



Climate Action Plan/CAP Consistency Checklist

Urban Forestry Program

Standards are detailed in Section 3047 of the City's Zoning Ordinance.

UFP Design

- ◆ Permeable pavers
- ◆ Native trees
- ◆ Strategic planting location
- ◆ Efficient irrigation



As part of an effort to reduce greenhouse gas (GHG) emissions and increase overall tree canopy, the City of Oceanside requires that **new development** provide for a walkable environment through the incorporation of tree canopy and permeable surface area. Rather than dictating a minimum number of trees, the City has instead set minimum lot coverage standards for tree canopy and permeable surface area. These standards complement other landscaping requirements and serve to enhance site areas already designated for landscaping or open space purposes. Applicants can utilize a variety of resources to calculate the associated GHG emission reductions with the proposed tree canopy, such as the [U.S. Forest Service CURF Tree Carbon Calculator](#), or work with a qualified consultant. To support applicants subject to these requirements, the City has prepared a **recommended tree list** that can be accessed on the [City's website](#).

Urban Forestry Program (UFP) refers to design features that create a walkable environment by using tree canopy and permeable surface area. UFP can help cool the urban environment by providing shade and evapotranspiration.

UFP Alternatives

Planting in the public right-of-way fronting the project site.

Planting on an alternative site within the City.

Paying into the City's Tree Fund.

Paying into a qualified tree planting program.



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Urban Forestry Program (UFP)

Benefits of trees...

CLEANER AIR

100 trees remove 53 tons of carbon dioxide and 430 pounds of other air pollutants per year.



COMBATS CLIMATE CHANGE

By reducing energy demand and absorbing carbon dioxide, trees and vegetation decrease the production and negative effects of air pollution and greenhouse gas emissions.



REDUCES URBAN HEAT ISLAND EFFECT

Shaded surfaces may be 20-45°F cooler than the peak temperatures of unshaded materials.



SAVE ENERGY

Strategically placed shade trees can help save up to 56% on annual air-conditioning costs.



CLEANER WATER

A medium-sized tree intercepts up to 2,300 gallons of stormwater runoff per year.



CAPTURES RAINWATER

100 mature trees can capture and store about 139,000 gallons of rainwater per year.



INCREASE PROPERTY VALUE

Healthy, mature trees add an average of 10% to a property's value.



IMPROVE MENTAL HEALTH

People living in neighborhoods with less than 10% tree canopy are more likely to report symptoms of depression, stress and anxiety.



INCREASE BUSINESS

Shoppers will spend 9% to 12% more for goods and services in business districts having high quality tree canopy.



GREEN ECONOMY

In 2009, urban forestry supported 60,067 jobs in California resulting in \$3.3 billion individual income.



IMPROVES PUBLIC HEALTH

People living in polluted urban area are less likely to be admitted to hospitals with asthma when there are lots of trees in their neighborhood.



Climate Action Plan/CAP Consistency Checklist

Transportation Demand Management (TDM)

TDM standards are detailed in Section 3047 of the City's Zoning Ordinance.

Common TDM Measures

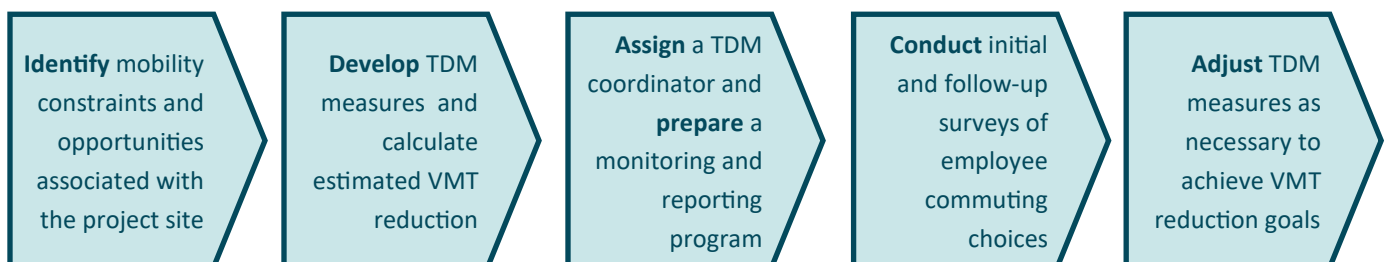
- ◆ Carpool/Vanpool
- ◆ Telecommuting
- ◆ Transit Passes
- ◆ Shuttle Service
- ◆ Parking Cash-Out
- ◆ Bicycle Facilities
- ◆ Flexible Schedules
- ◆ Guaranteed Rides



As part of an effort to reduce greenhouse gas (GHG) emissions associated with single-occupancy vehicle (SOV) trips, the City of Oceanside requires that **new non-residential development generating more than 100 daily vehicle trips** prepare and implement a transportation demand management (TDM) plan that reduces SOV commute trips by at least 10 percent. Rather than prescribing TDM measures, the City allows applicants to select measures best suited to their workforce, operations, and project site. Applicants can utilize off-the-shelf TDM resources (e.g., **SANDAG's Mobility Management Toolbox**) or work with a qualified transportation consultant to choose preferred measures, calculate estimated trip reduction, and develop a monitoring and reporting program. To support applicants subject to TDM requirements, the City has prepared a **TDM plan template** that can be accessed on the [City's website](#).

Transportation Demand Management (TDM) refers to programs and strategies that reduce single-occupancy vehicle trips by encouraging other modes of transportation. In addition to easing traffic congestion, TDM can improve air quality, reduce transportation costs, increase worker productivity, and enhance public health.

The TDM Process





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Transportation Demand Management (TDM)

Local Businesses Encouraging Sustainable Commuting Choices...



Genentech covers nearly 100 percent of the transportation costs of employees who chose alternative commute options:

- \$170 monthly subsidy for any type of public transportation
- Ride-hailing subsidy for first-mile/last-mile connections
- Fully subsidized vanpool
- Forthcoming incentives for active transportation



Magnaflow provides a variety of incentives and site improvements to urge employees to commute sustainably:

- Pre-tax savings plan for transit costs
- Telework and alternative work schedules
- Designated electric vehicle parking
- Bike racks



Hydranautics encourages employees to explore alternative commute options through:

- Designated vanpool and electric vehicle parking
- Bike to Work Day and Rideshare Week promotions
- Shuttle service to transit stations
- Bike racks, showers, and locker rooms

All of the businesses highlighted above have coordinated their TDM efforts with SANDAG's **iCommute** program, which provides resources for commuters, employers, and local governments seeking to reduce SOV commute trips. Local businesses subject to the City's TDM requirements are encouraged to contact **iCommute** staff to learn about rideshare subsidies, commuter benefit programs, trip planning services, and other ways to make sustainable commuting a viable option for employees.



To better understand the basis for the City's TDM requirements, see Emission Reduction Measure TL-5 in the City's [Climate Action Plan](#).



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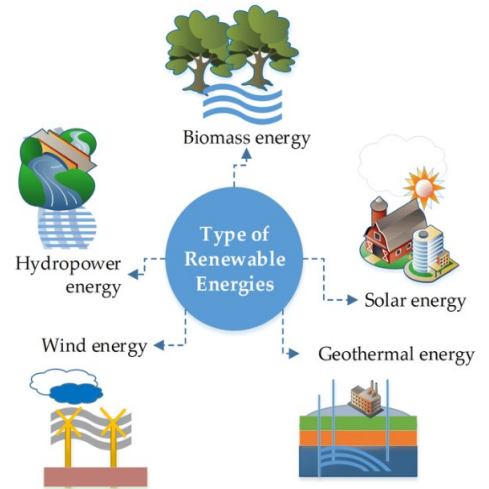
On-Site Renewable Energy

Standards are detailed in Section 3047 of the City's Zoning Ordinance.

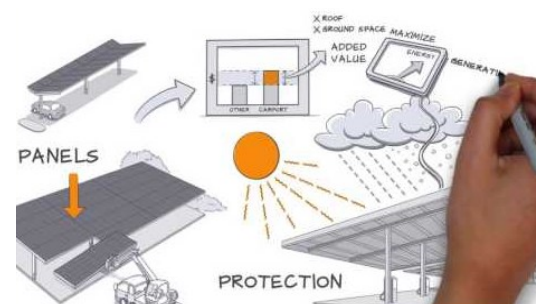
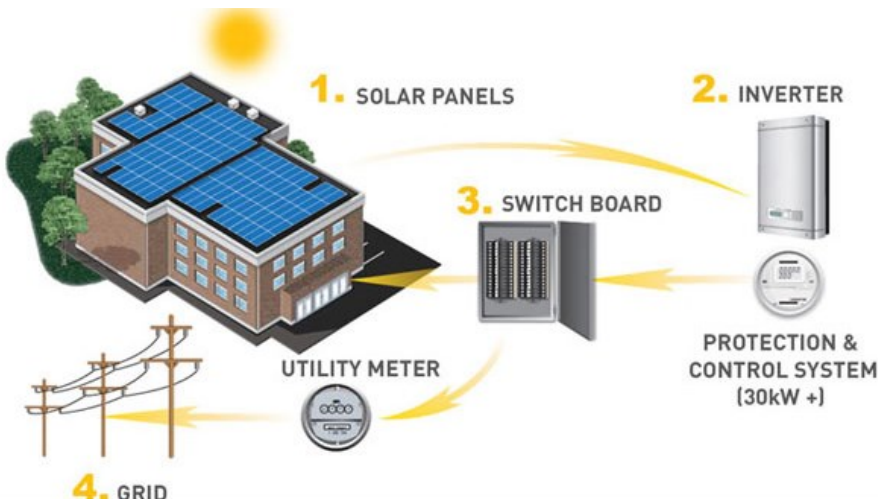
As part of an effort to reduce greenhouse gas (GHG) emissions associated with energy consumption, the City of Oceanside requires the projects listed below to offset at least 50% of their forecasted energy demand by incorporating on-site renewable energy sources:

- Residential projects that include 25 or more units
- Industrial projects larger than 25,000 square feet
- Commercial projects larger than 12,500 square feet
- Institutional projects larger than 12,500 square feet
- Mixed-use projects larger than 12,500 square feet

Additionally, all development projects over 1,500 square feet are required to be "Solar Ready" per the California Energy Code and California Green Building Standards Code.



Renewable energy refers to energy that comes from natural sources or processes that are constantly replenished, such as solar or wind.



Solar Ready design is implemented when designing the building's rooftop and associated equipment. The intent is to reserve a penetration-free and shade-free portion of the roof for the potential future installation of solar panels.

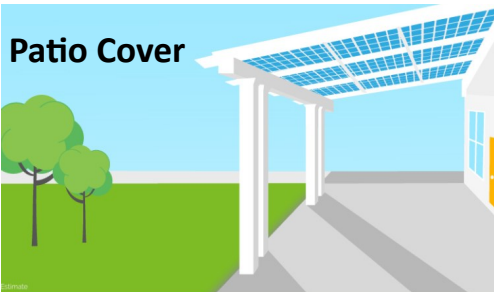


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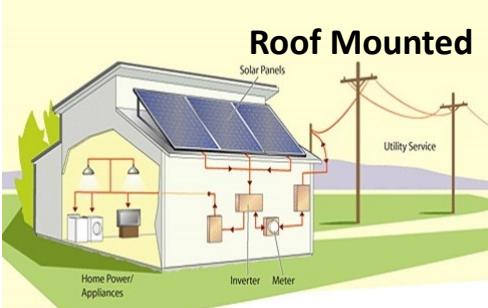
On-Site Renewable Energy: Solar Panels

Solar PV Installation Systems

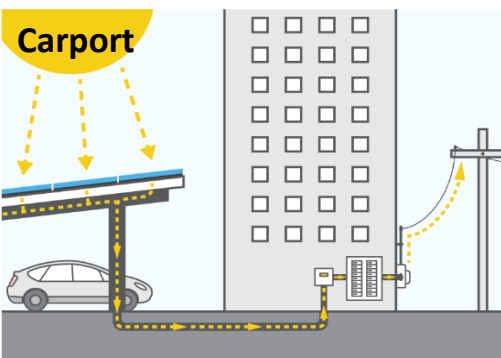
Patio Cover



Roof Mounted



Carport



Ground Mounted



Solar PV panels generate electricity without releasing emissions and reduce electricity demand from non-renewable energy generation. Benefits of solar include: **reduced carbon footprint, lower utility bills, increased property value, and tax credits and/or rebates.**

Solar PV Financing Options

1. **Buy.** Purchase solar PV system and own the entire system.
2. **Home Equity Loan.** Secured to finance the system.



3. **Lease.** Rent the system for a set time period. Pay a fixed monthly rate. *Most common option.*
4. **Power Purchase Agreement (PPA)** . Similar to a lease, but monthly payment is based on every kWh the solar system produces instead of a fixed monthly rate.
5. **Property Accessed Clean Energy Program (PACE)** . System is financed through an assessment collected with property taxes.

If unfeasible to install on-site solar panels, alternatives to meeting renewable energy requirements include programs such as [EcoChoice](#) and [EcoShare](#). Information on these programs is available thru [SDG&E](#).

To better understand the basis for the City's on-site renewable energy requirements, see

Emission Reduction Measure E-2 in the City's [Climate Action Plan](#).



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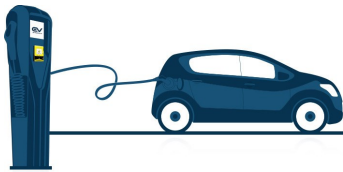
Electronic Vehicle (EV) Charging

EV standards are detailed in Section 3047 of the City’s Zoning Ordinance.

EV Key Acronyms

- ◆ EVSE (Electric vehicles supply equipment)
- ◆ HEVs (Hybrid electric vehicles)
- ◆ PEVs (Plug in electric vehicles)
- ◆ PHEVs (Plus in hybrid electric vehicles)
- ◆ ZEVs (Zero emission vehicles)
- ◆ Level 1 (120 volt charging)
- ◆ Level 2 (240 volt charging)

Oceanside’s Climate Action Plan (CAP) provides policies and standards that assist in solidifying the City’s commitment to reducing Green House Gases (GHG) emissions by increasing the amount of zero-emission vehicles by 2035. The City’s goal for reducing GHG emissions will require an ordinance that provides zero-emission vehicle parking and electric vehicle charging stations included within new construction and residential renovations. The proposed EV ordinance will enable alternative fueled vehicles as specified within CAP measures TL2 & TL3 and zero emission vehicle parking requirements and ratios as specified within the amended Articles 30 & 31 of the Zoning Ordinance. The table below represents the City’s proposal as per Sect. 4.106.4 of the Cal Green Building Code for required Residential & Non-Residential EV charging spaces and EV equipped spaces.



Total # of Actual Parking Spaces	# of Required EV Spaces	# of Required EVSE Installed Spaces
5-9	1	1
10-25	2	1
26-50	4	2
51-75	6	3
76-100	9	5
101-150	12	6
151-200	17	9
201+	10% of total ¹	50% of required

¹. Calculation for EV spaces & EVSE installed spaces shall be rounded up to the nearest whole number.



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Electronic Vehicle (EV) Charging

What types of projects are required to comply with this ordinance?

All new residential and non-residential construction, major additions that require new parking, and alterations to existing developments that include electric vehicle charging capabilities as part of project.

The City's CAP provides zero emission/EV measures and strategies for EV charging stations, pre-wiring for residential and non-residential developments, 12% designated parking requirements for non-residential and compliance with the with Green Oceanside incentives. More information regarding the City's CAP zero emission/electric vehicle regulations can be accessed in the City's [Climate Action Plan](#).



NCTD (North County Transit District) located in the downtown area of the City provides a handful of EV charging opportunities through Level 2 facilities.



Retail/Shopping Centers have converted small percentages of their available customer parking to EV charging stalls. Staff anticipates higher percentages of EV stalls will be coming in the future.

The sites listed above comply with the state's AB1236, which establishes the permitting process and communication requirements for EV vehicle charging. The San Diego Regional Planning organization (SANDAG) provides a regional EV charging program that includes incentives for public and workplace Level 2 charging infrastructure. SANDAG Energy and Climate Change Section for regional EV charging programs informs the public on Federal policies for EV development, while informing the public on different tax credits, rebate programs, and other incentives from various agencies, [SDG&E](#), such as the [Air Resource Board](#), [Caltrans](#), many more. See the [SANDAG' Regional Electric Vehicle Charging Program](#) website for additional resources and background on ways to reduce our carbon footprint.