

## **Appendix B**

**Enabling Statute for the Air Quality Improvement Program – Health and Safety  
Code Sections 44270 – 44274**



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### Enabling Statute for the Air Quality Improvement Program Health and Safety Code Sections 44270 – 44274

**Created by Assembly Bill No. 118 (Chapter 750, Statutes of 2007) and Amended  
by Assembly Bill 109 (Chapter 313, Statutes of 2008)**

44270. This chapter shall be known, and may be cited, as the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007.

44270.3. For the purposes of this chapter, the following terms have the following meanings:

(a) "Commission" means the State Energy Resources Conservation and Development Commission.

(b) "Full fuel-cycle assessment" or "life-cycle assessment" means evaluating and comparing the full environmental and health impacts of each step in the life cycle of a fuel, including, but not limited to, all of the following:

(1) Feedstock production, extraction, cultivation, transport, and storage, and the transportation and use of water and changes in land use and land cover therein.

(2) Fuel production, manufacture, distribution, marketing, transport, and storage, and the transportation and use of water therein.

(3) Vehicle operation, including refueling, combustion, conversion, permeation, and evaporation.

(c) "Vehicle technology" means any vehicle, boat, off-road equipment, or locomotive, or component thereof, including its engine, propulsion system, transmission, or construction materials.

44271. (a) This chapter creates the Alternative and Renewable Fuel and Vehicle Technology Program, pursuant to Section 44272, to be administered by the commission, and the Air Quality Improvement Program, pursuant to Section 44274, to be administered by the state board. The commission and the state board shall do all of the following in fulfilling their responsibilities pursuant to their respective programs:

(1) Establish sustainability goals to ensure that alternative and renewable fuel and vehicle deployment projects, on a full fuel-cycle assessment basis, will not adversely impact natural resources, especially state and federal lands.

(2) Establish a competitive process for the allocation of funds for projects funded pursuant to this chapter.

(3) Identify additional federal and private funding opportunities to augment or complement the programs created pursuant to this chapter.

(4) Ensure that the results of the reductions in emissions or benefits can be measured and quantified.

(b) The state board shall develop and adopt guidelines for both the Alternative and Renewable Fuel and Vehicle Technology Program and the Air Quality Improvement Program to ensure that programs meet both of the following requirements:

(1) Activities undertaken pursuant to the programs complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.

(2) Activities undertaken pursuant to the programs maintain or improve upon emission reductions and air quality benefits in the State Implementation Plan for Ozone, California Phase 2 Reformulated Gasoline standards, and diesel fuel regulations.

(c) For the purposes of both of the programs created by this chapter, eligible projects do not include those required to be undertaken pursuant to state or federal law, district rules or regulations, memoranda of understanding with a governmental entity, or legally binding agreements or documents. For the purposes of the Alternative and Renewable Fuel and Vehicle Technology Program, the state board shall advise the commission to ensure the requirements of this subdivision are met.

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

(b) A project funded by the commission shall be approved at a noticed public hearing of the commission and shall be consistent with the priorities established by the investment plan adopted pursuant to Section 44272.5.

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

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

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

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

(4) The project's ability to decrease, on a life-cycle basis, the discharge of water pollutants or any other substances known to damage human health or the environment, in comparison to the production and use of California Phase 2 Reformulated Gasoline

or diesel fuel produced and sold pursuant to California diesel fuel regulations set forth in Article 2 (commencing with Section 2280) of Chapter 5 of Division 3 of Title 13 of the California Code of Regulations.

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

(6) The project provides nonstate matching funds.

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

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

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

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

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

(d) Only the following shall be eligible for funding:

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

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

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

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

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

(6) Projects to develop and improve light-, medium-, and heavy-duty vehicle technologies that provide for better fuel efficiency and lower greenhouse gas emissions, alternative fuel usage and storage, or emission reductions, including propulsion systems, advanced internal combustion engines with a 40 percent or better efficiency level over the current market standard, light-weight materials, energy storage, control systems and system integration, physical measurement and metering systems and software, development of design standards and testing and certification protocols, battery recycling and reuse, engine and fuel optimization electronic and electrified components, hybrid technology, plug-in hybrid technology, battery electric vehicle technology, fuel cell technology, and conversions of hybrid technology to plug-in technology through the installation of safety certified supplemental battery modules.

(7) Programs and projects that accelerate the commercialization of vehicles and alternative and renewable fuels including buy-down programs through near-market and

market-path deployments, advanced technology warranty or replacement insurance, development of market niches, supply-chain development, and research related to the pedestrian safety impacts of vehicle technologies and alternative and renewable fuels.

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

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

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

(11) Block grants administered by not-for-profit technology entities for multiple projects, education and program promotion within California, and development of alternative and renewable fuel and vehicle technology centers.

(12) Life-cycle and multimedia analyses, sustainability and environmental impact evaluations, and market, financial, and technology assessments performed by a state agency to determine the impacts of increasing the use of low-carbon transportation fuels and technologies, and to assist in the preparation of the investment plan and program implementation.

(e) The commission may make a single source or sole source award pursuant to this section for applied research. The same requirements set forth in Section 25620.5 of the Public Resources Code shall apply to awards made on a single source basis or a sole source basis. This subdivision does not authorize the commission to make a single source or sole source award for a project or activity other than for applied research. The commission may pursuant to this subdivision make a single source or sole source award for the applied research to be conducted by the Quiet Motorized Road Vehicle and Safe Mobility Committee created pursuant to Section 25227 of the Public Resources Code, if Senate Bill 1174 of the 2007-08 Regular Session, which would add that section, is enacted.

(f) Until January 1, 2012, the commission may contract with the Treasurer to expend funds through programs implemented by the Treasurer, if that expenditure is consistent with all of the requirements of this chapter.

44272.5. (a) The commission shall develop and adopt an investment plan to determine priorities and opportunities for the Alternative and Renewable Fuel and Vehicle Technology Program created pursuant to this chapter. The investment plan shall establish priorities for investment of funds and technologies to achieve the goals of this chapter and describe how funding will complement existing public and private investments, including existing state programs that further the goals of this chapter. The commission shall create and consult

with an advisory body as it develops the investment plan. The advisory body is subject to the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code). The commission shall, at a minimum, hold one public hearing on the advisory body's recommendations prior to approving the investment plan.

(b) Membership of the advisory body created pursuant to subdivision (a) shall include, but is not limited to, representatives of fuel and vehicle technology entities, labor organizations, environmental organizations, community-based justice and public health organizations, recreational boaters, consumer advocates, academic institutions, workforce training groups, and private industry. The advisory body shall also include representatives from the Resources Agency, the Business, Transportation and Housing Agency, the Labor and Workforce Development Agency, and the California Environmental Protection Agency.

(c) The commission shall hold at least three public workshops in different regions of the state and one public hearing prior to approving the investment plan. The commission shall annually update and approve the plan. The commission shall reconvene and consult with the advisory body created pursuant to subdivision (a) prior to annually updating and approving the plan.

44273. (a) The Alternative and Renewable Fuel and Vehicle Technology Fund is hereby created in the State Treasury, to be administered by the commission. The moneys in the fund, upon appropriation by the Legislature, shall be expended by the commission to implement the Alternative and Renewable Fuel and Vehicle Technology Program in accordance with this chapter.

(b) Notwithstanding any other provision of law, the sum of ten million dollars (\$10,000,000) shall be transferred annually from the Public Interest Research, Development, and Demonstration Fund created by Section 384 of the Public Utilities Code to the Alternative and Renewable Fuel and Vehicle Technology Fund. Prior to the award of any funds from this source, the commission shall make a determination that the proposed project will provide benefits to electric or natural gas ratepayers based upon the commission's adopted criteria.

(c) Beginning with the integrated energy policy report adopted in 2011, and in the subsequent reports adopted thereafter, pursuant to Section 25302 of the Public Resources Code, the commission shall include an evaluation of research, development, and deployment efforts funded by this chapter. The evaluation shall include all of the following:

(1) A list of projects funded by the Alternative and Renewable Fuel and Vehicle Technology Fund.

(2) The expected benefits of the projects in terms of air quality, petroleum use reduction, greenhouse gas emissions reduction, technology advancement, and progress towards achieving these benefits.

(3) The overall contribution of the funded projects toward promoting a transition to a diverse portfolio of clean, alternative transportation fuels and reduced petroleum dependency in California.

(4) Key obstacles and challenges to meeting these goals identified through funded projects.

(5) Recommendations for future actions.

44274. (a) The Air Quality Improvement Program is hereby created. The program shall be administered by the state board, in consultation with the districts. The state board shall develop guidelines to implement the program. Prior to the adoption of the guidelines, the state board shall hold at least one public hearing. In addition, the state board shall hold at least three public workshops with at least one workshop in northern California, one in the central valley, and one in southern California. The purpose of the program shall be to fund, upon appropriation by the Legislature, air quality improvement projects relating to fuel and vehicle technologies. The primary purpose of the program shall be to fund projects to reduce criteria air pollutants, improve air quality, and provide funding for research to determine and improve the air quality impacts of alternative transportation fuels and vehicles, vessels, and equipment technologies.

(b) Projects proposed for funding pursuant to subdivision (a) shall be evaluated based on their proposed or potential reduction of criteria or toxic air pollutants, cost-effectiveness, contribution to regional air quality improvement, and ability to promote the use of clean alternative fuels and vehicle technologies as determined by the state board, in coordination with the commission.

(c) The program shall be limited to competitive grants, revolving loans, loan guarantees, loans, and other appropriate funding measures that further the purposes of the program. Projects to be funded shall include only the following:

(1) On- and off-road equipment projects that are cost effective.

(2) Projects that provide mitigation for off-road gasoline exhaust and evaporative emissions.

(3) Projects that provide research to determine the air quality impacts of alternative fuels and projects that study the life-cycle impacts of alternative fuels and conventional fuels, the emissions of biofuel and advanced reformulated gasoline blends, and air pollution improvements and control technologies for use with alternative fuels and vehicles.

(4) Projects that augment the University of California's agricultural experiment station and cooperative extension programs for research to increase sustainable biofuels production and improve the collection of biomass feedstock.

(5) Incentives for small off-road equipment replacement to encourage consumers to replace internal combustion engine lawn and garden equipment.

(6) Incentives for medium- and heavy-duty vehicles and equipment mitigation, including all of the following:

(A) Lower emission schoolbus programs.

(B) Electric, hybrid, and plug-in hybrid on- and off-road medium- and heavy-duty equipment.

(C) Regional air quality improvement and attainment programs implemented by the state or districts in the most impacted regions of the state.

(7) Workforce training initiatives related to advanced energy technology designed to reduce air pollution, including state-of-the-art equipment and goods, and new processes and systems.



Workforce training initiatives funded shall be broad-based partnerships that leverage other public and private job training programs and resources. These partnerships may include, though are not limited to, employers, labor unions, labor-management partnerships, community organizations, workforce investment boards, postsecondary education providers including community colleges, and economic development agencies.

(8) Incentives to identify and reduce emissions from high emitting light-duty vehicles.

(d) (1) Beginning January 1, 2011, the state board shall submit to the Legislature a biennial report to evaluate the implementation of the Air Quality Improvement Program established pursuant to this chapter.

(2) The report shall include all of the following:

(A) A list of projects funded by the Air Quality Improvement Account.

(B) The expected benefits of the projects in promoting clean, alternative fuels and vehicle technologies.

(C) Improvement in air quality and public health, greenhouse gas emissions reductions, and the progress made toward achieving these benefits.

(D) The impact of the projects in making progress toward attainment of state and federal air quality standards.

(E) Recommendations for future actions.

(3) The state board may include the information required to be reported pursuant to paragraph (1) in an existing report to the Legislature as the state board deems appropriate.

44274.5. The Air Quality Improvement Fund is hereby created in the State Treasury, to be administered by the state board. The moneys in the Air Quality Improvement Fund, upon appropriation by the Legislature, shall be expended by the state board in accordance with this chapter to implement the Air Quality Improvement Program. The Legislature may transfer moneys from the fund to the Carl Moyer Memorial Air Quality Standards Attainment Trust Fund.

44274.7. (a) Notwithstanding any other provision of this chapter, funds appropriated by the Legislature to the state board from the Air Quality Improvement Fund in the Budget Act of 2008, not used to implement the Air Quality Improvement Program, shall be expended by the state board to provide financial assistance to owners and operators of on-road heavy-duty diesel-fueled motor vehicles for costs associated with early compliance with both of the following regulations:

(1) Regulations to reduce emissions of diesel particulate matter, oxides of nitrogen, and other criteria pollutants, and greenhouse gases from in-use heavy-duty diesel-fueled vehicles.

(2) Regulations to reduce greenhouse gas emissions from heavy-duty tractors and 53-foot box-type trailers that transport freight on state highways.

(b) Funds shall be expended for low- or zero-interest loans or grants.

(c) Priority for funding shall be provided to both of the following:

(1) Owners of less than three on-road heavy-duty diesel-fueled motor vehicles and to those owners and operators most heavily impacted by the regulations described in subdivision (a) who demonstrate financial hardship as determined by the state board.

(2) On-road heavy-duty diesel-fueled motor vehicles that are used for short-haul trucking, including short-haul trucking that crosses state or federal borders where there are significant air pollution impacts in the state.

(d) The state board may contract with the Treasurer for assistance in expending funds through programs implemented by the Treasurer.

(e) The state board shall maximize use of the funds described in this section with other funds that may be available for on-road heavy-duty diesel-fueled motor vehicle pollution reduction, including, but not limited to, the Goods Movement Emission Reduction Program (Chapter 3.2 (commencing with Section 39625) of Part 2) and the Carl Moyer Memorial Air Quality Standards Attainment Program (Chapter 9 (commencing with Section 44275)).

(f) By January 1, 2010, and each January 1 thereafter until all funds are expended, the state board shall report to the Legislature on the implementation of this section, including, but not limited to, the types of financial assistance provided.