

AMENDED IN SENATE MARCH 28, 2016

SENATE BILL

No. 1425

Introduced by Senator Pavley

February 19, 2016

An act to ~~amend Section 44272 of the Health and Safety Code, relating to vehicular air pollution.~~ *add Section 39732 to the Health and Safety Code, relating to greenhouse gases.*

LEGISLATIVE COUNSEL'S DIGEST

SB 1425, as amended, Pavley. ~~Alternative and Renewable Fuel and Vehicle Technology Program.~~ *Water-energy nexus registry.*

The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulations sources of emissions of greenhouse gases.

Existing law, until 2008, established the former California Climate Action Registry to carry out specified actions, including, among others, helping various entities in the state to establish emissions baselines, encourage voluntary actions to increase energy efficiency and reduce greenhouse gas emissions, and recognize, publicize, and promote participants in the registry.

This bill would require the state board, in consultation with relevant state agencies and a specified nonprofit organization, to develop a registry of greenhouse gas emissions resulting from the water-energy nexus using the best available data, as specified, including the above-stated actions of the former California Climate Action Registry as those relate to the water-energy nexus.

~~Existing law establishes the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007, which includes the Alternative and Renewable Fuel and Vehicle~~

~~Technology Program, administered by the State Energy Resources Conservation and Development Commission. Existing law requires the emphasis of the Alternative and Renewable Fuel and Vehicle Technology Program to be to develop and deploy technology and alternative and renewable fuels in the marketplace, without adopting any one preferred fuel or technology.~~

~~This bill would make a technical, nonsubstantive change to that provision.~~

Vote: majority. Appropriation: no. Fiscal committee: ~~no~~-yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. *The Legislature finds and declares all of the*
2 *following:*
- 3 (a) *Water and energy resources are inextricably connected.*
4 *This relationship is known as the water-energy nexus.*
- 5 (b) *The energy used to drive the state's water system accounts*
6 *for nearly 20 percent of the total electricity usage and 30 percent*
7 *of nonpower-related natural gas consumed and includes, among*
8 *other things, the fuels used to power groundwater pumps,*
9 *transportation, and treatment and disposal systems for water and*
10 *wastewater; the heating and cooling of water in buildings and*
11 *other facilities; the delivery of water; and end uses. There are*
12 *known gaps in quantifying greenhouse gas emissions associated*
13 *with that energy usage.*
- 14 (c) *The water used to drive the state's energy system represents*
15 *a substantial portion of our state water demand and includes,*
16 *among other things, the water used to turn turbines for*
17 *hydropower, to produce steam and cooling systems for*
18 *thermoelectric power, and to extract and refine oil and gas,*
- 19 (d) *Consequently, saving water saves energy and vice versa.*
- 20 (e) *Because the production of energy often results in the*
21 *emission of greenhouse gases, there is substantial potential for*
22 *emissions reductions in the water system.*
- 23 (f) *While energy usage has historically been a fundamental*
24 *element in the planning and development of the state's water supply*
25 *systems, there are new opportunities for improving this linkage to*
26 *reduce water-related greenhouse gas emissions. New projects that*

1 *best serve water and energy investments can maximize greenhouse*
2 *gas emissions reductions.*

3 *(g) It is the intent of the Legislature, in enacting this act, to do*
4 *both of the following:*

5 *(1) More closely integrate the planning for water, energy, and*
6 *greenhouse gas emissions reductions.*

7 *(2) Recognize innovative projects and programs that reduce*
8 *the carbon intensity of our water system.*

9 *SEC. 2. Section 39732 is added to the Health and Safety Code,*
10 *to read:*

11 *39732. (a) For purposes of this section, the following terms*
12 *have the following meanings:*

13 *(1) "The Climate Registry" means the nonprofit organization*
14 *that is a successor to the California Climate Action Registry*
15 *(former Chapter 6 (commencing with Section 42800) of Part 4, as*
16 *added by Section 1 of Chapter 1018 of the Statutes of 2000).*

17 *(2) "Registry" means the water-energy nexus registry*
18 *established pursuant to this section.*

19 *(b) (1) The State Air Resources Board, in consultation with*
20 *other relevant state agencies and The Climate Registry, shall*
21 *develop and administer a registry of greenhouse gas emissions*
22 *resulting from the water-energy nexus using the best available*
23 *data.*

24 *(2) Participation in the registry shall be voluntary and open to*
25 *any entity conducting business in the state. A participating entity*
26 *may register its emissions, including emissions generated outside*
27 *of the state, on an entitywide basis and may utilize the services of*
28 *the registry.*

29 *(c) In administering the registry, the State Air Resources Board*
30 *shall do all of the following:*

31 *(1) Help participating entities in the state to establish emissions*
32 *baselines.*

33 *(2) Encourage voluntary actions to increase water and energy*
34 *efficiency measures to reduce the carbon intensity of the state's*
35 *water system.*

36 *(3) Enable participating entities to record voluntary entitywide*
37 *greenhouse gas emissions reductions made after 1990 in a*
38 *consistent format that is supported by third-party verification.*

39 *(4) Ensure that sources in the state receive appropriate*
40 *consideration for entity-level verified emissions reductions under*

1 *potential future regulatory regimes or qualification for financing*
2 *opportunities relating to greenhouse gas emissions.*

3 (5) *Recognize, publicize, and promote participating entities*
4 *making voluntary reductions of greenhouse gas emissions.*

5 (6) *Recruit broad participation in the registry from all economic*
6 *sectors and regions of the state.*

7 SECTION 1. ~~Section 44272 of the Health and Safety Code is~~
8 ~~amended to read:~~

9 ~~44272. (a) The Alternative and Renewable Fuel and Vehicle~~
10 ~~Technology Program is hereby created. The program shall be~~
11 ~~administered by the commission. The commission shall implement~~
12 ~~the program by regulation pursuant to the requirements of Chapter~~
13 ~~3.5 (commencing with Section 11340) of Part 1 of Division 3 of~~
14 ~~Title 2 of the Government Code. The program shall provide, upon~~
15 ~~appropriation by the Legislature, competitive grants, revolving~~
16 ~~loans, loan guarantees, loans, or other appropriate funding~~
17 ~~measures, to public agencies, vehicle and technology entities,~~
18 ~~businesses and projects, public-private partnerships, workforce~~
19 ~~training partnerships and collaboratives, fleet owners, consumers,~~
20 ~~recreational boaters, and academic institutions to develop and~~
21 ~~deploy innovative technologies that transform California's fuel~~
22 ~~and vehicle types to help attain the state's climate change policies.~~
23 ~~The emphasis of this program shall be to develop and deploy~~
24 ~~technology and alternative and renewable fuels in the marketplace,~~
25 ~~without adopting any one preferred fuel or technology.~~

26 ~~(b) A project that receives more than seventy-five thousand~~
27 ~~dollars (\$75,000) in funds from the commission shall be approved~~
28 ~~at a noticed public meeting of the commission and shall be~~
29 ~~consistent with the priorities established by the investment plan~~
30 ~~adopted pursuant to Section 44272.5. Under this article, the~~
31 ~~commission may delegate to the commission's executive director,~~
32 ~~or his or her designee, the authority to approve either of the~~
33 ~~following:~~

34 ~~(1) A contract, grant, loan, or other agreement or award that~~
35 ~~receives seventy-five thousand dollars (\$75,000) or less in funds~~
36 ~~from the commission.~~

37 ~~(2) Amendments to a contract, grant, loan, or other agreement~~
38 ~~or award as long as the amendments do not increase the amount~~
39 ~~of the award, change the scope of the project, or modify the purpose~~
40 ~~of the agreement.~~

1 ~~(e) The commission shall provide preferences to those projects~~
2 ~~that maximize the goals of the Alternative and Renewable Fuel~~
3 ~~and Vehicle Technology Program, based on the following criteria,~~
4 ~~as applicable:~~

5 ~~(1) The project's ability to provide a measurable transition from~~
6 ~~the nearly exclusive use of petroleum fuels to a diverse portfolio~~
7 ~~of viable alternative fuels that meet petroleum reduction and~~
8 ~~alternative fuel use goals.~~

9 ~~(2) The project's consistency with existing and future state~~
10 ~~climate change policy and low-carbon fuel standards.~~

11 ~~(3) The project's ability to reduce criteria air pollutants and air~~
12 ~~toxics and reduce or avoid multimedia environmental impacts.~~

13 ~~(4) The project's ability to decrease, on a life-cycle basis, the~~
14 ~~discharge of water pollutants or any other substances known to~~
15 ~~damage human health or the environment, in comparison to the~~
16 ~~production and use of California Phase 2 Reformulated Gasoline~~
17 ~~or diesel fuel produced and sold pursuant to California diesel fuel~~
18 ~~regulations set forth in Article 2 (commencing with Section 2280)~~
19 ~~of Chapter 5 of Division 3 of Title 13 of the California Code of~~
20 ~~Regulations.~~

21 ~~(5) The project does not adversely impact the sustainability of~~
22 ~~the state's natural resources, especially state and federal lands.~~

23 ~~(6) The project provides nonstate matching funds. Costs incurred~~
24 ~~from the date a proposed award is noticed may be counted as~~
25 ~~nonstate matching funds. The commission may adopt further~~
26 ~~requirements for the purposes of this paragraph. The commission~~
27 ~~is not liable for costs incurred pursuant to this paragraph if the~~
28 ~~commission does not give final approval for the project or the~~
29 ~~proposed recipient does not meet requirements adopted by the~~
30 ~~commission pursuant to this paragraph.~~

31 ~~(7) The project provides economic benefits for California by~~
32 ~~promoting California-based technology firms, jobs, and businesses.~~

33 ~~(8) The project uses existing or proposed fueling infrastructure~~
34 ~~to maximize the outcome of the project.~~

35 ~~(9) The project's ability to reduce on a life-cycle assessment~~
36 ~~greenhouse gas emissions by at least 10 percent, and higher~~
37 ~~percentages in the future, from current reformulated gasoline and~~
38 ~~diesel fuel standards established by the state board.~~

1 ~~(10) The project's use of alternative fuel blends of at least 20~~
2 ~~percent, and higher blend ratios in the future, with a preference~~
3 ~~for projects with higher blends.~~

4 ~~(11) The project drives new technology advancement for~~
5 ~~vehicles, vessels, engines, and other equipment, and promotes the~~
6 ~~deployment of that technology in the marketplace.~~

7 ~~(d) The commission shall rank applications for projects proposed~~
8 ~~for funding awards based on solicitation criteria developed in~~
9 ~~accordance with subdivision (c), and shall give additional~~
10 ~~preference to funding those projects with higher benefit-cost scores.~~

11 ~~(e) Only the following shall be eligible for funding:~~

12 ~~(1) Alternative and renewable fuel projects to develop and~~
13 ~~improve alternative and renewable low-carbon fuels, including~~
14 ~~electricity, ethanol, dimethyl ether, renewable diesel, natural gas,~~
15 ~~hydrogen, and biomethane, among others, and their feedstocks~~
16 ~~that have high potential for long-term or short-term~~
17 ~~commercialization, including projects that lead to sustainable~~
18 ~~feedstocks.~~

19 ~~(2) Demonstration and deployment projects that optimize~~
20 ~~alternative and renewable fuels for existing and developing engine~~
21 ~~technologies.~~

22 ~~(3) Projects to produce alternative and renewable low-carbon~~
23 ~~fuels in California.~~

24 ~~(4) Projects to decrease the overall impact of an alternative and~~
25 ~~renewable fuel's life-cycle carbon footprint and increase~~
26 ~~sustainability.~~

27 ~~(5) Alternative and renewable fuel infrastructure, fueling~~
28 ~~stations, and equipment. The preference in paragraph (10) of~~
29 ~~subdivision (c) shall not apply to renewable diesel or biodiesel~~
30 ~~infrastructure, fueling stations, and equipment used solely for~~
31 ~~renewable diesel or biodiesel fuel.~~

32 ~~(6) Projects to develop and improve light-, medium-, and~~
33 ~~heavy-duty vehicle technologies that provide for better fuel~~
34 ~~efficiency and lower greenhouse gas emissions, alternative fuel~~
35 ~~usage and storage, or emission reductions, including propulsion~~
36 ~~systems, advanced internal combustion engines with a 40 percent~~
37 ~~or better efficiency level over the current market standard,~~
38 ~~lightweight materials, intelligent transportation systems, energy~~
39 ~~storage, control systems and system integration, physical~~
40 ~~measurement and metering systems and software, development of~~

1 design standards and testing and certification protocols, battery
2 recycling and reuse, engine and fuel optimization electronic and
3 electrified components, hybrid technology, plug-in hybrid
4 technology, battery electric vehicle technology, fuel cell
5 technology, and conversions of hybrid technology to plug-in
6 technology through the installation of safety certified supplemental
7 battery modules.

8 (7) Programs and projects that accelerate the commercialization
9 of vehicles and alternative and renewable fuels including buy-down
10 programs through near-market and market-path deployments,
11 advanced technology warranty or replacement insurance,
12 development of market niches, supply-chain development, and
13 research related to the pedestrian safety impacts of vehicle
14 technologies and alternative and renewable fuels.

15 (8) Programs and projects to retrofit medium- and heavy-duty
16 onroad and nonroad vehicle fleets with technologies that create
17 higher fuel efficiencies, including alternative and renewable fuel
18 vehicles and technologies, idle management technology, and
19 aerodynamic retrofits that decrease fuel consumption.

20 (9) Infrastructure projects that promote alternative and renewable
21 fuel infrastructure development connected with existing fleets,
22 public transit, and existing transportation corridors, including
23 physical measurement or metering equipment and truck stop
24 electrification.

25 (10) Workforce training programs related to alternative and
26 renewable fuel feedstock production and extraction, renewable
27 fuel production, distribution, transport, and storage,
28 high-performance and low-emission vehicle technology and high
29 tower electronics, automotive computer systems, mass transit fleet
30 conversion, servicing, and maintenance, and other sectors or
31 occupations related to the purposes of this chapter.

32 (11) Block grants or incentive programs administered by public
33 entities or not-for-profit technology entities for multiple projects,
34 education and program promotion within California, and
35 development of alternative and renewable fuel and vehicle
36 technology centers. The commission may adopt guidelines for
37 implementing the block grant or incentive program, which shall
38 be approved at a noticed public meeting of the commission.

39 (12) Life cycle and multimedia analyses, sustainability and
40 environmental impact evaluations, and market, financial, and

1 technology assessments performed by a state agency to determine
2 the impacts of increasing the use of low-carbon transportation fuels
3 and technologies, and to assist in the preparation of the investment
4 plan and program implementation.

5 ~~(13) A program to provide funding for homeowners who~~
6 ~~purchase a plug-in electric vehicle to offset costs associated with~~
7 ~~modifying electrical sources to include a residential plug-in electric~~
8 ~~vehicle charging station. In establishing this program, the~~
9 ~~commission shall consider funding criteria to maximize the public~~
10 ~~benefit of the program.~~

11 ~~(f) The commission may make a single source or sole source~~
12 ~~award pursuant to this section for applied research. The same~~
13 ~~requirements set forth in Section 25620.5 of the Public Resources~~
14 ~~Code shall apply to awards made on a single source basis or a sole~~
15 ~~source basis. This subdivision does not authorize the commission~~
16 ~~to make a single source or sole source award for a project or~~
17 ~~activity other than for applied research.~~

18 ~~(g) The commission may do all of the following:~~

19 ~~(1) Contract with the Treasurer to expend funds through~~
20 ~~programs implemented by the Treasurer, if the expenditure is~~
21 ~~consistent with all of the requirements of this article and Article~~
22 ~~1 (commencing with Section 44270).~~

23 ~~(2) Contract with small business financial development~~
24 ~~corporations established by the Governor's Office of Business and~~
25 ~~Economic Development to expend funds through the Small~~
26 ~~Business Loan Guarantee Program if the expenditure is consistent~~
27 ~~with all of the requirements of this article and Article 1~~
28 ~~(commencing with Section 44270).~~

29 ~~(3) Advance funds, pursuant to an agreement with the~~
30 ~~commission, to any of the following:~~

31 ~~(A) A public entity.~~

32 ~~(B) A recipient to enable it to make advance payments to a~~
33 ~~public entity that is a subrecipient of the funds and under a binding~~
34 ~~and enforceable subagreement with the recipient.~~

35 ~~(C) An administrator of a block grant program.~~