

Date of Hearing: June 19, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES

Luz Rivas, Chair

SB 394 (Gonzalez) – As Amended June 12, 2023

SENATE VOTE: 40-0

SUBJECT: Master Plan for Healthy, Sustainable, and Climate-Resilient Schools

SUMMARY: Requires, upon appropriation, the California Energy Commission (CEC) to develop a Master Plan for Healthy, Sustainable, and Climate-Resilient Schools (Master Plan) by March 31, 2025.

EXISTING LAW:

- 1) Requires the Air Resources Board (ARB), pursuant to California Global Warming Solutions Act of 2006 [AB 32 (Núñez), Chapter 488, Statutes of 2006], to adopt a statewide greenhouse gas (GHG) emissions limit equivalent to 1990 levels by 2020 and adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorizes ARB to permit the use of market-based compliance mechanisms to comply with GHG reduction regulations once specified conditions are met. Requires ARB to approve a statewide GHG emissions limit equivalent to 85% below the 1990 level by 2045. (Health and Safety Code (HSC) 38500-38599.11)
- 2) Establishes a goal of doubling energy efficiency savings from existing buildings by January 1, 2030. Requires the CEC to establish annual targets for statewide energy efficiency savings and demand reduction to achieve this goal. (Public Resources Code (PRC) 25310)
- 3) Requires ARB to develop by July 1, 2025, a framework for measuring and reducing the carbon intensity of new building construction. Requires the framework to include a comprehensive strategy to achieve a 40% net reduction in the carbon intensity of construction and materials used in new construction as soon as possible, but no later than December 31, 2035. Establishes an interim target of reducing the carbon intensity of construction materials 20% by December 31, 2030, and requires ARB to assess the feasibility and cost impact of meeting the 2030 interim goal. (HSC 38561.3)
- 4) Establishes the School Energy Efficiency Stimulus Program (also known as the California Schools Healthy Air, Plumbing, and Efficiency Program – CalSHAPE), which provides grants to local educational agencies (LEAs) to fund appliance, plumbing, and HVAC upgrades at schools using ratepayer energy efficiency incentives. Designates the CEC as the third-party administrator of CalSHAPE grants and sunsets the program on January 1, 2027. (Public Utilities Code 1610 *et seq.*)
- 5) Establishes the Clean Energy Job Creation Program, and allocates Proposition 39 revenues, to fund energy efficient retrofits and clean energy installations as well as related improvements and repairs that contribute to reduced operating costs and provide certain non-energy benefits, including improved health and safety conditions in public schools. Allocates funds to the State Energy Conservation Assistance Account Education Subaccount (ECAA-

Ed) to provide LEAs with no-interest revolving loans to fund energy efficiency and renewable energy projects. (PRC 26200 *et seq.*)

- 6) Authorizes schools or school districts located in communities with high cumulative exposure burdens, as specified, to work with districts to identify school sites in need of air quality improvements. Specifies that these schools and districts may be eligible for grants as part of a community emissions program to implement air quality mitigation efforts, including air filter installations and upgrades and vegetation buffer planting. (PRC 44391.3)

THIS BILL:

- 1) Requires the CEC, upon appropriation, to develop the Master Plan in consultation with the California Department of Education (CDE), Division of the State Architect (Division), Office of Public School Construction (OPSC), and the Natural Resources Agency (NRA) by March 31, 2025.
- 2) Requires CEC to organize and lead a steering team to facilitate the planning process and stakeholder engagement. Specifies that the steering team include representatives from CDE, the Division, the Office, and the NRA and meet monthly beginning March 1, 2024.
- 3) Requires that the process to create the Master Plan include input from additional state agencies that provide funding, guidance, and oversight for school buildings and grounds, including the Board of Education, State Allocation Board, California School Finance Authority, California Health and Human Services Agency, Department of Public Health, Strategic Growth Council, Office of Planning and Research, ARB, Department of Resources Recycling and Recovery, Public Utilities Commission, California Environmental Protection Agency, and State Water Resources Control Board.
- 4) Requires that the process to develop the Master Plan engage a diverse group of stakeholders and experts to inform the recommendations, as specified.
- 5) Requires the steering team to undertake or solicit and be informed by analysis employing geographic cross-referencing among areas where climate-related hazards, such as heat indices and air pollution, and elevated and where there are concentrated populations of pupils who may be especially vulnerable to stresses and disruptions, including socioeconomically disadvantaged pupils, pupils of color, English learners, and pupils with disabilities.
- 6) Requires that the completed Master Plan be provided electronically to the Governor, the appropriate policy and fiscal committees of the Legislature, CEC, Superintendent of Public Instruction, Secretary of the NRA, and leadership of the state agencies involved in developing the Master Plan. Requires CDE, the Division of the State Architect, OPSC, and NRA to make the Master Plan publicly available on their websites.
- 7) Requires the Master Plan to include:
 - a) An assessment of a representative sample of the state's public elementary and secondary school buildings and grounds, as specified, and recommendations for building ongoing capacity and systems to track and analyze the data to inform planning and investment decisions, including for vulnerability to climate hazards and GHG emissions,

- sustainability, and mitigation potential. Specifies that the sample may be provided by LEAs that agree to participate.
- b) A set of priorities, benchmarks, and milestones for health, resilience, and decarbonization of public school campuses and support facilities in alignment with the state's climate and equity goals, as specified.
 - c) Actionable steps and state agency roles within each priority area and an estimate of the costs to implement and achieve the benchmarks and milestones over a multiyear period, and the fiscal health and learning costs of inaction.
 - d) Guidance for the Legislature and the Governor to inform the development of infrastructure-related programs and the identification of the financial resources for LEAs to implement the recommendations and achieve the goals of the Master Plan, informed by policy and institutional analyses to understand state and local climate adaptation capacities, limitations, and opportunities.
 - e) Recommendations on future school infrastructure spending, including guidance on infrastructure-related budget proposals and state bond measures to:
 - i) Align spending with the state's goal of achieving carbon neutrality by 2045 and action plans for climate adaptation and extreme heat;
 - ii) Position California schools to take full advantage of incentives and funding for decarbonization and climate adaptation within relevant federal legislation; and,
 - iii) Equitably identify climate-vulnerable communities for priority investment.
 - f) Guidance for local school infrastructure funding measures that align with state decarbonization and climate adaptation goals.
 - g) Guidance on the roles of state and county agencies and other partners in providing technical assistance to LEAs to support sustainable and climate-resilient school infrastructure.
 - h) Recommendations to ensure that LEAs have access to sufficient technical assistance, professional learning, training programs, and pipelines of sustainability and climate-resilience personnel to implement decarbonization and climate adaptation plans that include high road labor standards, project labor agreements, workforce development, and training opportunities for current LEA employees.
 - i) Recommendations for state and local leaders from public and private sectors to connect sustainable and climate-resilient school buildings and grounds to learning opportunities for pupils, green career and technical education, and pathways to green economy careers that support and advance statewide sustainability and resilience.
 - j) Recommendations for county and city governments to more effectively include LEAs in their decarbonization and climate adaptation efforts.
- 8) Requires CEC to enter into a contract with one or more nongovernmental entities to review existing research and data, support and coordinate the Master Plan development process, and

conduct research on priority areas of study to guide the implementation of well-aligned state investments in healthy, sustainable, climate-resilient school infrastructure

- 9) States related legislative findings and declarations.

FISCAL EFFECT: According to the Senate Appropriations Committee:

- 1) The CEC estimates one-time costs of \$1.5 million (Energy Resources Programs Account [ERPA] or General Fund) and 10 limited-term positions to develop the Master Plan. In addition, the CEC estimates one-time costs of up to \$5 million (ERPA or General Fund) to fund the work of the nongovernmental agency contractor.
- 2) Unknown, likely minor costs (various funds) for other departments and state entities to participate in development of the Master Plan.

COMMENTS:

- 1) **Reducing building emissions.** Achieving net zero GHG emissions – when GHG emissions are either zero or are offset by equivalent atmospheric GHG removal – is an important part of reducing GHG emissions and minimizing the effects of climate change. Net zero GHG emissions is also often used interchangeably with carbon neutrality; however, net zero GHG emissions includes GHGs other than those that contain carbon, such as nitrous oxide. Constructing buildings to be net zero will substantially reduce the state’s GHG emissions.
- 2) **Children’s health and air pollution.** Air pollution, particularly ozone and particulate pollution, poses significant risks to human health including premature death, reproductive harm, asthma, lung cancer, cardiovascular disease, and more. Eighty percent of a child’s alveoli, where the transfer of oxygen to blood occurs, develop after birth, and lungs and alveoli aren’t fully developed until adulthood. Children are also generally more active than adults and are outside for more hours per day on average, increasing their exposure to air pollution. The Southern California Children’s Health study tracked 1,759 children between the ages of 10 and 18 from 1993 to 2001 and found that the decrease in lung function associated with growing up in polluted areas was similar to that of children raised in households with parents who smoked. A follow-up study of 863 children in the same area between the years of 2007 and 2011, when air quality had significantly improved compared to the period from 1993 to 2001, found that the population studied had significantly greater lung function than the first study cohort, demonstrating the positive impact that air quality improvements can have on human health. Pollution exposure also increases the probability that children will develop other respiratory symptoms or suffer from impaired development of their nervous, endocrine, and immune systems. These health risks are often disproportionately concentrated in low-income areas and communities of color. According to the Public Policy Institute of California (PPIC), the highest-poverty school districts experienced higher air pollution levels, with approximately 15% higher concentrations of unhealthy particulate matter than in the lowest-poverty school districts. This average does not adequately demonstrate the larger, but infrequent, spikes in poor air quality in these districts.
- 2) **Road proximity and air pollution exposure.** Proximity to freeways and busy roads increases exposure to hazardous particulate air pollution, subsequently increasing health risks. SB 352 (Escutia), Chapter 668, Statutes of 2003, prohibited the construction of new

schools within 500 feet of freeways or other major roadways, but did not outline plans to address schools located in this area prior to 2003. Further, recent research shows that air pollution can still be present at hazardous levels far outside the 500 foot buffer, and that pollution levels also depend on air circulation patterns, geography, time of day and other factors. Additionally, the increase in severity and frequency of wildfires has increased children's exposure to dangerous levels of particulate matter throughout the state, even in areas that have historically had good air quality.

- 3) **Heat.** Average temperatures have increased since 1895, with the fastest relative increase beginning in the 1980s. Every decade since 1980 has been warmer than the previous decade. Globally, the seven warmest years on record were the last seven years. Areas of the state that have not historically faced extreme temperatures have been hit with heat waves resulting in increased emergency room visits and deaths. Children are vulnerable to extreme heat, which can quickly cause dehydration, heat exhaustion, heat cramps, and heat stroke. Moreover, heat contributes to irritability and affects children's ability to learn.

In 2022, the Governor's office released *Protecting Californians from Extreme Heat: A State Action Plan to Build Community Resilience* (Action Plan), which includes "near-term areas of focus," including:

- Implement a statewide public health monitoring system to identify heat illness events early, monitor trends, and track illnesses to intervene and prevent further harm.
 - Accelerate readiness and protection of communities most impacted by extreme heat, including through cooling schools and homes, supporting community resilience centers, and expanding nature-based solutions.
 - Protect vulnerable populations through codes, standards, and regulations.
 - Expand economic opportunity and build a climate smart workforce that can operate under and address extreme heat.
 - Increase public awareness to reduce risks posed by extreme heat.
 - Protect natural and working lands, ecosystems, and biodiversity from the impacts of extreme heat
- 4) **California schools.** California's K-12 facilities include approximately 12,800 schools with more than 714 million square feet of space, making LEAs the largest category of building in the public building sector. Unlike other commercial end users, government buildings generally aren't able to use the financial savings from energy improvements to reinvest in additional capital improvements, which leads public buildings to require regular cycles of investment to update facilities and replace less efficient appliances. While some district may seek local and state bond or tax funding to make these updates, other districts may seek monies and tax incentives from the recently enacted Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA).
- 5) **CEC programs.** While the CEC has not established a master plan addressing K-12 buildings' climate adaptation needs, the CEC has administered multiple programs to provide incentives to improve energy efficiency, water savings, and non-energy benefits associated with clean energy and appliance installations in LEA facilities. Following the passage of Proposition 39 in 2012, the CEC administered the Clean Energy and Jobs Creation Program. Between 2013 and 2020, the CEC approved 2,108 applications from 1,739 LEAs for a total \$1.53 billion in funding. As part of the program, the CEC also approved 42 loans from the

ECAA-Ed program totaling \$64.6 million. Following an extension and revision of the Proposition 39 program in 2017, the program expanded to include the School Bus Replacement Program. As part of this program, the CEC awarded \$74.7 million for replacement electric buses and \$14.1 million for electric bus charging infrastructure.

6) **Author's statement:**

California's K-12 students are served by over 1,000 school districts that utilize more than 10,000 facilities, comprising 125,000 acres of grounds, and 730 million square feet of buildings. The students who attend these schools each day are increasingly burdened by climate-related threats such as extreme heat, flooding, wildfire smoke, and other hazards that can harm their health and hinder their ability to learn.

While the condition of our school facilities plays an integral part in the mission of educating California's students, the State currently has no mechanism for assessing its school facilities' sustainability, and no cohesive strategy to make school buildings and grounds climate-resilient to protect the health and safety of students. It is abundantly clear that for California to meet its climate goals and ensure the educational opportunities of students there must be a comprehensive policy and implementation road map.

SB 394 will address the lack of guidance and planning around school facilities and sustainability by requiring the California Energy Commission to collaborate with various state agencies and education stakeholders to develop a Master Plan for Healthy, Sustainable, and Climate-Resilient Schools. The Master Plan will provide the State and the public with substantive guidance to ensure California's school facilities will be resilient in the face of continuing climate change and its acute impacts on the health and wellbeing of our students. A cohesive plan will also position California to take full advantage of forthcoming grants and incentives for de-carbonization and climate adaptation under the federal Inflation Reduction Act and the federal Infrastructure Investment and Jobs Act and Inflation Reduction Act.

7) **This bill.** This bill seeks to establish a Master Plan to provide guidance to LEAs' building decarbonization and climate resilience investments. The diversity of California's school districts may make the development of the Master Plan challenging, given the vast differences in size, location, resources, and needs of LEAs. Smaller LEAs may require technical assistance to identify and implement the guidance.

8) **Double referral.** This bill has also been referred to the Assembly Education Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

California Federation of Teachers
California School Employees Association
Climate Reality Project, Los Angeles Chapter
Climate Reality Project, San Fernando Valley

Los Angeles Unified School District

Opposition

None on file

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