



White Paper: Implementing the Climate Action Plan in the Zoning Regulations

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Introduction

California is a global leader in addressing climate change. The State adopted the Global Warming Solutions Act (AB 32) in 2006 to establish the statewide goal of reducing statewide greenhouse gas (GHG) emissions to 1990 levels by the year 2020. Local governments are developing and implementing local strategies to reduce and mitigate GHG emissions. Pursuant to AB 32 goals, the City of San Luis Obispo adopted its Climate Action Plan (CAP) in August 2012. The CAP includes the City's adopted GHG emissions reduction targets and the plan to achieve those targets. As part of the plan implementation measures, the CAP calls for specific revisions to the Zoning Regulations. This paper outlines recommendations to update the Zoning Regulations to effectuate the CAP Implementation Program.

Zoning Implementation Comparison Table

The following section outlines the implementation measures from the CAP that require revisions to the Zoning Regulations. The first and second columns in the Zoning Implementation Comparison Table list the Goals and Implementation measures from the CAP. Since adoption of the CAP in 2012, the City has begun implementing several of the zoning-related implementation measures. The third and fourth columns indicate whether the Zoning Regulations already address the Implementation measure and, where applicable, include reference to the specific Zoning Regulations Chapter or Section.

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Zoning Implementation Comparison Table

Information from the Climate Action Plan (CAP)			
Goal	Implementation	Do the Existing Zoning Regulations Meet the Implementation Measure?	Existing and Proposed Updates to the Zoning Regulations or Other City Documents
BLD 2: New Construction Energy Conservation Encourage and incentivize new development to exceed minimum CALGreen requirements.	<input checked="" type="checkbox"/> BLD 2.1 Expand incentive program for projects that exceed Title 24 energy efficiency standards.	Yes	Yes, see Downtown-Commercial (C-D) Zone - Section 17.42.020, and Planned Development (PD) Overlay Zone - Section 17.50.060
	<input type="checkbox"/> BLD 2.2 Require new development to install energy-efficient appliances.	No	<u>This issue is best addressed in Title 15 – Buildings and Construction or as a matter of policy.</u>
	<input type="checkbox"/> BLD 2.3 Amend design guidelines and other documents to promote low-impact development strategies such as cool roofs and cool paving surfaces.	No	<u>Can be addressed in Design Guidelines or Title 15 – Buildings and Construction.</u>
RE 2: Renewable Energy Implementation Incentivize renewable energy generation in new and existing developments.	<input type="checkbox"/> RE 2.1 Incentivize renewable energy generation by streamlining review processes, reducing permit costs, and/or allowing modest density bonuses for construction projects with renewable energy installations.	No	Zoning Regulations could include FAR bonuses for project with renewable energy installations.
	<input type="checkbox"/> RE 2.2 Revise City policies and regulations as needed to eliminate barriers to the use of renewable energy; implement General Plan programs that require solar power for certain residential projects (COSE 4.6.17).	No	Zoning Regulations can include provision for small-scale renewable systems integrated into development projects.

Zoning Implementation Comparison Table

Information from the Climate Action Plan (CAP)			
Goal	Implementation	Do the Existing Zoning Regulations Meet the Implementation Measure?	Existing and Proposed Updates to the Zoning Regulations or Other City Documents
TLU 2: Alternative Vehicles Promote clean air vehicles (CAV), and expand the network of electric car charging stations and car-sharing parking spaces.	<input type="checkbox"/> TLU 2.1 Require all new development with 50 or more parking spaces to designate a minimum 8% of parking spaces for clean air vehicles.	No	Provision can be included in the parking regulations.
	<input type="checkbox"/> TLU 2.2 Require all new development with 50 or more parking spaces to pre-wire for electric vehicle charging stations and provide a minimum of two percent charging spaces.	No	Provision can be included in the parking regulations.
	<input type="checkbox"/> TLU 2.5 Allow car-sharing companies to designate spaces in public parking areas and multifamily housing projects.	No	Can be indicated as an allowed use (as additional parking other than that required by the development project)
TLU 5: Land Use Diversity and Density Encourage compact urban form and mixed-use developments.	<input checked="" type="checkbox"/> TLU 5.2 Promote infill by amending the General Plan and Zoning Regulations to increase residential densities in suitable zones.	Yes	See Downtown-Commercial (C-D) Zone - Chapter 17.41.
	<input checked="" type="checkbox"/> TLU 5.3 Incentivize mixed-use development by reducing parking requirements, allowing alternatives to Parking and Driveway Standards, and streamlining permit review.	Yes	Updated Zoning Regulations will build upon existing standards to allow more shared parking and justifiable parking reductions.
	<input checked="" type="checkbox"/> TLU 5.5 Apply a Mixed-Use (MU) overlay zone to areas suitable for TOD based on the SLO2035 General Plan update.	Yes	See current Mixed-Use (MU) Overlay Zone – Chapter 17.55. Updated Zoning Regulations will expand applications.

Zoning Implementation Comparison Table

Information from the Climate Action Plan (CAP)			
Goal	Implementation	Do the Existing Zoning Regulations Meet the Implementation Measure?	Existing and Proposed Updates to the Zoning Regulations or Other City Documents
TLU 7: Shared Parking Reduce VMT and associated GHG emissions by further reducing parking requirements for land uses that share the same parking lot.	<input type="checkbox"/> TLU 7.1 Amend the Zoning Regulations to increase the potential shared parking reduction from 10% to 30%.	Yes	See existing Section 17.16.060 Parking Space Requirements. These regulations will be modified in the updated Zoning Regulations.

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Consistency with the CAP

This section focuses on the CAP implementation measures that require updates to the Zoning Regulations, describes goal associated with each measure, and recommends revisions to the Zoning Regulations to achieve the goals.

BLD 2: New Construction Energy Conservation. *Encourage and incentivize new development to exceed minimum Cal Green requirements.*

“Green” building techniques improve environmental quality by reducing energy consumption, GHG emissions, harmful pollutants in the air, and storm water runoff. The CAP directs the City to take additional steps beyond Title 24 to promote low-impact development strategies, such as cool roofs, cool paving surfaces, permeable paving, and grassed swales. The City has an interest in promoting the use of these technologies because they reduce citywide reliance on the traditional electrical grid and enhance energy resiliency into the future.

The City has adopted several development regulations that exceed CALGreen energy conservation requirements, such as requiring buildings taller than 50 feet in the C-D zone to meet minimum energy conservation requirements (see Development Regulations Section 17.42.020). The City has also established incentives in Development Regulations Section 17.50.060 that allow higher maximum building heights for projects that exceed Title 24 energy requirements by at least 30 percent.

WHAT IS TITLE 24?

Title 24 of the California Code of Regulations contains the regulations that govern the construction of buildings in the state. The California Green Building Standards Code, or CALGreen, is Part 11 of Title 24. The CALGreen code focuses on promoting positive environmental impacts and encouraging sustainable construction practices.

While CAP Implementation Measures BLD 2.2 and BLD 2.3 are not directly related to the Zoning Regulations, the City can address these measures by amending the Community Design Guidelines. Section 6.1 of the existing Community Design Guidelines focuses on site planning and structure design to reduce energy and other resource consumption. Section 6.7 builds upon Section 6.1 by laying out guidelines for the location and orientation of solar energy facilities. The City can revise Chapter 6 of the Community Design Guidelines to cover additional types of energy-efficient installations, including wind and alternative forms of solar installations such as solar roof tiles. The City can also amend Chapter 6 to include a new section that provides guidelines and strategies for low-impact development, such as cool roofs and cool paving surfaces. (Amending the Community Design Guidelines is not in the scope of the Zoning Regulations Update, however certain Guidelines, particularly regarding Infill Development, are being enhanced and incorporated into the Zoning Regulations.)

RE 2: Renewable Energy Implementation. *Incentivize renewable energy generation in new and existing developments.*

Renewable energy installations, such as solar panels and wind turbines, provide numerous benefits, including reducing GHG emissions and dependence on fossil fuels, enhancing resiliency during natural disasters such as heat waves or severe droughts, and reducing or eliminating energy bills. Despite these long-term benefits, development standards often pose a barrier to renewable energy installations because the standards may be unclear or overly cumbersome. Additionally, the upfront capital costs for construction and installation can be a hindrance. To increase the use of renewable energy, the City can require that new developments (i.e., residential, commercial, mixed-use, industrial) include renewable energy systems at the outset of a project. This can directly benefit a new owner or tenant since they would not be paying the total cost up front. Instead, the fee for renewable energy installation would be bundled in either the rent or sale price of the property. To incentivize existing developments to install renewable energy systems, the City could provide flexible development standards such as reduced setbacks or increased lot coverage or building height.

The existing Zoning Regulations do not include incentives for renewable energy generation. To achieve Implementation Measure RE 2.1 of the CAP, the City should revise Chapter 17.18: Performance Standards to include incentives for new residential, office, commercial, and industrial projects that include renewable energy generation. For example, the City of San Diego offers applicants the opportunity to apply for expedited permit processing for solar installation, only if the solar installed onsite provides a percentage of energy to the development, reducing its demand on the power grid. Other communities such as Tucson waive permitting fees up to \$1,000 for single installations and up to \$5,000 for large installations. The City can also adopt standards that require installation of renewable energy systems in all new developments. This provision could apply to all residential, office, commercial, and industrial zones in Chapter 17.24. For example, the City/County of San Francisco requires newly constructed non-residential buildings that are 2,000 square feet or greater in gross floor area and are 10 floors or less to install solar panels (see Section 5.201.1.2 of the City and County of San Francisco Municipal Code).

To implement measure RE 2.2 of the CAP, the City can perform a thorough review of regulations and development standards to assess whether existing standards are creating barriers for renewable energy installations. The City can consider increasing height limits for components of solar energy systems from 10 feet to 15 or 20 feet above the maximum building height in Section 17.16.040. Additionally, the City can modify existing Zoning Regulations Section 17.16.020, which categorizes solar collectors as “architectural features” with a maximum extension of 30 inches into a required setback (see Section 17.16.020). The City could modify this section to allow an extension into setbacks greater than 30 inches for solar and wind turbine installations.

TLU 2: Alternative Vehicles. *Promote clean air vehicles (CAV), and expand the network of electric car charging stations and car-sharing parking spaces.*

The California Department of Motor Vehicles (DMV) has designated vehicles makes and models that qualify as clean air vehicles (CAVs). The DMV identified these CAVs based on whether the vehicle was either a certified pure zero emission vehicle (100 percent battery electric and hydrogen fuel cell), a compressed natural gas (CNG) vehicle, or a transitional zero emission vehicle (TZEV). The existing Zoning Regulations do not include requirements for new development to provide on-site parking for CAVs. The City should amend the Zoning Regulations to require that all new development projects with 50 or more parking spaces designate a minimum of eight percent of parking spaces for CAVs.

Similar to CAVs, electric and hybrid vehicles have numerous benefits for the environment and the consumer, including increasing energy security, improving the fuel economy, and lowering fuel costs. Electric vehicles also do not emit GHG, while hybrid vehicles emit a lower amount of GHG compared to conventional fuel vehicles. The existing Zoning Regulations do not include requirements for new development to provide parking spaces for electric vehicle charging stations. The City should also require new developments with 50 or more parking spaces to provide a minimum of two percent of parking spaces that are pre-wired for electric vehicle charging stations.

In addition to the environmental and economic advantages of CAVs and electric vehicles, the growing popularity of car-sharing and ridesharing is providing an alternative to car-ownership altogether. The rise of car-sharing through online platforms such as Zipcar, Car2Go, and Reachnow improve the accessibility to car rental alternatives. Ridesharing apps such as Lyft and Uber further provide alternative modes of transportation. These options enable more City residents to reduce or eliminate vehicle ownership, reducing parking demand and traffic congestion.



Figure 1: Examples of designated spaces for car-sharing vehicles.

The existing Zoning Regulations do not address car-sharing services or ridesharing services. The City can revise the parking standards to designate parking spaces for car-sharing vehicles, which encourages car-sharing and provides flexibility to choose different transportation modes. The City can also ensure that ridesharing vehicles that are dropping off and picking up passengers do not impede the overall flow of traffic. Because the City has the greatest need for passenger loading zones for ridesharing services in

downtown, the City can require large projects in the C-D zone to provide designated passenger loading zones for ridesharing services (either curb-side or on site where space is available).

TLU 5: Land Use Diversity and Density. *Encourage compact urban form and mixed-use developments.*

The City has an interest in promoting a compact urban form to reduce automobile trips, promote walking and biking, cultivate economic activity, support a sense of community, and preserve open space and agricultural land. The City has promoted infill projects by increasing residential densities along heavily traveled corridors, near Cal Poly, and in Downtown, while maintaining existing development standards for areas zoned low-density residential (R-1) to preserve neighborhood character. The Zoning Regulations Section 17.16.060 incentivizes mixed-use development by reducing parking requirements by up to 30 percent based on Director approval of an Administrative Use Permit. The City also established a Mixed-Use (MU) Overlay Zone for areas that can be enhanced by additional housing and proximity to services and jobs (see Development Regulations Chapter 17.55).

To implement measure RE 2.2 of the CAP, the City might consider applying the MU Overlay Zone to parcels zoned High-Density Residential (R-4). Applying the MU Overlay Zone would provide flexibility to dense housing projects in the R-4 zone, such as the ability to incorporate active uses on the ground floor, including neighborhood retail and commercial uses. The City could also revise Chapters 17.30: High-Density Residential (R-4) Zone and Chapter 17.42: Downtown-Commercial (C-D) Zone to increase residential densities—or even eliminate density standards in the C-D zone, as discussed in the Flexible Density white paper—and promote a compact urban form by allowing more dwelling units per acre.

TLU 7: Shared Parking. *Reduce Vehicle Miles Traveled (VMT) and associated GHG emissions by further reducing parking requirements for land uses that share the same parking lot.*

Parking demands, like other transport demand patterns, operate on a peak and off-peak schedule depending on related land use. Distinct but complementary patterns, such as “office parking” that is generally empty in the evenings and on weekends and “residential parking” that is generally more heavily used in the evenings, offer an opportunity for cities to better satisfy residents and commuters without increasing supply. Shared parking is a land use/development strategy that optimizes parking capacity by allowing complementary land uses to share spaces, rather than producing separate spaces for separate uses.

The City is currently meeting Goal TLU 7 through existing regulations in Section 17.16.060 that allow for two or more uses to share parking spaces and reduce their total parking requirement by up to 30 percent. In the Zoning Regulations Update, the City is considering requiring parking demand studies to justify the type and percentage of reductions on a case-by-case basis, which could further reduce the amount of land devoted to parking.

Considerations for Updating the Zoning Regulations

The City is committed to addressing climate change to enhance sustainability, quality of life, and economic prosperity into the future. The City can continue reducing GHG emissions by fulfilling the commitments set forth in the CAP, which includes the following revisions to the Zoning Regulations:

- Encourage and incentivize “green” building techniques in new development to promote energy conservation by:
 - Establishing minimum energy conservation standards to each residential, office, commercial, and industrial zone in Chapters 17.24: Low-Density Residential (R-1) Zone to 17.49: Business Park (BP) Zone.
- Incentivize renewable energy installations in new and existing developments by:
 - Revising Chapter 17.18: Performance Standards of the Zoning Regulations to include incentives for new residential, office, commercial, and industrial projects to include renewable energy generation, or adopt separate sets of standards for each residential, office, commercial, and industrial zone in Chapter 17.24.
 - Increasing the height limit for components of solar energy systems from 10 feet to 15 or 20 feet above the maximum building height in Section 17.16.040.
 - Amending Section 17.16.020, which defines solar collectors as “architectural features” with a maximum extension of 30 inches into setbacks. Develop separate setback regulations for renewable energy installations, including solar and wind turbines, and provides a greater extension beyond 30 inches.
- Promote the use of clear air vehicles (CAV) and expand the network of electric car charging stations and designated ridesharing passenger loading zones by:
 - Revising the parking standards to designate parking spaces for car-sharing vehicles.
 - Requiring large projects in the C-D zone to designated passenger loading zones on major roads specifically for ridesharing services.
- Encourage compact urban form and supporting mixed-use development by:
 - Identifying parcels zoned High-Density Residential (R-4) that are appropriate for the MU Overlay Zone.
 - Revising Chapters 17.30: High-Density Residential (R-4) Zone and Chapter 17.42: Downtown-Commercial (C-D) Zone to increase residential densities and promote a compact urban form through increasing the height and maximum number of dwelling units per acre.

- Continue to reduce VMT and associated GHG emissions through parking demand studies on a case-by-case basis to substantiate the amount and type of parking reductions instead of relying on a set percentage for each type of reduction.

Updating the Zoning Regulations with a focus on climate change mitigation and adaption will ensure the City of San Luis Obispo is proactively developing a resilient community.

Sources

American Planning Association: Integrating Solar Energy into Local Development Regulations, accessed January 2018:

<https://www.planning.org/research/solar/briefingpapers/localdevelopmentregulations.htm>

California Air Resources Board, accessed January 2018:

<https://www.arb.ca.gov/msprog/carpool/carpool.htm>

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