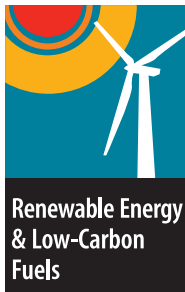


Sustainability Best Practices Framework



About ILG's Sustainable Communities Program

The Institute's Sustainable Communities program helps local officials and staff identify and apply policies and best practices that support sustainable communities — places that foster and maintain a high quality of life for their residents on an ongoing basis. www.ca-ilg.org/Sustainability

Sustainability Best Practices Framework: Options to Consider

The Institute for Local Government's Sustainability Best Practices Framework offers options for local action in ten areas. They are drawn from practical experiences of cities and counties throughout California. The options vary in complexity and are adaptable to fit the unique needs and circumstances of individual communities.

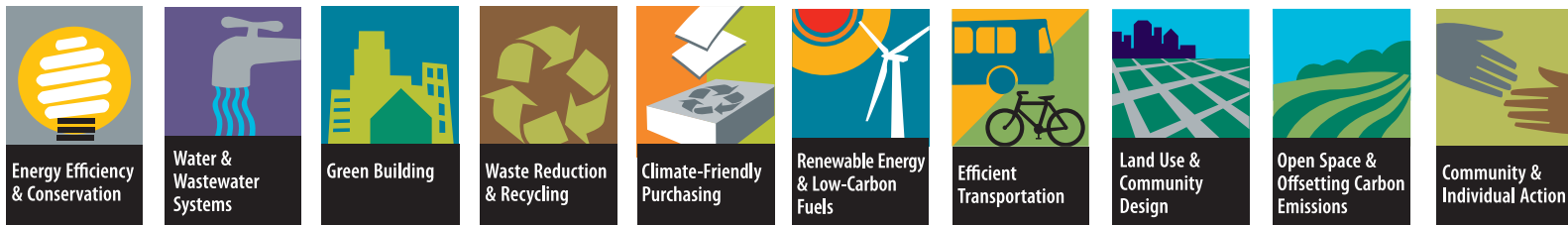
Local officials and staff may use the framework in a variety of ways, including to:

- Generate ideas about programs and policies to pursue;
- Inform a comprehensive climate action planning process; or
- Integrate sustainability into general plan policies.

Many of the activities can lead to multiple benefits, including:

- Reduced greenhouse gas emissions;
- Energy, water, fuel and cost savings;
- Improved health; and
- Increased resilience to climate change impacts.

Sustainability Best Practices Framework



Feedback Welcome

The Sustainability Best Practices Framework highlights the ongoing good work at the local level to save energy and reduce greenhouse gas emissions. It is an evolving resource. New ideas are welcome, along with any materials or background information that may benefit local agencies. Please email us at sustainability@ca-ilg.org.

About the Institute for Local Government

The Institute for Local Government (ILG) is the nonprofit research affiliate of the League of California Cities and the California State Association of Counties. The Institute's mission is to promote good government at the local level with practical, impartial and easy-to-use resources for California communities. www.ca-ilg.org

The activities can also help make communities more attractive places to live, work and conduct business. Learn more about the co-benefits of sustainability strategies at www.ca-ilg.org/SustainabilityCo-Benefits

Updated Sustainability Best Practices Now Available

First released in 2008, the Sustainability Best Practices Framework has gone through several iterations, including the most recent 2013 update.

The new updates reflect activities local agencies, including cities and counties, participating in the Beacon recognition program have undertaken, technological advancements, and policy changes at the state level. Like the original Best Practices Framework, these updates have been peer-reviewed and reflect input from local and state officials, technical experts and others. www.ca-ilg.org/SustainabilityBestPractices

More Information to Support Local Efforts

Visit the Institute's website (www.ca-ilg.org/SustainabilityBestPractices) to read stories and watch videos (www.ca-ilg.org/BeaconAwardVideos) about local sustainability efforts from around California and to access resources to support efforts in the ten best practice areas.

Additionally, join the Institute's Sustainable Communities Learning Network LinkedIn group (www.ca-ilg.org/SCLNLinkedIn), which enables local agency sustainability practitioners to connect, exchange information, discuss best practices, and seek feedback directly from their peers.

Sustainability Best Practices Framework



**Local Leadership Toward
Solving Climate Change**

About the Beacon Program

The Beacon program, sponsored by the Institute for Local Government and the Statewide Energy Efficiency Collaborative, recognizes and supports California cities and counties that are working to reduce greenhouse gas emissions, save energy and adopt policies and programs that promote sustainability. Learn about the Beacon program and participant accomplishments at www.ca-ilg.org/BeaconAward.

The program is funded by California utility customers and administered by Southern California Gas Company, San Diego Gas & Electric Company, Pacific Gas and Electric Company and Southern California Edison, under the auspices of the California Public Utilities Commission.

The Statewide Energy Efficiency Collaborative (SEEC) is an alliance to help cities and counties reduce greenhouse gas emissions and save energy. SEEC is a collaboration between three statewide non-profit organizations, including the Institute for Local Government, and California's four investor-owned utilities. www.californiaseec.org





Energy generation is the second largest source of greenhouse gas emissions. Thus, strategies to conserve energy and use it more efficiently in agency operations and the community help reduce greenhouse gas emissions. In addition, energy efficiency and conservation measures save money and resources.

For other energy-related best practices: see Green Building and Water and Waste Water Systems areas.

Energy Efficiency & Conservation

Options to Consider

Agency

Audits and Assessment

- Audit energy use of agency buildings to identify opportunities for energy savings through efficiency and conservation measures.
- Use energy management software to monitor real-time energy use in agency buildings to identify energy usage patterns and abnormalities.
- Conduct commissioning and retro-commissioning studies of agency buildings, including equipment such as heating, ventilation and air conditioning (HVAC) and lighting systems to ensure they are operating as designed and installed.
- Benchmark energy use of major agency buildings.

Internal Policies and Procedures

- Establish an energy efficiency and conservation policy that provides employees with behavioral guidelines for energy efficient use of the facility such as turning lights, copiers and computers off, appropriate thermostat use, etc.
- Establish energy efficiency and conservation protocols for building custodial and cleaning services and other contract employees.
- Adopt and implement a policy to reduce "plug" load in agency facilities by removing personal equipment such as desk lamps and space heaters or installing smart power strips.
- Implement a network cloud-computer system to reduce computer work station energy use.
- Incorporate energy efficiency features in agency data centers, such as through implementation of an information technology energy efficiency program.
- Adopt ENERGY STAR® purchasing standards for all new computer equipment, appliances and equipment.
- Require new agency buildings to exceed Title 24, California's energy efficiency building standard.
- Implement off-peak scheduling of pumps, motors, and other energy intensive machinery where possible.
- Implement a revolving loan fund or other mechanism to finance future energy investments in agency buildings and operations.
- Work with energy provider to access technical assistance and financial incentives, such as facility audits, rebates, on-bill financing, loans, savings-by-design and demand management programs.
- Require agency new construction to be net zero energy.

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- Train agency building inspectors to understand and enforce Title 24, California's energy efficiency building standard.
- Develop and implement shading requirements for agency buildings and other facilities.
- Require agency funded or supported affordable housing projects to incorporate energy efficiency features, equipment and appliances.
- Prepare and implement an Energy Action Plan for agency facilities.
- Participate in voluntary sustainability and climate change recognition program, The Beacon Award: Local Leadership toward Solving Climate Change to track and share agency energy savings accomplishments.
www.ca-ilg.org/BeaconAward

Retrofits and Upgrades

- Develop and implement a schedule to address no cost/low cost energy retrofit projects.
- Develop and implement a schedule to address capital intensive energy retrofits projects.
- Reduce energy demand by capturing "day lighting" opportunities.
- Install motion sensors, photocells, and multi-level switches to control room lighting systems.
- Replace incandescent lights with more energy efficient lighting, such as compact fluorescents, overhead fluorescent lights or light-emitting diodes (LEDs).
- Upgrade exit signs with light-emitting diode (LED) lighting.
- Add vending misers to cold beverage machines.
- Upgrade pumps, motors and other energy intensive machinery where feasible.
- Replace agency appliances and equipment such as vending machines, refrigerators, and washing machines, with energy efficient models.
- Replace agency natural gas fueled appliances and equipment, such as boilers, stoves, water heaters, with high efficiency units.
- Replace and/or tint windows in agency-owned buildings to reduce heating by sunlight.
- Install cool roof systems on existing and new agency buildings.
- Install smart meters on agency buildings.

Tip: Evaluate agency electric bills to ensure each account is on the optimal rate schedule.

Outside Lighting

- Use "de-lamping" techniques to reduce lighting levels at parks, sports fields and parking lots, where appropriate for the location and use, considering security and decorative lighting issues.
- Change downtown holiday or decorative lighting to light-emitting diodes (LEDs) or other energy efficient lighting systems.
- Replace incandescent traffic and crosswalk lights with energy-efficient lighting such as light-emitting diodes (LEDs).
- Replace incandescent and mercury vapor street, parking lot, park and other outdoor lights with energy efficient alternatives, such as light-emitting diodes.

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Community

Working with Local Businesses

- Encourage community businesses to conduct energy audits and implement energy efficiency retrofits through activities such as energy efficiency workshops, energy fairs, agency websites and social media.
- Encourage businesses to install energy efficient exterior lighting that is appropriate for the location and use, considering security and decorative lighting issues.
- Collaborate with local retail businesses to encourage businesses to purchase energy efficient products.
- Promote and reward energy efficiency efforts of local retail businesses.
- Adopt an energy financing program, such as through a PACE (Property Assessed Clean Energy) financing district, to help businesses install energy efficiency retrofits in existing residential and commercial buildings.
- Require energy audits and/or retrofits for commercial properties at time of sale.
- Require new commercial buildings to exceed Title 24, California's energy efficiency standard, to the extent permitted by law.
- Require new commercial construction to be net zero energy.

Working with Homeowners and Apartment Owners

- Provide information about Energy Upgrade California™ to help homeowners increase energy efficiency.
- Provide rebates or other financial incentives to help residents pay for whole house retrofits.
- Sponsor a home energy makeover contest that includes energy efficient audit and improvements as prizes.
- Adopt an energy financing program, such as through a PACE (Property Assessed Clean Energy) financing district, to help homeowners install energy efficiency retrofits in existing residential buildings.
- Require energy audits and/or retrofits at time of sale for residential properties.
- Require energy audits and/or retrofits at time of residential remodeling or renovation projects.
- Require new residential buildings to exceed Title 24, California's energy efficiency standard, to the extent permitted by law.
- Require new residential construction to be net zero energy.

Working with Energy Providers

- Work with energy provider to encourage local businesses to implement energy efficiency strategies and retrofits.
- Work with energy provider to provide information to homeowners and businesses about available utility rebates for new residential and commercial buildings that exceed Title 24, California's energy code, by 15 percent or more.

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- Work with energy provider to promote use of utility financial incentives to assist residential and commercial customers improve energy efficiency, such as by using on-bill financing, loans and rebates and demand management programs, as appropriate for the customer.

Engaging the Community

- Host/support compact fluorescent light bulb, LED give-away or incandescent bulb exchange programs.
- Collaborate with schools and colleges to co-sponsor students to conduct energy audits and/or retrofits for agency buildings, businesses or homeowners.
- Upgrade foreclosed homes in the community with energy efficiency measures and solar photovoltaic or hot water systems.
- Prepare and monitor progress of implementing Energy Action Plan to reduce energy use in the community.





Green buildings reduce energy consumption, use water more efficiently and utilize materials with recycled content, thus saving money and natural resources and related greenhouse gas emissions. Local agencies have taken a variety of approaches to embrace green building policies and programs, consistent with the unique characteristics of their individual communities.

Note: The California Green Building Standards Code, known as CALGreen, went into effect in 2011 for residential and non-residential new construction and major remodels. CALGreen is updated triennially with the next update going into effect January 2014. CALGreen includes options for stronger locally adopted standards. Several other green building rating systems, such as GreenPoint Rated and LEED® certification programs, provide options to consider for exceeding California's Green Building Code. www.bsc.ca.gov/Home/CALGreen.aspx

For other green building-related best practices: see Energy Efficiency and Conservation area.

Green Building

Options to Consider

Agency

- Adopt a policy that requires new agency buildings to exceed the minimum requirements of California's Green Building Standards Code (also known as CALGreen). Options to exceed the standard include CALGreen's built-in tiers and/or certification under Build It Green's Green Point Rated system, LEED®, or alternative certification program.
- Require agency buildings to exceed Title 24, Part 6, the State's Building Standard Code which establishes energy efficiency requirements for residential and non-residential new construction and major remodels.
- Incorporate materials that are renewable, reusable, recyclable, recycled, non-toxic and those that have zero or low volatile organic compounds (VOCs).
- Explore using alternate materials such as packed gravel or permeable concrete instead of conventional concrete or asphalt to enhance replenishment of ground water.
- Develop and implement sustainable landscaping standards for public agency facilities to reduce water consumption.
- Incorporate water efficient plants, trees, green roofs and rain gardens in agency landscaping.
- Use compost and mulch in agency landscaping as a water conservation measure.
- Require agency landscaping and parks to incorporate smart irrigation technology systems that save water and energy.
- Require verification by a certified third-party rater to ensure compliance with green building standards for all newly built agency facilities.

Community

- Establish a green building awareness program to educate and encourage homeowners and builders to use green building techniques.
- Organize a sustainable building task force that includes representation from various fields within the building industry and other groups to evaluate feasibility of incorporating green building techniques that exceed the state standards into all new building and retrofit projects in the community.
- Create a dedicated page on the agency's website to help residents find green building information and resources.
- Provide information to homeowners and businesses about available utility rebates for new residences and commercial buildings that exceed California's Title 24 energy code by 15 percent.
- Provide incentives, such as expedited review/permit processing, to encourage green building.
- Provide technical and financial assistance and other significant incentives to development projects that meet or exceed specified standards under green building programs.

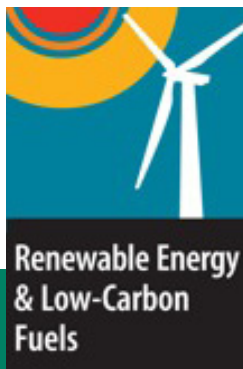
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- Train appropriate agency staff (such as planners, inspectors, and plan checkers) in green building standards and technologies to facilitate the permitting approval and inspection processes.
- Adopt a policy that requires new homes, buildings or remodels to exceed the minimum requirements of California's Green Building Standards Code (also known as CalGreen). Options to exceed the standard include CALGreen's built-in tiers and/or certification under Build It Green's Green Point Rated system, LEED®, or alternative certification program.
- Adopt a "Solar Ready" ordinance, requiring all new residential buildings to be pre-wired and pre-plumbed for photovoltaic and solar hot water systems. (Required in the California Green Building Code January 1, 2014)
- Require new residential and commercial construction buildings to exceed Title 24 energy efficiency standards, to extent permitted by law.
- Require new and renovated commercial construction to incorporate smart irrigation technology systems that save water and energy.
- Require energy efficiency performance audits for specific types of residential and commercial remodeling projects.
- Require buildings, facilities or affordable housing developments using agency funds or other agency support to exceed minimum state green building or energy standards.
- Offer fee reductions, waivers, loans or grants to developers and contractors who commit to verifiable green building practices that exceed state or local minimum standards.
- Offer technical expertise and assistance for community members, builders and businesses undertaking green building projects.
- Work with neighboring jurisdictions, where feasible, to adopt a regional green building standard that exceeds the California Green Building Code Standard or Title 24 energy efficiency standards.
- Enact a construction and demolition debris recycling ordinance that requires 50 percent or more diversion of project waste.





Energy generated from renewable sources produces less greenhouse gas emissions than energy generated from conventional sources. Low carbon fuels are those that are formulated to produce fewer greenhouse gas emissions.

For other renewable energy and low carbon fuels-related best practices: see Efficient Transportation and Waste Reduction and Recycling areas.

Renewable Energy and Low Carbon Fuels

Options to Consider

Agency

Solar Projects

- Replace traditional pedestrian “walk” signals and safety lights with solar powered signals.
- Install solar powered smart parking meters.
- Adopt a “Solar Ready” policy requiring new agency buildings to be pre-wired and pre-plumbed for solar photovoltaic and solar hot water systems. (Required January 2014 as part of the California Green Building Code.)
- Purchase solar photovoltaic systems or enter into power purchase agreements (PPA) to meet all or part of the electrical energy requirements of buildings and facilities owned, leased or operated by the agency.

Methane Recovery Programs and Projects

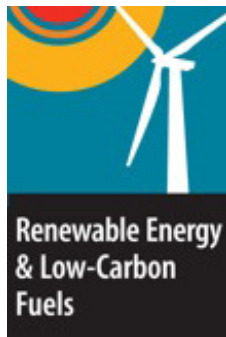
- For jurisdictions that own or operate landfills, recover and use the maximum feasible amount of methane gas from the landfill to produce electricity, fuel co-generation facilities, and/or produce compressed natural gas for use in alternative fuel vehicles.
- For jurisdictions that host landfills owned by private companies or other public agencies, enter into partnerships or agreements with agencies or companies that own or operate landfills to ensure that the maximum feasible amount of methane is recovered for waste-to-energy or other renewable energy projects.
- Install digesters and other technologies at wastewater treatment facilities to capture methane and other bio-fuels.
- Install fuel cells to generate power for wastewater treatment plants.

Fuel Efficient and Alternative Fuel Vehicles

- Establish and implement a policy to convert agency fleets, including agency owned, leased or operated vehicles, to alternative or fuel efficient vehicles.
- Establish and implement a policy to purchase new alternative or fuel efficient vehicles for agency operated transit systems.
- Use regional purchasing options or the California Department of General Services bulk purchasing program to buy green fleet vehicles from local auto dealers.
- Train agency fleet mechanics to service alternative and fuel efficient vehicles.
- Implement bike sharing program for agency employees traveling between agency facilities.
- Install bicycle racks, showers, and other amenities at agency facilities to promote bicycle use by agency employees and visitors.

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Community

Solar and Small Wind Projects

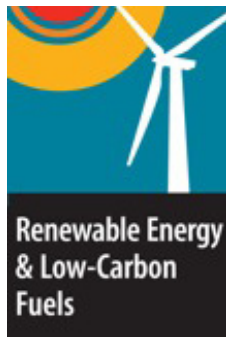
- Develop a map that residents can access online that identifies where solar projects are located in the community.
- Conduct renewable energy workshops for residential, commercial and industrial property owners.
- Offer workshops and information for residents and businesses to provide resources and permitting assistance for those interested in adding renewable energy systems to their properties.
- Provide information about the California Solar Initiative rebate and other renewable energy incentive programs on agency website.
- Work with solar photovoltaic system providers to establish a discounted bulk purchasing program for residents and businesses that wish to purchase and install solar photovoltaic systems on their buildings.
- Offer financial incentives to those who install solar photovoltaic or hot water systems on homes or businesses.
- Adopt a renewable energy financing program, such as through a PACE (Property Assessed Clean Energy) financing district, to help homeowners, multi-family dwellings and businesses install solar photovoltaic and hot water systems on existing residential and commercial buildings.
- Adopt policy or program that offers incentives, such as streamlined permitting system or fee waivers, to encourage installation of photovoltaic systems on new or existing residential and commercial buildings.
- Adopt a "Solar Ready" ordinance requiring new residential or commercial construction to be pre-wired and pre-plumbed for solar photovoltaic and solar hot water systems. (Required January 2014 as part of the California Green Building Standards Code.)
- Adopt an ordinance for small wind energy systems for residential and commercial installations.
- Adopt a solar photovoltaic system siting ordinance for systems proposed on agricultural and open space lands.

Fuel Efficient and Alternative Fuel Vehicles

- Work with electric utility to develop and implement electric vehicle charging infrastructure plan for the community.
- Develop permitting standards for installation of electric vehicle charging stations at residential and commercial buildings.
- Streamline the permitting process for installing home or business electric vehicle charging stations.
- Install electric vehicle charging stations at public facilities, such as at parking lots and airports, for community use.

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- Allow the public to use agency facilities that support use of alternate fuel vehicles, such as compressed natural gas fueling facilities and electric vehicle charging stations.
- Require new commercial developments to include electric vehicle charging stations in parking lots or garages.





Water and wastewater systems play an important role in sustainability for several reasons. First, energy is used to convey, pump, distribute, treat and heat water, so saving water saves energy. Second, experts agree that the effects of climate change will further reduce the availability of water. Therefore, efforts to conserve water will play an important role saving energy, reducing greenhouse gas emissions and securing water resources for the future.

For other water and wastewater-related best practices: see Green Building, Energy Efficiency and Conservation, and Land Use and Community Design areas.

Water and Wastewater Systems

Options to Consider

Agency

Ensure Water Efficiency in Agency Buildings and Operations

- Audit agency's water and wastewater pumps and motors to identify most and least efficient equipment.
- Work with agency or company that provides water and wastewater service to implement a cycling and equipment replacement program for least efficient water and wastewater pumps and motors.
- Initiate a water loss program or "leak-audit" of agency water infrastructure.
- Upgrade and retrofit agency plumbing systems and appliances with water efficient technology and fixtures.
- Retrofit existing agency buildings and facilities to meet standards for the LEED® Standards Rating Systems for Existing Buildings (EB), Build It Green, Commercial Interiors (CI), or other equivalent standards.
- Incorporate water-efficient systems in new agency buildings that include opportunities for recycled water.
- Require dual plumbing for use of recycled water for new facilities.

Reduce Water Use in Parks and Landscaping

- Implement all feasible water efficiency strategies included in the Ahwahnee Water Principles for Resource Efficient Land Use in agency parks, landscaping and other new developments. (www.lgc.org/ahwahnee/h2o_principles)
- Install smart water meters to track water usage and the effectiveness of water efficiency activities and programs.
- Assess, maintain and repair existing irrigation systems to minimize water use, including parking lot landscaping, public rest rooms and parks, golf courses and other recreational facilities.
- Install weather-based smart irrigation systems in agency parks and landscaping areas.
- Adopt a water recycling master plan that connects parks into a recycled water system.
- Use recycled water for agency facilities and operations, including parks and medians, where appropriate.
- Convert all water distributing vehicles, such as street sweepers and tree-watering tankers, to use reclaimed water, where feasible.
- Reduce turf and grass in agency landscaped areas. Use native turf and grass, when applicable.
- Implement drought tolerant and hydro-design principles to group compatible plants based upon water needs for agency parks and landscaping.
- Use compost, biosolids and mulch in agency landscaping as a water conservation measure.

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Tip: For more information, visit ILG's Water Conservation Leadership Guide: Issues for Local Officials to Consider at www.ca-ilg.org/WaterConservationLeadership.

Create Safe and Efficient Water and Wastewater Systems

- Use non-toxic fertilizers in agency parks and landscaped areas to reduce contaminants in run-off.
- Create a Fats, Oils and Grease (FOG) Control Program to reduce blockages in the wastewater system.
- Reduce energy use by auditing agency's water and wastewater pumps and motors to identify most and least energy efficient equipment.
- Work with agency or company that provides wastewater service to implement an audit, cycling and equipment replacement program to increase energy efficiency for water and wastewater pumps and motors.
- Work with local wastewater service provider to determine whether biosolids can be recycled by using them on local landscaping, golf courses, community parks and other programs to improve soil quality and reduce irrigation needs.
- Promote methane capture and enhanced production through co-digestion of other organic waste streams for use as renewable energy at wastewater treatment plants.

Address Future Water Security

- Construct a new groundwater recharge facility that can hold additional surface water secured in wet years to eliminate possible groundwater overuse in the region.
- Create an urban runoff recycling facility.

Community

Promote Water Conservation

- Adopt water efficiency principles similar to the Ahwahnee Water Principles for Resource Efficient Land Use for new and existing residential and commercial developments. (www.lgc.org/ahwahnee/h2o_principles)
- Adopt a retrofit program to encourage or require installation of water conservation measures in existing businesses and homes that exceed state standards.
- Require water efficiency audits at point of sale for commercial and residential properties.
- Provide free faucet aerators, water-efficient shower heads and low flow hose nozzles to residents at community or other events.
- Pass a water-efficient landscaping ordinance stronger than state standards, where feasible.
- Develop a training program to educate local landscapers and agency personnel on practices that reduce the use of water and toxic pesticides.
- Create a water efficient demonstration garden that includes native and drought tolerant plants and requires low volume mulch, irrigation and other water saving features.
- Implement a lawn buy-back program for residents who convert sod or grass to drought-tolerant landscaping.

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Tip: Greywater is wastewater generated from domestic activities such as laundry, dishwashing and bathing, which can be recycled in-site for uses such as landscape and irrigation.

Note: For additional stormwater management practices, visit www.epa.gov/stormwater/best_practices.htm.

Promote Water Recycling and Greywater Use

- Incentivize and promote the installation of residential greywater systems that meet appropriate regulatory standards.
- Develop a local ordinance to require all new homes to have a greywater system.
- Require dual plumbing for use of recycled water for new commercial and/or residential developments.
- Provide educational resources to encourage residents to harvest rainwater.

Educate about Water Pollution Prevention

- Install informational kiosks at agency parks to educate residents about stormwater pollution.
- Engage the public in riverbank planting events, storm drain marking or stream-cleanup programs.
- Promote bio-retention basins for stormwater collection and treatment prior to discharge.
- Promote local solutions for stormwater management, such as rain gardens, green roofs and detention ponds.
- Develop an educational community program or campaign that engages residents as watershed stewards.





The largest sources of human-generated methane, a potent greenhouse gas, comes from improperly managed landfills. Thus, waste reduction and recycling activities reduce the potential to generate methane at landfills, as well as reduces pollutants generated from transporting waste to disposal sites. Waste reduction and recycling also conserve natural resources.

Waste Reduction and Recycling

Options to Consider

Agency

Reduce

- Implement a comprehensive waste reduction and recycling program in agency offices and facilities.
- Create and facilitate an agency employee education program highlighting waste reduction and recycling best practices.
- Adopt a policy to encourage paper reduction through activities such as:
 - Promoting a “think before you print” campaign.
 - Reducing margins and logos on agency templates, letterhead and memos.
 - Using computer software that removes blank pages and images from documents.
 - Using “eCopy” copy machines that allow users to scan paper documents and distribute electronic copies via e-mail.
 - Uploading bid documents using online resources instead of printing hard copies for contractors.
 - Requiring fewer or smaller-sized copies of project plans or submittals.
 - Establishing a policy to use electronic devices (tablets, computers and projectors) for agendas and notes at meetings, such as for board of supervisor, city council or planning commission meetings.

Reuse

- Reuse unwanted printed material for other purposes, such as for scratch paper or shred for use at the local animal shelter.
- Reuse or redistribute to community non-profit groups office items such as supplies, computer, furniture and cell phones in order to divert items from the landfill.
- Host a community garage sale or swap meet for the community to sell or redistribute unwanted items.
- Incorporate reuse programs at publically owned landfills and transfer stations for diverting materials to non-profits.
- Provide and encourage the use of reusable dishes and drinkware at agency facilities.

Recycle

- Adopt a “Buy Recycled” policy for agency departments.
- Recycle or refill ink/toner cartridges, as appropriate.

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- Provide bins for collection of used batteries and compact florescent lights for proper disposal or recycling.
- Implement a partnership with other public agency offices located within the jurisdiction for green procurement, waste reduction and recycling at those facilities.
- Require all agency demolition projects to incorporate de-construction/ construction and demolition waste recycling or recovery practices.
- Adopt agency or community waste diversion and recycling goals that are higher than existing state law.
- Evaluate current community recycling infrastructure relative to future population growth and waste generation.
- Include provisions and incentives for new recycling infrastructure and facilities to accommodate growth in land use planning and zoning.
- Work with solid waste and recycling collection providers to calculate the carbon footprint of collection system.
- Work with solid waste and recycling collection providers to reduce collection system carbon footprint.

Organics

- Evaluate agency facilities and operations to identify opportunities to increase material recovery and beneficial use of organic material.
- Evaluate opportunities to convert agency organic waste into biofuels to use in agency vehicles.
- Distribute or post materials illustrating best practices for organics collection and composting.
- Establish a program to use the maximum amount of organic waste possible that is generated within the jurisdiction to produce compost for use on agency parks and landscaping.
- Create a vermicomposting (worm-bin) program with a complementary educational component at agency facilities, such as county detention centers and city jails.
- Approve siting of composting facility within jurisdiction.
- Distribute an annual newsletter highlighting agency and community waste reduction programs and accomplishments.

Businesses

- Coordinate with the California Department of Resources, Recycling, and Recovery (CalRecycle) on the latest information, resources and programs to assist local businesses. www.calrecycle.ca.gov
- Adopt a program or ordinance to encourage or require waste audits and waste reduction plans for existing and/or new commercial developments.
- In partnership with the waste hauler(s) serving the commercial sector, institute a comprehensive waste reduction and recycling program with financial and other incentives, such as a tiered rate system that charges less for collecting recyclable materials than for collecting solid waste, to promote waste reduction and recycling for commercial/industrial waste generators.

Note - California law now requires:

- All businesses that generate 4 or more cubic yards of waste weekly to recycle.
- Apartment communities/multi-family housing with 5 or more units to recycle.
- Apartment owners to offer recycling services to residents.
- Cities and counties to educate businesses about new recycling requirements.

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- Adopt a program or ordinance that exceeds state minimum standards by requiring businesses generating less than 4 cubic yards of waste a week to recycle.
- Work with local material collectors and economic development experts to recruit or retain regional recycling manufacturers.
- Adopt an ordinance to restrict the use of expanded-polystyrene containers at fast food restaurants and other establishments.
- Adopt a program or ordinance to restrict the availability of single-use bags at retail stores.
- Implement a green business program that rewards local businesses for sustainability measures.
- Implement a food scrap collection program for large food waste generators.
- Encourage local restaurants to use compostable foodware, where appropriate.
- Encourage local restaurants to create opportunities and signage that promotes food waste and recyclable collections.
- Require food waste and recycling at farmers markets and other community events.
- Require recycling at special events, such as through special event permit conditions.

Residential

- Include information about recycling opportunities on agency's website.
- Provide information to residents about how to stop receiving unwanted catalogues, phone books and weekly circulars.
- Work with landlords to include recycling requirement information in lease agreements and/or move in packets.
- Adopt a program or ordinance that exceeds state standards by requiring recycling at multi-family housing with four or fewer units.
- Offer a food waste recycling program to residential customers.
- Educate residents about the importance of not contaminating recyclable wastestreams.
- Work with solid waste service providers to adopt enforcement mechanisms for residents and businesses that misuse or contaminate green waste and recycling containers.
- Offer composting and sustainable landscaping classes to the community.
- Implement a vermiculture (worm bin) composting program where residents can "check out" or borrow composting bins and equipment from the agency to start their own composting efforts at home.
- Educate the community about "buy recycled" opportunities.

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For other recycling-related best practices: see Green Building and Climate-Friendly Purchasing areas.

Additional Resources:

- ILG's Commercial Recycling Resource Center: www.ca-ilg.org/commercialrecycling.
- Carbon Footprint Calculator for businesses: www.coolcalifornia.org/business-calculator.
- Commercial Recycling Climate Calculator: www.calrecycle.ca.gov/climate/calculator.

Schools

- Create a partnership with local schools to help encourage waste reduction and recycling.
- Collaborate with schools or nonprofit agencies to help develop and distribute educational materials related to recycling and waste reduction for use in classrooms.
- Encourage schools and other public agencies to use rubberized asphalt pavement for parking lots, where feasible.
- Encourage schools to use tire-derived products for a variety of uses, including sport facilities.

Electronic-Waste and Hazardous Materials

- Create and distribute information about e-waste and hazardous waste disposal.
- Increase opportunities for e-waste and hazardous materials collection and recycling.
- Distribute information and create opportunities for used motor oil recycling.
- Promote proper recycling and disposal options for compact fluorescent light bulbs and batteries.
- Offer disposal options for home-generated "sharps" (needles) and prescription drugs to prevent injuries and contamination of water and wastewater.

Construction Materials and Debris

- Adopt a program or ordinance to reduce, reuse and recycle community construction and demolition waste.
- Adopt a "deconstruction" program or ordinance to salvage and reuse materials in all community remodeling projects.
- Establish a program or ordinance that results in 100 percent recycling of all Portland cement and asphalt concrete.
- Adopt a policy to require use of rubberized asphalt concrete for streets and roads.
- Adopt a policy to use recycled asphalt pavement for streets and roads.
- Adopt a policy to use recycled asphalt pavement for commercial and community parking lots, where feasible.
- Use recycled tire rubber for playground resurfacing and other projects, where appropriate.
- Partner with local businesses to create materials reuse opportunities.



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Local agencies are large consumers of goods and services. As such, their purchasing practices can have a significant impact on the environment. By purchasing products or procuring services that reduce greenhouse gas emissions relative to competing goods and services, local agencies can remain fiscally responsible while promoting practices that conserve natural resources.

For other climate-friendly purchasing-related best practices: see Waste Reduction and Recycling and Green Building areas.

Tip: See ILG's Sample Climate-Friendly Purchasing Policy at www.ca-ilg.org/samplepurchasingpolicy and ILG's Greening Agency Fleets Resource Center at www.ca-ilg.org/GreeningAgencyfleets.

Climate-Friendly Purchasing

Options to Consider

Agency

- Review current purchasing practices to identify possible green procurement opportunities.
- Adopt and implement a procurement policy that establishes standards for purchasing climate-friendly products and services. Examples may include:
 - Office and cleaning supplies and equipment that minimize environmental impacts and that do not have a negative effect on human health, such as:
 - Paper products that contain a minimum percentage of post-consumer recycled content.
 - Cleaning products and services recognized with the GreenSeal or EcoLogo.
 - New equipment that meets Energy Star or comparable energy efficiency standards.
 - Computers that meet the highest feasible Electronic Product Environmental Assessment Tool (EPEAT) certification level.
 - Computer and lighting controls that reduce energy and computer idle time.
 - Rechargeable batteries, where appropriate.
 - Recyclable or reusable cups, plates and utensils.

Green Building materials that create a healthier and more sustainable environment, such as:

- Building and landscaping materials and systems that exceed the CALGreen building code.
- Carpeting, furnishings or plastic items that contain a minimum percentage of recycled content
- Paint or carpets that contain low or no volatile organic compounds (VOC).

Fleets that reduce environmental impact, such as:

- Fuel efficient, dual fuel or alternative fuel fleet vehicles.
- Vehicles that have GPS or trip planning devices.

- Conduct employee awareness training on the purchasing and use of green products and services.
- Establish an interdepartmental team to promote policy implementation, track policy adherence and suggest additional items to be included in the policy.
- Report achievements of green procurement program to staff and policy makers annually.
- Consider participating in multi-agency procurement pools that have a climate-friendly purchasing component.
- Consider life cycle pricing to ensure that the maintenance, operating, insurance, disposal and replacement cost of the product or service is considered when evaluating purchase options.

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- Consider efficient transportation methods when purchasing goods and services, such as using local vendors and/or locally produced goods to reduce greenhouse gas emissions.
- Consider encouraging the practice of not purchasing new materials, such as office supplies and furniture, through the reuse of existing items in surplus when appropriate and feasible.
- Ensure that minimal packaging materials are used by the agency and that all packaging materials are recycled, non-toxic and/or reusable, where feasible.

Contracting

- Require consultants, contractors and grantees to use recycled products and supplies, when feasible.
- Require service providers to follow climate-friendly practices, or include a preference in selecting and contracting with service providers to those that use climate-friendly practices.
- Require parks maintenance staff or contractors to adopt water or Bay-Friendly practices, if applicable.
- Require agency-issued bids specifications to exceed state law requirements for recycled content.
- When feasible, consider the greenhouse gas emission impacts associated with transportation distances when determining which business or service providers to award contract.
- Provide incentives for the use of fuel-efficient, dual-fuel or alternative fuel vehicles for agency contracts for services involving vehicles, such as buses, waste hauling and recycling, and construction.
- When issuing proposals for services, request firms to show current green certifications that demonstrate their technical knowledge and commitment to sustainability.

Community

- Educate the public about climate-friendly procurement opportunities through the agency's website, traditional marketing and social media.
- Work with the business community to educate them about climate-friendly procurement opportunities through social media and traditional marketing.
- Educate the public about climate-friendly procurement actions being implemented by a local agency.





Transportation is the largest generator of greenhouse gas emissions in California. Efficient transportation systems, encouraging alternatives to single occupancy vehicles, and reducing the miles that vehicles travel can reduce greenhouse gas emissions, help conserve fuel and cut fuel costs, improve air quality, reduce traffic congestion and make streets safer for pedestrians, bicyclists, transit users and motorists.

Note: Metropolitan Planning Organizations and Regional Transportation Planning Agencies can provide guidance on inter-agency collaboration and technical support for the adaptation and use of transportation models.

For other efficient transportation-related best practices: see Land Use and Community Design area.

Efficient Transportation

Options to Consider

Agency

Planning

- Assess the long-term mobility (the ability for people to get around) needs of the community, including the efficient movement of people and goods.
- Update transportation models to reflect all types (or modes) of transportation, such as walking, bicycling, private vehicles, commercial vehicles, buses, trains and other forms of transit.
- Include transportation mitigation measures for new development which enhance all modes of travel rather than only focusing on automobile delay or speeds.
- Develop short and long-range community transportation goals, objectives and policy statements and include all appropriate goals, objectives and policies in the circulation element of the agency's general plan.
- Develop and include a realistic long-range transportation and land use scenario (or diagram) for local and regional growth in the circulation element of the agency's general plan and other local land use plans (such as specific plans and project development plans), consistent with a regional Sustainable Communities Strategy, if appropriate.
- Collaborate with other agencies (such as cities, counties and metropolitan planning organizations) to share transportation-related information, coordinate planning goals and processes, and take advantage of opportunities to combine and leverage resources.
- Make reducing vehicle-miles traveled (VMT) a high-priority criteria in evaluation of policy, program, and project proposals and alternatives.
- Adopt a policy requiring limitations on idling for commercial vehicles, construction vehicles, buses and other similar vehicles, beyond the requirements of state law, where feasible.
- Implement programs to reduce "incident-based" traffic congestion, such as expedited clearing of accidents from major traffic arteries, airport traffic mitigation, etc.
- Develop a financial plan that covers life-cycle costs related to the development, maintenance and operation of current and future transportation facilities and services (such as transit service).
- Identify funding sources for implementing transportation plans.
- Implement transportation planning strategies that consider demand management solutions for transit, bicycle and walking growth equally with strategies to increase automobile capacity.

Infrastructure

- Implement Intelligent Transportation Systems (ITS) for surveillance and traffic control, such as synchronized signals, transit and emergency signal priority, and other traffic flow management techniques as appropriate, to improve traffic flow and reduce vehicle idling.

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- Install signal priority technology in agency transit systems (such as buses) to reduce number of stops and idling.
- Ensure that traffic lights have sensors to detect bicycles.
- Install roundabouts in lieu of signalized intersections as a way to improve traffic flow, reduce accidents and reduce greenhouse gases.
- Improve intersection safety through pedestrian countdown signals and high visibility crosswalks.
- Identify opportunities for infrastructure improvements such as High Occupancy Vehicle (HOV), High Occupancy Toll (HOT) lanes and dedicated bus rapid transit right-of-ways and coordinate with regional and state agencies when appropriate.
- Encourage and/or construct infrastructure for electric vehicle charging and natural gas vehicle fueling for agency vehicles and the community.
- Develop a non-motorized connectivity plan (complete streets) to create a path and roadway network and make sure that bicycle paths and pedestrian walkways connect to neighborhood destinations, schools, parks, light rail stations and essential services.
- Include bicycle, pedestrian and transit facilities in public works projects, where appropriate, as a component of a local complete streets program.
- Prepare a bicycle master plan to guide bikeway policies and development standards to make bicycling safer, more convenient and enjoyable for all bicyclists.
- Prepare a pedestrian master plan to guide walkway policies and development standards to make walking safer, more convenient and enjoyable for all pedestrians.
- Increase the number of bicycle lanes, lockers, racks, paths and signage throughout the community.
- Reduce parking requirements for projects that link or emphasize alternative types of travel.
- Use microwave technology, video detection and street embedded sensors to protect cyclists from buses, cars and motorcycles.
- Use alternative or recycled materials for road paving (such as cold central plant recycling or cold in-place recycling) to reduce energy and greenhouse gas emissions from transport and material production/processing.

For more options: see Renewable and Low-Carbon Fuels area.

Agency Fleet

- Adopt a policy that sets fleet efficiency standards for new agency vehicles.
- Purchase or lease fuel efficient or alternative fuel vehicles, including zero or near-zero emission vehicles, to save fuel and money and reduce greenhouse gas emissions.
- Install low-draw emergency lighting in agency vehicles, allowing lights to be used without the engine running.
- Consider purchasing bicycles for local travel by agency employees.
- Install battery systems for vehicles with onboard equipment (such as boom trucks) to decrease truck idling while equipment is used.

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For additional resources related to Fuel Efficient and Alternative Fuel Vehicles: see ILG's Greening Agency Fleets Resource Center at www.ca-ilg.org/greeningagency-fleets.

- Provide fuel saving tips to drivers of fleet vehicles.
- Use Global Positioning Systems (GPS) and integrated software to control fleet vehicles, reduce misuse and increase efficiency through trip planning and location information.
- Replace buses with smaller, more fuel efficient, buses for light-traveled transit routes.
- Evaluate natural gas fueling infrastructure and sharing of facilities with other public agencies to help pay for installation and ongoing costs.
- Establish a crew-based maintenance plan (such as with parks employees) instead of individual assignments, to create a "carpool effect" that lowers the annual miles traveled for maintenance staff.
- Utilize technology options (such as digital service requests accessible by mobile devices) for field personnel to avoid extra trips back to the office.

Agency Employee Programs

- Offer agency employees with incentives to use alternatives to single-occupant auto commuting, such as parking cash-out, flexible schedules, transit incentives, bicycle facilities, bicycle sharing programs, ridesharing services and subsidies, locker/shower facilities and telecommuting.
- Develop a real-time ridesharing program that utilizes smart phone technology.
- Incorporate a guaranteed ride home program as part of agency commuter trip reduction incentive programs.
- Provide parking spaces dedicated to employees who use alternative transportation (such as walking, bicycling, bus, etc.) for the rare occasions they need to drive to work.
- Implement a flexible work schedule for agency employees, incorporating telecommuting and modified schedules.
- Establish a "bike barn" to enable agency employees to borrow a bicycle to use for local meetings.
- Construct bicycle stations for employees that include bicycle storage, showers and bicycle repair space.
- Offer employees incentives to purchase fuel efficient or alternative fuel vehicles.

Community

- Increase online permitting services to reduce the need to travel to agency offices for minor permits.
- Consolidate offices that community members often visit at the same time (such as building permitting and environmental health permitting) to reduce vehicle miles traveled.
- Encourage and facilitate the development of car-sharing, Dial-a-Ride (or a similar flexible-route transit service), bicycle sharing programs and other services that reduce the need to use a personal motor vehicle.
- Implement variable demand pricing for on- and off-street parking facilities in order to discourage single-occupant-vehicle and peak travel, increase parking supply, business access and parking turnover.

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Note - Additional resources available from ILG:

- SB 375 Resource Center: www.ca-ilg.org/sb-375-resource-center.
- Greening Agency Fleets Resource Center: www.ca-ilg.org/greenin-gagencyfleets.
- Safe Routes to Schools Toolkit: www.ca-ilg.org/srts-toolkit.

- Work with major employers in the community to offer incentives and services to increase the use of alternatives to single-occupant auto commuting (also called voluntary commute trip reduction programs).
- Develop and implement voluntary agreements to encourage commuter trip reduction programs for new commercial developments.
- Offer car and bicycle-sharing programs in the community.
- Encourage or require parking preferences for those who rideshare or use alternative fuel vehicles in public and private parking lots, garages, and on-street spaces.
- Adjust bus schedules to maximize ridership opportunities for residents.
- Provide real-time bus arrival and departure information to riders at transit stops and through the web-based services and text messaging.
- Dedicate revenues from fees and tolls to promote alternative transportation modes, to the extent permitted by law.
- Consider the public health co-benefits in promoting use of transit and other alternatives to single-occupant vehicle travel.
- Offer presentations to community groups highlighting the economic, health and environmental benefits of bicycling and walking.
- Partner with health organizations to offer incentive programs to encourage bicycling and walking.
- Partner with schools and other agencies to identify and implement safer travel opportunities for bicycles and walking between home and school (such as through Safe Routes to School Programs).
- Create and distribute bike maps and “safe routes to school” maps to community members through collaborating with local businesses, service organizations and schools.
- Include information on agency website about state and federal clean vehicle rebates.





Well-planned communities with a balance of housing, jobs, shopping, schools and recreation can reduce the length and frequency of trips and give people the option of walking, biking, or using transit rather than driving. This results in lower greenhouse gas emissions and also promotes physical activity and more vibrant, healthy and sustainable communities.

For other land use and community design-related best practices: see Green Building, Renewable Energy and Efficient Transportation areas.

Land Use and Community Design

Options to Consider

Agency

Encourage Compact, Efficient and Contiguous Development

- Develop general plan policies that integrate diverse land uses – including housing, employment and community services – at appropriate densities to help reduce automobile travel and promote walking, bicycling and other opportunities for physical activities.
- Work with school districts to develop school siting policies that encourage infill locations to take advantage of existing complementary uses, existing housing, and walking and bicycling opportunities, and avoid greenfield locations outside established urban areas.
- As part of general plan housing element updates, inventory potential infill development sites, and maintain a community-wide database of vacant and underutilized infill sites to monitor the community's growth and change.
- Plan, zone and provide incentives for new development and renovation of existing uses in identified infill areas.
- Streamline the entitlement process for development of high quality residential construction in older and infill areas through updates to the housing element of the general plan or the zoning code, including taking full advantage of opportunities to streamline the California Environmental Quality Act (CEQA) review for infill development.
- Implement methods (such as urban service boundaries and priority infrastructure investment areas) to limit non-contiguous development patterns and foster more compact urban form.
- Consider increasing development density in areas that are well-served by transit, including incentives and streamlining for transit-oriented development.
- Develop policies and incentives (such as minimum conservation requirements, development boundaries, density limitations and support for the Williamson Act) to promote the preservation of farmland, open space and sensitive lands.
- Establish a policy that increases the available open space (such as parks, green belts, hiking trails, etc.) to support different types of uses and the different recreational needs of the community.

Support Alternative Energy and Waste Processing Land Use Options

- Identify appropriate sites for potential solar or wind generation facilities.
- Identify appropriate sites and zoning designations for recycling processing facilities and manufacturing that uses recycled materials.
- Adopt policy or program that mandates or offers incentives (such as Property Assessed Clean Energy (PACE) financing, streamlined permitting or fee waivers) for installation of photovoltaic and/or solar hot water systems on new or existing residential and commercial buildings and energy efficiency retrofits on existing buildings.

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Tip: Consider a public health approach to planning and development that encourages alternatives to single-occupant-vehicle travel and promotes active transportation in order to provide health benefits such as new exercise opportunities (walking and bicycling), pedestrian and bicyclist safety and improved air quality that reduces asthma and other health conditions and diseases.

Land Use Policies Supporting Green Building

- As a way to provide more predictability to the development community, include in the general plan and the zoning code policies and regulations that support and encourage green building practices and development patterns that promote sustainable communities through subjects, such as green building ordinances, solar orientation of structures and subdivisions, bicycle and pedestrian access, in-fill development and alternative energy use.
- Require new housing and mixed use developments to be built to the LEED® for Neighborhood Development (LEED-ND) standard, Build It Green or equivalent standards.
- Require bicycle racks, showers and/or other amenities as part of new commercial development projects to promote bicycle use by new employees/residents.
- Provide expedited application processing for development projects that meet or exceed sustainable land use policies.

Planning for a Variety of Transportation Choices

Bicycle and Pedestrian Opportunities

- Assess and report to local governing body and the public on pedestrian and bicycle conditions in existing communities and neighborhoods.
- Develop and adopt a community-wide pedestrian and bicycle plan and capital investment program that maximizes the potential for residents to walk or bicycle within and between neighborhoods.
- Provide bicycle access to transit services on major transit corridors and other routes that may attract bicyclists, such as routes serving schools and colleges.
- Incorporate new overpasses and underpasses with bike lanes and pedestrian sidewalks to improve air quality by reducing GHG emissions from vehicle idling while waiting for pedestrians and bicycles crossing.
- Increase opportunities for walking and bicycling by requiring direct pedestrian and bike paths even when roadways do not connect through new and existing developments.
- Implement zoning for mixed-use development to encourage walking or biking for short trips rather than using vehicles.
- Require sidewalks in all new developments and incorporate new trees and tree wells in sidewalk areas.

Transit Opportunities

- Update the general plan to address multi-modal transit, mass transit, infill development, density and mixed-use and reducing greenhouse gas emissions.
- Provide incentives and remove potential barriers to the development of mixed-use and higher intensity development projects at transit nodes and along transit corridors (existing and planned).
- Require new development at transit nodes and along transit corridors to meet planning and design standards to generate, attract and facilitate transit ridership as a condition of approval; for instance, make the project more attractive to the target population (such as young, single urban individuals).

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Parking Opportunities

- Reduce parking requirements, to the extent feasible, to facilitate higher density development that fosters access to walking, biking and public transit.
- Integrate park-and-ride lots and car sharing service spaces with mixed-use facilities and transportation hubs/centers.
- Promote revitalization of transit corridors by improving light rail, bus rapid transit (BRT) or other high-service transit facilities and services, and promoting an appropriate mix of housing, retail, and office space.
- Require new commercial developments to include electric vehicle charging and natural gas fueling stations in parking lots or garages.

Streets and Roads Opportunities

- Plan and encourage roadways of smaller residential-scaled streets (generally 2 or 4 lanes maximum) with high levels of connectivity and short blocks.
- Implement design standards that require streets and sidewalks to be designed for multi-modal mobility and access, including walking and bicycling, to ensure that new development is designed, sited and oriented to facilitate pedestrian, bicycle and other mobility and access (also referred to as complete streets).
- Create residential neighborhood traffic management (traffic calming) plans to improve livability by reducing speeding and traffic volumes and increase safety for walking and bicycling.
- Cluster freight facilities near ports, airports, and rail terminals to reduce their impact on streets and roadways.

Evaluate Greenhouse Gas Emissions and Plan for Mitigating and Adapting to Climate Change

- Adopt a climate action plan or include a greenhouse gas reduction, climate adaptation or climate mitigation plan or policies in the general plan, or include within the general plan a requirement for development and adoption of such plans.
- Ensure that the adopted climate action plan complies with the California Environmental Quality Act (CEQA) Guidelines to help streamline the CEQA review for future development projects that are consistent with the climate action plan.
- Include within a climate action plan or general plan a procedure to monitor and track greenhouse gas emissions associated with development projects and municipal operations.
- Review zoning codes and development policies to identify changes that could improve implementation of land use and transportation policies that reduce greenhouse gas emissions.
- Develop and adopt a preferred land use and transportation scenario for future development to reduce vehicle miles traveled (VMT) in alignment with the region's sustainability strategy, including through computer modeling tools.
- Work with other jurisdictions within the region to identify and address existing and potential regional sources of greenhouse gas emissions under different development scenarios.

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- Amend local CEQA guidelines to explain how to treat analysis of greenhouse gas emissions, such as including thresholds of significance.
- Adopt policies in the general plan, climate action plan or other appropriate policy document to address the potential land use and community design effects of climate change (such as sea level rise, heat events, wildfires) especially for providing essential public services (such as police, fire, etc.).

Improve Communication, Collaboration and Inclusion

- Coordinate planning and project approval procedures to increase collaboration between planning and other agency staff (such as public works, utilities, public safety, etc.), as appropriate.
- Involve a diverse group of stakeholders in planning processes to ensure the agency's guiding plans are representative of community's diverse population and interests.
- Use non-conventional methods to gather input from diverse community groups, particularly those that do not ordinarily participate in community planning efforts (for example conduct outreach and education through community groups and non-profits prior to public hearings).
- Collaborate with local, regional and state agencies to share land use and community design-related information, coordinate planning goals and processes, and take advantage of opportunities to combine and leverage scarce resources.
- Analyze impacts of development projects on safety and involve emergency responders and public safety staff early and consistently in development of growth plans.
- Develop and implement an approach to planning that identifies and balances economic, environmental and social equity needs.
- Participate in regional planning efforts, such as processes to develop and implement the regional Sustainable Communities Strategy pursuant to SB 375 and, where appropriate, align local general plans and zoning for consistency with the regional transportation plan.





Forests, parks, agricultural lands and open space serve as “carbon sinks” by storing greenhouse gas emissions that otherwise contribute to climate change.

Open Space and Offsetting Carbon Emissions

Options to Consider

Agency

Plans and Policies

- Include specific goals and policies designed to reduce carbon emissions in the open space element of the agency’s general plan.
- Adopt a tree ordinance to protect urban forests, including protection for specific individual trees or tree species important to the community.
- Adopt a ridgeline and hills ordinance to restrict grading and home building on hillsides as a way to enhance public safety and preserve open space.
- Adopt a climate action plan that includes strategies to reduce carbon emissions through open space.
- Adopt a policy to thin agency trees and remove brush on agency land, as feasible and appropriate, to reduce the threat of fire and release of carbon emissions from forest and range fires.
- Adopt a policy to support waste-to-energy projects that use forest waste, food waste or other vegetative sources of methane and other greenhouse gases that would otherwise release greenhouse gases into the atmosphere.
- Apply for designation as a Tree City USA community by the Arbor Day Foundation.

Parks

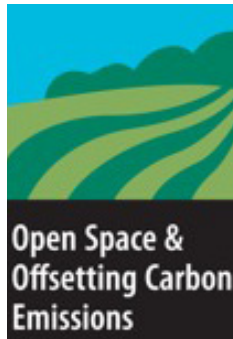
- Increase the number, type and accessibility of parks and other recreational opportunities in the community, including promoting associated public health benefits.
- Increase opportunities for recreational open space.
- Build environmentally sustainable parks by incorporating reused and recycled materials, water-efficient landscaping and water-efficient technology systems.
- Evaluate opportunities to convert closed solid waste landfills to parks or open space.

Habitat & Open Space

- Protect natural lands through:
 - Partnerships with other agencies, stakeholders and non-profit organizations
 - Land acquisition
 - Conservation easements
 - Other long-term mechanisms
- Evaluate habitat monitoring, management and restoration protocols to consider possible future impacts of changing climatic conditions.
- Work with property owners, state and federal wildlife agencies to create a new or expanded multi-species habitat conservation plan.

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- Develop and implement a community-wide urban forestry management and reforestation program to increase the carbon storage potential of trees and other vegetation in the community.
- Manage parks, open space, recreational facilities and other natural areas owned or operated by the agency to ensure the long-term health and viability of trees and other vegetation.
- Remove invasive non-native plants in order to reduce risk of forest and grassland fires (and the associated greenhouse gas release) and promote sustainable native forests and grasslands.
- Inventory existing trees on property owned or managed by the agency, including street trees, and implement a management system to preserve and enhance the tree system.
- Plant native trees and drought tolerant vegetation throughout the community.

Agriculture and Food Purchases

- Enact a policy to purchase locally grown food for agency food purchases, when feasible, to promote retention of local agricultural land uses.
- Where feasible, direct new development away from open space and agricultural lands in order to take advantage of carbon storage opportunities.

Offsetting Carbon (Greenhouse Gas) Emissions

- Achieve carbon neutrality at agency-sponsored events and activities through conservation, efficiency, recycling, alternative transportation and other strategies that reduce greenhouse gas emissions.
- Purchase and retire (put out of use) third-party verified greenhouse gas emission reduction credits.
- Create incentives for community organizations, businesses and residents to reduce their carbon emissions, including the purchase of third-party verified greenhouse gas emission reductions.

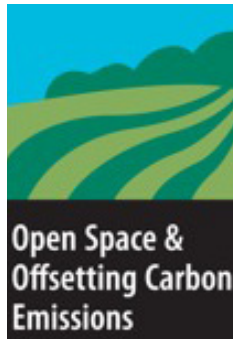
Community

Tree Planting

- Provide tree planting resources and information on the agency website to encourage tree planting by residents.
- Participate in regional tree planting efforts to mobilize and encourage the community to plant trees.
- Create an agency-sponsored tree planting program that offers free shade and other trees to residents, businesses, schools and non-profits, as well as education about the care and benefits from trees. Collaborate with the local utility if it has a tree planting program to help get the word out.

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Agriculture and Food Purchases

- Assist efforts by community groups and non-profit organizations to create community gardens.
- Encourage community gardens and farmers markets to support the availability of healthy, locally grown produce.
- Provide financial incentives for low-income residents to purchase fresh produce at farmers markets in the community.
- Promote the purchase of locally-grown produce through farmers markets and other measures.
- Promote conservation tillage and other agricultural practices to retain carbon fixed in soils.
- Host workshops to showcase community supported agriculture, farm-to-school programs and local organic farms.





Providing reliable and objective information helps inform residents about the causes, impacts and possible responses to climate change. Involving the community in the development of proposed sustainability policies and programs builds buy-in and awareness. Providing practical information that helps individuals reduce their greenhouse gas emissions empowers them to take action and make a difference.

Community and Individual Action

Options to Consider

Inform

- Develop and implement a community climate change education program that provides community members with basic information about climate change.
- Host informational workshops to educate residents and businesses about sustainability opportunities, such as those from energy efficiency and water conservation.
- Develop information and positive messages about activities individuals and businesses can take to reduce greenhouse gas emissions.
- Inform the public about the environmental, community and financial benefits of actions that reduce greenhouse gas emissions.
- Create a sustainability handbook, available online and in hard copy, that outlines the steps residents and businesses can take to go green, such as by reducing energy and water use, recycling and using alternative transportation.
- Issue a sustainability edition of the agency newsletter.
- Include information in local agency mailings, websites and other media about actions that individuals and businesses can take to address climate change.
- Share progress with community members on the implementation of agency and/or community climate action plans and sustainability policies.
- Use the agency's social media channels, such as Facebook, Twitter, Nixle and Notify Me, to inform the community about sustainable activities in the community.
- Work with ethnic media to engage non-English speaking groups in the development of sustainability programs and policies.
- Develop public service announcements and/or talk shows related to sustainability.
- Distribute give-away items, such as reusable bags and compact fluorescent lightbulbs, to encourage environmental responsibility.
- Distribute maps showing the community bicycle and walking trail systems to encourage reduction of vehicle miles traveled.

Consult

- Survey businesses and residents to understand attitudes and behaviors related to sustainability, energy efficiency and climate change; use this information to develop and implement community wide sustainability action items.
- Create ongoing opportunities for community members to provide feedback on proposed sustainability policies and programs, such as through surveys, online or public forums and at stakeholder meetings.

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Involve

- Create a community sustainability commission to help with the development, implementation and tracking of a climate action or sustainability plan.
- Host a green leadership summit for community leaders, school groups and private entities to gather and share experiences, expertise, strategies and ideas for the development of a healthier and more sustainable community.
- Involve diverse stakeholders, including such groups as ethnic chambers of commerce and neighborhood groups, in developing sustainability policies and programs.
- Include sustainability and climate change-related projects as part of youth commission activities.
- Provide programs and/or incentives to individuals, groups and businesses that adopt practices that reduce their carbon footprint. Incentives can be financial or non-financial, such as official recognition of participants' efforts.
- Challenge community members to go on a "carbon diet" to promote individual action to reduce greenhouse gas emissions.

Collaborate

- Invite community members, organizations and other local agencies to participate in ongoing conversations regarding future growth plans and policies.
- Collaborate with local utilities to create and publicize energy efficiency opportunities for residents and businesses, such as through an energy showcase home or model sustainable landscape projects that reduce water and energy.
- Collaborate with schools to educate students about opportunities to be more energy efficient and to reduce, re-use and recycle.
- Develop a sustainability or community climate change outreach and education program that enlists participation from schools, museums, service groups and business organizations, such as local chambers of commerce, neighborhood and homeowner associations and other community partners.
- Partner with the local community college and grade schools to develop classes or workshops with an environmental focus.
- Collaborate with high schools and community colleges to provide students with internship opportunities related to sustainability.
- Collaborate with other local government agencies to share information about climate change and best practices to reduce greenhouse gases.
- Partner with other organizations to implement a bulk purchase discount program for such items as energy efficiency equipment and photovoltaic solar systems.
- Create an inter-agency local or regional climate action partnership and/or action plan with one or more agencies or neighboring jurisdictions.
- Initiate a community climate action partnership with a global sister agency.

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Empower

- Participate in the CoolCalifornia Challenge which challenges local agencies to engage residents in taking action to reduce household energy and vehicle miles traveled.
- Sponsor a program to assist local business in adopting sustainable practices.
- Host one or more events to highlight and promote sustainability programs, such as an e-waste drop off, plant a tree tree, bike to work day or buy local campaigns.

