

Appendix B
LOCAL ACTION

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This appendix provides examples of local actions that can support the State's climate goals. It is organized into two categories: (A) local municipal code changes, zoning changes, or policy directions that could apply broadly to the community within the general plan or climate action plan area; and (B) mitigation measures that could be required of individual projects under the California Environmental Quality Act (CEQA), if feasible, when the local jurisdiction is the lead agency.

This appendix should be viewed as a general reference document. It should not be interpreted as official guidance or as dictating requirements for a city or county in addressing greenhouse gases (GHGs) in its General Plan or for local project CEQA mitigation.

This is not considered an exhaustive list, nor does it represent the complete list of actions identified by the State to help meet the 2030 target. Local governments are encouraged to examine additional policies and refine existing policies and measures to address GHG emissions to meet their specific needs. Not all of the listed local measures or CEQA measures listed will be relevant to, or appropriate for, a given area or project. Nothing in the Scoping Plan or this appendix limits the discretion conferred to lead agencies in determining the appropriate level and type of mitigation, so long as their decisions are supportable by evidence in the record as required by CEQA. There is no "one size fits all" solution and different policies will be more suitable in urban and suburban areas versus rural areas, among other considerations.

Climate change planning documents from the California Air Pollution Control Officers Association (CAPCOA) provided the basis for much of the content in this appendix. It should also be noted that the Governor's Office of Planning and Research has been engaged in a thorough update of the *General Plan Guidelines (GPG)*. The new GPG will include resources, data, tools, and model policies to help cities and counties update their general plans. Internet links to the CAPCOA planning documents, GPG update, and other references, are listed in Section C of this appendix.

A. Examples of local municipal code changes, zoning changes, or policy directions that could apply broadly to the community within the general plan or climate action plan area:

Energy

- Streamline permitting and environmental review and reduce fees for small-scale renewable energy systems
- Adopt a community solar program to help realize economies of scale and help residents without appropriate rooftop space to participate in clean energy generation

Energy (continued)

- Promote property-assessed clean energy financing districts or other financing mechanisms to fund permanent energy-efficiency, water-efficiency, and renewable energy improvements in the residential and commercial sectors
- Adopt local ordinances to require energy-efficiency upgrades for existing buildings at the time of a major remodel or change of ownership
- Reduce permit fees and streamline permitting requirements for energy-efficiency- and renewable energy-related building renovations
- Implement building energy audit and retrofit programs and residential solar programs
- Adopt residential and commercial energy conservation, renewable energy, and/or zero net energy ordinances (consider requirements for audits or upgrades at major renovation or time of sale)
- Incorporate renewable energy and energy efficiency into public facilities' capital improvements
- Replace public lighting with energy-efficient lighting
- Permit renewable energy generation facilities as of right in zones with compatible uses
- Create incentive programs to promote the building energy-efficiency projects
- Implement large-scale energy storage in commercial and industrial buildings to control peak loads
- Require new residential and commercial construction to install solar or be solar ready
- Encourage the development of brightfields – brownfields that are used to develop solar energy – through tax incentives, streamlining, and use of locally-owned land
- Pursue renewable energy development on municipal buildings or purchase renewable energy to power municipal operations
- Require on-site renewable energy generation by large-scale residential and commercial projects
- Incentivize energy-efficiency upgrades to existing buildings, where appropriate, upon issuing a permit for substantial modification

Transportation and Land Use

- Update Lead Agency's transportation impact analysis guidelines and congestion management plans to comply with SB 743
- Adopt general plan policies and diagram designations and zone map and standards that are consistent with the Sustainable Communities Strategy
- In appropriate locations, adopt: 1) as-of-right zoning, and 2) design standards and guidelines, to enable mixed use, walkable, compact, infill development that includes a range of housing types and affordability levels
- Adopt an urban growth boundary
- Streamline permitting and environmental review and reduce fees for construction of secondary units to promote infill in targeted areas
- Streamline local permitting and siting for hydrogen fueling and electric vehicle (EV) charging infrastructure

Transportation and Land Use (continued)

- Adopt a jurisdiction-wide transportation demand management plan which sets numeric targets or caps for the proportion of non-single occupancy vehicle (SOV) trips associated with new development, and/or an overall vehicle miles traveled (VMT) target
- Require employer-based trip reduction programs and provide funding to support them if feasible
- Update code of ordinances to reduce parking requirements and eliminate parking minimums; impose parking maximums
- Adopt and implement EV and hydrogen readiness plans
- Adopt green building standards that exceed minimum State building standards for EV-capable parking spaces (e.g., by requiring installation of EV chargers and/or a larger number of EV-capable parking spaces) or match local climate action plan goals
- Replace public fleet vehicles and trips with electric or alternative fueled vehicles as much as feasible and provide EV chargers in public spaces
- Adopt and implement a bicycle and pedestrian master plan which includes targets for trips taken by bicycle and on foot
- Adopt complete streets policies and active design guidelines
- Develop a transportation impact fee program to fund low-carbon transportation
- Support biogas use in the transportation sector
- Provide incentives for certifying development plans and projects using LEED for Neighborhood Development or similar third-party certification system.
- Partner with local/regional transit agencies to enhance transit ridership
- Adopt a Transportation Management Ordinance to require carpool, electric vehicle, and/or vanpool preferential parking spaces close to the major employment areas
- Promote a Safe Routes to School Program that encourages youth to walk or ride bicycles to schools
- Promote Safe Routes to transit programs for pedestrians and bicyclists
- Promote intelligent traffic management systems to improve traffic flow
- Promote use of alternative fuel or high-fuel efficient vehicles by public agencies and private businesses
- Require local public agencies to contract with fleets that set targets and policies for lowering the average GHG emissions of their fleet vehicles
- Require clean vehicles be purchased as part of municipal vehicle fleet procurement
- Adopt regional joint-purchase agreements to facilitate local fleets to purchase EVs, hybrids, telematics, and other technology that can reduce GHG emissions
- Require local specific plans for rideshare-designated parking spaces, new bus stops, employment centers, and commercial areas
- Expand transit and rail services and clean-fueled transit vehicles
- Promote ridesharing and last-mile connections
- Create incentives for electric landscaping power tools and off-road equipment
- Promote smart driving strategies through public education and outreach
- Restrict idling for all vehicles, especially in sensitive areas such as near schools

Natural and Working Lands (NWL)

Policy in this sector should balance carbon sequestration with other co-benefits. The overall objective is to maintain NWL as a carbon sink and minimize the net GHG and black carbon emissions associated with management, biomass disposal, and wildfire events. Examples that could be considered include:

- Incorporate NWL conservation into local land use plans including adoption of a natural and working lands climate plan, land climate plan, and the recognition of the climate resiliency benefits of NWL
- Adopt policies that encourage management practices known to enhance carbon sequestration on NWL
- Adopt policies to expand urban forests for net long-term carbon storage
- Adopt urban forestry and green infrastructure programs
- Adopt zoning to allow empty lots and other underutilized space to be converted into community gardens
- Adopt ordinances preserving and enhancing carbon sequestration of wetlands, forests, croplands, and grasslands
- Adopt plans to conserve lands, water, and other natural features and resources for habitat and natural community
- Adopt ordinances preserving trees through the review of proposed land use developments where trees are present on either public or private property
- Adopt plans and support projects for forest management activities to restore California forest lands that have high tree mortality and unnaturally dense fuel loads to a fire resilient condition that will mitigate wildfire size and severity
- Promote and encourage the development of value-added alternatives, such as composting, energy, biochar, and wood products to avoid open burning of forest biomass wastes
- Develop strategies to value the benefits of forest fuels reductions on upper-watershed water quality, quantity, and timing
- Carbon sequestration through compost amendment to rangelands

Agriculture

- Incorporate farmland conservation in local land use plans
- Provide incentives for carbon sequestration and carbon-based conservation farming techniques, including the use of biochar and compost from biomass wastes that would have otherwise been landfilled or open burned
- Promote value-added alternatives, such as composting, energy, biochar, and wood products, and prohibit open burning of agricultural biomass wastes
- Develop incentives to reduce applications of pesticides and fertilizers
- Support development of farmers markets and provide guidance and support for local farmers, especially in disadvantaged communities
- Develop programs to encourage use of composting to enhance soil for carbon sequestration and soil healthy farms plans
- Promote low carbon diets
- Promote grazing management and animal dietary strategies to reduce methane emissions from enteric fermentation

Agriculture (continued)

- Require best management practices for livestock waste for confined animal facilities

Water

- Adopt water-efficient landscaping ordinances, including the use of compost and mulch, to reduce water use and encourage use of greywater for landscaping, when available
- Develop a plan requiring water recycling, and greywater and rain water reuse and provide funding for incentives and other program delivery mechanisms if feasible
- Develop a plan to quantify and reduce GHG emissions at publicly operated treatment works (POTWs)
- Develop a residential water efficiency auditing program
- Create an incentive program to promote efficient water use projects
- Eliminate Homeowner Association requirements for lawns and landscaping
- Work with local water agencies to evaluate the impact of proposed new developments and land use plans on groundwater and long-term water supply

Waste Management

- Prohibit disposal of organic materials at landfills and/or prohibit the jurisdictions' hauler(s) and self-haulers from taking organic material to landfills
- Require that collected organic materials be used in edible food recovery programs or as feedstock for composting and anaerobic digestion; include assessment of 15 years organics recycling capacity needs in the General Plan; and provide appropriate zoning in compatible areas for large and community-scale composting and digestion operations
- Require implementation of residential and commercial recycling, organics collection, and edible food recovery programs
- Require generators of edible food to have contracts/agreements with food rescue organizations and prohibit edible food from being disposed or destroyed
- Implement a green-waste and/or food waste collection program
- Adopt ordinances to meet zero waste goals by 2020
- Adopt ordinances requiring hauling routes and fuels that minimize vehicle emissions compared to current practices (e.g., through use of renewable fuels, route optimization plan, etc.)
- Adopt a construction & demolition waste recycling ordinance
- Adopt an ordinance for zero waste from construction and demolition waste
- Adopt green building standards that include targets to exceed minimum State building standards for new construction, including requiring new construction to include bin space for organics recycling
- Require that landfills incorporate the financial impact of organics disposal reductions pursuant to SB 1383 into their Financial Assurance plans
- Create an effective solid waste management plan to reduce source generation and to divert waste from landfills to achieve emission reductions

Waste Management (continued)

- Ensure compost materials meet standards to be used in rural lands application for carbon sequestration
- Expand anaerobic digestion capacity at existing wastewater treatment plants to allow them to accept food waste
- Require zero waste public events
- Require food waste reduction at commercial facilities such as restaurants, hotels, hospitals, etc., including food donations
- Require large commercial landscapers to use compost-based nutrients and soil amendments on landscaping and plants instead of artificial fertilizers and soil amendments

Short-Lived Climate Pollutants

- Require biogas generation at wastewater treatment plants and methane capture at landfill facilities
- Require that air conditioning and refrigeration units in new construction (and at major renovation) rely on refrigerants with low global warming potential (e.g., they use CO₂ or ammonia instead of hydrofluorocarbons)
- Promote alternative disposal options for woody biomass wastes and prohibit open pile burning
- Support hazardous fuel reduction, defensible space clearing and forest fuel reduction in rural forested areas with high tree mortality and unnaturally high fuel loads to reduce the size and severity of catastrophic wildfires which reduces the release non-anthropogenic black carbon and methane
- Adopt use of low global warming potential (GWP) alternative refrigerants
- Work with local utility and waste management agencies to adopt a curbside program for old refrigerators, air-conditioning units, and automobiles to ensure proper disposal of refrigerants
- Adopt programs, ordinances, or regulations to reduce wood smoke from residents, commercial, and recreational activities
- Require alternatives to wood heating such as heat pumps or gas heating devices in new developments, in appropriate climate zones, where infrastructure is available
- Provide incentives to reduce wood smoke by changing out uncertified wood heating devices to gas, electric, or pellet devices

Green Buildings

- When determined to be feasible and achievable within the local jurisdiction, adopt "Tier 2" residential and commercial green building standards of the 2016 California Green Building Standards (CALGreen Code), or a third party green building certification such as the LEED or GreenPoint rating systems
- Incentivize or require electrification of residential heating for new construction, and provide incentives to convert existing residences from natural gas to electricity

Green Buildings (continued)

- Incentivize or require implementation of CALGreen Code building code requirements to divert and recycle construction and demolition waste, and use locally-sourced building materials and recycled content building materials, including mulch/compost, to the extent possible
- Adopt Guidelines for incentivizing new buildings to maximize energy conservation designs to promote passive solar energy generation, natural ventilation, effective use of daylight, or other on-site electricity generation
- Encourage the use of renewable energy and storage
- Link green building with transportation planning to encourage lowest possible transportation impacts
- Develop strategies and goals to reduce urban heat islands through cool roofs, urban forestry (shade trees) and cool non-roof surfaces, including covered parking areas with PV systems to provide shading
- Require cool roofs and/or green roofs on new construction, for all buildings or a subset (commercial, multi-family, etc.) of building types
- Require cool paving and/or light reflective permeable surfaces in sidewalks, patios, driveways, parking lots, or other paved areas

B. Examples of potentially feasible mitigation measures that could be considered for individual projects under CEQA when the local jurisdiction is the lead agency.

Construction

- Enforce idling time restrictions for construction vehicles
- Require construction vehicles to operate with the highest tier engines commercially available
- Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible
- Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance
- Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators
- Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available
- Require diesel equipment fleets to be lower emitting than any current emission standard

Operation

- Comply with lead agency's standards for mitigating transportation impacts under SB 743
- Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals

Operation (continued)

- Allow for new construction to install fewer on-site parking spaces than required by local municipal building code, if appropriate¹
- Dedicate on-site parking for shared vehicles
- Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects
- Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan
- Require on-site renewable energy generation
- Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size developments
- Require cool roofs and “cool parking” that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing
- Require solar-ready roofs
- Require organic collection in new developments
- Require low-water landscaping in new developments. Require water efficient landscape maintenance to conserve water and reduce landscape waste.
- Achieve Zero Net Energy performance targets prior to dates required by CALGreen
- Require new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program or the LEED rating system
- Require the design of bike lanes to connect to the regional bicycle network
- Expand urban forestry and green infrastructure in new land development
- Require preferential parking spaces for park and ride to incentivize carpooling, vanpooling, commuter bus, electric vehicles, and rail service use
- Require a transportation management plan for specific plans which establishes a numeric target for non-SOV travel and overall VMT
- Develop a rideshare program targeting commuters to major employment centers
- Require the design of bus stops/shelters/express lanes in new developments to promote the usage of mass-transit
- Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available
- Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment
- Require the design of the electric boxes in new residential unit garages to promote electric vehicle usage
- Require electric vehicle charging station (Conductive/inductive) and signage for non-residential developments
- Provide electric outlets to promote the use of electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands

¹ This is not to be confused with the Americans with Disabilities Act (ADA) requirements or other minimum parking requirements for dedicating space to clean air vehicles and/or EV charging infrastructure.

Operation (continued)

- Require each residential unit to be “solar ready,” including installing the appropriate hardware and proper structural engineering
- Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans
- Require each residential and commercial building equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers
- Require large-scale residential developments and commercial buildings to report energy use, and set specific targets for per-capita energy use
- Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets
- Require the use of energy-efficient lighting for all street, parking, and area lighting
- Require the landscaping design for parking lots to utilize tree cover
- Incorporate water retention in the design of parking lots and landscaping
- Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district
- Require the project to purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry determined to be acceptable by the local air district
- Encourage the applicant to consider generating or purchasing local and California-only carbon credits as the preferred mechanism to implement its off-site mitigation measure for GHG emissions and that will facilitate the State’s efforts in achieving the GHG emission reduction goal

C. Additional References

- California Air Pollution Control Officers Association, “Model Policies for Greenhouse Gases in General Plans: A Resource for Local Government to Incorporate General Plan Policies to Reduce Greenhouse Gas Emissions”, June 2009 – accessible here: <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-ModelPolicies-6-12-09-915am.pdf>
- California Air Pollution Control Officers Association, “Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures,” August 2010 – accessible here: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>
- Governor’s Office of Planning and Research, “General Plan Guidelines” – accessible here: https://www.opr.ca.gov/s_generalplanguidelines.php

Additional References (continued)

- For a range of local climate actions that include public health, please refer to the CDPH guidance document, “Climate Action for Health: Integrating Public Health into Climate Action Planning” (February 2012)—accessible here:
https://www.cdph.ca.gov/programs/Documents/CAPS_and_Health_Published3-22-12.pdf
- Governor’s Office of Planning and Research, “Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA,” January 2016—accessible here:
https://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf