

PZD-1: Review zoning requirements and identify restrictions that intentionally or unintentionally prohibit solar PV development. Compile findings in a memo.

This SolSmart prerequisite requires communities to (a) conduct a review of zoning requirements, (b) identify restrictions that prohibit PV development, and (c) commit to addressing these barriers during the next community zoning review. To assist your community, Great Plains Institute has conducted an initial review of your community’s code to assess possible obstacles (i.e. height restrictions, set-back requirements, etc.) and gaps. Below, please find the outcome of their review. By reading the narrative, reviewing the example code language provided, and signing the statement at the bottom of the page, your community will satisfy PZD-1 and be one step closer to achieving SolSmart designation.

Considerations for incorporating solar into municipal zoning codes

| Section(s) | Element | Reviewer Comments | Example(s) from other codes | SolSmart Credit | Priority Level |
|--|-------------------------|--|--|-------------------------|----------------|
| 115-26 | Definitions | <p>Recommendation: Define accessory solar energy systems, including distinguishing between roof- and ground-mount uses. Define solar as a principal use (solar farm) and consider separately defining solar gardens.</p> <p>Consider including a definition for “solar resource,” where the characteristics of a meaningful solar resource can be defined in order to distinguish between a properly functioning system and a poorly functioning system. Solar energy systems require access to direct sunlight for several hours every day, usually including solar noon, for the entire year, in order to properly function. Consider adding a definition for “building-integrated” solar energy systems.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section III | Enables several credits | High |
| 115-140.c(9); 115-142.a(2); 115-143.a(3); 115-144.a(4); | Rooftop Solar Accessory | The City does not explicitly address solar energy systems as a permitted use. For clarity and to be consistent with State law, the City should identify rooftop solar arrays as a permitted | Wisconsin Local Government Solar Toolkit Model Ordinance | PZD-2 | High |

| Section(s) | Element | Reviewer Comments | Example(s) from other codes | SoISmart Credit | Priority Level |
|--|---|--|--|-----------------|----------------|
| 115-145.a(2) | Use | <p>accessory use in all districts where buildings are allowed.</p> <p>Recommendation: Explicitly allow rooftop solar energy systems as an accessory use in all zoning districts where buildings are allowed</p> | Section IV. | | |
| 115-140.b; 115-142.a; 115-143.a; 115-144.a; 115-145.a | Principal Use Solar Land Uses | <p>As state law establishes a right to install solar energy systems, except where health or safety considerations would limit it, consider whether or not to allow solar as a principal use, in the form of a garden or farm.</p> <p>Recommendation: List principal use solar (solar gardens or solar farms), as a conditional use in at least one district.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section V | PZD-12a | Moderate |
| 115-140.c(9); 115-142.a(2); 115-143.a(3); 115-144.a(4); 115-145.a(2) | Ground-Mount Accessory Use | <p>The City does not explicitly address solar energy systems as a permitted use. For clarity and to be consistent with State law, identify ground-mount solar arrays as a permitted accessory use in all districts where buildings are allowed.</p> <p>Recommendation: Explicitly allow ground-mount accessory solar as a permitted accessory use in at least one major district, consider allowing in all districts if solar design standards are developed (see examples in model ordinance for more information)</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section IV | PZD-10a | High |
| 115-390(1).d | Rooftop Solar Height Standard exemption | <p>Recommendation: Allowing solar panels to exceed the height limit, but as a conditional use, upon demonstration that the owner otherwise would have inadequate access to direct sunlight for solar energy production. Add rooftop solar to height regulation exceptions.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section IV.A | PZD-10b | Moderate |
| | Setbacks for ground-mounted solar | <p>In residential zones, front yards are required to be set back up to 25 feet. Side yards may not be less than 6 feet in width, while rear yards are limited to a depth of not less than 20 percent of the depths of the lot, provided the rear yard does not exceed 30 feet in depth or be less than 15 feet. The standards are somewhat unclear about whether a ground-mount solar installation would be considered an accessory use or a non-</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section IVB.2 | PZD-10c | Moderate/Low |

| Section(s) | Element | Reviewer Comments | Example(s) from other codes | SoISmart Credit | Priority Level |
|--------------|-------------------------------------|---|---|-----------------|----------------|
| | | <p>principal permitted use, as it is not explicitly addressed (as mentioned above). As with solar installations attached to buildings, consider language that allows some flexibility for placement of ground-mounted solar installations.</p> <p>Recommended options:</p> <ul style="list-style-type: none"> • Include ground-mount solar installations as an “accessory structure” • Allow incursions for ground-mounted solar collectors into a required yard, similar to the encroachments allowed for structural elements attached to the principal building. • Allow incursions only if necessary to use the lot’s solar resource, as a conditional use. This would be most consistent with the intent of the Wisconsin solar/wind rights statute (66.0401). • Define building-mounted systems that serve a functional building purpose (such as an awning) as a building-integrated system that is regulated as the building component rather than as a solar installation. | | | |
| 115-390(2).c | Lot Coverage for ground-mount solar | <p>The availability of pervious area within a given yard can be a barrier to ground-mount solar installation. This does not appear to be an issue within the current zoning ordinance.</p> <p>Solar farms and gardens are becoming more common in the Midwest and consideration of this type of development will require different standards for lot coverage issues. More specifically, solar collectors seem to fit the definition of Land Disturbing Activities in Sec. 105-19 of the City’s erosion control ordinance. Addressing the storm water implications of solar farms or gardens (principal uses) may require more clarity in defining how to model impervious surfaces and the ability of the post-development lot to meet on-site storm water standards.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section IV.D | PZD-10c | Moderate |

| Section(s) | Element | Reviewer Comments | Example(s) from other codes | SoISmart Credit | Priority Level |
|--|---|---|---|-----------------|----------------|
| | | <p>Recommended Options:</p> <ul style="list-style-type: none"> Require appropriate modeling for NPDES standards and demonstrating compliance with on-site storm water retention and sediment control. Developing new design and performance standards for installing and maintaining vegetative cover under the solar array as mitigation for the impervious surface of the collector. Many solar garden developers use ground under and around the arrays as pollinator habitat and stormwater risk mitigation. Sample performance standard language can be found in the Illinois Grow Solar Local Government Toolkit (see sidebar on previous page). Exempting accessory use solar collectors as impervious surfaces. | | | |
| | Solar Rights | <p>Wisconsin State Statutes protect the rights of property owners to install solar arrays, and provide provisions for promoting access to, and protecting existing access of, sunlight for solar collectors (State Statute 66.0401, 7900.41, 844.22).</p> <p>Recommendation: Develop standards for cross-property solar access, including procedures for solar easements, consistent with Wisconsin Statutes.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section IV | SR-3; SR-4 | Moderate |
| Zoning district accessory use sections | Solar Carport Incentives | <p>Recommendation: Recognize solar carports or parking structures as a permitted accessory use in non-residential or multi-family districts. Consider parking requirement incentives (reduction of required spaces) to encourage such solar development, particularly if coupled with EV charging infrastructure.</p> | <p>EV parking incentives, Plug-in Georgia model ordinance</p> | PZD-8 | Consider |
| New section | Principal Use Solar Development Pathway | <p>Consider areas of the city that might be appropriate for solar farms or gardens, particularly those areas where other forms of development is difficult. Thoughtful regulation for principal solar uses, and appropriate guiding of solar farm development, is crucial to maximizing benefits and minimizing problems.</p> <p>Recommendation: Consider creating an overlay district</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section V | PZD-12b | Low |

| Section(s) | Element | Reviewer Comments | Example(s) from other codes | SoISmart Credit | Priority Level |
|------------|------------------------------|---|--|-----------------|----------------|
| | | identifying where principal solar uses are desired. | | | |
| 115-156 | Solar Ready Zoning Standards | <p>Removing potential barriers to the development of property owners' solar resources is a critical step in enabling solar development. The City does not appear to currently use regulatory incentives within the zoning or subdivision code. However, the City also has options to include economic incentives for solar development, similar to incentives that the City uses to encourage other community benefits in the development process. Examples of incentives that can encourage development of solar resources include:</p> <p>Recommendation: Consider incorporating solar development as a component of PUD benefits, similarly to PUD requirements for trails, open space, or desired mix of uses.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section VII | CC-2 | Consider |
| 115-230 | Historic Districts | Recommendation: Establish clear guidance for installing solar PV on historic properties or districts with special design standards that might limit solar installations. | | PZD-4 | Moderate |
| 113 | Subdivisions/HOAs | <p>The subdivision process offers other opportunities to encourage solar installations, by protecting solar access, creating solar development incentives, and integrating the concept of solar as an important local resource into the fabric of the region's infrastructure. The subdivision ordinance (Chapter 113 - Subdivisions) does not include mention of solar resources or development. The subdivision ordinance does have design standards that could include be modified to encourage consideration of solar resources and uses at the point of subdivision.</p> <p>Solar resources can be protected most easily in the subdivision process by identifying lots with a good solar resource, protecting those resources in subdivision design and landscaping choices where possible, or requiring development of the good solar resources as part of the development process.</p> | Wisconsin Local Government Solar Toolkit Model Ordinance Section VI | SR-5 | Consider |

| Section(s) | Element | Reviewer Comments | Example(s) from other codes | SolSmart Credit | Priority Level |
|------------|---------|---|-----------------------------|-----------------|----------------|
| | | <p>Recommendation:</p> <ul style="list-style-type: none"> Require, as part of the application requirements for a preliminary plat in the subdivision process, identification of lots with solar resources, and encourage development of local solar resources as part of the build-out. Require that applicants demonstrate that the subdivision properly plans for possible solar energy installations within the subdivision and as it relates to adjacent property. | | | |

Additional notes

This memo, paired with the La Crosse solar scan document, describes the opportunities to remove barriers to solar development in their zoning ordinance. A model ordinance is linked for Wisconsin local governments as well.

Zoning Review – La Crosse, WI

I, _____, as _____ of _____, _____
[Name] [Title] [Community] [State]
 have received the zoning review and read its findings.

Signature _____

Date _____