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# RENEWABLE ENERGY DEVELOPMENT

## STATE TAX POLICIES AND INCENTIVES IMPACTING RENEWABLE ENERGY DEVELOPMENT

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### CALIFORNIA

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## **Tribal Governments are Eligible for:**

- Some utility on-bill financing programs only

### **State Taxes that Impact Energy Investment Attractiveness**

#### **Gross Receipts Tax**

California imposes an \$800 gross receipts tax on LLC's. If gross receipts exceed \$250,000, the tax increases to \$11,970.

#### **Possessory Interests in Taxable Government-Owned Real Property**

California imposes a possessory interest tax, which exists when there is a private, beneficial use of publicly-owned, non-taxable real property.

#### **Property Tax as a Percent of Income**

3.44 percent

#### **Personal Income Tax**

- 1 percent for \$0 to \$7,124
  - 2 percent for \$7,124 to &17,346
  - 4 percent for \$17,346 to \$27,377
  - 6 percent for \$27,377 to \$38,004
  - 8 percent for \$38,004 to \$48,029
  - 9.30 percent for \$48,029 to \$1,000,000
  - 10.3 percent for \$1,000,000+

#### **Corporate Income Tax**

8.84 percent

#### **Sales and Use Tax**

7.25 percent

#### **Unemployment Insurance Tax**

1.5 percent to 6.2 percent

#### **Gasoline Tax**

37.7 cents per gallon



	<p><b><u>Diesel Tax</u></b></p> <p>15 cents per gallon</p>
<p><b>Exemptions for Doing Business in Indian Country</b></p>	<p>None.</p>
<p><b>Tax Incentives</b></p> <p>➤ <b>Property Tax Exclusion (Solar)</b></p>	<p><b><u>Property Tax Exclusion for Solar Energy Systems</u></b></p> <p>The California Revenue and Taxation Code includes a property tax exclusion for certain solar energy systems installed by December 31, 2016. It applies only if the owner-builder did not already receive an exclusion for the same solar energy system.</p> <ul style="list-style-type: none"> <li>➤ <i>Incentive:</i> 100 percent of system value; 75 percent of system value exemption for dual-use equipment</li> <li>➤ <i>Eligible Renewable Technologies:</i> Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics and Solar Mechanical Energy</li> <li>➤ <i>Applicable Sectors:</i> Commercial, Industrial and Residential</li> <li>➤ <i>Expiration:</i> December 31, 2016</li> <li>➤ <i>Authority:</i> Cal Rev &amp; Tax Code § 73</li> </ul>
<p><b>State-Implemented Manufacturing and Business Incentives and Policies</b></p>	<p><b><u>Sales and Use Tax Exclusion for Advanced Transportation and Alternative Energy Manufacturing Program</u></b></p> <p>As a program administered by the California Alternative Energy and Advanced Transportation Financing Authority, California excludes sales and use tax for projects on property used for the design, manufacture, production or assembly of alternative source products, components or systems.</p> <ul style="list-style-type: none"> <li>➤ <i>Incentive:</i> 100 percent exclusion</li> <li>➤ <i>Eligible Renewable Technologies:</i> “Alternative energy” which includes solar photovoltaic manufacturing, landfill gas capture and production, biogas capture and production, electrical vehicle manufacturing, demonstration hydrogen fuel production, electric vehicle battery manufacturing and more.</li> <li>➤ <i>Applicable Sectors:</i> Industrial (private entities)</li> </ul>
<p><b>Other State-Implemented Financial Incentives and</b></p>	<p><b><u>Renewable Auction Mechanism (RAM)</u></b></p> <p>The Renewable Auction Mechanism is designed to streamline the procurement process</p>



## Programs

- Renewable Auction Mechanism
- California Solar Initiative
- Emerging Renewables Program
- Renewable Energy Transmission Initiative

for distributed generation projects (of up to 20 MW in capacity) and is expected to result in 1,000 MW of new distributed generation over the course of two years. The reverse auction occurs twice annually for each investor-owned utility, and each utility is responsible for procuring their share of the 1,000 MW total based on their electricity sales. Bids are screened by the utility and then selected based on the least costly projects. The first auction took place in November 2011—winners will be announced in January 2012.

- *Eligible Renewable Technologies:* Solar Thermal Electric, Photovoltaics, Wind, Biomass, Landfill Gas, Geothermal Electric, Anaerobic Digestion, Municipal Solid Waste, Small Hydroelectric, Wave Energy, Tidal Energy, Ocean Thermal, Biodiesel and Fuel Cells using Renewable Fuels
- *Authorities:* CPUC Decision 10-12-048 (2010) and CPUC Resolution 4414 (2011)

For more information visit

<http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/Renewable+Auction+Mechanism.htm>.

### **California Solar Initiative (CSI)**

In January 2006, the California Public Utilities Commission (CPUC) adopted the California Solar Initiative (CSI), providing \$3.2 billion in incentives for solar-energy projects. The objective is to provide 3,000 MW of solar capacity by 2016. The CSI transitions to performance-based and expected performance-based incentives as opposed to capacity-based buydowns.

Expected performance-based buydowns for systems under 30 kW are \$2.50/W AC for residential and commercial systems and adjusted based on expected performance. Buydowns are \$3.25/W AC for government entities and nonprofits and are also adjusted based on expected performance.

Performance-based incentives (PBI) for systems 30 kW and larger begin at \$0.39/kWh for the first five years for taxable entities and \$0.50/kWh for the first five years for government entities and nonprofits. Incentive levels decline as aggregate capacity of PV installations increases.

- *Incentive:* Varies by system size and sector
- *Eligible Renewable Technologies:* Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat and Photovoltaics
- *Applicable Sectors:* Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Fed. Government, Multi-Family Residential, Low-Income Residential, Agricultural, Institutional, (All customers of PG&E, SDG&E, SCE; Bear Valley eligible only for NSHP)
- *Authorities:* SB 1 (2006), CSI Handbook (2010), CPUC decision 06-01-024 and CPUC Proceeding R0803008



For more information visit <http://www.cpuc.ca.gov/PUC/energy/solar>.

### ***Solar Water Heating Rebate Program (California Solar Initiative)***

California offers rebates for solar water heating systems. Of the \$350 million in total available funding, \$250 million is set aside for systems that displace natural gas powered water heaters and \$100 million is reserved for systems that replace electric water heaters. The program is administered by Pacific Gas & Electric (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCGC) and CCSE on behalf of San Diego Gas & Electric (SDG&E).

- *Rebate Amount:* \$12.82 per estimated therm displaced for systems that displace natural gas; \$0.37 per estimated kWh displaced for systems that displace electricity
- *Maximum Amount:* Varies
- *Eligible Renewable Technologies:* Solar Water Heat
- *Applicable Sectors:* Commercial, Residential and Multi-Family Residential
- *Equipment Requirements:* SRCC certified
- *Eligibility Requirements:* Homes must heat water using gas or electricity that is supplied by one of the participating utilities.
- *Expiration:* December 31, 2017, or when the funds run out
- *Authorities:* AB 1470 (2007) and CSI Thermal Handbook (2010)

For more information visit <https://www.csithermal.com>.

### ***Single-Family Affordable Solar Housing Program (SASH) and the Multi-Family Affordable Solar Housing (MASH) Program (California Solar Initiative)***

Of the \$3.2 billion in total funding for the California Solar Initiative (CSI), \$216 million is reserved for programs to help fund photovoltaic (PV) installations on low-income housing. Half of the funding is for the Single-Family Affordable Solar Housing (SASH) Program and the other half is for the Multi-Family Affordable Solar Housing (MASH) Program.

- *Rebate Amount:* Varies depending on participant's income level and California Alternative Rates for Energy Program eligibility.
- *Maximum Amount:* No maximum for partially subsidized systems; \$10,000 for fully subsidized systems (for single-family residential).
- *Eligible Renewable Technologies:* Photovoltaics
- *Applicable Sectors:* Low-Income Residential and Multi-Family Residential
- *System Requirements:* Minimum system size of 1 kW CEC-AC. Equipment and installation requirements also apply.
- *Expiration:* December 31, 2015
- *Authorities:* SB 1 (2006), CPUC Decision 08-10-036 (2008) and CSI Handbook (Appendix D)

Visit <http://www.gridalternatives.org/sash/single-family-affordable-solar-homes->



program (SASH) and <http://www.cpuc.ca.gov/PUC/energy/Solar/mash.htm> (MASH) for more information.

### ***New Solar Homes Partnership (NSHP)***

The New Solar Homes Partnership (NSHP), a ten year, \$400 million program, is administered by the California Energy Commission and provides incentives for solar on new home construction. Homes must receive electricity from one of a few identified investor-owned utilities. Residential dwelling units must achieve at least 15 percent higher energy efficiency than the current Title 24 Building Energy Efficiency Standards.

- *Incentive:* Rebate amounts vary by the housing type and expected performance of the system.
- *Eligible Renewable Technologies:* Photovoltaics
- *Applicable Sectors:* Residential, Construction, Multi-Family Residential and Low-Income Residential
- *System Requirements:* At least 1 kW AC; 100 percent of a home's expected electrical load. Equipment and installation requirements apply.
- *Authority:* NSHP Guidebook (2010)

For more information visit <http://www.gosolarcalifornia.ca.gov/about/nshp.php>.

### **Emerging Renewables Program**

Cash rebate incentives to promote grid-connected small wind and fuel cell renewable energy electric-generating systems. Wind systems must be permanently interconnected, but fuel cells used for backup generation for emergency or safety purposes do not have to be grid-connected. Participants must be a customer of certain specified utilities. Funds for fuel cell rebates ran out in March 2012.

- *Rebate Amount:* For small wind turbines of up to 50 kW, the rebate is \$3.00/W for the first 10 kW and \$1.50/W for increments between 10 kW and 30 kW.
- *Eligible Renewable Technologies:* Wind, Fuel cells using renewable fuels
- *Applicable Sectors:* Commercial, Industrial, Residential, Agricultural, Institutional, Low-Income Residential, and Schools
- *System Requirements:* Wind systems up to 50 kW. Rebate is limited to less than 30 kW.
- *Program Guidebook:* <http://www.energy.ca.gov/2011publications/CEC-300-2011-004/CEC-300-2011-004-ED12-CMF.pdf>.

For more information visit <http://www.consumerenergycenter.org/erprebate/>.

### **Renewable Energy Transmission Initiative (RETI)**

As a joint collaborative between the California Public Utilities Commission (CPUC), California Energy Commission (Energy Commission), California Independent System Operator (California ISO) and Publicly-Owned Utilities, this statewide initiative



	<p>identifies transmission projects that could help accommodate California’s renewable energy goals. RETI facilitates transmission corridor designation as well as transmission and generation siting and permitting, and assesses competitive renewable energy zones that can provide electricity to consumers by 2020 in the most cost effective and environmentally friendly manner.</p> <p>For more information visit <a href="http://www.energy.ca.gov/reti/">http://www.energy.ca.gov/reti/</a>.</p>
<p><b>Renewable Portfolio Standard</b></p>	<p>20 percent by December 31, 2013  25 percent by December 31, 2016  33 percent by 2020</p> <ul style="list-style-type: none"> <li>➤ <i>Eligible Renewable Technologies:</i> Solar Thermal Electric, Photovoltaics, Landfill Gas, Biomass, Wind, Geothermal Electric, Energy Storage, Municipal Solid Waste, Small Hydroelectric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel and Fuels using Renewable Fuels</li> <li>➤ <i>Applicable Sectors:</i> Municipal Utility, Electricity Service Provider, Investor-Owned Utility and Community Choice Aggregator</li> <li>➤ <i>Authorities:</i> CA Public Utilities Code § 399.11 et seq., CA Public Resources Code § 25740 et seq. and SBX1-2 (2011)</li> </ul>
<p><b>Public Benefits Fund</b></p>	<p><b><u>Public Benefits Funds for Renewables and Efficiency</u></b></p> <p>California’s three major investor-owned utilities must collect public goods surcharges on ratepayer electricity to create a public benefits fund for renewable energy. The funds are managed through the Emerging Renewables Program (79 percent), the Existing Renewable Facilities Program (20 percent) and the Consumer Education Program (one percent). Rates vary by utility and customer type and are usually about 1.6 mills/kWh for renewables.</p>
<p><b>Regulatory Policies</b></p> <ul style="list-style-type: none"> <li>➤ <b>Feed-In Tariff</b></li> <li>➤ <b>Net Metering</b></li> <li>➤ <b>Interconnection Standards</b></li> <li>➤ <b>Solar Easements and Solar Shade Control Act</b></li> </ul>	<p><b><u>California Feed-In Tariff</u></b></p> <p>California’s feed-in tariff allows eligible customer-generators to enter into standard contracts (of 10, 15 or 20 years) with utilities to sell the electricity produced by small renewable energy systems at time-differentiated market-based prices. A higher-level rate is provided for solar electricity generated between 8 a.m. and 6 p.m. If investor-owned utilities and publicly-owned utilities have 75,000 or more customers, they must make a standard feed-in tariff available.</p> <ul style="list-style-type: none"> <li>➤ <i>Eligible Renewable Technologies:</i> Photovoltaics, Solar Thermal Electric, Landfill Gas, Wind, Biomass, Geothermal Electric, Anaerobic Digestion, Municipal Solid Waste, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel and Fuel Cells using Renewable Fuels</li> <li>➤ <i>Terms:</i> 10, 15 or 20 year contracts</li> </ul>



- Solar Rights Act
- Solar Contractor Licensing
- CA State Licensing Code
- Homebuyer Solar Option and Solar Offset Program
- Green Building Action Plan for State Facilities
- County Wind Ordinance Standards

- *Applicable Sectors:* Commercial, Industrial and Residential
- *Authorities:* CA Public Utilities Code § 399.20 (2006), CPUC Resolution E-4137 (2008) and SB 32 (2009)

**Net Metering**

All utilities except LADWP must provide for net metering. System capacity must not exceed 1 MW or 5 MW for systems that are owned by, operated by, or on the property of a local government or university. The aggregate capacity limit is 5 percent of the utility’s peak demand, and net excess generation is credited to the customer’s next bill. At the end of the year, customers can roll over the credit or receive payment.

- *Authorities:* Cal Pub Util Code § 2827 et seq. (1996), CA Public Utilities Code § 2830 (2008), SB 489 (2011) and AB 512 (2011)

**Interconnection Standards**

California’s interconnection standards apply to investor-owned utilities and the commercial, industrial and residential sectors. Net metering applies to renewable energy systems up to 1 MW in capacity. There are separate rules for renewables under 10 kW and these systems do not have to pay costs associated with interconnection studies or application review fees.

- *Authority:* CPUC decision 00-12-037

**Solar Easement and the Solar Shade Control Act**

California’s Civil Code (CA Civil Code §801.5) ensures that neighbors can sign solar easements so that sunlight is available to those who have solar systems. The Government Code (65850.5) provides that solar easements applicable to all plots within the division can be included in the subdivision’s plans.

The Solar Shade Control Act (Public Resources Code 25980) encourages the use of natural shading except where it interferes with solar systems. Trees and shrubs cannot cast shadows that cover more than 10 percent of a solar collector’s absorption area at any time between 10 a.m. and 2 p.m. if the tree or shrub was planted after the solar collector was installed.

**Solar Rights Act**

The Solar Rights Act bars restrictions by homeowners associations on solar energy system installations. Public entities cannot receive state grant funds or loans for solar energy programs if they prohibit installation of solar energy systems. AB 2180 of 2008 also provided more consumer protections by providing that homeowners’ associations must pay the solar system owner a civil penalty up to \$1,000 if that association is not a public entity that willfully violates the Solar Rights Act.

- *Authorities:* CA Civil Code § 714 et seq., CA Health and Safety Code § 17959.1 and CA Government Code § 65850.5





### **Solar Contractor Licensing**

Contracting licensing is administered by the California Contractors State License Board. The C-46 Solar Contractor License covers active solar and water and space heating systems, photovoltaic systems, and solar pool heating systems.

- *Requirements:* Four years of experience and passing the law, business and trade exams.

Visit <http://www.cslb.ca.gov/GeneralInformation/Library/LicensingClassifications/>.

### **California State Energy Code**

All buildings that are heated and/or mechanically cooled must meet requirements set by CALGreen, the statewide green building code. Annual energy-use reporting is required for all nonresidential buildings, and owners of commercial buildings must disclose energy usage and Energy Star ratings to potential buyers, leasers and financiers. See Title 24, Part 6.

### **Homebuyer Solar Option and Solar Offset Program**

The same bill that established the California Solar Initiative also required the California Energy Commission (CEC) to implement regulations requiring sellers of production homes to offer a solar energy system option to homebuyers. Sellers of homes that are constructed on land for which an application for a subdivision map has been deemed complete must disclose the total installed cost of the solar option, estimated cost savings and information about solar incentives to prospective homebuyers.

- *Eligible Renewable Technologies:* Photovoltaics
- *Applicable Sector:* Residential
- *Authorities:* CA Public Resources Code § 25405.5 et seq. and 20 CCR 2700 et seq.

### **Green Building Action Plan for State Facilities**

All state buildings must improve their energy performance and reduce grid-based energy usage by 20 percent of 2003 levels by 2015. All new and renovated buildings must meet at least the “Silver” level of LEED standards, and agencies must seek office space leases in Energy Star ratings in buildings of 5,000 square feet or more. Solar energy equipment must be installed on any public building or facility, new or existing, where an installation is cost-effective over the life of the system and funding is available.

- *Eligible Renewable Technologies:* Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Biomass, Geothermal Heat Pumps, CHP/Cogeneration, Bio-gas, Daylighting, Small Hydroelectric
- *Applicable Sector:* State government
- *Authorities:* Executive Order S-20-04, CA Government Code § 14710 et seq



and CA Government Code § 14684.1

### **County Wind Ordinance Standards**

Counties can adopt ordinances to provide for small wind system (50 kW or smaller) installations outside urbanized areas. State law establishes limiting factors by which a county's ordinance can be no more restrictive. Counties can make more lenient ordinances, but AB 45 of 2009 established maximum restrictions if a county chooses to develop small wind ordinances. Maximum restrictions address tower height, setbacks, public notice, noise level, acreage of land parcel, visual effects, and more.

- *Eligible Renewable Technology:* Wind
- *Applicable Sectors:* Commercial, Industrial, Residential, Agricultural and Local Government
- *Expiration:* January 1, 2017
- *Authority:* AB 45 of 2009 and CA Government Code § 65893

### **NCSL Contact**

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### ***Sources:***

*Database of State Incentives for Renewables & Efficiency*, a joint effort between U.S. Department of Energy Office of Energy Efficiency & Renewable Energy, North Carolina Solar Center and the Interstate Renewable Energy Council; [www.dsireusa.org](http://www.dsireusa.org)

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Various state websites

