California Statewide GHG Reduction Goals¹

1990 GHG emission levels by 2020 (AB 32)

40% reduction in GHGs below 1990 levels by 2030 (SB 32)

Net carbon neutrality by 2045 (Executive Order B-55-18)

80% reduction in GHGs below 1990 levels by 2050 (Executive S-03-05)

Regulatory Framework

Executive Order S-3-05

In 2005, the Governor of California signed Executive Order (EO) S-3-05, which established GHG emission reduction targets to reduce emissions as follows:

- -By 2010, reduce GHG emissions to 2000 levels
- -By 2020, reduce GHG emissions to 1990 levels
- -By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32

In September 2006, Governor Schwarzenegger signed Assembly Bill 32, the California Global Warming Solutions Act of 2006. This law requires California to reduce statewide GHG emissions to 1990 levels by 2020.

Senate Bill 32

On September 8, 2016, SB-32 was signed into law by Governor Jerry Brown. SB-32 sets into law the mandated reduction target in GHG emissions as written into Executive Order B-30-15.

Climate Change Scoping Plan

The Climate Change Scoping Plan was approved by the California Air Resources Board (ARB) in 2008, and outlines the State's plan to achieve emission reductions required in AB 32. The plan encourages local governments to adopt goals to reduce greenhouse gas (GHG) emissions by 15% below 1990's levels by 2020, 40% below 1990 levels in 2030, and 80% below 1990 levels by 2050 (CARB).

Executive Order B-30-15

On April 29, 2015, California Governor Jerry Brown announced E.O. B-30-15, which contains the following GHG emissions target:

- By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels
- The emission reduction target of 40 percent below 1990 levels by 2030 is an interim-year goal to provide substantial progress toward the ultimate goal of reducing emissions by 80 percent below 1990 levels by 2050.

In September 2018, Governor Brown signed Executive Order B-55-18, which established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter."

¹ This summary of State actions was prepared in November 2018 by PlaceWorks and Cadmus.

Local Context for Greenhouse Gas Emissions Reduction Goals

In 2015, Contra Costa County prepared a Climate Action Plan (CAP) to reduce GHG emissions in the unincorporated county, which relied upon the community-wide GHG emissions inventory completed in 2005 and updated in 2013. The inventory includes activities in the unincorporated areas of Contra Costa County within the County's jurisdictional control. The target set forth in the 2015 CAP is to reduce countywide emissions to 1990 levels by 2020, consistent with the GHG reduction target adopted by the State through the Global Warming Solutions Act (AB 32). To be consistent with SB 32, the CAP will need to be revised to include targets for 2030 . The 2005 baseline GHG Community-wide emissions inventory has been updated to include data from 2017, in accordance with the current methodology. The County is currently in process of updating the CAP.

Example Community-wide GHG Reduction Targets and Climate Action Strategies

County	GHG Emissions Reduction Target	Year	Climate Action Strategies
Santa Clara County	100% carbon neutrality by 2045	2045	 Decarbonizing the building sector through renewable energy credits Diesel Free by '33 initiative to eliminate diesel fuel from county operations by the year 2033. Phasing out oil and gas operations in the county
Los Angeles County	Net-zero emissions by 2050	2050	 Encourage renewable biogas projects at regional landfills Energy efficiency retrofits of wastewater equipment Identifies sustainable policies for new building design Encourage solar installation for new and existing buildings Expand and improve facilities for cyclists. Improve pedestrian network to promote walking and access to transit Enhance traffic signal synchronization Promote electric vehicle infrastructure Create bus priority lanes and improve transit facilities and amenities Establish electrification requirements for construction and landscaping equipment Limit idling time for heavy duty construction equipment Offer water saving rebates on domestic equipment

County	GHG Emissions Reduction Target	Year	Climate Action Strategies			
			 Reduce landfilled waste by diverting at least 75% of waste Achieve carbon sequestration through conservation and creation of new natural spaces 			
San Mateo County	100% carbon neutrality by 2045	2045	 Promote opportunities for businesses "greening" through local chambers of commerce and other partners. Require tree planting, shading design, solar orientation, "cool" hardscapes, and pervious and open-grid materials such as pavers, Provide incentives for anaerobic digesters and other technologies to promote waste diversion. Provide incentives for solar water heaters and reduce/remove permit fees for solar hot water energy installations. Employer transit subsidies fund fleet conversions to alternative and low- emissions fuels. Promote low-emissions agricultural practices. establish a list of best practices for agricultural management such as soil tillage and fertilizer management. Work toward zero waste through comprehensive recycling and composting programs, in addition to aggressive outreach efforts. Adopt recycling ordinances that incorporate new standards for trash, recycling, and composting collection enclosures. 			
Marin County	Net-zero emissions by 2045	2045	 Planting of trees with urban forestry practices Divert construction waste. Support alternate work schedules. Promote transportation alternatives. Support and integrate water district conservation efforts 			
Counties Outside CA						
Denver City and County	80% below 2005 levels by 2050	2050	 Municipal buildings 100% renewable energy by 2025 			

County	GHG Emissions Reduction Target	Year	Climate Action Strategies
			 Increase building code to net-zero energy for new buildings and to be significantly more stringent for existing buildings by 2035 Accelerate the adoption of electricity storage systems Increase the capacity and types of customer choice renewable programs available in Denver Establish mixed use development standards and incentives
Washtenaw County Michigan	Net-zero emissions for County Operations by 2035	2035	 Land conservation program protecting over 3,000 acres of natural area and farmland. Free weatherization services for incomequalified owners Green purchasing policies for county operations