SENATE RULES COMMITTEE

Office of Senate Floor Analyses

(916) 651-1520 Fax: (916) 327-4478

THIRD READING

Bill No: AB 1279

Author: Muratsuchi (D) and Cristina Garcia (D), et al.

Amended: 8/28/22 in Senate

Vote: 21

PRIOR VOTES NOT RELEVANT

SUBJECT: The California Climate Crisis Act

SOURCE: Author

DIGEST: This bill declares it the policy of the state to achieve net-zero greenhouse gas (GHG) emissions as soon as possible, but no later than 2045, to achieve that goal with at least an 85% reduction in GHG emissions, and to achieve and maintain net negative GHG emissions thereafter. The bill also creates requirements for reporting from the California Air Resources Board (ARB) and review by the Legislative Analyst's Office (LAO). This bill is contingent upon enactment of SB 905 (Caballero).

ANALYSIS:

Existing law, under the California Global Warming Solutions Act of 2006 (Health and Safety Code (HSC) §38500 et seq.):

- 1) Establishes the Air Resources Board (ARB) as the state agency responsible for monitoring and regulating sources emitting greenhouse gases.
- 2) Requires ARB to approve a statewide greenhouse gas (GHG) emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 (AB 32, 2006) and to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030 (SB 32, 2016).
 - a) Requires ARB to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions and to update the scoping plan at least once every 5 years.

- 3) Requires ARB when adopting regulations, to the extent feasible and in furtherance of achieving the statewide GHG emissions goal, to do the following:
 - a) Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities.
 - b) Ensure that activities pursuant to the regulations do not interfere with efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.
 - c) Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.
 - d) Consider cost-effectiveness of these regulations.

This bill:

- 1) Defines "net zero greenhouse gas emissions" as emissions of GHGs to the atmosphere being balanced by removals of GHG emissions over a period of time, as determined by ARB.
- 2) Declares it is the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter.
- 3) States that this goal is in addition to, and does not replace or supersede, the GHG emissions reduction targets created by SB 32 (2016).
- 4) Declares it is the policy of the state to ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85% below 1990 levels.
- 5) Directs ARB to work with relevant state agencies to:
 - a) Ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals; and
 - b) Identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California to complement emissions reductions and achieve these goals.

- 6) Requires ARB, by December 31, 2035, to evaluate the feasibility and tradeoffs of achieving the 85% emissions reduction goal relative to alternative scenarios to achieve the net zero emissions goal.
- 7) Requires ARB to annually report to the Joint Legislative Committee on Climate Change Policies on progress towards these goals.
- 8) Requires the Legislative Analyst's Office, every two years, to conduct independent analysis of ARB's progress towards these goals and prepare a public report detailing the review. The report shall include any recommendations for improvements, including shortfalls in direct emissions reductions, barriers to carbon dioxide removal deployment, and potential changes to ARB's evaluation and reporting practices that will advance transparency and accountability.
- 9) States that this act shall only become operative if SB 905 of the 2021-22 Regular Session is enacted and become operative on or before January 1, 2023.

Background

1) California and the climate crisis. California is particularly susceptible to the harmful effects of climate change, including an increase in extreme heat events, drought, wildfire, sea level rise, and more. According to the Fourth California Climate Change Assessment, by 2100, the average annual maximum daily temperature is projected to increase by 5.6-8.8 °F, water supply from snowpack is projected to decline by two-thirds, the average area burned in wildfires could increase by 77%, and 31-67% of Southern California beaches may completely erode without large-scale human intervention, all under business as usual and even moderate GHG reduction pathways.

Climate change comes with a huge price tag for every government, and California is no exception. To give a sense of scale, California's 2018 wildfires (though only less than half the size of those in 2020) cost \$148.5 billion in damages. This amount is roughly half of California's entire 2022-2023 budget. There is a greater human cost to climate change as well. In addition to capital losses, increased cost of resources and health costs, the impacts of climate change on mental health, food security, displacement and migration, and more are becoming a bigger part of the conversation but are still difficult to quantify.

California has long prided itself on its climate leadership. Even when the

national climate discourse was still litigating whether the climate was changing or not, California began setting aggressive targets and taking decisive action. In the preface to an August 1989 report from the Senate Office of Research titled *The Greenhouse Effect and Global Climate Change: Doing Something About the Weather* then-President pro Tempore of the Senate David Roberti wrote, "Although a global problem, California bears significant responsibility for the increasing greenhouse effect. With only about .6 percent of the world's population, we create about 1.5 percent of the world's carbon dioxide, the major greenhouse gas. As a responsible member of the world community, California must explore ways to reduce its contribution to the global climate change problem." While some of those numbers vary slightly today, the message still rings as true as it did then, 33 years ago.

2) Governor Newsom's climate pillars. In the spirit of upholding California's climate leadership, Governor Newsom has taken steps in the last several weeks to push California further. In a July 22 letter to the chair of ARB, the Governor wrote, "The Legislature has been a leader in establishing California's ambitious climate goals and is our indispensable partner in increasing the ambition of those goals and making them a reality in our state. I am committed to working with the Legislature in the coming weeks to make carbon neutrality state law and to increase our ambition towards our 2030 climate goals."

Subsequently, the Governor's Office provided five specific proposals to the Legislature on August 12th, of which this is one. In total, the package proposes to (1) accelerate our 2030 GHG emission reduction goal, (2) codify a 2045 carbon neutrality goal, (3) advance the state's clean electricity targets, (4) establish a statewide carbon capture, utilization, and storage (CCUS) framework, and (5) establish protections with setbacks from fossil fuel wells.

All five of these bills bear similarity to legislative proposals from either past or present sessions, each of which substantially increases California's ambition on addressing the causes of climate change. Thus, the committee will likely be familiar with the broader considerations surrounding these proposals, if not yet the specifics included here.

3) Net zero GHG emissions. Achieving net zero GHG emissions – a state where GHG emissions either reach zero or are entirely offset by equivalent atmospheric GHG removal – is essential in all scenarios that would keep Earth's average temperature within 1.5 °C of its historical average. Net zero GHG emissions is also often used interchangeably with "carbon neutrality,"

however net-zero GHG emissions implies the inclusion of GHGs other than those that contain carbon, such as nitrous oxide, as defined by AB 32 (Nunez, Chapter 488, Statutes of 2006). The sooner net-zero GHG emissions is reached globally, the less warming will be experienced.

In California, carbon neutrality by 2045 was set as a goal for the state under Governor Brown's Executive Order (EO) B-55-18. Prior to that, EO S-3-05 by Governor Schwarzenegger set the GHG reduction target of 80% below 1990 levels by 2050. A few additional sweeping targets have also been set to help achieve these goals, including SB 100 (De León, Chapter 312, Statutes of 2018) to get California to 100% zero-carbon energy by 2045, EO N-79-20 to phase out sales of gas-powered cars in the state by 2035, and EO N-82-20 to conserve 30% of the state's land and waters by 2030. Notably, besides SB 100 and the SB 32 target of 40% GHG reduction by 2030, all of these goals are established solely by executive order and thus, are not codified in statute.

Comments

- 1) Purpose of Bill. According to the author, "Climate change is the defining crisis of our time and it is happening even more quickly than we originally thought. No corner of this state is immune from the devastating consequences of climate change. The rising temperatures are fueling environmental degradation, sea level rise, weather extremes such as drought, food and water insecurity, economic disruption, ocean acidification, and catastrophic wildfires.
 - "According to experts, to avert the most catastrophic impacts of climate change, we must limit atmospheric warming to 1.5 degrees Celsius, which necessitates California reaching net zero emissions by mid-century.
 - "This bill would require the state to achieve net zero emissions as soon as possible, but no later than 2045 and net negative greenhouse gas emissions thereafter. This bill also requires an emissions reduction level of 85 percent."
- 2) Achieving net zero emissions is necessary to meet the challenge of the climate crisis. The continued acceleration of clean energy and carbon neutrality goals by cities, states, and countries reflects the reality of observed climate change impacts, and the dire calls of climate scientists. California has long been seen as a global leader on climate change, but as more data is gathered and catastrophes are endured, the world has become increasingly aware of the need for drastic action, unprecedented in scale and necessity. AB 1279 would set a new ambitious goal of 85% GHG emissions reduction by 2045, which would

be one of the most ambitious reduction-specific goals in the world. Furthermore, by committing California to achieving net zero emissions, AB 1279 will ensure California stops contributing to climate change and helps solve the climate crisis.

3) Setting ambitious reduction targets will clarify goals for the establishment of carbon dioxide removal strategies. There are many different scenarios wherein California could achieve net-zero emissions. One extreme possibility is to only modestly reduce emissions and rely on massive amounts of carbon dioxide removal (CDR). However, nature-based carbon dioxide removal is susceptible to forest fires or other reversals and engineered carbon removal is expensive and not widely deployed.

Alternatively, the state could cut emissions to zero. This would require absolutely herculean efforts in reducing emissions from all sectors of the economy, but would not necessitate any carbon removal to achieve net-zero status. The costs of developing and distributing zero-emission options for every single piece of energy generation, transportation, housing, industry, and all the rest of the state's economy would be tremendous.

Undoubtedly, the most realistic and achievable path to net-zero in California relies on a mixture of emission reductions and carbon removal. This bill establishes a goal of 85% emissions reductions below 1990 levels by 2045, which would result in residual annual emissions of roughly 64 million metric tons of CO₂ equivalents. This ambitious goal reaffirms California's commitment to emission reductions and would mitigate the risks associated with heavily relying on carbon dioxide removal strategies that are susceptible to delays, reversals, and other shortcomings.

This bill's enactment is contingent upon the enactment of legislation (SB 905) detailing how the state will responsibly develop and deploy CDR and CCUS strategies. The guidance on targets from this bill will help inform the goals of SB 905 and in turn the provisions of that bill will help California achieve the ambitious goals set forth in AB 1279. AB 1279 also wisely includes a provision for ARB to reassess the specific 85% goal in several years as new technologies become available and the state's experience with carbon removal strategies deepens. With this new information ARB will evaluate if the 85% reduction goal is still the best path to reach net zero by 2045, or if a new path is better. Passage of these two bills, along with other elements of the Governor's climate pillars, will require accelerated legislative action at the end of session,

which may make sense given the pressing severity of the climate crisis. AB 1279 and SB 905 will ensure California is doing everything it can to accelerate emissions reductions goals while continuing to grow its economy.

4) Ensuring transparency and accountability. Since establishing California's 2020 emissions target in AB 32 (2006), the Legislature has granted ARB the responsibility to chart a path to the state's goals and the authority to establish market-based compliance mechanisms and other regulations to achieve those goals. As a means to chart that path, ARB is required to release and update a Scoping Plan every five years. These Scoping Plan Updates provide a robust look at the suite of fiscal and policy levers that may be used to achieve the state's climate goals.

Despite the regular updates from the Scoping Plan, questions remain unanswered about our progress towards state goals. To address these concerns AB 1279 directs ARB to give annual reports to the Joint Legislative Committee on Climate Change Policies on progress towards its goals. It also directs the Legislative Analyst's Office to conduct independent analysis of ARB's progress every two years and prepare a public report with recommendations on improving our progress. This will ensure that the state remains on track in achieving this complex and ambitious goal.

Related/Prior Legislation

AB 1395 (Muratsuchi, 2021) declared that it is the policy of the state to achieve net zero greenhouse gas (GHG) emissions and reduce anthropogenic GHG emissions by at least 90% below the 1990 level no later than 2045. AB 1395 failed passage on the Senate floor.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

SUPPORT: (Verified 8/30/22)

350 Silicon Valley
Active San Gabriel Valle
California Environmental Voters
Calpine
Coalition for Renewable Natural Gas
Environmental Defense Fund
Families Advocating for Chemical and Toxics Safety
Greenbelt Alliance

Natural Resources Defense Council Nextgen California The Climate Center The Nature Conservancy

OPPOSITION: (Verified 8/30/22)

Agricultural Energy Consumers Association

Almond Alliance of California

Asian Pacific Environmental Network

Bay Area Council

Bia Bay Area

Boma California

Building Industry Association of Fresno/Madera Counties, Inc.

Building Industry Association of San Diego County

Building Industry Association of Tulare/Kings County, Inc.

California Agricultural Aircraft Association

California Building Industry Association

California Building Industry Association of Southern California

California Business Properties Association

California Business Roundtable

California Citrus Mutual

California Cotton Ginners & Growers Association

California Fresh Fruit Association

California Fuels and Convenience Alliance

California Grain & Feed Association

California Independent Petroleum Association

California League of Food Producers

California Manufacturers & Technology Association

California Poultry Federation

California Rice Commission

California Seed Association

Center for Biological Diversity

Central Coast Alliance United for a Sustainable Economy

Communities for a Better Environment

Earthjustice

Far West Equipment Dealers Association

Food & Water Watch

Home Builders Association of Kern County

Home Builders Association of The Central Coast

Indigenous Environmental Network

Leadership Counsel for Justice and Accountability
Los Angeles County Business Federation
NAIOP California
North State Building Industry Association
Pacific Egg & Poultry Association
Physicians for Social Responsibility - Los Angeles
Poder
San Francisco Bay Physicians for Social Responsibility
United Chamber Advocacy Network
Western Agricultural Processors Association
Western Plant Health Association
Western States Petroleum Association

ARGUMENTS IN SUPPORT: According to a coalition of environmental organizations, "There is no doubt that ambitious action is needed to address climate change and its impacts. The latest IPCC report underscores that absent immediate and aggressive efforts to reduce climate pollution and build resilience to the impacts of climate change, the climate challenges that we already face will continue to worsen, further threatening the health and wellbeing of communities and the environment.

"AB 1279 would codify a target for the state to achieve net zero greenhouse gas emissions as soon as possible, and by no later than 2045, and achieve and maintain net negative emissions thereafter, outlining a framework for reaching these goals that maximizes emissions reductions and ensures protection for communities and the environment. This includes a commitment to reducing greenhouse gas emissions 85% from 1990 levels by 2045. By doing this, the bill takes a critical step in addressing the climate disaster, ensuring that the state actively works towards minimizing its contribution to it, as it aims to achieve net zero and net negative greenhouse gas emissions.

"California has been recognized as a global leader in advancing climate policy, and AB 1279 is an important opportunity to continue this leadership and prompt other states and countries to adopt similar measures that respond to the climate disaster with urgency."

ARGUMENTS IN OPPOSITION: According to a broad coalition of opposed groups, "AB 1279 mandates the California Air Resources Board (CARB) to establish new climate goals to achieve 85% emission reductions by 2045, leading to massive reductions in new housing construction, agriculture production, energy, transportation, and all manufacturing. This is an extraordinarily aggressive goal

that would require large-scale transformation of California's entire economy.

WSPA opposes AB 1279 for the following reasons: Just six years ago, this Legislature passed SB 32 which sets a 40% GHG emission reduction below 1990 target by 2030. The state is in its first two year of implementing this new target and adding a new and more drastic target now is premature; It is estimated to cost Californians roughly \$4 trillion dollars over the next 25 years; It is a regressive mandate that will hit those at the lower end of the income spectrum the hardest. AB 1279 would cost every household in California \$5,600 to \$10,700 annually; It makes building housing more expensive by a minimum of \$50,000 per home; Risk hundreds of thousands of California jobs and could lead to companies moving to other states or countries causing emission leakage; Industries do not have the tools to comply with these types of goals; The Cap-and-Trade program that drives emission reductions from industries and was approved by the legislature with 2/3rds bipartisan support is set to expire in 2030; Policies to accelerate and promote Carbon Capture. Utilization, and Sequestration (CCUS) projects have been hijacked to make them too burdensome and unworkable, including to ban projects that actually reduce the carbon intensity of fuel in the state; CARB is currently, via the scoping plan, assessing how the state will meet the current goal, as well as a 2045 carbon neutrality goal which must include CCUS. This work should be completed prior to the authorization of a new goal in law; AB 1279 is tied to SB 905 which had little to no industry input and is so onerous that it will make CCUS projects nearly impossible to build in California."

Prepared by: Jacob O'Connor / Eric Walters / E.Q. / (916) 651-4108 8/31/22 10:09:01

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