Post-2020 Greenhouse Gas Regulation in California: Balancing Climate Goals and the Economy

In 2016, the Legislature passed a far-reaching revision of California's climate laws. The landmark greenhouse gas reduction policy that was adopted in 2006 will extend through 2030 and will significantly tighten down on greenhouse gas emissions.

In 2017, the Legislature took the necessary steps to extend the most cost-effective cornerstone regulation to aid the achievement of those goals, the cap-and-trade program.

Carbon Regulation in California

California is noted nationally and internationally as a force in climate change policy—as much for its ambition and reach as for the efficacy of its policies. California is especially conspicuous in the absence of comprehensive regulation in other states or by the federal government.

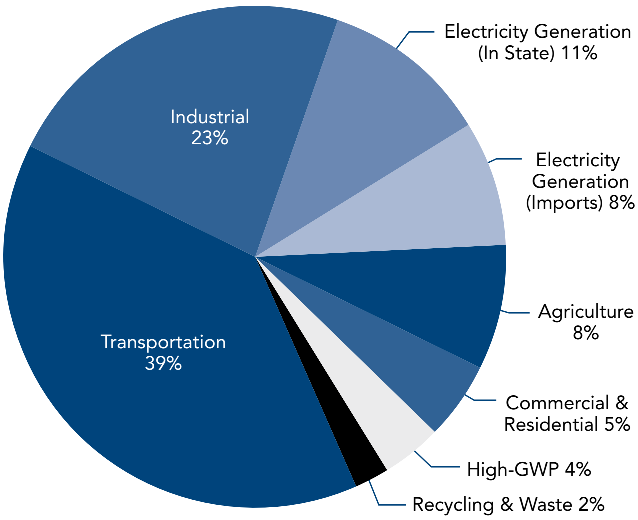
In 2006, Governor Arnold Schwarzenegger and the Legislature passed a landmark statute setting mandatory greenhouse gas emission reductions. AB 32 (Chapter 488, Statutes of 2006), authored by then-Assembly Speaker Fabian Núñez (D-Los Angeles), directed the California Air Resources Board (CARB) to develop a regulation to reduce greenhouse gas (GHG) emissions to 1990 levels by 2020, equivalent to a 30% reduction compared to a business as usual trend.

Unfortunately, though, many of the mechanisms the state's regulatory agencies have used to reduce carbon emissions have increased costs for businesses. For instance, there has been a sharp rise in electricity and transportation fuel prices. Regulators often rejected the most cost-effective approach or failed to give sufficient consideration to the economic impact of policy choices, both in the short-term and long-term. Furthermore, the reductions made to date have mostly targeted the low-hanging fruit. Continued progress toward more aggressive targets will require increasingly more difficult and costly changes to business processes, lifestyles and the economy that may be harder for Californians to absorb. Ultimately, the regulations may limit the ability of businesses to grow, despite overall improvements in the economy.

CARB's efforts to implement AB 32 and its myriad of regulatory measures continue to be a major issue for businesses and industries statewide that will be affected, either directly, or indirectly. California's GHG emission reduction strategies comprise more than just AB 32. Numerous complementary measures are aiding in the reduction of GHG emissions. Some of these measures include:

• **Vehicle fuel efficiency** (set by federal agencies)—sets the fuel economy for cars and light-duty trucks, currently 54.5 miles per gallon by model year 2025.

California Carbon Emissions by Source



2015 Total Emissions 440.4 $MMTCO_2e$

Source: California Air Resources Board, California's 2017 Climate Change Scoping Plan (November 2017).

• **Renewable portfolio standards** (set by statute and the Public Utilities Commission)—requires that 50% of retail sales of electricity come from eligible renewable resources by 2030.

• **Low Carbon Fuel Standard** (set by CARB)—requires the intensity of carbon in transportation fuel be reduced; currently the standard is set at a 10% reduction by 2020.

• **Energy efficiency standards** (set by the California Energy Commission)—reduces the amount of energy needed to provide goods and services.

Key Legislation Shaping Climate Policies

Climate change policy has been a major focus of Governor Edmund G. Brown Jr. and the Legislature over the last few years. Governor Brown set the agenda by highlighting climate change issues in his second inaugural address. The Governor stated that "(W)e are well on our way to meeting our AB 32 goal of reducing carbon pollution and limiting the emissions of heat-trapping gases to 431 million tons by 2020. But now, it is time to establish our next set of objectives for 2030 and beyond."

Greenhouse Gas Reduction Extension to 2030

Seeking an approach more consistent with the original path blazed by AB 32, Senator Fran Pavley (D-Agoura Hills), one

CalChamber

Expanding Opportunity
An Agenda for All Californians

2018 Business Issues and Legislative Guide

See the entire CalChamber 2018 Business Issues and Legislative Guide at
www.calchamber.com/businessissues
Free PDF or epub available to download.

Special Thanks to the Sponsors
Of the 2018 Business Issues and Legislative Guide

Premier

Chevron

Silver

Wells Fargo

Bronze

enterprise

Iron

Automobile Club of Southern California — We're always with you.®

manatt

of AB 32's original authors, authored SB 32 (Chapter 249, Statutes of 2016). The final version of the legislation was very simple. It set a new statewide goal of reducing GHG emissions at least 40% below 1990 levels by 2030. In addition, in an effort to address the concerns of environmental justice advocates about air quality in disadvantaged communities, the bill further required that the emission reductions should be prioritized within disadvantaged communities.

Conditions on How CARB Achieves Reductions

Alongside the passage of SB 32, a companion bill, AB 197 (Chapter 250, Statutes of 2016) by Assemblyman Eduardo Garcia (D-Coachella) was joined to SB 32 to provide additional oversight of CARB. Beyond the oversight component, however, the bill makes significant policy changes by placing conditions on how CARB must achieve the post-2020 GHG emission reductions.

A major focus of AB 197 was to ensure that emission reductions take place in disadvantaged communities and that those reductions are first being made at large stationary sources, such as refineries, followed by mobile sources (vehicles) and other stationary source facilities. This approach moves away from the current climate program by focusing on specific facilities rather than the overall statewide cap.

AB 197 further addressed concerns by advocates for communities affected by industrial pollution by requiring that CARB make available the information on GHG, criteria air pollutants and toxic air contaminants for all facilities covered in the cap-and-trade program.

The joining of SB 32 and AB 197 brings a radical shift in how the state will approach climate change policies post-2020. No longer will the focus be on GHGs; instead, the focus will include reductions of criteria pollutants, regardless of the cost-effectiveness and technological feasibility of GHG emission reductions.

Short-Lived Climate Pollutants

Short-lived climate pollutants (SLCPs) remain in the atmosphere for a shorter period of time than CO2, but their impact often is more intense. These pollutants were a focus of 2016 legislation by Senator Ricardo Lara (D-Bell Gardens). The bill, SB 1383 (Chapter 395, Statutes of 2016), requires a 50% reduction in black carbon, 40% reduction in methane and 40% reduction in fluorinated gases (HFCs) from 2013 levels by 2030. Although all these emissions are currently regulated directly or indirectly at the federal, state or local levels, CARB will now implement a new, parallel regulation focusing solely on SLCPs.

Major Differences Between Current CARB Cap-and-Trade Regulation and AB 398*

Design Feature	Current Regulation	AB 398 Extension (2021 Through 2030)
Setting Post-2020 Emissions Caps	Establishes the number of allowances issued each year through 2030.	When setting post-2020 caps, directs CARB to evaluate and address concerns related to a large number of banked allowances.
Banking	No expiration date for allowances; limits on the number of allowances an entity can hold at a time.	Directs CARB to adopt banking rules that "discourage speculation, avoid financial windfalls, and consider impact on complying entities and market volatility."
Price Ceiling	"Soft" price ceiling of about $60 per allowance in 2017, increasing gradually in future years.	Directs CARB to establish "hard" price ceiling and consider various factors when setting the level of ceiling.
Price Containment Points	None.	Directs CARB to establish two price containment points (also known as speed bumps) between the price floor and the price ceiling.
Offset Limits	Maximum of 8 percent of a covered entity's emissions.	Maximum of 4 percent in 2021-2025 and 6 percent in 2026-2030, with no more than half from projects that do not provide direct environmental benefits in California.
Industry Assistance	Different IAFs for high- (100 percent), medium- (75 percent) and low- (50 percent) risk industries from 2018 through 2020; not specified from 2021 through 2030.	100 percent IAFs from 2021 through 2030.

*Chapter 135 of 2017 (AB 398, E. Garcia).
CARB = California Air Resources Board and IAF = industry assistance factor.

Source: Legislative Analyst's Office, "Cap and Trade Extension: Issues for Legislative Oversight" (December 2017).

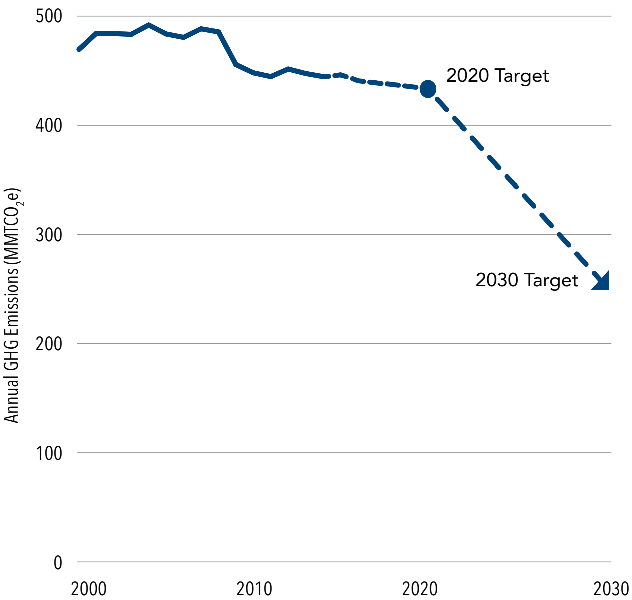
Under pressure by strong industry and business opposition to the measure, the author agreed at the last minute to amendments to assist the dairy and waste sectors with the methane reductions. Some of the amendments delayed the implementation of regulations while others reduced the total reduction obligation for the sectors. For example, SB 1383 limits the reduction requirements for dairy and livestock manure management to "up to 40%," down from the original strategy floated by CARB of a 75% reduction by 2030. It is unclear at this point how and from where the additional methane emission reduction will come. The final SLCP was adopted in March 2017 and additional workshops are being conducted to develop regulations to implement this strategy.

Senator Lara has announced that he will build on the SLCP in 2018 by introducing legislation to reduce HFCs. HFCs are found in air conditioning and refrigeration units. Although the SLCP already calls for a 40% reduction in HFCs, this new legislation, "The California Cooling Act," will include incentives to encourage businesses and residents to convert to lower-polluting refrigeration and air conditioning.

Cap-and-Trade Program Extension

The CARB has adopted a cap-and-trade regulation that places a cap on aggregate emissions from entities responsible for roughly 80%

California's Path Forward



Source: California Air Resources Board, California's 2017 Climate Change Scoping Plan (November 2017).

of the state's GHG emissions. Entities emitting in excess of 25,000 metric tons of GHGs are subject to the cap-and-trade scheme.

The cap-and-trade program has been operating since 2013 with the prices hovering around the floor price set by CARB. In 2014, Quebec joined California's program and in January 2015, motor vehicle fuels also came under the cap, significantly expanding the scope of the regulation. On January 1, 2018, Ontario joined the trading program. Over time, the majority of emission allowances will be auctioned by CARB, creating an enormous revenue stream that is deposited into the Greenhouse Gas Reduction Fund (GGRF) which, in turn, will be appropriated by the state Legislature for various programs related to climate change.

The Legislature adopted a cap and trade extension with a two-thirds legislative vote in 2017, which satisfied the California Chamber of Commerce legal challenge alleging the auction mechanism was a tax. The bill, AB 398 (E. Garcia; D-Coachella; Chapter 135, Statutes of 2017) extended the cap-and-trade through 2030, made many programmatic changes, included tax relief measures, established auction revenue expenditure priorities, and created new reporting and oversight requirements.

Programmatic Changes

• Establishes a price ceiling that will be set by CARB. This ensures that the cost for carbon will be capped at a certain price, providing additional certainty for obligated industries.

• Establishes two speed bumps (price containment points) at levels below the price ceiling. These will be set at two intervals to stabilize the market and control price spikes should they occur.

• Maintains industry assistance allowances from current compliance period, which is a cost containment measure.

• Evaluates and addresses concerns related to over-allocation in ARB's determination of the number of available allowances.

• Reduces offset limits to 4% in 2021–2025 and 6% in 2026–2030.

• Removes the refinery measure (20% reduction in GHGs from refineries) from the Scoping Plan update (See below).

• Prohibits an air district from adopting or implementing an emission reduction rule for carbon dioxide from stationary sources that also are subject to the cap-and-trade regulation.

• Requires CARB to develop approaches to increase offset projects in the state considering guidance provided by the Compliance Offsets Protocol Task Force.

• Establishes allowance banking rules that discourage speculation, avoid financial windfalls, and consider the impact on complying entities and volatility in the market.

Tax Relief Measures

• Suspends the State Responsibility Area (SRA) fire prevention fee from July 1, 2017 to January 1, 2031, and sunsets the SRA fee thereafter.

• Extends the existing manufacturers partial sales-and-use tax exemption for certain equipment from July 1, 2022 to July 1, 2030.

Spending Priorities

Although it did not include specific dollar amounts or percentages of expenditures, AB 398 established GGRF expenditure priorities through 2030:

• Air toxic and criteria air pollutants from stationary and mobile sources.

• Low- and zero-carbon transportation alternatives.

• Sustainable agricultural practices that promote the transitions to clean technology, water efficiency, and improved air quality.

• Healthy forests and urban greening.

• Short-lived climate pollutants.

• Climate adaptation and resiliency.

• Climate and clean energy research.

The legislation also included numerous reports and oversight measures to check on the progress of emission reductions, market performance, scoping plan updates, economic impacts of the program, offsets and workforce development.

To address environmental justice concerns that the cap-and-trade program is not dealing with criteria and toxic air pollutant reductions in certain communities, AB 617 (C. Garcia; D-Bell Gardens; Chapter 136, Statutes of 2017) was adopted. (See Community Air Monitoring issue summary.) This bill, in conjunction with the cap-and-trade extension, will radically change the way facilities will operate in the state. Additional cleanup legislation will be needed for both these bills, which are expected to continue to be a focus, not only of the regulators, but also the Legislature in 2018.

2017 Scoping Plan Update

California's population is anticipated to increase by 50% from 1990 to 2030.The increasing demand for energy and related GHG emissions will run headlong into the need to reduce per capita GHG emissions by 50% by 2030. California has some of the most ambitious clean energy mandates in the world and the state's industries are already among the most energy efficient.

The state has already made great strides in reducing GHGs, but many of those reductions were either low-hanging fruit or the result of a long and painful recession. Moving forward, the emission reductions will be much more difficult and expensive.

The 2030 Target Scoping Plan update process started in late 2015 (even before passage of SB 32), and a draft was released in January 2017. While initially considering three scenarios to meet the 2030 GHG reduction mandates, AB 398 required CARB to adopt by January 1, 2018 a scoping plan that designates the market-based compliance mechanism as the rule for oil and gas production facilities and petroleum refineries to meet their GHG reduction mandates. This meant that the CARB had to remove the intended refinery measure from the scoping plan.

Next, CARB will coordinate the 2030 target scoping plan with additional policies to aid in reducing GHG emissions. Although CARB's vision sets out the goals below, it also has stated its intent to coordinate efforts with other plans to achieve co-benefits and cross-agency coordination.

- SB 350—50% renewable energy mandate and doubling of energy savings in existing buildings.
- Increase of the Low Carbon Fuel Standard (LCFS)—reduce the carbon intensity of fuel by at least 18%.
- Mobile Source Strategy—improved air quality though cleaner technology and fuels in the transportation sector.
- Implementation of Short-Lived Climate Pollutant Strategy by 2030—reduction of high global warming potential gases.
- Increased stringency of SB 375 Sustainability Communities Strategy—reduction of GHGs through land use planning.
- California Sustainable Freight Plan—Improve freight efficiency and transition to zero-emission technologies.
- Cap-and-trade regulation.

The final proposed scoping plan was released in late November 2017 and was adopted at the CARB meeting on December 14, 2017.

The more GHG emissions are reduced, the more difficult and costly further reductions will be to achieve. Reductions will come at a greater expense than necessary and will have a significant impact on California's economy and business—not just those parties directly obligated under these programs, but all businesses that use energy.

In addition to the goals above, the CARB will integrate additional policies that reduce criteria pollutants and toxic emissions, addressing concerns from communities near industrial facilities and transportation corridors.

International Climate Change Efforts

Internationally, California has been working with other countries and jurisdictions to share best practices, develop policies, and make commitments under the United Nations Framework Convention on Climate Change, as well as under other bilateral agreements. It is important to note that, as a state, California cannot enforce international agreements, but can express its aspirations and intent, pass laws that implement those aspirations, and provide leadership and an example for other subnational or national governments to achieve.

The 2015 Paris Accord resulted in international leaders reaching an agreement on climate change. This agreement was ratified on October 5, 2016 and includes non-binding language on "Intended Nationally Determined Contributions." These contributions are a public declaration of what actions each country intends to take to address climate change. For example, the United States intended to reduce greenhouse gas emissions by 26%–28% below 2005 levels by 2025. The contributions from this agreement will include approximately 90% of global emissions (compared to 14% in the Kyoto Protocol). Seen as a success, the agreement in Paris envisions that all nations will contribute to the reductions; would in the aggregate limit temperature rises below 2 degrees Celsius; calls on developed nations to donate $100 billion annually to developing nations by 2020 to help those nations achieve GHG reduction goals without derailing their economies; and seeks publication of GHG reduction targets and a goal of carbon neutrality by 2050.

Governor Brown, along with a California delegation of lawmakers, business leaders and academics, attended the U.N. Climate Change Conference in Paris to sell the successes of California's climate change program and promote it as a model to the rest of the world. Before traveling to Paris, in a December 1, 2015 interview, Governor Brown stated, "Our goal is to take what we are doing in California and get others to join us, so we don't put ourselves as an outlier in an uncompetitive position."

On June 1, 2017, President Donald Trump pulled the United States out of the Paris Accord. Although this is a significant signal internationally and nationally about the administration's climate change policies, it will not have an impact on California or the policies that the state has in place.

In December 2017, Governor Brown returned to Paris and attended the One Planet Summit, on the two-year anniversary of the Paris Accord, to demonstrate California's commitment to climate change policies.

California's Climate Policy Portfolio

- Double building efficiency
- 50% renewable power
- More clean, renewable fuels
- Cleaner zero or near-zero emission cars, trucks and buses
- Walkable/Bikeable communitites with transit
- Cleaner freight and goods movement
- Slash potent "super-pollutants" from dairies, landfills and electricity
- Cap emissions from transportation, industry, natural gas and electricity
- Invest in communities to reduce emissions

Source: California Air Resources Board, California's 2017 Climate Change Scoping Plan (November 2017).

CalChamber Position

The California Chamber of Commerce will:

• Oversee the implementation of the Global Warming Solutions Act of 2006 (AB 32) and SB 32 (Chapter 249, Statutes of 2016) and subsequent legislation by advising the California Air Resources Board (CARB) and other relevant regulatory agencies about cost-effective strategies to reduce the state's greenhouse gas emissions.

• Support strategies that include market incentives, such as cap-and-trade, for industries to reduce emissions.

• Advocate climate solutions and market strategies that are fair and equitable.

• Discourage the pursuit of climate change legislation that would interfere with the ongoing implementation of current climate policies, increase the cost of compliance, or discourage business from locating or expanding in California.

• Help state lawmakers develop policies to bring new businesses to California and help employers reduce greenhouse gas emissions in the most cost-effective, technologically feasible manner.

• Advocate market principles and cost-effective solutions that will help reduce emissions on a global level without discouraging investment in California.

• Continue to monitor the progress of linking California's cap-and-trade program into a regional market.

Staff Contact
Amy Mmagu
Policy Advocate

amy.mmagu@calchamber.com
January 2018

CalChamber