

Are Your Building and Land Use Codes Ready for the Changing Climate?

Zoning for Solar Gardens

New Partners for Smart Growth
Saturday, February 15, 2014
1:45-3:15 PM



SunShot Solar Outreach Partnership



Leaders at the Core of Better Communities



American Planning Association

Making Great Communities Happen



NARC

Building Regional Communities

National Association of Regional Councils



The SunShot Solar Outreach Partnership (SolarOPs) is a U.S. Department of Energy (DOE) program designed to increase the use and integration of solar energy in communities across the United States.

<http://solaroutreach.org>

Key Questions

- What is a solar garden?
- Why are solar gardens important?
- Is zoning a barrier to solar gardens?
- How can zoning support solar gardens?



What Is a Solar Garden?



What Is a Solar Garden?

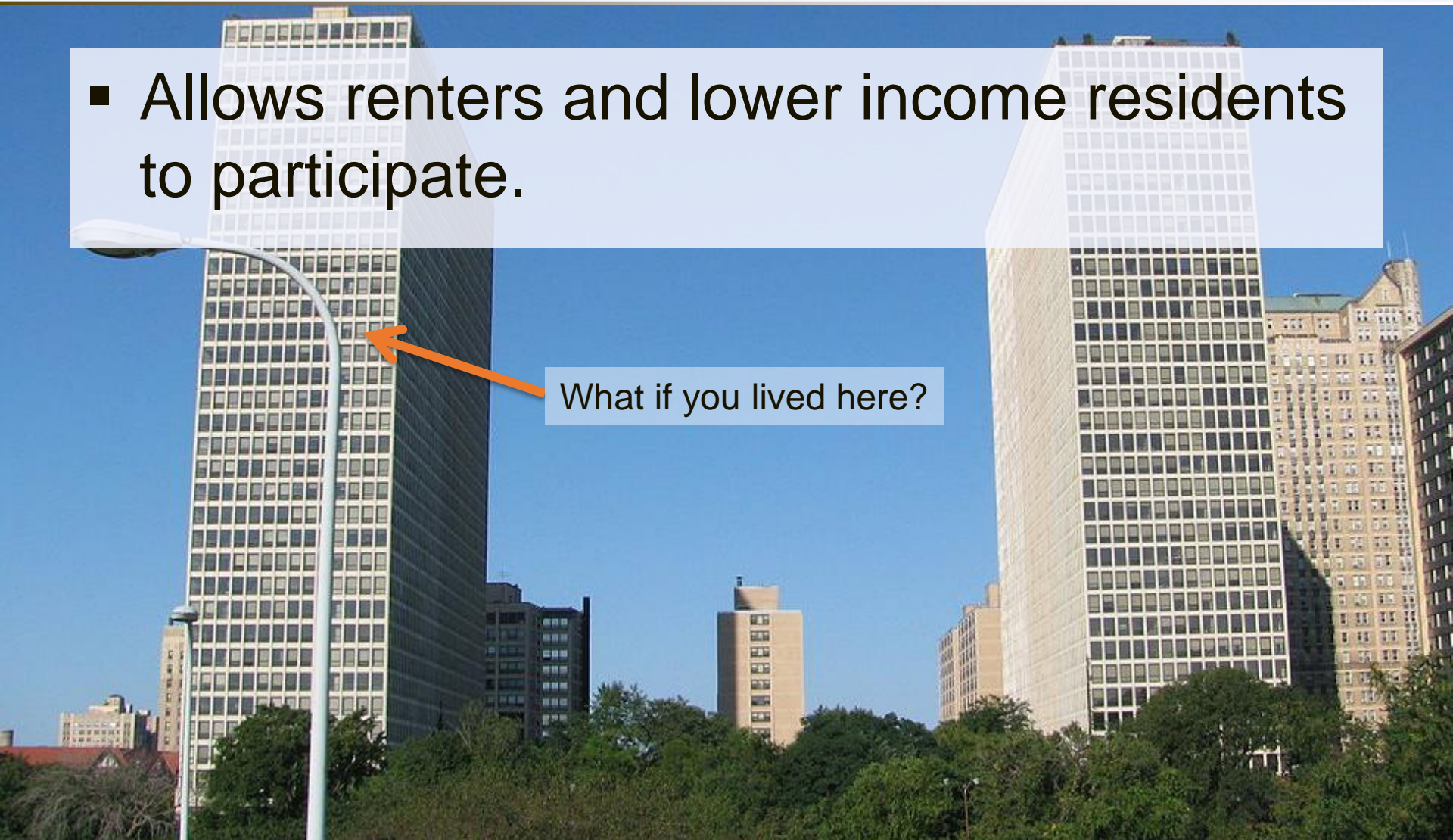
Solar Garden:

Any freestanding solar energy system as a primary land use on a small parcel of land (e.g., 10 acres or less).



Why Are Solar Gardens Important?

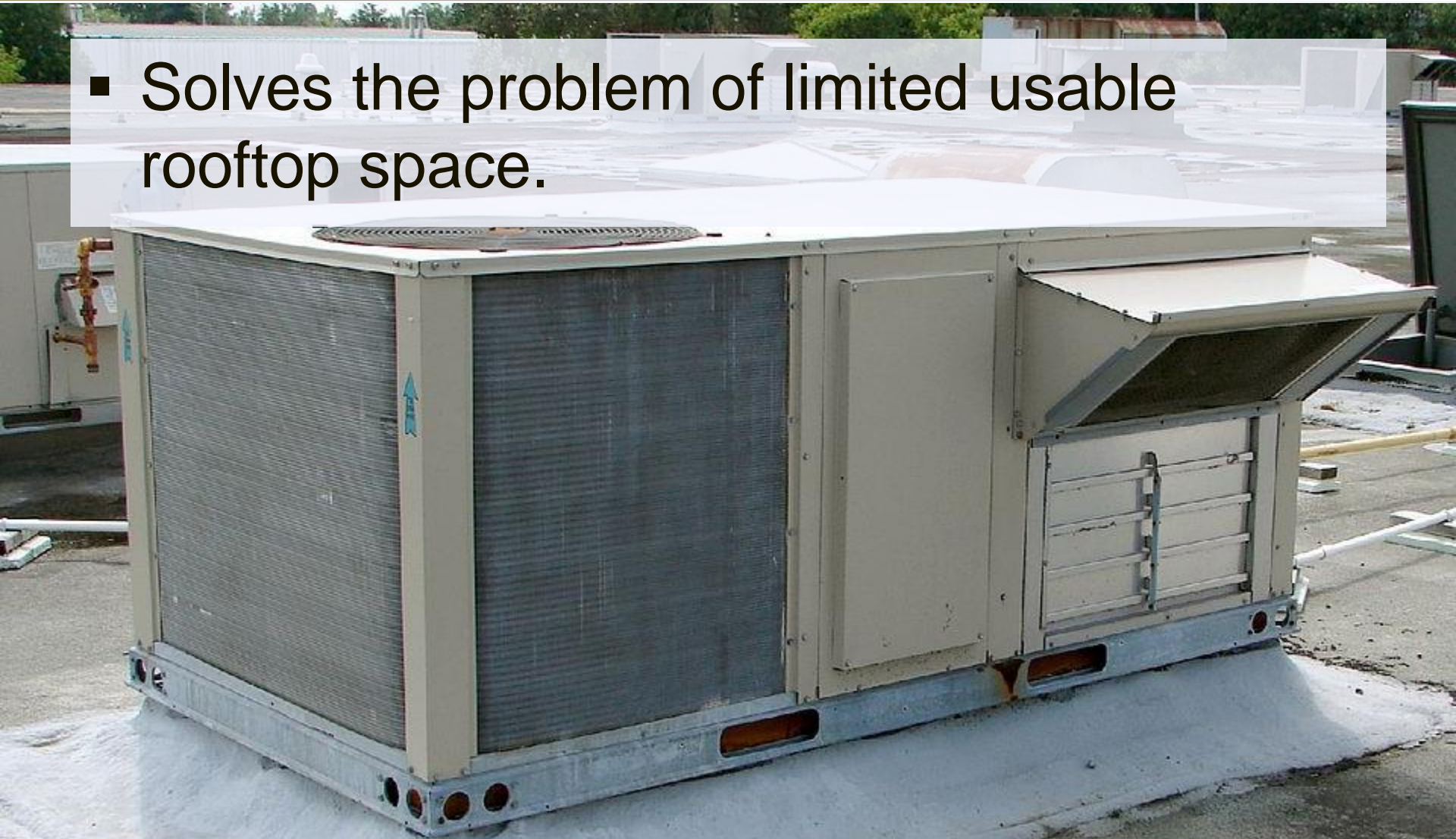
- Allows renters and lower income residents to participate.



What if you lived here?

Why Are Solar Gardens Important?

- Solves the problem of limited usable rooftop space.



Why Are Solar Gardens Important?

- Minimizes conflicts with tree protection, historic preservation, and densification.




Why Are Solar Gardens Important?

- Provides an alternative use for vacant land.



Is Zoning a Barrier to Solar Gardens?

- Potential Barrier 1: Regulatory silence



Wait a minute! You're telling me the word "solar" doesn't appear once in our code?

Is Zoning a Barrier to Solar Gardens?

- Potential Barrier 2: Explicit prohibition

TABLE OF PERMITTED USES

P = Permitted; C=Conditional Use; A=Accessory Use Only

	Residential Districts		Mixed-Use Districts			Commercial Districts		Industrial Districts	
Use	R-1	R-2	MX-1	MX-2	CBD	NC	GC	LI	HI
solar energy system	A	A	A	A	A	A	A	A	A

Is Zoning a Barrier to Solar Gardens?

- Potential Barrier 3: A lack of nuance

TABLE OF PERMITTED USES

P = Permitted; C=Conditional Use; X=Prohibited

Use	Residential Districts		Mixed-Use Districts			Commercial Districts		Industrial Districts	
	R-1	R-2	MX-1	MX-2	CBD	NC	GC	LI	HI
accessory solar system	P	P	P	P	P	P	P	P	P
solar farm	X	X	X	X	X	X	X	C	P

How Can Zoning Promote Solar Gardens?

- Define solar gardens as a distinct use.

Medium Solar Energy System: A Solar Energy System that is at least one (1) acre in size but less than five (5) acres in size. (Jackson Township, OH)

Solar Garden: A free-standing solar electric generation facility with a nameplate rating of two megawatts or less where the beneficial use of the electricity generated by the facility belongs to the subscribers to the community solar garden. (Lakewood, CO)

Medium Solar Energy System: A ground-mounted solar energy system with a rated capacity greater than five kilowatts but less than two hundred kilowatts or a roof mounted solar energy system of any capacity in excess of five kilowatts and serving, or designed to serve, any agricultural, residential, commercial, institutional or industrial use on a single lot or parcel or group of adjacent lots or parcels. (Worcester County, MD)

How Can Zoning Promote Solar Gardens?

- Add solar gardens to permitted use tables.

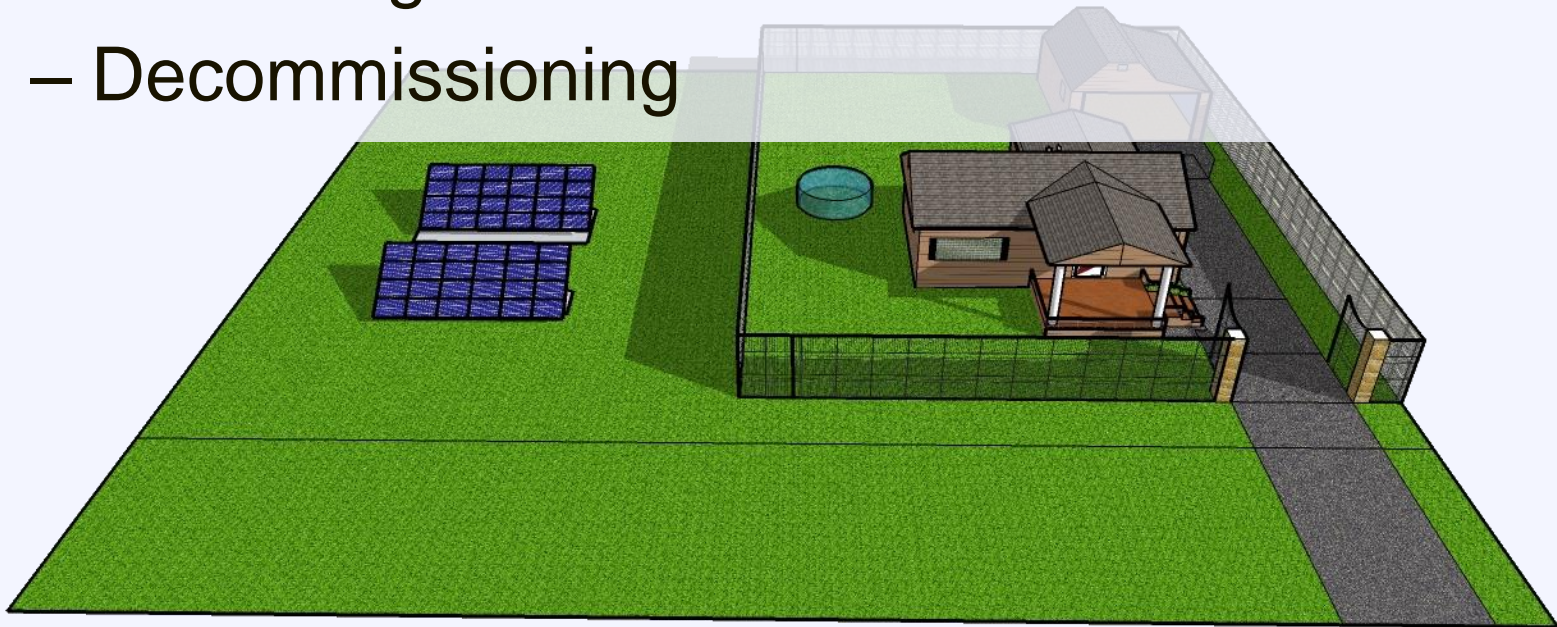
TABLE OF PERMITTED USES									
P=Permitted; C=Conditional Use; X=Prohibited									
Use	Residential Districts		Mixed-Use Districts			Commercial Districts		Industrial Districts	
	R-1	R-2	MX-1	MX-2	CBD	NC	GC	LI	HI
accessory solar system	P	P	P	P	P	P	P	P	P
solar garden	P	P	P	P	C	C	P	P	P
solar farm	X	X	X	X	X	X	X	C	P

OR

TABLE OF PERMITTED USES										
P=Permitted; C=Conditional Use; X=Prohibited										
Use	Residential Districts		Mixed-Use Districts			Commercial Districts		Industrial Districts		Additional Standards
	R-1	R-2	MX-1	MX-2	CBD	NC	GC	LI	HI	
accessory solar system	P	P	P	P	P	P	P	P	P	\$12.225.030
primary solar system	P	P	P	P	C	C	P	P	P	\$12.225.040

How Can Zoning Promote Solar Gardens?

- Adopt appropriate use-specific standards.
 - Minimum lot size
 - Setbacks, lot coverage, height
 - Screening
 - Decommissioning





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U.S. Department of Energy

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Solar Outreach Partnership: solaroutreach.org

APA's SolarOPs resources:

www.planning.org/research/solar/