

Example General Plan Provisions to Address Climate Change

Climate Action Plan “Model” Provisions

Source: Yolo County Draft General Plan

- Principle 9: Fundamental changes are needed to secure the health, safety, and prosperity of our communities against the potentially adverse effects of climate change.
- Objectives:
 - 9.1 Significant and measurable reductions in greenhouse gas emissions through adoption of a Greenhouse Gas Emissions Reduction/Climate Action Plan(s) that inventories emissions, establishes reduction targets, develops strategies for achieving the targets, and allocates resources for implementation.
 - 9.2 Integration of greenhouse gas reduction into all aspects of County operations and activities.
 - 9.3 Communities, businesses, and natural resources that have prepared for and successfully adapted to the potential opportunities and adverse effects of climate change.
 - 9.4 “Green” building design in new and existing construction, through the increased use of energy efficiency, alternative energy, recycled materials, renewable resources, local materials, water efficiency, and pollution reduction.
 - 9.5 Reduction of vehicle miles traveled by developing communities with increased density, mixed uses, compact development, pedestrian and bicycle friendly design, transit oriented development (TOD), and incentives to develop alternatives to fossil fuel-based transportation.
 - 9.6 Expanded capacity and reliance on renewable energy resources such as solar, wind, biomass, and others.
- Reduce greenhouse gas emissions and plan for adaptation to the future consequences of global climate change. (Goal CO-8 Climate Change)
- Assess current greenhouse gas (GHG) emission levels and adopt strategies based on scientific analysis to reduce global climate change impacts. (Policy CO-8.1)

- Implementation Program Action (CO-A-115)
 - Develop a GHG Emissions Reduction Plan and/or Climate Action Plan (CAP) for the County, to control and reduce net GHG emissions, and to address economic and social adaptation to the effects of climate change. Development of this plan(s) shall include the following steps:
 - 1) Conduct a baseline analysis (GHG emissions inventory) for 1990;
 - 2) Adopt an emissions reduction target;
 - 3) Develop strategies and actions for reducing emissions including direct offsets and fees to purchase offsets;
 - 4) Develop strategies and actions for adaptation to climate change;
 - 5) Implement strategies and actions; and
 - 6) Monitor emissions and verify results a minimum of every five years starting in 2010.
 - Encourage collaboration with the cities to include the incorporated areas in the plan(s). Require County operations and actions, as well as land use approvals to be consistent with this plan(s). Utilize the 1982 Energy Plan as a starting point for this effort. Timeframe: 2009-2011

Land Use Element

In general check for provisions that:

- Amend land use designations and zoning at infill sites to establish baseline densities;
- Identify areas near transit stations where lower densities, single use “zones” and heights should be modified to allow for more efficient land uses and transit supportive density (possibly use overlays with incentives to achieve best results);
- Adopt flexible parking standards at infill and TOD (Transit-Oriented Development) sites;
- Adopt flexible Traffic Levels of Service (LOS) where alternatives are available; and
- Provide for development that is attractively designed along with walkability, mixed uses, transit supportive densities, grid street patterns, connectivity.

Prioritize Infill (Infill First)

- Encourage infill by offering reduced fees or elimination of fees in infill locations, fast track processing and infill-only plans and funding for infrastructure. (*See Sacramento Regional County Sanitation District, Lancaster Urban Structure Program and Attorney General Stockton Settlement Agreement*);
- Promote infill and more efficient land use patterns through land use designations; infill and higher density along corridors; assistance with site assembly (*See Santa Cruz; City of Sacramento Infill Program; San Leandro for site assembly*); and

- Promote Transit Oriented Development through reduced transportation fees/parking requirements (*See Davidson NC; City of Los Angeles TOD Ordinances/zoning*).

Require Jobs-Housing Balance

- Strive to achieve a minimum jobs/housing balance of 1.2 jobs for every dwelling unit on average within each community. (*Yolo County Draft General Plan, Policy CC-2.10*); and
- Ensure that jobs are created concurrent with housing. Include requirements to ensure a reasonable ongoing balance between housing and jobs and/or other mechanisms to constrain housing to stay balanced with job creation through buildout of the area. Each phase of housing shall be required to be accompanied by balanced job-generating development. Strive to match overall wages to home prices. (*Yolo County Draft General Plan, Policy CC-3.3*)

Require Mixed Use

- Require all commercial properties in the City to have a mix of uses. (*Santa Rosa Draft General Plan, Principle #16*);
- Where feasible, require light industrial and public use parcels to have a mix of uses; and
- Encourage [require] multi-story and mixed use buildings within downtown areas. (*Draft Yolo County Draft General Plan, Policy CC-4.22*)

Require Great Design

- Prohibit gated or walled communities; garage forward design; cul de sacs;
- Require houses to front on street with front exterior living spaces where feasible; and
- Require commercial uses to be oriented to the side-walk with pedestrian scale elements on the ground floor, with varied and articulated facades and windows, covered arcades and other attractive elements.

Sustainable Development:

- The City shall commit itself to sustainable development practices. (*Santa Rosa Draft General Plan, Principle #17*);
- Require LEED certification for all public, private and existing buildings and LEED- Neighborhood Design (LEED ND) for other applicable projects. (*Yolo County Draft General Plan, Policy CC-4.13*);
- Require sufficient density in new residential development to support local bus service (*see Attorney General Stockton Settlement, 5.d.; See also Greenbelt Alliance Climate Change Policies which support minimum residential densities of 10-15 dwelling units per acre for single-family homes and at least 25-35 for suburban multi-family housing*).

Complete Neighborhoods Policy to Increase Walkability

Source: City of Sacramento General Plan

"The City shall promote the design of complete and well structured neighborhoods whose physical layout and land use mix promote walking to services, biking and transit use; foster community pride; enhance neighborhood identity; ensure public safety; are family friendly and address the needs of all ages and abilities."

Model Definition of Complete Neighborhoods

Complete neighborhoods promote livability and safety for residents of all ages, incomes, and cultural backgrounds. Characteristics of complete neighborhoods include the following:

- A mix of housing types and affordability in a combination of vertical and horizontal mix of uses (ideally vertical along "main street or mini-main streets;")
- One or more nodes of vibrant commercial or civic activity that provide identify for the neighborhood (e.g. such as shopping district, collection of public buildings or spaces);
- Neighborhood services and facilities including, schools, parks, retail (e.g. grocery store, drug store), restaurants and cafes, and community centers or other public meeting hall. (These can be identified for each complete neighborhood during detailed planning (specific planning by surveying existing residents within a one-mile radius of the area);
- Employment opportunities that are walkable, bikable and contain densities that support transit (including buses, shuttles and other forms of transit);
- Extensive tree canopy and attractive landscaping;
- Limited to no surface parking;
- Sustainable designs and green infrastructure that respond to climatic demands and conserves scarce resources;
- An interconnected street system with short blocks and no cul de sacs;
- Superior design that is pedestrian scale and brings buildings up to the street with space for vibrant sidewalks and walkways connecting through to existing neighborhoods; and
- A complete network of pedestrian, bicycle, transit and roadway facilities that are connected to adjacent neighborhoods.

Energy Element

(See also Handout on Housing Element Policies and Programs Addressing Climate Change)

- Require green building through a mandatory Green Building Program and Ordinances.
- Require new residences be equipped with Energy Star appliances, compact fluorescent lighting and LED outdoor lighting.
- Encourage [require] all new construction to be zero-net energy by combining building energy efficiency design features with on-site clean distributed generation so as to result in no net purchases from the electricity grid. (*Yolo County Draft General Plan*, Policy CC-4.4)
- Require measures to minimize “heat islands” by requiring light-colored and reflective roofing materials and paint; “green” roofs; light colored roads and parking lots; extensive numbers of shade trees in parking lots; and shade trees and/or overhangs on the south and west sides of new or renovated buildings. (*Yolo County Draft General Plan*, Policy CC-4.8)
- Create financial incentives programs to encourage the remodel of older homes to reduce energy use. (e.g. through AB 811 financing) (*Yolo County Draft General Plan*, Policy CC-A27)
- Exceed State waste diversion requirements. (*Yolo County Draft General Plan*, Policy PF-9.1)
- Require salvage, reuse or recycling of construction and demolition materials and debris at all construction sites (at least 75%). (*Yolo County Draft General Plan*, Policy PF-9.8)

See also:

- – new buildings must exceed 2008 Title 24 standards by 20%; p. 4-73 and p. 7-15, 7-16 – include cool roofs and pavement and shading parking areas (*Solano County General Plan*, Policy RS.I-4.8);
- LED lighting (require use for traffic lights, street lights, parking garages, outdoor lighting, etc.; see “LED City Community” at: <http://www.ledcity.org/>); Energy Star appliances and windows (*Solano County General Plan*, Policy RS.I-47),
- Solar Ready buildings (Sebastopol, Chula Vista); energy performance audit or energy use disclosure at time of sale (*Solano County General Plan*, Policy RS.I-38); California Energy Commission New Solar Home Partnership, Tier II energy efficiency standard: 30% more efficient than 2008 Title 24.
- Renewable energy: Requirements to incorporate onsite renewable generation, where feasible. Solano Co. GP, Policies RS.I-46 (at least 20% of need on new commercial buildings and 50% on new county buildings (RS.I-40); residential development of more than 6 units must participate in CEC’s New Solar Homes Partnership; renewable energy financing districts, see Palm Desert, Sonoma Co., Berkeley.

- RECO: Programs requiring energy audits and requiring energy efficiency upgrades to existing buildings at time of sale, or major remodels or additions. Examples: Sacramento, San Francisco, San Diego (re plumbing); Sacramento GP policy; Stockton Settlement.
- Require energy efficiency building orientation; Pre-wiring for solar.

Circulation Element

- Require all new development to be walkable. Require pedestrian oriented design including compact and street oriented mix of uses; interconnected grid street system; short to medium width blocks; narrower roadways; accessibility to transit; safe pedestrian connections and crossings; parks, public open spaces, street furniture, attractive pedestrian oriented design at the street level; street facing buildings; and street trees and landscaping. (*Walnut Creek “pedestrian retail zoning district”*).
- Provide for greater street connectivity and efficient movement of all transportation modes by: allowing roundabouts; requiring bicycle and pedestrian connections; requiring a grid-street system; incorporating traffic calming. (*Yolo County Draft General Plan, Policy CI-3.15*)
- Reduce required number of parking spaces; parking minimums, shared parking, allow flexible parking standards, parking pricing to reduce driving. See *Downtown Ventura Parking Management Plan, MTC Parking Policies Toolkit, Central Petaluma Specific Plan, Section 6, Parking Standards*.
- Reduced Vehicle Miles Traveled/Target for New Development (*Yolo County Draft General Plan DEIR*)
- The Dunnigan Specific Plan shall incorporate a maximum of 44 Vehicles Miles Traveled generated per household per weekday through implementation of all feasible actions. Additional actions are required if the VMT goal is not achieved. (*Yolo County Draft General Plan, Policy CI-3*)
- Adopt and fund a Safe Routes to School program (*Petaluma Ordinance*).

Open Space and Conservation Elements

- Map and preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space lands that provide carbon sequestration benefits. (*Solano County Resource Element; Yolo County Draft General Plan; Marin County General Plan*).
- Establish a mitigation program for purchase or transfer of development rights in open space areas that provides carbon sequestration benefits.

- The target threshold for resource parks (regional plus open space parks) shall be 20 acres per 1,000 population. Larger ratios may be required in Specific Plans. (*Yolo County Draft General Plan: Policy CO-1.10*)
- Solano County Resources Element:
 - Require the protection of natural water courses. (*Policy RS.P-65*)
 - Protect existing open spaces, natural habitat, floodplains, and wetland areas that serve as groundwater recharge areas. (*Policy RS.P-68*)
- Water Conservation
 - Zero net new water use. (*Marin County General Plan; City of Lompoc Ordinance*)
 - Require water efficient landscapes.

Safety Element

- Map and preserve areas needed to protect public safety from the impacts of climate change including areas of high fire danger, flooding and sea level rise and the like through programs for purchase or transfer of development rights in these high risk areas.
- Monitor the impacts of climate change and use adaptive management to develop new strategies to respond to the impacts of climate change. (*Marin County General Plan*)