



Home	Bill Information	California Law	Publications	Other Resources	My Subscriptions	My Favorites	
------	------------------	----------------	--------------	-----------------	------------------	--------------	--

AB-43 Greenhouse gas emissions: building materials: embodied carbon trading system. (2023-2024)

SHARE THIS:  

Date Published: 10/09/2023 02:00 PM

Assembly Bill No. 43

CHAPTER 316

An act to amend Section 38561.3 of, and to add Section 38561.6 to, the Health and Safety Code, relating to greenhouse gas emissions.

[Approved by Governor October 07, 2023. Filed with Secretary of State October 07, 2023.]

LEGISLATIVE COUNSEL'S DIGEST

AB 43, Holden. Greenhouse gas emissions: building materials: embodied carbon trading system.

The California Global Warming Solutions Act of 2006 requires the State Air Resources Board to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030. Under the act, a violation of a rule, regulation, order, emission limitation, emission reduction measure, or other measure adopted by the state board under the act is a crime.

Existing law requires the state board, by December 31, 2026, to develop, in consultation with specified stakeholders, a framework for measuring and then reducing the average carbon intensity of the materials used in the construction of new buildings, including those for residential uses. Existing law requires the state board to develop, by December 31, 2028, a comprehensive strategy for the state's building sector to achieve a 40% net reduction in greenhouse gas emissions of building materials, as determined from a baseline calculated using a certain 2026 report, if that report is adequate, or as specified. Existing law requires that strategy to achieve this target as soon as possible, but no later than December 31, 2035, provides for an interim target of 20% net reduction by December 31, 2030, authorizes the state board to adjust the interim target, as provided, and requires the established targets to begin no sooner than January 1, 2027. Existing law also requires the state board to form and maintain a technical advisory committee, as described.

This bill would, among other changes, eliminate the interim target of 20% net reduction. The bill would require the baseline described above to be established based on either an industry average of environmental product declarations reported for the 2026 calendar year or on the most relevant, up-to-date information available, as determined by the state board. The bill would also require the established targets to begin to apply no sooner than January 1, 2027, and 2 years after the baseline is established. The bill would delete the requirement that the state board form and maintain a technical advisory committee, and would instead require the state board to consult experts to advise the state board on methods to reduce the carbon intensity of building materials and covered projects, as specified. The bill would also exempt violations of these requirements from criminal penalties and authorize the imposition of specified civil penalties for those violations. The bill would express the intent of the Legislature regarding the applicable civil penalties.

Existing law requires the state board, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero emissions of greenhouse gases associated with cement used within the state as soon as possible, but no later than December 31, 2045.

This bill would authorize the state board to establish an embodied carbon trading system, as defined and as provided. The bill would authorize the state board to integrate the embodied carbon trading system into the framework for measuring the average carbon intensity of the materials used in the construction of new buildings, as described above, on or before December 31, 2026, and to implement the system on and after January 1, 2029. The bill would authorize the state board to adopt rules and regulations for the credit allocation approach, the anticipated carbon price in the scheme, and trading periods. The bill would also require the state board to periodically review and update its emission reporting and compliance standard requirements, as necessary.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: no

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. It is the intent of the Legislature that the penalty provisions applicable to violations of Sections 38561.3 and 38561.6 of the Health and Safety Code, and any regulation or action implementing those sections, shall be strictly limited to the penalties described in subdivisions (a), (b), and (d) of Section 42402 of the Health and Safety Code and that no other section or part referred to in those subdivisions may be enforced against the entity undertaking construction of a project or any other regulated entity.

SEC. 2. Section 38561.3 of the Health and Safety Code is amended to read:

38561.3. (a) By December 31, 2026, the state board, in consultation with relevant stakeholders, including, but not limited to, the California Building Standards Commission, the Department of Housing and Community Development, and the State Energy Resources Conservation and Development Commission, shall develop a framework for measuring the average carbon intensity of the materials used in the construction of new buildings, including those for residential uses.

(b) The state board shall also develop, by December 31, 2028, a comprehensive strategy for the state's building sector to achieve a 40-percent net reduction in greenhouse gas emissions of building materials as soon as possible, but no later than December 31, 2035. The baseline for the 40-percent net reduction shall be established based on an industry average of environmental product declarations reported for the 2026 calendar year, or the most relevant, up-to-date data that is available, as determined by the state board.

(c) The framework developed pursuant to subdivision (a) shall include both of the following:

(1) A requirement for the submission by an entity undertaking the construction of a project with a minimum size of five new residential units or 10,000 square feet of nonresidential building space of a life-cycle assessment, as defined in the International Organization for Standardization (ISO) 14040 series of standards with a focus on the Product Stage phases (A1-A3), to determine the carbon intensity of the materials used in new residential and nonresidential buildings.

(2) A requirement for the submission by the manufacturer of a building material of an Environmental Product Declaration, Type III, as defined by the International Organization for Standardization (ISO) Standard 14025, or similarly robust material life-cycle assessment approaches that have uniform standards in data collection consistent with ISO Standard 14025, industry acceptance, and integrity for construction materials used for the building. The state board shall determine how to proceed in the event that insufficient material life-cycle assessments or Environmental Product Declarations exist, or in the event of significant supply chain issues.

(d) The framework developed pursuant to subdivision (a) may include a tracking and reporting mechanism in order to facilitate the reporting of data to the state board on the carbon intensity of buildings, and that would also allow tracking of progress toward the carbon intensity reduction targets set forth in this section. Except for a fee to reimburse the state board for any administrative costs incurred in administering the reporting mechanism, the state board shall not impose any other charges on the participants in the reporting mechanism authorized under this subdivision.

(e) Based on the information submitted by an entity undertaking the construction of a covered project pursuant to paragraph (2) of subdivision (i), as well as other relevant information as determined by the state board, the state board shall evaluate the cost impact and feasibility of implementation of the strategy developed pursuant to subdivision (b), for the purpose of developing recommendations for addressing known cost impact and feasibility issues in strategy implementation. This subdivision does not affect the project's status as deemed to comply with the applicable target based on the finding made solely by the entity undertaking the construction of a project pursuant to paragraphs (1) and (2) of subdivision (i).

(f) As used in this section the following terms have the following meanings:

(1) "Feasibility," in regard to the use of a material, means all of the following:

(A) The material is capable of being installed in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

(B) The material does not harm the health or safety of those who install the materials or occupy the building.

(C) The building using the material can be designed to provide an equivalent function and, at a minimum, the same useful life, performance, and durability as the building made with baseline materials.

(D) The material is commercially available to the region of the project.

(E) The material has not been involved in a claim for a construction or design defect, breach of express or implied warranty, fraud, or misrepresentation.

(F) The material provides an equivalent function and at least the same useful life, performance, and durability as the baseline material.

(2) (A) "Cost impact" means a significant overall material or operational cost increase or schedule delay resulting from incorporating the lower carbon material.

(B) As used in subparagraph (A), "significant" means an increase of 5 percent or more in the operational or overall material cost at the location of the project or time schedule delay that is attributable to incorporating a lower carbon material compared to the baseline material for which it is a substitute in the project. For purposes of this paragraph, the baseline material shall be the material that would have been used by the entity undertaking the construction of the project if this section did not apply to the project at the time the application for the building permit is submitted for a model home or project, as applicable.

(g) The state board shall allow the entity undertaking the construction of a project to use the same persons as those responsible for the Certificate of Installation pursuant to paragraph (3) of subdivision (a) of Section 10-103 of Title 25 of the California Code of Regulations in submitting, reporting, notifying, tracking, or otherwise conveying information to the state board.

(h) The targets established by this section shall begin to apply no sooner than January 1, 2027, and two years after the baseline is established. The applicable target for each residential unit built within a project shall be the target that applied at the time the application was submitted for a building permit of the first model home in the project. For projects that do not use model homes, the applicable target shall be the target in effect at the time of submission of the application for the building permit.

(i) (1) For buildings covered by this section, the incorporation of lower carbon materials shall be limited or excluded to the extent that it has a cost impact or is unfeasible.

(2) An entity undertaking the construction of a project may seek to achieve the applicable target through the use of materials or methods pursuant to this section and, if an embodied carbon trading system is established or other alternative compliance method, pursuant to Section 38561.6, separately or in combination, as determined by the available compliance methods. If the entity undertaking the construction of a project uses materials or methods described in this section, Section 38561.6, or both, subject to the feasibility criteria and up to the cost impact limit, and the entity finds that it is still unable to achieve the applicable target due to unfeasibility or cost impact, then the project shall be deemed to comply with the applicable target. In that case, the entity undertaking the construction of a project shall provide the state board with documentation that shall be specified in the reporting and recordkeeping regulations that will be established by the state board.

(3) The state board shall consult experts, including, but not limited to, building product manufacturers, builders, and design professionals, to advise the state board on methods to reduce the carbon intensity of building materials and covered projects, while maintaining the avoidance of cost impact and their feasibility.

(4) The state board shall not have the authority to approve, deny, or delay the planning, use, development, design, or construction of a project.

(5) Manufacturers of building materials shall be required to report data to the state board to ensure that their products comply with applicable reduction targets in accordance with reporting and compliance requirements that will be established by the state board.

(j) This section does not apply to appliances.

(k) For purposes of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code), no adverse environmental impact associated with the manufacture of building materials may be attributed, directly or indirectly, to the project incorporating the building material. This subdivision does not relieve the entity undertaking the construction of a covered project from complying with any other provision within this section.

(l) In developing the strategy pursuant to subdivision (b), the state board shall do all of the following:

(1) Research and prioritize actions and provisions that leverage state and federal incentives, where applicable, to reduce costs of implementing greenhouse gas emissions reduction technologies, processes, and materials used in construction-related projects for the construction industry, homeowners, and developers, and to increase economic value for the state.

(2) Evaluate measures to support market demand and financial incentives to encourage the production and use of materials used in construction-related projects with low greenhouse gas intensity, including, but not limited to, consideration of the following measures:

(A) Measures to expedite the adoption for use in projects undertaken by state agencies, including the Department of Transportation and the Department of General Services.

(B) Measures to provide financial support and incentives for research, development, and demonstration of technologies to mitigate emissions of greenhouse gases from the manufacture of materials used in construction-related projects, with the objective of accelerating commercial availability of those technologies.

(C) Measures to provide consumer access to building material embodied carbon data reported to the state board.

(m) The Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code) does not apply to reporting regulations and reporting standards promulgated pursuant to this section. Prior to adopting those reporting standards and regulations pursuant to this section, the proposed rulemaking shall be made available to the public and stakeholders for comment and workshopping. The state board, the California Building Standards Commission, the Department of Housing and Community Development, and the State Energy Resources Conservation and Development Commission shall exchange technical information with each other as part of this process prior to the adoption of any reporting standard or regulation pursuant to this section. All other regulations adopted pursuant to this section are subject to the Administrative Procedure Act.

(n) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to the state board's development and approval of the framework and comprehensive strategy developed pursuant to this section.

(o) Paragraphs (1) and (2) of subdivision (i) apply when the state board adopts any mechanism, standard, requirement, regulation, rule, protocol, framework, strategy, credit, target, or establishes an embodied carbon trading system, or alternative incentives or compliance programs, whichever occurs first.

(p) Penalties relating to the use or failure to use low-carbon building materials, or the failure to achieve the applicable target, may not be applied to an entity undertaking the construction of a project that is deemed to comply pursuant to paragraphs (1) and (2) of subdivision (i).

(q) Except as otherwise provided in subdivision (p), penalties for a violation of this section are limited to the penalties described in subdivisions (a) and (d) of Section 42402, unless the violation shows a disregard for the regulations under this section, extreme negligence, or acts of deceit, in which case the penalties set forth in subdivision (b) of Section 42402 apply.

(r) Notwithstanding any other law, the penalties described in subdivision (q) are the exclusive enforcement mechanism against regulated entities for a violation of this section and Section 38561.6.

(s) As used in this section, "entity undertaking the construction of a project" means a person or entity who owns the real property that is the subject of a development agreement.

SEC. 3. Section 38561.6 is added to the Health and Safety Code, to read:

38561.6. (a) For purposes of this section, the following definitions apply:

(1) "Carbon intensity" means the quantity of life-cycle greenhouse gas emissions per unit of building material, and specifically the ratio between the net upstream carbon dioxide impact (emissions minus storage) of a material and the weight of the material.

(2) "Embodied carbon trading system" means a market-based credit trading platform of greenhouse gas emissions exchanges, banking, credits, and other transactions, governed by rules and protocols established by the state board, that result in the same greenhouse gas emission reduction, over the same time period, as direct compliance with a greenhouse gas emission limit or emission reduction measure adopted by the state board pursuant to this division.

(3) "Low-carbon building standard" means a framework created pursuant to Section 38561.3 to reduce by 40 percent the carbon intensity of the materials used in newly constructed buildings identified in paragraph (1) of subdivision (c) of Section 38561.3 and within the embodied carbon trading system, to facilitate a credit trading platform for building materials along with other requirements as specified.

(4) "Material life-cycle" means the aggregate of greenhouse gas emissions associated with material production, as defined in the International Organization for Standardization (ISO) 14040 series of standards with a focus on the Product Stage phases (A1-A3).

(5) "Entity undertaking the construction of a project" means a person or entity who owns the real property that is the subject of a development agreement.

(b) The state board may establish an embodied carbon trading system in compliance with the requirements set forth in Section 38561.3 and this section that meets both of the following requirements:

(1) If the state board opts to establish an embodied carbon trading system, the system shall be designed to be used by entities undertaking a construction project and building material manufacturers.

(2) The embodied carbon trading system unit of measurement shall be Global Warming Potential (GWP) per gross square foot (kg CO₂e/sq. ft.²).

(c) The state board shall have the flexibility to design the embodied carbon trading system and may do all of the following with respect to the embodied carbon trading system:

(1) (A) Adopt rules and regulations for the credit allocation approach, the anticipated carbon price in the scheme, and trading periods.

(B) In developing the rules and regulations for the credit allocation approach, including those governing any tradeable compliance instrument, make efforts to avoid an overabundance of compliance credits in the market, and, to this end, may consider setting an upper limit on amount of credits that can be generated per unit of material.

(2) Consider using the credits generated through the use of the embodied carbon trading system to help promote innovation and investment in building construction materials that reduce emissions of greenhouse gases.

(3) Consider all relevant information pertaining to low-carbon building materials reduction programs in other states, localities, and nations, including other states, Canada, and the European Union, and, in doing so, review existing and proposed international, federal, and state greenhouse gas emission reporting programs, make reasonable efforts to promote consistency among the programs established pursuant to this division and other programs, and streamline reporting requirements on greenhouse gas emission sources.

(4) Integrate the embodied carbon trading system with the framework described in Section 38561.3 on or before December 31, 2026, and shall implement that system on and after January 1, 2029.

(5) Consult with the California Building Standards Commission, the Department of Housing and Community Development, and the State Energy Resources Conservation and Development Commission in the development of building regulations, in order to minimize duplicate or inconsistent regulatory requirements.

(d) The state board shall have the discretion to adopt further greenhouse gas emission reduction targets within the scope of Section 38561.3 prior to December 31, 2035, or provide early reduction credit considering market adoption, if appropriate.

(e) In developing its plan, the state board shall identify opportunities for emission reduction measures from all verifiable and enforceable actions, and best management practices.

(f) (1) The state board may adopt rules and regulations to monitor, verify, and enforce reductions in embodied carbon in building materials pursuant to this section and Section 38561.3.

(2) The state board shall minimize the administrative burden of implementing and complying with these regulations when possible.

(3) The state board shall design any rules and regulations to encourage manufacturers of building materials to produce low-carbon materials for sale in California to ensure that entities that undertake construction of projects identified in paragraph (1) of subdivision (c) of Section 38561.3 have an adequate supply of low-carbon materials that meet all of the feasibility and cost impact requirements of subdivision (f) of Section 38561.3 to meet the greenhouse gas reduction targets established in Section 38561.3.

(g) The state board may consider the use of third parties, such as verifiers, for purposes of implementing the requirements of this section.

(h) Compliance mechanisms, reporting requirements, and penalties for noncompliance with any compliance standards or an embodied carbon trading system established pursuant to this section or Section 38561.3 will be determined by the administrative

process. The carbon trading system established pursuant to this section alone or in combination with Section 38561.3 shall not cause a project to have a cost impact or be unfeasible as those terms are defined in subdivision (f) of Section 38561.3.

(i) The state board shall periodically review and update its emission reporting and compliance standard requirements, as necessary.

(j) This section does not limit the state board's ability to establish alternative incentives or compliance programs aside from or in addition to an embodied carbon trading system.

(k) This section provides guidance only. This section does not limit or expand the authority of the state board.

(l) This section does not authorize the creation of a revenue-generating program or any other program that would result in moneys being paid to the state, other than penalties imposed for a violation of this section.

(m) Notwithstanding any other law, the penalties described in subdivision (q) of Section 38561.3 are the exclusive enforcement mechanism against regulated entities for a violation of this section.