ZONING REVIEW – Lower Merion, PA

PZD-1: Review zoning requirements and remove restrictions that intentionally or unintentionally prohibit PV development. Compile findings in a memo, and commit to reducing barriers to PV during next zoning review.

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, the national solar experts at SolSmart have 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.

As there are no references to solar in the current code, the development of a solar ordinance may be advisable. Below are some considerations for the creation of such an ordinance. Solar may still be worth adding to the use tables for each district in the existing sections of the code, even solar's status as by-right is established in the solar ordinance.

Gaps in current code language

Element	Best Practice	Reviewer Comments	Example(s) from other codes
Intent/purpose	• Many municipalities have inserted language explicitly encouraging solar in the section that lays out the intent and purpose of the solar ordinance.		See P.7-8 of DVRPC Renewable Energy Ordinance Framework
Definitions	• Include in the definition of a solar energy system: solar collectors or solar energy devices used for space heating, space cooling, electric generation, and water heating • Define and distinguish between large-scale or primary use installations and secondary or accessory use installations	• No definitions for solar energy systems or alternative energy systems.	Massachusetts model solar ordinance
Use-by-right	• Allow small rooftop and ground mount solar installations in all major zoning districts as a use-by-right (allowed without special review) • Many communities identify and allow for	• Solar energy systems are neither allowed nor disallowed as accessory uses. • Ground-mounted systems in a flood-plain require a zoning permit.	Use Tables P. 3 Massachusetts model solar ordinance

	solar installations as accessory uses in every district		
Encouraging solar-friendly design	• Many municipalities encourage subdivisions to be laid out in an orientation that would maximize either active solar or passive solar benefits. • Some possible ways to encourage solar include waiving permit fees, providing density bonuses, reducing minimum parking requirements, and mandating solar ready construction.	• There are currently no incentives or mandates encouraging or requiring solar-friendly design.	See P. 12-13 of APA Essential Info Packet-30 ("Solar Orientation and Siting" and "Solar-Ready Homes") See P. 2 of APA Solar Briefing Papers ("Creating Incentives")
Height	• Provide rooftop solar an exemption from or allowance above building height restrictions • Identify a maximum allowed ground mount solar height of 10'-15'		P. 7 Massachusetts model solar ordinance
Lot coverage	Exempt ground mount solar from lot coverage restrictions that apply to primary buildings		P. 9 Model Zoning for the Regulation of Solar Energy Systems
Accessory use maximum	• Exempt solar from the maximum allowable number of accessory uses		
Setbacks	• Require a setback applicable to fences to ground mount solar, rather than a setback required of buildings, or allow solar an exemption from setback requirements		P. 7, 8 Model Zoning for the Regulation of Solar Energy Systems
Aesthetic requirements	• Exempt solar from rooftop equipment screening requirements • Allow PV installations to be seen from public roadways • Limit screening or aesthetic requirements to historic districts	• Some districts require screening for rooftop mechanical equipment. This can be pretty restrictive if solar PV is included in these regulations.	P.19 DVRPC Renewable Energy Ordinance Framework Historic districts
Rooftop fire safety access and setbacks	• Limit setback requirements from roof ridges to 3' and 1.5' from valleys and headwalls to allow access • Do not restrict rooftop solar based on a percentage of rooftop coverage (These restrictions may be amendments to the International Fire Code or part of the development regulations instead of the zoning code)	• No restrictions on rooftop setbacks. How is this currently handled?	San Francisco Solar PV System Safety and Fire Ground Procedures LA PV Fire Safety
Glare	• Do not regulate glare from photovoltaic installations as PV modules use non-reflective glass and are designed to absorb rather than reflect sunlight. PV	• There are no provisions regulating glare from solar PV.	FAA guidance PV at airports

	modules are generally less reflective than windows. • Municipalities can defer to the Federal Aviation Administration to regulate potential glare from solar installations on or near airports		
Ground mount solar	• Allow for small ground mount installations as accessory uses and large, primary use installations through a conditional or special use permit	• Not explicitly allowed or disallowed, however, zoning permits required for ground mount installations in flood plains.	P. 38 APA's Integrating Solar Energy into Local Development Regulations
Preexisting non-conforming uses	• Code should exempt rooftop solar or small ground-mounted solar from any special permits that may be required for alterations to a lot or structure that contains a preexisting non-conforming use.	• Current ordinance requires a special exception for any extension or expansion of the property. It is unclear if solar PV would count as an extension or expansion.	P. 20-21 Massachusetts model solar ordinance
Historic district guidance	• Municipal code should clearly explain the review process for historic districts. • Historic commissions and review boards are encouraged to write design guidelines that support the development of solar energy systems and are sensitive to the historic preservation goals of the Commission.	• The review process is clearly laid out. • Only very certain exterior alterations to buildings in the historic resources overlay district are allowed, and solar PV is not among them. • Any mechanical equipment surrounding the property must be screened, which is restrictive for ground mount systems.	NREL's Implementing Solar PV Projects on Historic Buildings and in Historic Districts NC Clean Energy Technology Center: Installing Solar Panels on Historic Buildings
Solar access/solar rights	• Establish a mechanism to protect solar access and rights (e.g. solar easement for installations) • Include active and passive solar provisions (such as orientation) in development and subdivision regulations	• Easements are defined and listed in the Subdivision and Land Development ordinance, but solar easements are not specifically mentioned. • No active or passive solar provisions found.	Wisconsin State Statute §66.0401. Perry, IA Subdivision Regulations
Regulate based on the area or impact	• Define and regulate solar installations based on the area (e.g. square feet) or impact of the installation rather than the capacity (kW) as efficiencies and technologies change over time • Do not regulate based on the use of the energy generated (e.g. requiring that accessory use solar electricity generation be consumed exclusively on-site), as this is often irrelevant to the impact		See p. 19 of Planning and Zoning for Solar in North Carolina Example: Fort Collins, CO

I, Arthur J. Noel [Name], as Assistant Director of Building [Title] of Lower Merion Twp [Community], PA [State]
have received the zoning review and have read its findings.

Signature _ *Arthur J. Noel* Date _May 10, 2017