Toolkit Overview









he Bay Area Solar Photovoltaic (PV) Ordinance Toolkit, a project of the Bay Area Regional Collaborative¹, provides guidance for Bay Area cities and counties that seek to require solar PV systems on new single-family and low-rise multifamily residential units. This effort supports the Bay Area Air Quality Management District's 2017 Clean Air Plan that seeks to reduce greenhouse gas emissions associated with the building sector to near zero by 2030. Working in coordination with the California Energy Commission, the Toolkit walks the user through the process of adopting a basic solar photovoltaic ordinance, and provides the support documents necessary to streamline approval with no additional analysis required.

A tool for local governments for adoption of rooftop solar and the transition to zero-net energy

New residential construction provides a critical opportunity to move toward very low carbon, or carbon-free buildings. Maximizing energy efficiency, installing electric rather than natural gas appliances and systems, and providing renewable energy sources for electricity will create a systemic approach to reducing the carbon footprint of a building's operation to near zero. The cost to retrofit existing homes is far greater than the incremental cost of adding these low carbon features during new home construction. Such homes are more affordable to operate and thus more attractive to homebuyers due to the lower monthly energy bills.

The solar ordinance requirements in this Toolkit offset approximately 80% of a new building's electric consumption and would affect new construction permitted through December 31, 2019. Starting in 2020, a more stringent version of the California Energy Code is expected to supersede the model ordinance contained in this Toolkit. The model ordinance in this Toolkit can thus be used as a bridge for early adopters until the 2020 statewide Energy Code update.

Elements of this Toolkit include:

- User Guide: Describes California's existing 2016 Building Code requirements for solar, local "reach" building codes, the state's zero-net energy goals and other emerging issues related to renewable energy.
- ◆ Solar PV Ordinance Template: Adapted from the Draft Model Local Solar Ordinance prepared by the California Energy Commission (CEC), the Solar PV Ordinance Template streamlines the ordinance development and adoption process for local governments. It allows local governments to customize certain features. It includes information about optional enhancements to consider such as solar thermal, commercial buildings and high-rise buildings.
- Cost-Effectiveness Study: Using this required analysis that has already been recognized by the CEC helps streamline state approval of the model ordinance.
- Local Adoption and State Approval Guide: Step-by-step guide for local adoption of the ordinance and obtaining state approval. Includes a sample staff report and state transmittal letter.
- Outreach Package: Materials for local government staff to facilitate communication to stakeholders and policymakers on the ordinance.
 Describes community benefits and includes a slide presentation and list of frequently asked questions and answers (FAQs).

Benefits of the Toolkit

This Toolkit is designed to provide local governments with tools and materials to facilitate amending their existing building codes to accelerate the adoption of rooftop solar electricity generation. Taking this step will also better prepare cities and counties for the transition to zero-net-energy (ZNE) requirements in the next statewide energy code update in which a solar requirement is expected. The Toolkit, featuring a model ordinance, provides for a straightforward, consistent approach for local permitting staff and building developers.

By requiring on-site electricity generation during new residential construction, local governments and the Bay Area region can make meaningful progress towards building a long-term infrastructure to greatly reduce greenhouse gas emissions and lower the environmental and health impacts associated with fossil fuel combustion. Investments in roof-top solar can reduce household energy expenses, protect ratepayers from price volatility, improve air quality, support regional economic development and, potentially, increase community resilience to climate change.





¹ The Bay Area Regional Collaborative (BARC) coordinates the planning efforts of the Bay Area Air Quality Management District (BAAQMD), the Bay Conservation and Development Commission (BCDC), and the Metropolitan Transportation Commission (MTC).