Appendix H

Glossary

March 2026

Bay Area Regional Climate Action Plan

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2022 Scoping Plan for Achieving Carbon Neutrality (Scoping Plan)	The State of California's plan to reduce greenhouse gas emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045.
Active transportation/transit	Walking, biking, roller skating, using mobility devices (wheelchairs or e-bikes/scooters), and other non-motorized travel modes.
Behind-the-meter (BTM)	Refers to generating power on the customer's side of the utility meter, such as rooftop solar.
Blue carbon	Carbon captured by the world's ocean and coastal ecosystems.
Brownfield-to-brightfield projects	Deployment of clean energy (often solar) on brownfields (i.e. abandoned, underused, or idled properties, often former industrial or commercial lands, with environmental contamination from past uses).
Building decarbonization	Transitioning buildings away from gas appliances to clean electric alternatives, paired with energy efficiency.
Cap-and-Invest program	Regulation that establishes a declining limit on major sources of greenhouse gas emissions in California. The state issues a declining number of allowances (or permits) equal to the total amount of permissible emissions (or 'cap'), which decreases each year, Revenue raised through issuing allowances goes into the Greenhouse Gas Reduction Fund to support a variety of programs and projects.
Carbon neutrality	Achieved when the amount of carbon dioxide emissions (CO_2) emitted into the atmosphere is offset by an equivalent amount removed, such as through sequestration, resulting in net-zero CO_2 emissions.
Carbon sequestration	The process of removing and storing carbon dioxide from the atmosphere naturally or artificially.
Carbon sink	A system or mechanism which absorbs more carbon dioxide from the atmosphere than it releases.
Carbon stock	The amount of carbon stored in a certain "pool" such as terrestrial ecosystems (forests, grasslands, etc).

Clean energy	Zero-emissions technologies that produce electricity without emitting greenhouse gases or harmful air pollution. Renewable natural gas and biodiesel are not considered clean energy sources due to air pollution impacts of combustion. Hydrogen, depending on how it is generated and used, may or may not be considered a clean energy source.
Climate adaptation	Process by which natural and human systems adjust to a new or changing climate.
Climate action plan	A roadmap for a city, state, region, nation, organization or community that outlines actions to reduce greenhouse gas emissions and track progress toward emission reduction goals.
Climate change	Changes to the Earth's climate that affect weather, oceans, ecosystems, and global temperatures. Human activities are driving climate change, primarily through the reliance on fossil fuels to power the economy, homes, and transportation that results in emissions of billions of tons of greenhouse gases each year.
Climate resilience	The capacity for entities (individual, community, organization, or natural system) to prepare for (climate-related) disruptions, recover from (climate-related) shocks and stresses, and adapt and learn from them (BARC, paraphrased from LCI).
Cogeneration facilities	Facilities that produce electricity on-site and utilize the thermal energy, or heat, released during generation of electricity for other processes.
Community-based organization (CBO)	A nonprofit or grassroots organization entity that operates within, serves, and is accountable to a specific geographic or demographic community, focusing on addressing local social, economic, health, or civic needs through direct services, advocacy, community organizing, and resident/worker engagement (MTC).
Community Choice Aggregators (CCAs)	Electricity providers who purchase electricity on behalf of the residents and businesses in their communities. They are public entities run by a city or county government or by a joint powers authority made up of two or more participating cities or counties.

Community solar	Solar projects or purchasing programs within a specific geographic area that benefit multiple customers such as individuals, businesses, nonprofits, and other groups. Customers typically subscribe to or own a portion of a solar array and receive credits on their electric bills for the power generated by their share (DOE).
Criteria air pollutants	Six air pollutants that the Clean Air Act directs the U.S. EPA to set standards for: particulate matter, ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide and lead. These pollutants can harm human health and the environment, and cause property damage.
Decarbonization	Transitioning fossil fuel energy-using appliances, equipment, and vehicles to clean electric alternatives, paired with energy efficiency.
Demand flexibility	Solutions that adjust energy usage to match electricity supply and can shift demand from periods when electricity is more expensive, polluting, and scarce to when it is cheaper, cleaner, and more plentiful (CEC).
Distributed energy resources (DERs)	Devices and technologies that interface with the electricity system at the building level by directly connecting to a utility's wires or on a customer's property behind the utility meter. Examples include rooftop solar and battery storage, electric vehicles and their charging stations, microgrids, as well as more traditional demand response resources and energy efficiency strategies (CEC).
Distribution lines	Power lines that deliver electricity from distribution substations (where voltages are reduced) to individual customers.
Electric vehicles	Vehicles that can be powered by electric motors that draw electricity from batteries and are capable of being charged by plugging into an external electrical source.
Electrification	Transitioning gas appliances, equipment, and vehicles to electric alternatives, paired with energy efficiency.
Embodied carbon	Greenhouse gas emissions from the lifecycle of materials, from raw material extraction, manufacturing, transport, and construction, to maintenance and eventual disposal.

Emergency diesel back-up generator (BUG)	Stationary power systems that supply electricity during a power outage in commercial, industrial, and residential buildings and homes by burning diesel fuel. These units should exclusively be operated for emergency use or for reliability-related activities.
Environmental justice	This term refers to the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Gov. Code, § 65040.12(e)(1)). Dr. Bunyan Bryant, a pioneering environmental justice scholar, defines environmental justice as "...cultural norms and values, rules, regulations, behaviors, policies, and decisions [that] support sustainable communities where people can interact with confidence that the environment is safe, nurturing, and productive. Environmental justice is served when people can realize their highest potential … where both cultural and biological diversity are respected and highly revered and where distributive justice prevails."
Equity	In environmental justice work, equity is often defined as increasing access to power, redistributing, and providing additional resources, and eliminating barriers to opportunity to empower historically marginalized or otherwise disadvantaged communities to thrive and reach full potential (Bay Area Air District, paraphrased from the Greenlining Institute).
Feed-in tariff (FIT)	A standardized, long-term, guaranteed contract that enables smaller local renewable energy projects to sell power they generate directly to the local utility or another power provider. Market-based, cost-effective feed-in-tariffs with streamlined interconnection allow local entities, such as businesses, residents, and organizations, to install clean local energy projects in available spaces (Clean Coalition). MCE and Sonoma Clean Power currently have feed-in tariff programs.
First mile/last mile	The start or end of a trip, bridging public transit from the trip's origin and to its destination, e.g. walking to or from a bus stop.

Frontline communities	Communities who bear the brunt of the impacts from fossil fuel dependence, including poor air quality, and are often the first to experience climate impacts such as extreme heat. They may include communities of color, lower-income neighborhoods, and other historically marginalized groups and communities They are identified in the BARCAP region by using the US EPA Inflation Reduction Act Disadvantaged Communities tool and two frameworks used by Bay Area regional agencies to identify priority communities for regional planning efforts: the Assembly Bill 617 communities framework and the MTC Equity Priority Communities framework. To learn more about the data and tools used to identify frontline communities visit: BARCAP's Frontline Communities Map.
Global warming potential (GWP)	A measure of how much heat a specific greenhouse gas traps in the atmosphere, or its potential to warm the planet, relative to the same amount of CO_2. For example, over 100 years, a ton of methane produces an amount of heat equivalent to 34 tons of CO_2.
Greenhouse gas (GHG)	Gases that absorb and trap heat energy emitted from the Earth's surface, reradiating some of it back towards the surface and warming the atmosphere. Greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, halogenated fluorocarbons, ozone, perfluorocarbons, sulfur hexafluoride, and hydrofluorocarbons.
Grid-enhancing technologies	Sensors, power flow control devices, and analytical tools that maximize electricity transmission across the existing electric system or grid. They can reduce the need for new electric transmission infrastructure by increasing efficiency and capacity, and enabling the addition of clean, renewable power to the grid (DOE).
Hazardous air pollutants	Also known as toxic air contaminants, toxic air pollutants or air toxics, these pollutants may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health.
Heat pump space heaters	Space heating appliances that operate on electricity and use mechanical compression and evaporation (i.e. refrigerant cycle) to transfer thermal energy instead of generating heat directly by gas combustion, making them 3-5 times more efficient than natural gas options.

Heat pump water heaters	Water heaters that operate on electricity and use a refrigerant cycle to transfer heat from the surrounding air to the water instead of directly heating the water with gas combustion, making them 3-5 times more efficient than natural gas options.
Heavy-duty vehicle	Vehicles with a gross vehicle weight rating above 10,000 pounds.
Just transition	The California Workforce Development Board defines just transition as “integrated policy approaches offering protection, support, and compensation for displaced workers and communities in specific industries or regions” (CWDB).
Light-duty vehicle	Vehicles with a gross vehicle weight rating less than 8,500 pounds.
Load flexibility	Solutions that adjust load (or energy usage) to match electricity supply and can shift load or demand away from periods when electricity is expensive, polluting, and scarce to when it is cheaper, cleaner, and more plentiful (CEC).
Load shifting	The ability to shift or reduce electric demand from times of high demand (and often higher cost) and scarcity to periods of lower demand (CEC). This is often accomplished through electricity management equipment such as smart devices.
Medium-duty vehicle	Vehicles with a gross vehicle weight rating between 8,501-10,000 pounds.
Micro-grid	A small, local power system with its own power generators and distribution lines that supplies power to a specific area, such as a single building or group of buildings. It can connect to the main grid or operate as one single controllable entity independent of the main grid when necessary.
Nature-based solutions	Actions aimed at protecting, conserving, restoring, and sustainably managing natural lands and ecosystems, to address societal, economic and environmental challenges like climate change and its impacts (UNEP).
Reach code	An ordinance adopted by a local government that creates additional requirements going beyond those required by state statute.

Reconductoring	Replacing old, existing power line conductors with newer, more efficient conductors, which can increase how much electricity they can carry.
Redlining	Policies and practices that financing entities and governments deployed to segregate communities of color in “declining” neighborhoods while reserving the “best” and most “desirable” neighborhoods for white communities (Bay Area Air District, paraphrased from CalEPA).
Renewable energy	Energy produced from natural and continually replenishing resources such as sunlight, wind, water, and heat from the earth’s core (DOE).
SB 1383	California State Senate Bill 1383, the Short Lived Climate Pollutant Act, aims to reduce organic waste going to landfills by 75%, and recover and redirect 20% of currently wasted edible food to feed people.
Transmission lines	High-voltage power conductors that transmit electricity over long distances, from electricity generation sites to substations and the local power distribution system.
Transportation Demand Management (TDM)	Policies, programs, information, services, and tools to reduce single occupancy vehicle (SOV) trips by promoting public transit, carpooling, biking, walking, and flexible work schedules.
Vehicle miles traveled (VMT)	The number of miles a vehicle is driven that can be used as a metric to measure the number of miles traveled for all vehicles in a geographic region over a given time period. Annual VMT denotes the miles driven over a one-year period.
Vehicle-to-everything	Also known as bi-directional electric vehicle charging, it allows vehicle owners to use the energy stored in the electric vehicle’s battery to power homes, buildings, the wider grid, and other devices.
Virtual power plants (VPP)	Software-based system to manage distributed energy resources, such as rooftop solar, batteries, electric vehicle chargers, and appliances *(including smart thermostats, smart water heaters, smart plugs),* to support the electric grid and reduce costs to consumers. By aggregating distributed energy resources, they can help reduce the need for additional grid infrastructure and enhance local resilience.

Wildland-urban-interface (WUI)	The zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland (FEMA).
Zero-emission vehicle (ZEV)	A vehicle that does not emit tailpipe emissions including air pollutants, toxic air contaminants, or greenhouse gas emissions.
Zero-NO_x building appliance rules	The Air District's Rules 9-4 and 9-6 that phase in requirements to reduce nitrous oxides (NO_x) from space and water heating appliances.