

AMENDED IN ASSEMBLY SEPTEMBER 3, 2021

AMENDED IN ASSEMBLY AUGUST 30, 2021

AMENDED IN ASSEMBLY JUNE 28, 2021

AMENDED IN ASSEMBLY JUNE 16, 2021

AMENDED IN SENATE MARCH 4, 2021

SENATE BILL

No. 596

**Introduced by Senator Becker
(Coauthor: Senator Wiener)**

February 18, 2021

An act to add Section 38561.2 to the Health and Safety Code, relating to greenhouse gases.

LEGISLATIVE COUNSEL'S DIGEST

SB 596, as amended, Becker. Greenhouse gases: cement sector: net-zero emissions strategy.

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. The act requires the state board to prepare and approve, and update at least once every 5 years, a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020 under the act, as provided.

This bill would require 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. The bill

would require the state board, in developing this comprehensive strategy, to define a metric for greenhouse gas intensity and evaluate data, as provided, to establish a baseline from which to measure greenhouse gas intensity reductions, coordinate and consult with other state agencies, prioritize actions that leverage state and federal incentives, and evaluate measures to support market demand and financial incentives to encourage the production and use of cement with low greenhouse gas intensity, among other actions. The bill would require the state board to establish interim targets for reductions in the greenhouse gas intensity of cement used within the state relative to the average greenhouse gas intensity of cement used within the state during the 2019 calendar year, with the goal of reducing the greenhouse gas intensity of cement used within the state to 40% below the 2019 average levels by December 31, 2035. The bill would require the state board, by July 1, 2028, to evaluate the feasibility of these interim targets and authorize the state board to adjust the targets upwards or downwards, as provided, to achieve these goals. *The bill would require the state board to implement the comprehensive strategy, upon appropriation by the Legislature.*

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

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

- 1 SECTION 1. (a) The Legislature finds and declares all of the
2 following:
- 3 (1) Climate change is an urgent threat to the health and
4 well-being of California’s residents and economy.
- 5 (2) California is a global leader on climate action and has
6 committed to achieve carbon neutrality as soon as possible, and
7 no later than 2045, in line with the latest climate science.
- 8 (3) Achieving this objective will require advance planning,
9 coordination, outreach, and development of a robust set of policies
10 tailored to the needs and opportunities of every major emitting
11 sector, including cement and concrete.
- 12 (4) California’s cement and concrete industry is well positioned
13 to lead and accelerate the commitments to achieve carbon neutrality
14 made by leading trade associations representing cement producers
15 in California, the United States, and globally.
- 16 (5) A wide range of commercially available technologies and
17 practices exist to reduce and remove emissions of greenhouse gases

1 throughout the life cycle of cement and concrete production and
2 use, but these technologies and practices face a series of market
3 and regulatory barriers hindering their deployment.

4 (6) Implementing complementary strategies to both reduce the
5 greenhouse gas intensity of cement production and grow the
6 demand for low-carbon concrete will also reduce air pollution and
7 improve public health in California communities.

8 (7) Positioning California’s cement and concrete sector to thrive
9 in a low-carbon economy will enhance the sector’s long-term
10 competitiveness, support high-quality jobs, and enable resilient
11 infrastructure development.

12 (b) It is the intent of the Legislature that attaining net-zero or
13 net-negative emissions of greenhouse gases from the cement and
14 concrete sector in a manner that enhances California’s
15 competitiveness, supports high-paying jobs, improves public health,
16 and aligns with local community priorities becomes a pillar of the
17 state’s strategy for achieving carbon neutrality.

18 SEC. 2. Section 38561.2 is added to the Health and Safety
19 Code, to read:

20 38561.2. (a) (1) By July 1, 2023, the state board shall develop
21 a comprehensive strategy for the state’s cement sector to achieve
22 net-zero emissions of greenhouse gases associated with cement
23 used within the state as soon as possible, but no later than
24 December 31, 2045.

25 (2) To ensure adequate progress is made toward achieving the
26 goal established in paragraph (1), the state board shall establish
27 interim targets for reductions in the greenhouse gas intensity of
28 cement used within the state relative to the average greenhouse
29 gas intensity of cement used within the state during the 2019
30 calendar year, with the goal of reducing the greenhouse gas
31 intensity of cement used within the state to 40 percent below the
32 2019 average levels by December 31, 2035.

33 (3) When determining the greenhouse gas intensity of cement,
34 the state board shall not include greenhouse gas emissions
35 reductions attributable to activities or offsets that are unrelated to
36 the raw materials, fuels or other energy sources, processes, or
37 transportation involved in making or using cement or its inputs.

38 (4) (A) By July 1, 2028, the state board shall evaluate the
39 feasibility of achieving the interim targets established under
40 paragraph (2) and may adjust the interim targets upward or

1 downward to reflect technological advancements and progress in
2 addressing barriers to the deployment of greenhouse gas emissions
3 reduction technologies and processes, including those barriers for
4 which measures have been identified pursuant to paragraph (7) of
5 subdivision (b).

6 (B) If the state board makes a downward adjustment to any
7 interim target established under paragraph (2), the state board shall
8 document the feasibility constraints the state board has identified
9 and recommend measures and actions, including proposed statutory
10 changes, necessary to overcome those constraints to enable the
11 cement sector to achieve net-zero emissions of greenhouse gases
12 as soon as possible, but no later than December 31, 2045.

13 (b) In developing the comprehensive strategy pursuant to
14 subdivision (a), the state board shall do all of the following:

15 (1) Define a metric for greenhouse gas intensity and evaluate
16 the data submitted by cement manufacturing plants to the state
17 board for the 2019 calendar year and other relevant data about
18 emissions of greenhouse gases for cement that was imported into
19 the state to establish a baseline from which to measure greenhouse
20 gas intensity reductions.

21 (2) Assess the effectiveness of existing measures, identify any
22 modifications to existing measures, and evaluate new measures to
23 overcome the market, statutory, and regulatory barriers inhibiting
24 achievement of the objectives described in this section.

25 (3) Identify actions that reduce adverse air quality impacts and
26 support economic and workforce development in communities
27 neighboring cement plants.

28 (4) Include provisions to minimize and mitigate potential leakage
29 and account for embedded emissions of greenhouse gases in
30 imported cement in a similar manner to emissions of greenhouse
31 gases for cement produced in the state, such as through a border
32 carbon adjustment mechanism.

33 (5) Coordinate and consult with other state agencies, districts,
34 and experts in academia, industry, and public health, and with local
35 communities.

36 (6) Prioritize actions that leverage state and federal incentives,
37 where applicable, to reduce costs of implementing greenhouse gas
38 emissions reduction technologies and processes and to increase
39 economic value for the state.

1 (7) Evaluate measures to support market demand and financial
2 incentives to encourage the production and use of cement with
3 low greenhouse gas intensity, including, but not limited to,
4 consideration of all of the following measures:

5 (A) Measures to expedite the adoption for use in projects
6 undertaken by state agencies, including the Department of
7 Transportation, of Portland limestone cement and other blended
8 cements.

9 (B) Measures to provide financial support and incentives for
10 research, development, and demonstration of technologies to
11 mitigate emissions of greenhouse gases from the production of
12 cement with the objective of accelerating industry deployment of
13 those technologies.

14 (C) Measures to facilitate fuel switching.

15 (D) Measures to create incentives and remove obstacles for
16 energy efficiency improvements and waste heat recovery at cement
17 manufacturing facilities.

18 *(c) The state board shall implement the strategy developed*
19 *pursuant to this section, upon appropriation by the Legislature.*