

## Senate Bill No. 1771

### CHAPTER 1018

An act to add Chapter 6 (commencing with Section 42800) to Part 4 of Division 26 of the Health and Safety Code, and to add Chapter 8.5 (commencing with Section 25730) to Division 15 of the Public Resources Code, relating to air pollution.

[Approved by Governor September 30, 2000. Filed  
with Secretary of State September 30, 2000.]

#### LEGISLATIVE COUNSEL'S DIGEST

SB 1771, Sher. Greenhouse gas emission reductions: climate change.

(1) Existing law imposes various emission limitations for the control of vehicular and nonvehicular air pollution. The State Air Resources Board is designated by state law as the air pollution control agency for all purposes set forth in federal law.

This bill would require the Secretary of the Resources Agency to establish the California Climate Action Registry as a public benefit nonprofit corporation, that would record and register voluntary greenhouse gas emission reductions made by California entities after 1990. The bill would require the registry to perform various functions, including adopting standards for verifying emissions reductions, adopting a list of approved auditors that would verify emissions reductions, referring entities to approved firms to verify emissions reductions, establishing emissions reduction goals, designing and implementing efficiency improvement plans, maintaining a record of all emissions baselines and reductions, and recognizing, publicizing, and promoting entities that participate in the registry.

The bill would also establish responsibilities for the State Energy Resources Conservation and Development Commission to develop a process to identify and qualify third-party organizations approved to provide technical assistance and advice in monitoring greenhouse gas emissions, setting industry-specific emissions reduction targets, and developing and implementing efficiency improvement programs.

(2) Existing law requires the commission, among other things, to analyze the environmental consequences of trends in the consumption of energy. Existing law also requires the commission to have conducted a study on or before June 1, 1990, regarding the manner in which global warming trends may affect California's energy supply and demand, economy, environment, agriculture, and water supplies.

This bill would require the commission, in consultation with the state board, the Department of Forestry and Fire Protection, the Department of Transportation, the State Water Resources Control Board, the California Integrated Waste Management Board, and any other state agencies with jurisdiction over matters affecting climate change, to update, by January 1, 2002, the inventory of greenhouse gas emissions from all sources located in the state, as identified in a specified report, and to acquire and develop data and information on global climate change and provide state, regional, and local agencies, utilities, business, industry, and other energy and economic sectors with information on the costs, technical feasibility, and demonstrated effectiveness of methods for reducing or mitigating the production of greenhouse gases from in-state sources.

The bill would require the commission to update its inventory every 5 years, and report on the updated inventory to the Governor and the Legislature.

The bill would require the commission to conduct at least one public workshop prior to finalizing each updated inventory. The bill would require the commission to post its report and inventory on the commission's web page on the Internet. The bill would also require the commission to convene an interagency task force consisting of state agencies with jurisdiction over matters affecting climate change to ensure policy coordination for those activities, and to establish a climate change advisory committee, as provided, to make recommendations to the commission on the most equitable and efficient ways to implement international and national climate change requirements, as provided.

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

SECTION 1. Chapter 6 (commencing with Section 42800) is added to Part 4 of Division 26 of the Health and Safety Code, to read:

#### CHAPTER 6. CALIFORNIA CLIMATE ACTION REGISTRY

##### Article 1. Findings and Declarations

42800. This chapter shall be known, and may be cited, as the California Climate Action Registry.

42801. The Legislature finds and declares all of the following:

(a) It is in the best interest of the State of California, the United States of America, and the earth as a whole, to encourage voluntary actions to achieve all economically beneficial reductions of greenhouse gas emissions from California sources.

(b) Mandatory greenhouse gas emissions reductions may be imposed on California sources at some future point, and in view of this, the state has a responsibility to use its best efforts to ensure that



organizations that voluntarily reduce their emissions receive appropriate consideration for emissions reductions made prior to the implementation of any mandatory programs.

(c) Past initiatives in the state that took early and responsible action to reduce air pollution and ozone smog have demonstrated political, economic, and technological leadership, and have proven to benefit the state.

(d) The state's tradition of environmental leadership should be recognized through the establishment of a registry to provide documentation of those greenhouse gas emissions reductions that are voluntarily achieved by sources in the state.

(e) The state hereby commits to use its best efforts to ensure that organizations that establish greenhouse gas emissions baselines and register emissions results that are verified in accordance with this chapter receive appropriate consideration under any future international, federal, or state regulatory scheme relating to greenhouse gas emissions. The state cannot guarantee that any regulatory regime relating to greenhouse gas emissions will recognize the baselines or reductions recorded in the registry.

#### Article 2. Purposes

42810. The purposes of the California Climate Action Registry shall be to do all of the following:

(a) Help various entities in the state to establish emissions baselines against which any future federal greenhouse gas emission reduction requirements may be applied.

(b) Encourage voluntary actions to increase energy efficiency and reduce greenhouse gas emissions.

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

(d) Ensure that sources in the state receive appropriate consideration for verified emissions reductions under any future federal regulatory regime relating to greenhouse gas emissions.

(e) Recognize, publicize, and promote registrants making voluntary reductions.

(f) Recruit broad participation in the process from all economic sectors and regions of the state.

#### Article 3. Climate Action Registry

42820. The Secretary of the Resources Agency shall establish a nonprofit public benefit corporation, to be known as the California Climate Action Registry.

42821. (a) The registry shall be governed by a seven-member board of directors, to be composed of all of the following members:



- (1) The Secretary of the Resources Agency, or his or her designee.
- (2) The Secretary for Environmental Protection, or his or her designee.

(3) Five public members representing business, local government, and public interest environmental organizations, to be appointed by the Governor for two-year terms, staggered so that, initially, three public members serve one-year terms and two members serve two-year terms.

(b) The board of directors of the registry is responsible for ensuring that the registry fulfills the purposes established by this chapter and meets the financial, reporting, and operating requirements of its articles of incorporation. The board of directors shall appoint and supervise an executive director, who shall hire and direct staff.

42822. (a) The procedures for monitoring, reporting, and verifying greenhouse gas emissions established by this chapter shall be the only protocols recognized by the state for the purpose of defining and reporting greenhouse gas emissions.

(b) The registry shall adopt a schedule of fees and, after an initial startup period, charge participants for registry services to cover the costs of its operations.

42823. The registry shall perform all of the following functions:

(a) Provide referrals to approved providers for advice on all of the following:

(1) Designing programs to establish emissions baselines and to monitor and track greenhouse gas emissions.

(2) Establishing emissions reduction goals based on international best practices for specific industries and economic sectors.

(3) Designing and implementing organization-specific plans that improve energy efficiency or utilize renewable energy, or both, and that are capable of achieving emission reduction targets.

(b) In coordination with the State Energy Resources Conservation and Development Commission, the registry shall adopt and periodically update a list of organizations recognized by the state as qualified to provide the detailed technical advice in subdivision (a) and assist participants in identifying and selecting providers that have expertise applicable to each participant's circumstances.

(c) Adopt standards for verifying emissions and reductions.

(d) Qualify independent firms that have demonstrated the capability of verifying and auditing emissions and reduction quantities and performance, and that are capable of providing opinions regarding the accuracy of reported results.

(e) Refer participants to qualified independent auditing firms.

(f) Adopt a uniform format for reporting emissions baselines and reductions to facilitate their recognition in any future regulatory regime.



(g) Maintain a record of all emissions baselines and reductions verified by qualified independent auditors. The public shall have access to this record, except for any portions of a participant's emissions results that a participant may deem confidential.

(h) Encourage organizations from various sectors of the state's economy, and those from various geographic regions of the state, to monitor emissions, establish baselines and reduction targets, and implement efficiency improvement and renewable energy programs to achieve those targets.

(i) Recognize, publicize, and promote participants that do any of the following:

- (1) Commit to monitor their emissions and set reduction targets.
- (2) Establish emissions baselines.
- (3) Report the quantity of their annual emissions progress.

42824. Participation in the registry is voluntary. Any entity conducting business in the state may register its emissions results, including emissions generated outside of the state, on an entitywide basis with the registry, and may utilize the services of the registry.

#### Article 4. Procedures for Reporting, Monitoring, and Verifying Emissions

42840. (a) Participants shall utilize the following reporting procedures:

(1) To establish an emissions baseline, participants shall report their actual emissions for the most recent year for which they have complete energy use and fuel consumption data as specified in this chapter. Participants that have complete energy use or fuel consumption data for earlier years that can be verified by independent auditors may establish their baseline as any year beginning after January 1, 1990. After establishing a baseline, participants shall report their verified emissions results in each subsequent year in order to record changes in emissions levels with respect to their baseline year. Participants may report annual emission results without establishing an emissions baseline.

(2) (A) Participants shall report emissions baselines and annual emissions results expressed by a fraction in terms of emissions efficiency rates, as follows:

(i) Private corporations and cooperatives other than electric generators shall report carbon dioxide emissions per dollar of revenue.

(ii) Electric generators shall report emissions of carbon dioxide per kilowatthour.

(iii) Nonprofit organizations and governmental agencies shall report carbon dioxide emissions per dollar of budgetary expenditure plus amortized capital expenditures.



(iv) Participants shall report both the numerator and the denominator of the fraction that determines their emission efficiency rate.

(B) The numerator utilized by each participant under subparagraph (A) shall include all actual emissions of greenhouse gases, expressed in terms of carbon dioxide equivalence. Participants shall report revenue and budgetary expenditures in year 2000 constant dollars.

(C) To complement or replace the general metrics described in subparagraph (A), the registry shall adopt industry-specific reporting metrics, linked to or based upon internationally accepted standards, as these become available, if both the State Energy Resources Conservation and Development Commission and the State Air Resources Board recommend their adoption, unless the board of directors of the registry determines that using industry-specific metrics would not further the purposes of this chapter.

(D) To help ensure that reported emissions do not diverge from actual emissions results, emissions reporting from corporations in industries deemed by the board of directors of the registry to be facing rapid changes in prices for their goods or services may be adjusted pursuant to a process to be recommended by the State Energy Resources Conservation and Development Commission.

(E) The registry may adopt guidelines encouraging participants to report emissions in relation to the annual average business-as-usual rate of improvement in the energy efficiency of the state economy, as determined periodically by the State Energy Resources Conservation and Development Commission.

(b) Participants shall report direct emissions and indirect emissions. Direct emissions include, but are not limited to, those emissions directly influenced by the participant's operations, including onsite combustion, fugitive noncombustion emissions, and vehicles owned and operated by the participant. Indirect emissions include, but are not limited to, those emissions embodied in electricity consumption and those resulting from offsite steam generation and district heating and cooling. After two years of operation, the registry shall consider phasing in guidelines for the measurement and reporting of indirect emissions associated with a participant's transportation-based activities, including, but not limited to, shipping of products and materials, employee commuting, and purchased air travel, pursuant to definitions and measurement procedures to be determined by the State Energy Resources Conservation and Development Commission not later than July 1, 2003.

(c) (1) All participants shall report direct and indirect emissions of carbon dioxide (CO<sub>2</sub>).



(2) The registry shall also encourage participants to monitor and report emissions of the following gases:

- (A) Hydrofluorocarbons (HFCs).
- (B) Methane (CH<sub>4</sub>).
- (C) Oxides of nitrogen (N<sub>2</sub>O).
- (D) Perfluorocarbons (PFCs).
- (E) Sulfur hexafluoride (SF<sub>6</sub>).

(3) The report of information specified in paragraph (2) is optional for three years after a participant joins the registry. After participating in the registry for a total of three years, participants shall report emissions and reductions required by both paragraphs (1) and (2).

(4) Emissions and reductions of all gases under this subdivision shall be reported by multiplying actual measured emissions times their global warming potential for the 100-year timeframe, expressed as an equivalent of pounds of CO<sub>2</sub>, as established by the Intergovernmental Panel on Climate Change.

(d) The basic unit of participation in the registry shall be an entity in its entirety. For the purposes of this chapter, “entity” means any corporation filing a separate tax return, any city or county, and each state government agency. The registry shall not record emissions baselines and reductions for individual facilities or projects, except to the extent they are included in an entity’s emissions reporting.

(1) Corporations may report emissions baselines and annual emissions results from subsidiaries if the parent corporation submits, in writing to the registry, a commitment to report corporatewide emissions within three years of first registering its subsidiary’s emissions results. Corporations that do not report corporatewide emissions within this three-year period shall have the emissions baselines and the results of its previously registered subsidiary removed from the registry list.

(2) Participants shall report emissions from all sources in the state when they initially register, and shall report emissions from all operations based in the United States, including any facility, division, or other entity in which the participant owns more than 50-percent interest within three years of joining the registry. In addition, the registry shall encourage corporations with operations outside of the United States to register their total worldwide emissions baselines and annual emissions results.

(3) To ensure that reported emissions reflect actual emissions reductions, participants that outsource production or services shall report emissions associated with the outsourced activity, and remove these emissions from their emissions baseline. The subcontracted entity, if it voluntarily chooses to participate in the registry shall report emissions associated with the outsourced activities it has taken over. Participants shall attest at least once each year that the entity has not outsourced any emissions, or that if it has, that all emissions



associated with the outsourced activity have been reported and subtracted from the entity's baseline emissions.

(4) To prevent changes in vertical integration within corporations from leading to apparent emissions reductions when in fact no reductions have occurred, the registry shall treat mergers, acquisitions, and divestitures as follows:

(A) The emissions baselines of any merged or acquired entity shall be added together, and the registry shall treat the resulting entity as if it had been one corporation from the beginning.

(B) In divestitures, the emissions baselines of the affected corporations shall be split, with the effect that the registry shall treat them as if they had been separate corporations from the beginning. If the divested corporation is purchased by another firm, the registry shall treat that purchase as a merger with the purchasing corporation. If the divested corporation remains a separate entity after the divestiture, its registry baseline shall reflect the emissions associated with the entity's operations before the divestiture. Corporations that divest operations may allocate verified emissions reductions achieved prior to the divestiture among the divesting and the divested entities, and the registry shall adjust their baselines accordingly.

(C) Any such adjustments for changes in vertical integration shall be verified in the annual emissions audits required for recordation of emissions results.

42841. (a) To support the measurement and reporting of emissions in a consistent format, the registry shall adopt standardized forms and emissions tracking software that all participants shall use to calculate and report emissions. The registry may choose to accept the forms presently required by other voluntary emissions reporting programs if it finds the forms adequate to meet the criteria of this chapter. Use of any other forms shall not alter any requirements imposed by this chapter.

(b) The procedures established for all of the following shall conform to the requirements of Article 6 (commencing with Section 42870):

(1) Establishing electricity and fuel usage and for calculating associated emissions.

(2) Mass-balance calculations of emissions from, or stack testing or continuous emissions monitoring of, greenhouse gases from onsite fuel combustion.

(3) Measuring and verifying noncombustion emissions of the gases listed in paragraphs (1) and (2) of subdivision (c) of Section 42840.

(4) Collecting and maintaining data and records of energy, fuel, and chemical consumption sufficient to allow contemporaneous and ex post verification of direct and indirect emissions.



42842. (a) Participants in the registry shall hire, at their own expense, a third-party organization qualified pursuant to subdivision (b) to independently verify and attest to the accuracy of the emissions results reported to the registry each year.

(b) The registry shall adopt an approved list of organizations recognized as competent to measure, test, and verify emissions results and able to provide an independent opinion as to the completeness and accuracy thereof. The process for evaluating and approving these organizations shall be developed in coordination with the State Energy Resources Conservation and Development Commission. The registry may reopen the qualification process periodically in order for new organizations to be added to the approved list.

(c) The registry shall refer participants to the organization on the approved list described in subdivision (b).

(d) Organizations approved pursuant to subdivision (b) shall review participants' energy usage records and emissions calculations and, where necessary to establish or confirm emissions rates or quantities, perform direct measurement, monitoring, and testing of emissions after noting adjustments or otherwise accounting for any changes in the corporate organization of the entity or use of outsourcing, and shall summarize its review in a report to the board of directors, or equivalent governing body, of the participating entity, attesting to the accuracy of the reported emissions results and noting any exceptions, omissions, limitations, or other qualifications to their representation of accuracy.

(e) The State Energy Resources Conservation and Development Commission shall perform an occasional review and evaluation of participants' emissions monitoring and documentation, by accompanying third-party auditors on field visits to participants' sites on a randomly chosen basis, and shall report any findings in writing to the registry. The registry shall include these findings in the annual report to the Governor and the Legislature required by Article 5 (commencing with Section 42860).

42843. Not later than July 1, 2003, and periodically thereafter, the registry shall evaluate and review the emission reporting metrics described in subdivision (b) of Section 42870, in light of knowledge gained from the actual practice of measuring, monitoring, documenting, and verifying emissions, and, in consultation with the State Energy Resources Conservation and Development Commission, may modify or revise those reporting metrics as appropriate to further the purposes of this chapter.

#### Article 5. Annual Report

42860. Not later than July 1, 2003, and biennially thereafter, the registry shall report to the Governor and the Legislature on the



number of organizations participating in the registry, the percentage of the state's emissions represented by the participants in the registry, and the reductions in greenhouse gas emissions achieved by those participants.

Article 6. Responsibilities of the State Energy Resources  
Conservation and Development Commission

42870. The State Energy Resources Conservation and Development Commission shall do all of the following:

(a) Develop a process to identify and qualify third-party organizations approved to provide technical assistance and advice in any or all of the areas of monitoring greenhouse gas emissions, set industry-specific emissions reduction targets, and develop and implement efficiency improvement programs appropriate to various industries and economic sectors. The process shall do all of the following:

(1) Define the minimum technical and organizational capabilities and other qualifications approved firms are required to meet.

(2) Call for applications or otherwise encourage interested organizations to submit their qualifications for review.

(3) Evaluate applicant organizations according to this list of qualification standards.

(4) Recommend, not later than July 1, 2001, specific organizations to the registry as qualified to provide the technical assistance functions of this chapter.

(5) Update the list of approved technical assistance providers every third year by doing all of the following:

(A) Reviewing the capabilities of already approved providers.

(B) Reviewing applications of new providers.

(C) Recommending to the registry specific organizations to be added to the approved list, and specific organizations no longer qualified to provide the technical assistance duties of this chapter.

(b) Develop or update certain emissions reporting metrics by doing all of the following:

(1) Review, in coordination with the State Air Resources Board, industry-specific greenhouse gas reporting metrics linked to or based on internationally accepted standards, as these become available periodically and advise the registry of its opinion as to whether the adoption of such sectoral or industry-specific metrics to complement or replace the general metrics established in Section 42840 would further the purposes of this chapter.

(2) On or before July 1, 2001, develop an emissions reporting metric for corporations in industries experiencing rapid changes in real prices, to ensure that reported emissions efficiency rates do not diverge from actual changes in emissions efficiency, and recommend this metric to the registry for adoption.



(3) On or before July 1, 2003, determine the annual average business-as-usual rate of improvement in the energy efficiency of the state economy over the last 10 years and recommend to the registry whether participants in the registry should explicitly report emissions in relation to this ongoing rate of efficiency improvement.

(4) By July 1, 2003, recommend to the registry for possible adoption a procedure for defining and measuring transportation-based emissions associated with registry participants' activities, including, but not limited to, shipping of products and materials, employee commuting, and purchased air travel.

(c) Develop, not later than July 1, 2001, definitive procedures to guide registry participants and third-party verifiers in all of the following processes:

(1) Establishing entities' electricity usage and calculating CO<sub>2</sub> emissions associated with such usage.

(2) Establishing entities' fuel usage and calculating CO<sub>2</sub> emissions associated with such usage.

(3) Determining, for emissions from onsite fuel combustion, the circumstances in which mass-balance calculations may be used to estimate emissions, the circumstances in which stack testing or continuous emissions monitoring of greenhouse gases shall be considered necessary, and the procedures for conducting stack testing or monitoring when they are considered necessary.

(4) Measuring and verifying the noncombustion emissions of the six greenhouse gases with which the registry is concerned.

(5) Collecting and maintaining data and records of energy, fuel, and chemical consumption sufficient to allow both contemporaneous and ex post verifications of direct and indirect emissions on an entity-wide basis.

(d) Develop, not later than January 1, 2002, a process for qualifying verification and auditing organizations recognized by the State of California as competent to measure, test, and verify the emissions results of the types of entities that may choose to participate in this registry, by doing all of the following:

(1) Developing a list of the minimum technical and organizational capabilities and other qualification standards such verification and auditing organizations shall meet. Those qualifications shall include the ability to sign an opinion letter, for which they may be held financially at risk, and attesting that the emissions results they have corroborated or reviewed are complete and accurate as reported.

(2) Publicizing an applications process or otherwise encouraging interested organizations to submit their qualifications for review.

(3) Evaluating applicant organizations according to the list of qualifications described in paragraph (1).

(4) Recommending specific third-party organizations to the registry as qualified to verify participants' actual emissions results in accordance with this chapter.



(5) Every third year, updating the list of approved verification organizations by doing all of the following:

(A) Reviewing the capabilities of approved organizations.

(B) Reviewing applications of organizations seeking to become approved.

(C) Recommending to the registry specific organizations to be added to the approved list, and specific organizations no longer qualified to perform the duties of this chapter.

(e) Occasionally, and on a random basis, accompany third-party auditors on field visits to participants' sites, to observe and evaluate the adequacy of any stack testing or other direct monitoring procedures, perform their own review of the documentation underlying participants' basis for reporting emissions, and report in writing to the registry on these findings, all to further ensure that reported emissions results accurately reflect actual emissions; that registry participants collect and retain adequate data on their energy and fuel use; and that qualified independent verification and auditing firms monitor and verify actual emissions in accordance with this chapter.

SEC. 2. Chapter 8.5 (commencing with Section 25730) is added to Division 15 of the Public Resources Code, to read:

#### CHAPTER 8.5. CLIMATE CHANGE INVENTORY AND INFORMATION

25730. The commission, in consultation with the State Air Resources Board, the Department of Forestry and Fire Protection, the Department of Transportation, the State Water Resources Control Board, the California Integrated Waste Management Board, and other state agencies with jurisdiction over matters affecting climate change, shall do all of the following:

(a) On or before January 1, 2002, update the inventory of greenhouse gas emissions from all sources located in the state, as identified in the commission's 1998 report entitled, "Appendix A: Historical and Forecasted Greenhouse Gas Emissions Inventories for California." Information on natural sources of greenhouse gas emissions shall be included to the extent that information is available. The inventory shall include information that compares emissions from similar inventories prepared for the United States and other states or countries, and shall include information on relevant current and previous energy and air quality policies, activities, and greenhouse gas emissions reductions and trends since 1990, to the extent that information is available.

(b) Acquire and develop data and information on global climate change, and provide state, regional, and local agencies, utilities, business, industry, and other energy and economic sectors with information on the costs, technical feasibility, and demonstrated effectiveness of methods for reducing or mitigating the production



of greenhouse gases from in-state sources, including net reductions through the management of natural forest reservoirs. The commission, in consultation with the State Air Resources Board, shall provide a variety of forums for the exchange of that information among interested parties, and shall provide other state agencies with information on cost-effective and technologically feasible methods that can be used to reduce or mitigate the emissions of greenhouse gases.

(c) Update its inventory every five years using current scientific methods, and report on the updated inventory to the Governor and the Legislature.

(d) Conduct at least one public workshop prior to finalizing each updated inventory. The commission shall post its report and inventory on the commission's web page on the Internet.

(e) Convene an interagency task force consisting of state agencies with jurisdiction over matters affecting climate change to ensure policy coordination at the state level for those activities.

(f) Establish a climate change advisory committee, to the extent that the commission determines that it can do so within existing resources. This advisory committee shall make recommendations to the commission on the most equitable and efficient ways to implement international and national climate change requirements based on cost, technical feasibility, and relevant information on current energy and air quality policies and activities and on greenhouse gas emissions reductions and trends since 1990. The commission shall designate one of its commissioners as chair, and shall include on the advisory committee members who represent business, including major industrial and energy sectors, utilities, forestry, agriculture, local government, and environmental groups. The meetings of the advisory committee shall be open to the public, and shall provide an opportunity for the public to be heard on matters considered by the advisory committee.

