

FEDERAL POLICIES ON PHOTOVOLTAICS/RENEWABLES:

The most significant federal program is the Business Energy Investment Tax Credit (ITC). It essentially gives a 30% tax credit for solar expenditures with no limit. The % is eventually stepped down to 10% in 2022.

PLEASE READ THE FOLLOWING LINKS:

<http://programs.dsireusa.org/system/program/detail/658>

<https://www.technologyreview.com/s/544981/tax-credit-extension-gives-solar-industry-a-new-boom/>

<http://www.seia.org/research-resources/impacts-solar-investment-tax-credit-extension>

NOTE:

- The ITC extension will lead to more than 72 GW of solar photovoltaic (PV) installations from 2016 through 2020, with installations expected to grow in 2021. The 72 GW over 5 years represents an increase of over 25 GW (or 54%) over baseline expectations without the extension.
- Thanks to the extension, by 2020, the U.S. will have installed approximately 98 GW of PV and 2 GW of concentrating solar power (CSP) to total 100 GW of solar electric capacity. This is enough capacity to power more than 20 million U.S. homes.
- By 2020, the U.S. will be installing 20 GW of solar capacity annually. To put this in perspective, at the end 2014, 20 GW was the total amount of solar America had installed in its history.
- By 2020, solar will provide more than 3.5% of all U.S. electricity, up from just 0.1% in 2010, an increase of well over 3000% in just a decade.

CALIFORNIA STATE POLICIES ON RENEWABLES:

Takeaway: California has by far the most renewable energy programs of any state.

PLEASE READ THIS PAGE, AND CLICK ON ANY LINKS OF INTEREST (OPTIONAL READING):

The Go Solar California Campaign (<http://www.gosolarcalifornia.ca.gov/>) has spawned a number of policies, including the *California Solar Initiative* (CSI) (<http://www.gosolarcalifornia.ca.gov/about/csi.php>). This program includes a budget of \$1.95 billion over 10 years. It includes:

- A “general market” program that provides solar rebates.
- Single Family Affordable Solar Housing (<http://www.gosolarcalifornia.ca.gov/affordable/sash.php>) ("provides incentives to qualified low-income homeowners to help offset the costs of a solar electric system")
- Multifamily Affordable Solar Housing (<http://www.gosolarcalifornia.ca.gov/affordable/mash.php>)

Most of these rebates are now over, but solar is still being installed without state incentives: (<https://www.greentechmedia.com/articles/read/the-legacy-of-the-california-solar-initiative>).

CSI appears to be a success overall:

(<https://cleantechnica.com/2016/07/12/subsidies-done-right-california-solar-initiatives-success/>, <https://www.pv-magazine.com/2017/01/05/over-128000-california-homes-go-solar-in-2016/>)

CSI also funds research projects. UC San Diego published a report a couple months ago about grid integration:

http://calsolarresearch.ca.gov/images/stories/documents/Sol4_funded_proj_docs/UCSD4_Kleissl/CSIRDD_Sol4-UCSD_CompGridInteg-SDG&E_FinalRpt_20161012.pdf.