NOTICE OF JOINT STUDY SESSION

University City, City Council and The City Green Practices Commission CITY HALL, Fifth Floor 6801 Delmar Blvd., University City, Missouri 63130 Monday, April 28, 2025 6:00 p.m.

<u>AGENDA</u>

Requested by the Green Practices Commission

- 1. Meeting called to order
- 2. Green Practices Commission Presentation "The Importance of Rooftop Solar"
- 3. Q&A
- 4. Adjournment

This meeting is OPEN to the public.

Posted 25th day of April, 2025

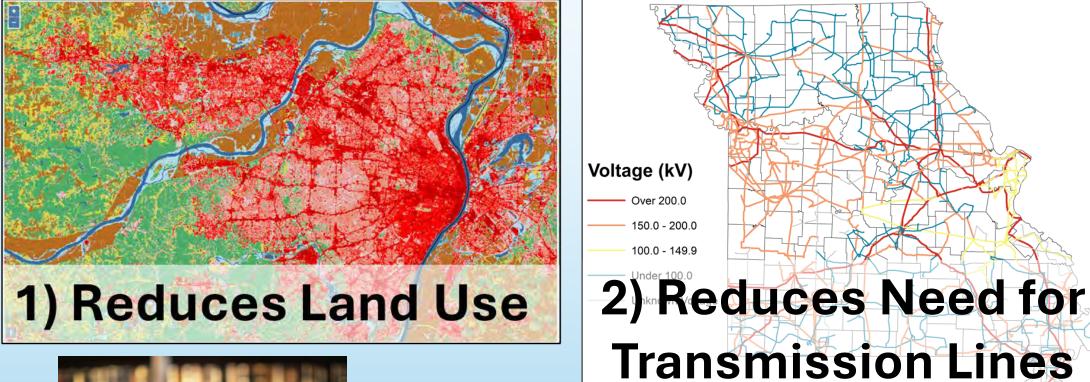
The Importance of Rooftop Solar

The Green Practices Commission of University City, MO (2025)

Proposed Ordinance:

"All new commercial and multi-family developments within University City with a footprint of at least 5,000 square feet will generate solar panel cost-benefit analyses. They will report their findings to the Green Practices Commission, which will in turn report the findings to the City Council."

Why is rooftop solar so critical?





3) Decreases Need for Litigation & Dragged-out Projects

Midcontinent Independent System Operator (MISO)'s Planning Resource Auction

2024 PRA Results Winter Spring Local Balancing Summer Fall Zone Authorities (Price \$/MW-Day) DPC, GRE, MDU, MP, NSP. 30.00 15.00 0.75 34.10 OTP, SMP ALTE, MGE, UPPC, WEC, 30.00 34.10 15.00 0.75 2 WPS, MIUP ALTW, MEC, MPW 30.00 15.00 0.75 34.10 AMIL, CWLP, SIPC, GLH 30.00 15.00 0.75 34.10 AMMO, CWLD 719.81 719.81 30.00 0.75 BREC, CIN, HE, IPL, NIPS, 30.00 34.10 15.00 0.75 SIGE 15.00 0.75 CONS, DECO 30.00 34.10 EAL 30.00 15.00 0.75 34.10 8 CLEC, EES, LAFA, LAGN, 30.00 0.75 34.10 15.00 LEPA EMBA, SME 30.00 15.00 0.75 34.10 10 KCPL, OPPD, WAUE (SPP), 0.75 34.10 ERZ PJM, OVEC, LGEE, AECI, 30.00 15.00 SPA TVA

MISO Resource Adequacy Zones 3 Zones 1-7: North/Central region Zones 8-10: South region

Missouri faced an energy deficit of 872 MW in 2024 (down from a 2,435 MW surplus in 2023) that can be traced back to:

- Power Plant Retirements
- Planned Power Plant Maintenance
- Seasonal Outages
- Higher Electricity Demand
- Tighter Limit on Imports

Highlighted values are CONE pricing

Source: https://cdn.misoenergy.org/2024%20PRA%20Results%20Posting%2020240425632665.pdf

The Grid Infrastructure Outlook with Status Quo



12,500+ Power Plants

200,000+ miles of High Voltage Power Lines Millions More Miles of Low Voltage Lines Millions of Transformers and Similar Equipment

Electric Poles at "End of Life" or in Disrepair

Increased Grid Infrastructure Results in...



Adding Rooftop Solar (and Solar Ready Construction) Will:



Resilience to Power Failures



Benefits of Solar-Ready Design

- **Solar-ready rooftops** ones that are designed and oriented for Photovoltaic (PV) and Solar Water Heating save more money than retrofitting existing buildings.
 - 10 kW PV system: \$2,644 cheaper installation costs
 - Scaling up saves more: 3-story mixed-use building installation savings could be anywhere between \$12,500 to \$25,000 for PV.



https://sustainablecitycode.org/brief/solar-ready-construction-4/#_ednref7 https://www.gogreensolar.com/products/10000-watt-10kw-solar-ground-mount-kit

Risks of Rooftop Solar Include:







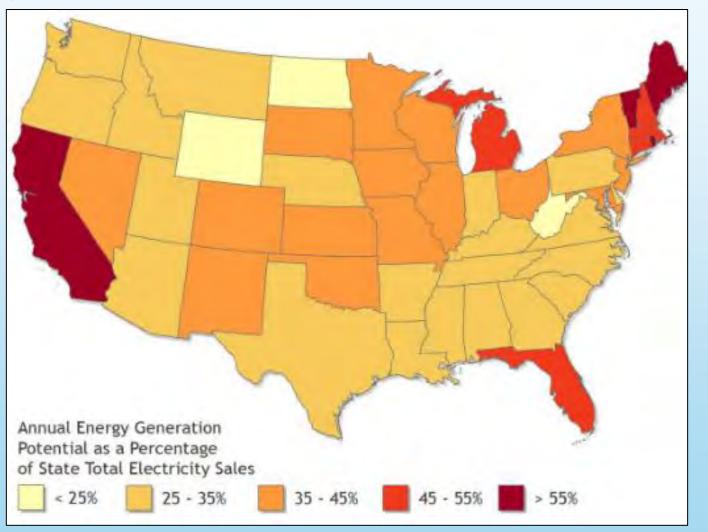


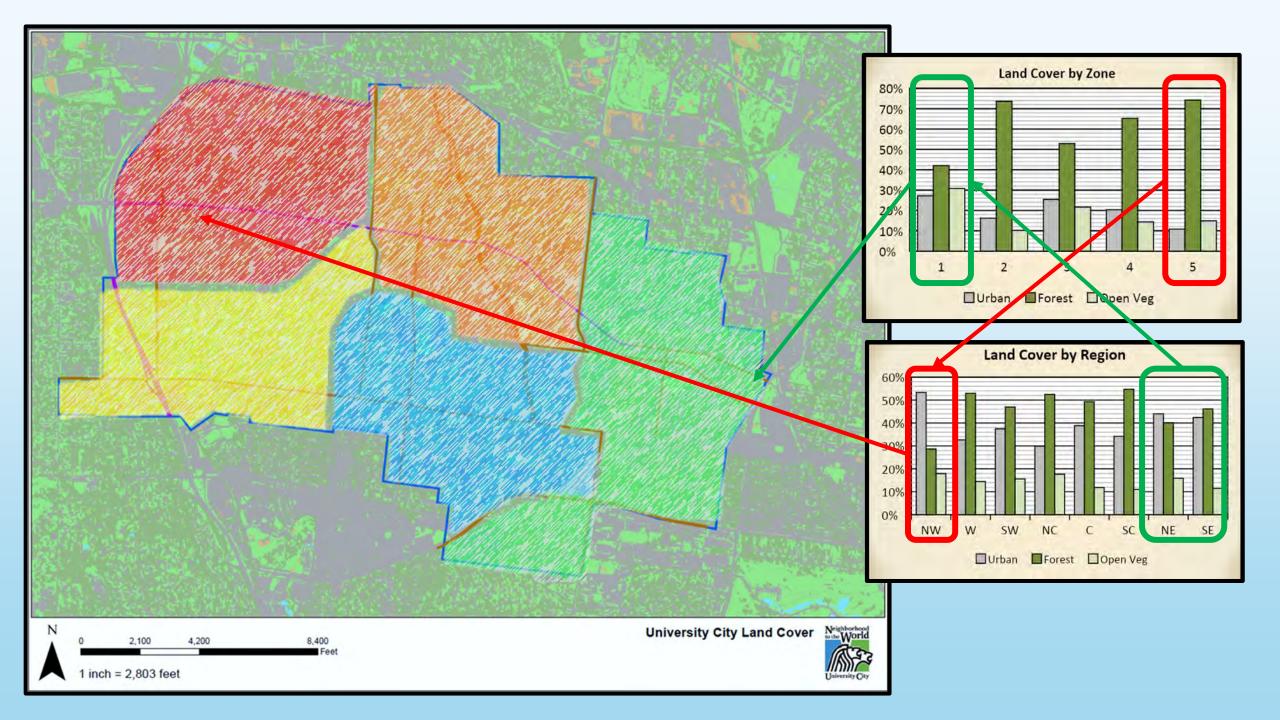






Potential rooftop solar annual generation from all buildings as a percentage of each state's total electricity sales in 2013





Why Should We Pass This Ordinance?

Demonstrate benefits of solar to developers

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Help University City gather data on obstacles to installing rooftop solar.



Establish University City at the forefront of sustainable practices



Low risk of developers pulling out due to this requirement since this service is extremely cheap or complete free.

Provide opportunity for energy buy-back from new solar roofs





Solar Ordinances in the STL Region

- STL City (2020) passed a solar readiness for commercial & residential construction.
 - Five stories or less
 - Roofs need to be sturdy enough for solar arrays
 - Must have electrical infrastructure installed "For Future Solar Electric"
- Clayton earned a Silver Solsmart designation
 - Reviewed local zoning requirements
 - Adopted nationally recognized standards for growing solar market
 - "Cutting red tape"
 - Improved conditions for solar growth
 - Trained staff on permitting & inspecting
- Collinsville changed code requiring native plants under commercial solar installations.
- *Lee's Summit, MO* municipal code 15.2830 requires:
 - New residential dwellings to be designed, oriented, and equipped with upgraded electric, roofing, etc. to accommodate future PV or SWH.

Questions?