

Outreach Package



FREQUENTLY ASKED QUESTIONS (FAQs)

Q. How does this ordinance fit in with the state's zero-net-energy efforts?

A. Many communities are experiencing significant residential new construction. These buildings will be around for a long time and could represent a lost opportunity to acquire clean energy. Federal Investment Tax Credits are scheduled to be lowered in 2020, thereby reducing potential financial benefits to local residents. Adoption of the model ordinance now allows for a smooth transition to state zero-net-energy requirements for new residential buildings, expected to be in place in 2020.

Q. Why does the model ordinance require 80 percent solar capacity instead of 100 percent?

A. A local government has to be able to demonstrate that the reach code in question will be cost effective for the homeowner, through a cost effectiveness study that calculates the length of time it would take for a homeowner to make back the investment on the PV system (payback period). This is calculated by estimating the annual net energy cost savings resulting from that system, including economic benefits from providing electricity to the grid, which decline when electricity production exceeds the building's consumption. The system sizing in this ordinance is designed for optimal economic effect while minimizing the risk of overproduction of electricity. A change in the solar capacity in the

ordinance would require a new cost effectiveness study that would have to be vetted and approved by the California Energy Commission (CEC) in order for the ordinance to be adopted.

The cost effectiveness study in this Toolkit has been recognized by the CEC. This reduces the time for adoption by a local government, should they use this ordinance. However, this does not preclude a local government from pursuing an ordinance requiring a higher solar capacity, or for different building types. For example, studies are being done on the cost-effectiveness of solar thermal and solar PV for additional building types (e.g., commercial and high-rise). When and if these studies demonstrate cost-effectiveness in local climate zones, and can be put forward to the CEC for approval, local governments may wish to amend the ordinance.

Q. What can be done to address the intermittent nature of solar energy?

A. California is unusually fortunate to have so much solar energy. However, solar is an intermittent resource, that is, it cannot be dispatched to meet demand. At certain times, the production of solar electricity may exceed the amount that the grid can absorb. However, the state is implementing measures to accommodate more solar by deploying electric load shifting measures and energy storage technologies. Residents themselves can manage loads to maximize the economic value of their solar power by shifting intensive energy uses such as air conditioning and vehicle charging to peak solar production times.

Q. Can a homeowner choose to exceed the minimum sizing requirements?

A. Yes, building owners may voluntarily exceed the minimum solar requirements included in the model ordinance. The cost-effectiveness study included in this Toolkit does not consider cost effectiveness of going above and beyond the 80 percent requirement, however.

Q. Would the incentive to builders under voluntary programs such as the New Homes Solar Partnership apply if it's required by local ordinance?

A. Yes, builders would have access to state and federal solar incentives and tax credits in jurisdictions where this model ordinance has been adopted. To qualify for incentives, the residential dwelling unit must achieve certain energy efficiency levels, as laid out in the New Homes Solar Partnership guidebook.

Q. What happens when the next statewide building energy code update is adopted?

A. The State is planning to introduce solar requirements as a strategy to achieve zero-net-energy in the next statewide building energy code update, which will become effective on January 1, 2020. If these requirements are more stringent than those in the model ordinance, the State code requirements will supersede the model ordinance. The model ordinance in this Toolkit can be used as a bridge for early adopters until the 2020 statewide Energy Code update, putting communities on a faster path to zero-net-energy and their own local climate protection goals.