# A BILL FOR AN ACT

RELATING TO GREENHOUSE GAS EMISSIONS.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. The legislature finds that transportation is
- 2 the State's largest lifecycle greenhouse gas emissions source
- 3 and that tourism is the State's largest economic driver as well
- 4 as transportation consumer. The legislature finds that better
- 5 management of waste and resources is critical to environmental
- 6 stewardship and a clean fuel standard is central to reducing the
- 7 State's lifecycle greenhouse gas emissions while also protecting
- 8 the State's economic competitiveness, public health, and the
- 9 environment. The legislature also finds that without policy
- 10 specific to the transportation sector, emissions reductions will
- 11 not be achieved in a timeframe consistent with the State's
- 12 goals. Therefore, a clean fuel standard that is technology-
- 13 neutral and market-based is an effective policy for reducing
- 14 emissions in the transportation sector while also achieving
- 15 other co-benefits.
- 16 The legislature additionally finds that by creating a clean
- 17 fuel standard that rewards environmental performance, the State



- 1 will incentivize the creation of jobs in various sectors,
- 2 including construction, agriculture, waste management, landscape
- 3 restoration, forestry, and transportation. A clean fuel
- 4 standard can create new markets for what is usually considered
- 5 waste, including but not limited to municipal solid waste;
- 6 construction and demolition debris; used cooking oil from food
- 7 processing; agricultural and forestry residuals; industrial
- 8 emissions; invasive species biomass from landscape restoration
- 9 projects; and renewable electricity. Furthermore, the demand
- 10 created for alternative fuels and cleaner forms of mobility
- 11 under a clean fuel standard will not only help reduce greenhouse
- 12 gas emissions but may also have a co-benefit of reducing air
- 13 pollution, improving the health of citizens of the State. To
- 14 prompt the use of clean fuels and zero-emission vehicles, other
- 15 states like California, Oregon, and Washington have successfully
- 16 implemented programs that reduce the carbon intensity of their
- 17 transportation fuels.
- 18 It is the intent of the legislature to support the
- 19 deployment of clean transportation fuel technologies through a
- 20 carefully designed program that reduces the carbon intensity of
- 21 fuel used in the State in order to:

| 1  | (1)       | Reduce lifecycle greenhouse gas emissions;              |
|----|-----------|---|
| 2  | (2)       | Stimulate the local, state, and regional economies,     |
| 3  |           | thereby providing economic development;                 |
| 4  | (3)       | Promote public and environmental health by increasing   |
| 5  |           | sustainability and encouraging a circular economy and   |
| 6  |           | landscape restoration activities; and                   |
| 7  | (4)       | Support existing jobs in the clean fuel industry and    |
| 8  |           | create new jobs in new innovative clean fuel            |
| 9  |           | technologies.   |
| 10 | Ther      | efore, the purpose of this Act is to require the Hawaii |
| 11 | state ene | rgy office to adopt rules governing a clean fuel        |
| 12 | standard  | for alternative fuels in the State.                     |
| 13 | SECT      | ION 2. (a) The Hawaii state energy office shall adopt   |
| 14 | rules pur | suant to chapter 91, Hawaii Revised Statutes, governing |
| 15 | a clean f | uel standard for alternative fuels in the State. The    |
| 16 | rules sha | ll include:   |
| 17 | (1)       | A schedule to phase-in the implementation of the clean  |
| 18 |           | fuel standard for alternative fuels in a manner that    |
| 19 |           | reduces the average carbon intensity by at least ten    |
| 20 |           | per cent below 2019 levels by 2035 and at least fifty   |
| 21 |           | per cent below 2019 levels by 2045, including the       |

| 1  |     | establishment of annual carbon intensity standards for |
|----|-----|--|
| 2  |     | alternative fuels;                                     |
| 3  | (2) | An implementation date for the clean fuel standard for |
| 4  |     | alternative fuels on or before January 1, 2026;        |
| 5  | (3) | Standards for measuring lifecycle greenhouse gas       |
| 6  |     | emissions using Argonne National Lab's GREET model     |
| 7  |     | attributable to the production and use of diesel,      |
| 8  |     | gasoline, and other alternative fuels throughout their |
| 9  |     | lifecycles, including feedstock production or          |
| 10 |     | extraction, fuel production, and the transportation of |
| 11 |     | raw materials and finished fuels;                      |
| 12 | (4) | A mechanism by which diesel and gasoline that has a    |
| 13 |     | carbon intensity below the annual carbon intensity     |
| 14 |     | standard is used within the State to generate credits; |
| 15 | (5) | A mechanism by which alternative fuel that has a       |
| 16 |     | carbon intensity below the annual carbon intensity     |
| 17 |     | standard is used within the State to generate credits; |
| 18 | (6) | A mechanism to adjust the carbon intensity of          |
| 19 |     | alternative fuel when the alternative fuel is used in  |
| 20 |     | a powertrain that is not equal in efficiency to that   |
| 21 |     | of the reference fuel and drivetrain combination;      |

| 1  | (7)      | A mechanism by which diesel or gasoline that has a    |
|----|----------|---|
| 2  |          | carbon intensity above the annual carbon intensity    |
| 3  |          | standard would generate a deficit;                    |
| 4  | (8)      | A mechanism by which an alternative fuel that has a   |
| 5  |          | carbon intensity above the annual carbon intensity    |
| 6  |          | standard would generate a deficit;                    |
| 7  | (9)      | A mechanism that requires diesel, gasoline, or other  |
| 8  |          | alternative fuel that is exported from the State to   |
| 9  |          | retire any associated credit or debit;                |
| 10 | (10)     | Exemptions for diesel, gasoline, or other fuels used  |
| 11 |          | by aircraft, railroad locomotives, military vehicles, |
| 12 |          | and interstate waterborne vessels;                    |
| 13 | (11)     | Procedures for verifying the validity of credits and  |
| 14 |          | deficits generated under the clean fuel standard; and |
| 15 | (12)     | A schedule by which the Hawaii state energy office    |
| 16 |          | will review and update the lifecycle greenhouse gas   |
| 17 |          | modeling every three years based on a review of the   |
| 18 |          | best available scientific literature.                 |
| 19 | (b)      | The Hawaii state energy office may adopt rules that   |
| 20 | include: |   |

| 1  | ( 1 ) | A cost containment mechanism designed to allow for     |
|----|-------|--|
| 2  |       | sufficient compliance flexibility and maximum          |
| 3  |       | greenhouse gas reductions;                             |
| 4  | (2)   | Mechanisms whereby an electric utility or an energy    |
| 5  |       | producer can generate credits for electricity for      |
| 6  |       | gaseous fuels used in transportation; provided that    |
| 7  |       | the Hawaii state energy office shall develop these     |
| 8  |       | mechanisms based on best practices in use in other     |
| 9  |       | states and in consultation with industry stakeholders; |
| 10 | (3)   | Mechanisms whereby exempt end-uses, such as aviation,  |
| 11 |       | marine, rail, and military can opt in to the program   |
| 12 |       | to generate credits when using alternative fuel;       |
| 13 | (4)   | Mechanisms whereby alternative fuel can opt in to the  |
| 14 |       | clean fuel program to generate credits when it         |
| 15 |       | displaces the combustion of gasoline or diesel in      |
| 16 |       | off-road, heating, cooling, and temporary power        |
| 17 |       | generation;  |
| 18 | (5)   | A schedule to phase in the implementation of the       |
| 19 |       | standards for alternative fuels that have achieved a   |
| 20 |       | predominant market share and have an average carbon    |

| 1  |      | intensity that exceeds the annual diesel or gasoline   |
|----|------|--|
| 2  |      | carbon intensity standard;                             |
| 3  | (6)  | A program to support the deployment of infrastructure  |
| 4  |      | for the distribution of electricity as a vehicle fuel  |
| 5  |      | based on a mechanism by which no more than per         |
| 6  |      | cent of the annual deficits can be allocated;          |
| 7  | (7)  | A program to support the deployment of new             |
| 8  |      | technologies and infrastructure for the distribution   |
| 9  |      | or production of liquid or gaseous alternative fuels   |
| 10 |      | based on a mechanism by which no more than per         |
| 11 |      | cent of the annual deficits can be allocated;          |
| 12 | (8)  | Any standards, specifications, testing requirements,   |
| 13 |      | and other measures as needed to ensure the quality of  |
| 14 |      | gasoline, diesel, and alternative fuels used in        |
| 15 |      | accordance with the clean fuel standard;               |
| 16 | (9)  | Linking the clean fuel standard to similar policies in |
| 17 |      | other jurisdictions, including but not limited to      |
| 18 |      | California, Washington, and Oregon;                    |
| 19 | (10) | A method to utilize the carbon intensity pathways      |
| 20 |      | already approved in other states like California,      |
| 21 |      | Oregon, and Washington to reduce the burden of         |

| 1  |  | administering and certifying the carbon intensity of   |  |
|----|--|--|--|
| 2  |  | transportation fuels in the clean fuel program;        |  |
| 3  | (11)   | Mechanisms that allow credits to be traded and to be   |  |
| 4  |  | banked for future compliance periods; and              |  |
| 5  | (12)   | Exemptions for diesel, gasoline, and alternative fuels |  |
| 6  |  | that are used in volumes below thresholds established  |  |
| 7  |  | by the Hawaii state energy office.                     |  |
| 8  | (c)  | As used in this section:                               |  |
| 9  | "Alt   | ernative fuel" means any fuel that is not gasoline or  |  |
| 10 | diesel and is used for transportation purposes, including but    |  |  |
| 11 | not limited to ethanol, biomass-based diesel, renewable diesel,  |  |  |
| 12 | sustainable aviation fuel, electricity, biomethane, biogasoline, |  |  |
| 13 | renewable natural gas, fuels from carbon capture and             |  |  |
| 14 | utilization, electrofuels, and hydrogen.                         |  |  |
| 15 | "Car   | bon intensity" means the quantity of lifecycle         |  |
| 16 | greenhouse gas emissions per unit of fuel energy, expressed in   |  |  |
| 17 | grams of carbon dioxide equivalent per megajoule.                |  |  |
| 18 | "Clean fuel standard" means standards for the reduction of       |  |  |
| 19 | greenhouse gas emissions, on average, per unit of fuel energy.   |  |  |
| 20 | "Greenhouse gas" means carbon dioxide, methane, nitrous          |  |  |
| 21 | oxide, hy  | drofluorocarbons, perfluorocarbons, sulfur             |  |

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- 1 hexafluoride, and any other gas or gases designated by the
- 2 Hawaii state energy office by rule.
- 3 SECTION 3. This Act shall take effect on July 1, 3000.

### Report Title:

Hawaii State Energy Office; Clean Fuel Standard; Greenhouse Gases; Alternative Fuels; Rules

### Description:

Requires the state energy office to adopt rules governing a clean fuel standard for alternative fuels in the State. Effective 7/1/3000. (HD1)

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2024-2270 SB2768 HD1 HMSO

