International, formerly known as the
9 American Society for Testing and Materials, the international
10 organization that develops and publishes technical standards.

11 "Carbon intensity" means the quantity of greenhouse gas
12 emissions associated with a unit of fuel, measured over the entire
13 life-cycle of the fuel and expressed in grams of carbon dioxide
14 equivalent per megajoule of energy generated by the fuel
15 (gCO₂e/MJ).

16 "Credit generator" means an entity that produces or imports a
17 low carbon fuel for use in New Jersey, which, with respect to
18 electricity used as a transportation fuel, includes, but is not limited
19 to, electric vehicle charging station providers, electric utilities, and
20 electric vehicle fleet operators.

21 "Department" means the Department of Environmental
22 Protection.

23 "Diesel" means a liquid that, without further processing or
24 blending, has practical and commercial fitness for use in the
25 propulsion engine of a diesel-powered highway vehicle.

26 "Electrofuel" means a carbon-based fuel that is obtained from
27 carbon dioxide and water, employing a renewable or low-carbon
28 source of electricity as the primary source of energy.

29 "Feedstock" means the required material inputs to the industrial
30 processes for the manufacture of gasoline, diesel, or alternative
31 fuels.

32 "Gasoline" means all products commonly or commercially
33 known or sold as gasoline that are suitable for use as a motor fuel.

34 "Gasoline" does not include products that have an ASTM octane
35 number of less than seventy-five as determined by the "motor
36 method," ASTM D2700-92.

37 "Greenhouse gas" means carbon dioxide, methane, nitrous oxide,
38 hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or any
39 other substance that contributes to global warming, as designated by
40 the department.

41 "GREET model" means the Greenhouse gases, Regulated
42 Emissions, and Energy use in Technologies model developed at the
43 Argonne National Laboratory, which simulates the energy use and
44 greenhouse gas emissions output of various vehicle and fuel
45 combinations.

46 "Low-carbon transportation fuel standard" means a mandated
47 annual standard for the carbon intensity of a transportation fuel.

1 “Transportation” means the use of motorized vehicles or other
2 machinery to move persons, goods, or other tangible items.

3
4 3. a. No later than one year after the effective date of this act,
5 the department shall establish an annual low-carbon transportation
6 fuel standard for gasoline, diesel, and alternative fuels, and a
7 program to implement and enforce the standards. Each refiner,
8 wholesaler, or importer of diesel or gasoline, and each producer of
9 alternative fuel that opts in to the program, shall ensure that the
10 transportation fuel refined, sold, imported, or produced by the
11 entity, as applicable, and supplied for use in the State, meets the
12 low-carbon transportation fuel standard for that fuel on an annual
13 basis. The department shall establish a system of salable and
14 tradable credits, under which transportation fuel that exceeds the
15 low-carbon transportation fuel standard shall generate credits,
16 which shall represent one metric ton of avoided greenhouse gas
17 emissions, as compared with the standard, and under which
18 transportation fuel that does not meet the low-carbon transportation
19 fuel standard shall generate deficits. The department shall develop
20 a system under which credits generated may be redeemed to offset
21 deficits. Each refiner, wholesaler, or importer of diesel or gasoline,
22 and each producer of alternative fuel that opts in to the program,
23 shall demonstrate compliance with this act by redeeming sufficient
24 credits to ensure that it generates no net deficits over each annual
25 reporting period.

26 b. The low-carbon transportation fuel standard program shall, at
27 a minimum, include:

28 (1) a schedule to phase in the implementation of the low-carbon
29 transportation fuel standard for diesel and gasoline in a manner that
30 reduces the average carbon intensity of diesel and gasoline used in
31 the State by 10 percent below 2019 levels by the year 2030;

32 (2) an implementation date for the low-carbon transportation fuel
33 standard on or before the eighteenth month after the effective date
34 of this act;

35 (3) standards for measuring, using a GREET model, the net
36 greenhouse gas emissions associated with a fuel over its entire life-
37 cycle, including feedstock production or extraction, fuel production,
38 transportation of raw materials and finished fuels, fuel use, and
39 greenhouse gas sequestrations, including, but not limited to,
40 sequestrations of carbon dioxide as organic compounds in soil and
41 geological storage;

42 (4) a mechanism by which a refiner, wholesaler, or importer of
43 gasoline or diesel that exceeds the low-carbon transportation fuel
44 standard and is supplied for use within the State can generate
45 credits for all carbon dioxide and carbon dioxide equivalent
46 reductions as determined by the GREET model;

47 (5) a mechanism by which a producer or importer of an
48 alternative fuel that exceeds the low-carbon transportation fuel

1 standard and is supplied for use within the State can generate
2 credits for all carbon dioxide and carbon dioxide equivalent
3 reductions as determined by the GREET model;

4 (6) a mechanism to adjust the carbon intensity of alternative fuel
5 when the alternative fuel is used in a powertrain that is more or less
6 efficient than the reference fuel and drivetrain combination;

7 (7) a mechanism by which a refiner, wholesaler, or importer of
8 gasoline or diesel that fails to meet the low-carbon transportation
9 fuel standard and is supplied for use within the State would
10 generate deficits;

11 (8) a mechanism by which a producer of an alternative fuel that
12 fails to meet the low-carbon transportation fuel standard, including
13 through an carbon intensity adjustment carried out pursuant to
14 paragraph (6) of this subsection, would generate a deficit;

15 (9) mechanisms that allow credits to be traded and to be banked
16 for future compliance periods;

17 (10) a requirement that diesel, gasoline, or alternative fuel that is
18 exported from the State would not generate any associated credit or
19 debit;

20 (11) exemptions for diesel, gasoline, and alternative fuels that
21 are used in volumes below certain thresholds, as established by the
22 department;

23 (12) exemptions for gasoline, diesel, or other fuels used by
24 aircraft, railroad locomotives, military vehicles and interstate
25 waterborne vessels with eligibility to generate credits on a
26 voluntary, opt-in basis;

27 (13) procedures for verifying the validity of credits and deficits
28 generated under the low-carbon transportation fuel standard;

29 (14) requirements that participants in the program who are
30 electric public utilities, State agencies, and State authorities direct
31 at least 40 percent of that participants' overall credit value to
32 electrified transportation programs, projects, or investments to
33 directly benefit overburdened communities. Such investments may
34 include, but are not limited to: support for school bus, transit bus, or
35 drayage truck electrification; the expansion of public electric
36 vehicle charging infrastructure for multi-family residences;
37 investment in electric mobility solutions such as electric vehicle
38 sharing and ride hailing programs; multilingual marketing,
39 education, and outreach designed to increase awareness and
40 adoption of electric vehicles; and additional rebates and incentives
41 for low-income individuals beyond existing rebates and incentives;
42 and

43 (15) a schedule under which the department shall review and
44 update the greenhouse gas emissions modeling used pursuant to this
45 act at least every three years, or sooner if the department determines
46 that new information is available that warrants an earlier review.
47 The review process shall include a review of the best available
48 scientific literature, a review of information from the Argonne

1 National Laboratory, and a review of standards from programs
2 implemented in other states that reduce the carbon intensity of
3 transportation fuels.

4 c. The low-carbon transportation fuel standard program may
5 contain the following provisions as needed to implement the
6 standard for gasoline, diesel, or alternative fuels, as determined by
7 the department:

8 (1) a cost containment mechanism that is designed to allow for
9 both sufficient compliance flexibility and maximum greenhouse gas
10 reductions;

11 (2) a mechanism by which greenhouse gas emissions reductions
12 associated with the production of low carbon electricity or
13 renewable natural gas can be indirectly accounted for when used as
14 transportation fuel or when used in the production of diesel,
15 gasoline, or an alternative fuel that is used within the State;

16 (3) mechanisms whereby a refiner, wholesaler, importer, or
17 producer of an exempt fuel, including a fuel exempted pursuant to
18 paragraph (12) of subsection b. of this section, can voluntarily opt-
19 in to the program to generate credits;

20 (4) mechanisms whereby producers of alternative fuel, including
21 a fuel exempted pursuant to paragraph (12) of subsection b. of this
22 section, can voluntarily opt-in to the program to generate credits
23 when the fuel use displaces the combustion of gasoline or diesel for
24 a non-transportation use; and

25 (5) any standards, specifications, testing requirements or other
26 measures as needed to ensure the quality of gasoline, diesel, and
27 alternative fuels used in accordance with the provisions of this act.

28 d. The department shall consult with fuel and transportation
29 experts while developing the low-carbon transportation fuel
30 standard program, and may consider linking New Jersey's program
31 with similar policies in other jurisdictions.

32

33 4. The department shall adopt, pursuant to the "Administrative
34 Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), rules and
35 regulations as necessary to implement the provisions of this act.

36

37 5. This act shall take effect immediately.

38

39

40 STATEMENT

41

42 This bill would establish a low-carbon transportation fuel
43 standard program in the Department of Environmental Protection
44 (DEP).

45 Under the program, each refiner, wholesaler, or importer of
46 diesel or gasoline, and each producer of alternative fuel, would be
47 required to ensure that the fuel refined, sold, imported, or produced
48 by the entity, as applicable, and supplied for use in the State, meets

1 the low-carbon transportation fuel standard, on an annual basis.
2 The low-carbon transportation fuel standard would be a maximum
3 level of greenhouse gas emissions associated with the entire life-
4 cycle of a given unit of fuel, including its production,
5 transportation, and consumption. An alternative fuel, under the bill,
6 is any fuel used for transportation other than gasoline or diesel.
7 Such fuels could include hydrogen, biodiesel, or electricity.

8 In implementing the program, the DEP would be required to
9 establish a system of salable and tradable credits and deficits, under
10 which a given unit fuel that exceeds the low-carbon transportation
11 fuel standard would generate a credit and a given unit of fuel that
12 does not meet the standard would generate a deficit. Entities
13 regulated under the program would be required to ensure that they
14 do not generate any net deficits in a given year, after offsetting their
15 deficits with credits they generate or purchase from third parties.

16 The bill would establish certain requirements for the low-carbon
17 transportation fuel standard program, as enumerated in subsection
18 b. of section 3 of the bill, including the requirement that the
19 program reduce the greenhouse gas emissions associated with the
20 diesel and gasoline used in the State by 10 percent below 2019
21 levels by the year 2030. The bill would also enumerate certain
22 optional requirements for the program, in subsection c. of section 3
23 of the bill, including mechanisms whereby producers of alternative
24 fuel can voluntarily opt-in to the program to generate credits when
25 the fuel use displaces the combustion of gasoline or diesel for a
26 non-transportation use. Finally, the bill would direct the DEP to
27 consult with fuel and transportation experts while developing the
28 program, and it would authorize the DEP to consider linking New
29 Jersey's program with similar policies in other jurisdictions.