



Planning Improvements

Step 3, PL 3-B Adopt a Solar Ready Ordinance

Adopt new ordinances or building codes to promote solar ready construction

Solar-ready requirements are a relatively low cost, but effective, addition to green-building codes and municipal ordinances. After a commercial or residential structure is built, structural and solar access issues can prevent a solar project from being cost effective or may make it entirely infeasible; thus, addressing solar readiness prior to and during construction can be a critical factor in the future adoption of solar.

One way to achieve solar-ready construction is by adding provisions to the local building code. Requiring that new construction follow solar-ready design guidelines is also an option. The building code would include the following requirements:

- For building permit approval, new construction must either include a solar system installation or electrical conduit for later installation.
- Specification of the applicable building types or geographic zones where the requirement applies.

Examples

Tucson, Arizona: Citywide Residential Solar Readiness Ordinance No. 10549

The city's 2008 ordinance requires solar stub-ins (i.e., conduit) on all new single-family and duplex residential dwelling units in order to receive a building permit.

<http://1.usa.gov/S5pOmA>

City of Chula Vista, California: Municipal Solar Ready Ordinance and Building Requirements

This collection of ordinances prepares each new home for future solar photovoltaic (PV) or solar hot-water systems by requiring installation of electrical conduits and plumbing during building construction.

- Photovoltaic pre-wiring requirement ordinance:
www.chulavistaca.gov/City_Services/Development_Services/Planning_Building/SustainabilityCenter/PDF/Solar%20Ready%20Ordinances.pdf
- Photovoltaic pre-wiring installation requirements and guidelines:
www.chulavistaca.gov/City_Services/Development_Services/Planning_Building/SustainabilityCenter/PDF/Form%204621%20PV%20Installation%20Requirements.pdf

Sebastopol, California: Solar Mandate

In March 2013, Sebastopol, California, amended their zoning code to create a solar mandate for new residential and commercial buildings. The mandate also applies for major renovations of existing structures. Permit applicants will be required to submit plans for a solar photovoltaic system along with their construction documents. Sites for which solar is infeasible must pay a fee. The ordinance also outlines minimum sizing requirements for solar installations based on either prescriptive or performance-based measurements.

www.publicceo.com/wp-content/uploads/2013/05/agenda_item_number_5_pv_ordinance.pdf

Colorado Building Energy Code with Mandatory Solar Option

This law applies statewide to builders who have single-family detached home projects in which buyers are under contract. Builders are required to give the buyer the option to either have a PV system installed on their new home, or to have all

the necessary wiring and/or plumbing installed so they can easily add a solar system at a later date. The builder must also provide the buyer with a list of every solar installer in the area, so the buyer can obtain expert help in determining if their home's location is suitable for solar and what the estimated cost savings would be.

<http://bit.ly/Ug0jBd>

City of Lancaster, California: Residential Solar Mandate

In 2013, the Lancaster City Council adopted Ordinance Number 989, which amended the zoning code to require a solar provision for all new residential subdivisions. Developers are required to meet the standard of 1 kW of solar electricity provided per unit. For a 10-subdivision home, this might mean one or several small solar systems provided by the developer to total 10 kW. Developers also have the option to procure the same allocation of solar energy through off-site generation.

<http://www.cityoflanasterca.org/index.aspx?page=1279>

Henderson, Nevada, Development Code. Development and Design Standards. Chapter 19.7, Table 12-1

Henderson, Nevada's design standards include a points-based system for sustainable design elements for approval of development projects. All residential or commercial buildings must achieve a minimum number of sustainability points by integrating items from a list of approved sustainability design options. Solar readiness is a listed option for commercial or residential developments. The design specifications request that single buildings include electrical conduits for solar electric systems and plumbing for hot-water units. Multi-structure developments must demonstrate that 20 percent of buildings are solar ready.

<https://www.planning.org/pas/infopackets/open/pdf/30part5.pdf>

Sample: Solar Ready Construction Ordinance

- Section 1. That this ordinance shall be known and referred to as the "Residential [or Commercial or New Construction] Solar Readiness Ordinance."
- Section 2. The [jurisdiction] is authorized to adopt appropriate rules, regulations and development standards necessary to implement the provisions of Sections 3 and 4.
- Section 3. All new single family and duplex residential dwelling (or commercial or new construction) units shall include an acceptable method to allow for later installation of a system which utilizes solar energy as the primary means of heating domestic potable water. This section shall become effective upon approval of the new standards.
- Section 4. All new single family and duplex residential dwelling (or commercial or new construction) units shall include an acceptable method to allow for later installation of a system which utilizes solar energy as a means of providing electrical power. This section shall become effective upon approval of the new standards.
- Section 5. The requirements of this ordinance may be modified or waived when it can be satisfactorily demonstrated to the Building Official that compliance with these regulations is impractical due to such issues as shading, building orientation, construction constraints or configuration of the parcel.
- Section 6. If any of the provisions of this ordinance or the application thereof to any person or circumstance is invalid, the invalidity shall not affect other provisions or applications of this ordinance that may give effect without the invalid provision or circumstance, and to the end the provisions of this ordinance are severable.
- Section 7. The various city officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this ordinance, including, but not limited to, providing an instructional pamphlet setting forth in plain language the requirements of this ordinance.
- Section 8. Whereas, it is necessary for the preservation of the peace, health and safety of the [jurisdiction] that this ordinance becomes immediately effective, an emergency is hereby declared to exist and this ordinance shall be effective immediately upon its passage and adoption.

(Source: Tucson, Arizona, Citywide Residential Solar Readiness Ordinance. Available online:

<http://cms3.tucsonaz.gov/files/agdocs/20080617/june17-08-311.pdf>)