The Landscape of Solar in the Midwest
Current & Future

ONESTL Sustainability Summit
April 5, 2017
Inspire a Solar Tribe to Create a Sustainable World

- Founded in 2006, 35+ Employees
- 8 MW & 750+ project portfolio
- Fully Licensed Electrical Contractor – NABCEP & DG-Certified Professionals
- CLEARE Values
  - Community
  - Lead
  - Educate
  - Advocate
  - Respect
  - Excellence
dude - this is awesome! i think you have hit the nail on the head! awesome! i will see you there tomorrow. this is terrific!

Marcia Lochmann, 3/22/2017
2016 - A Record-Breaking Year for US Solar!

- U.S. market installed 14,762 MWdc of solar PV in 2016 – nearly doubling the capacity installed in 2015
- For the first time ever, solar ranked as the No. 1 source of new electric generating capacity additions brought online on an annual basis at 39%.
- On average, a new MW of PV capacity came on-line every 36 minutes
- A record 22 states each added more than 100 MW of solar PV.
Solar is an Economic Driver in US

- Nearly 260,000 Americans work in solar (2016) - more than double the number in 2012 - at more than 9,000 companies in every U.S. state.

- By 2021, that number is expected to increase to more than 360,000 workers.

- The top 25 corporate solar users in America have installed nearly 1,100 MW of capacity at 2,000 different facilities across the country as of October 2016.

- The amount of solar installed at U.S. corporations and businesses is enough to offset 1.1 million metric tons of carbon dioxide emissions each year.

- Commercial prices have fallen by 58% since 2012 and by 16% in the last year.

- While 2017 installations are expected drop slightly from a record-shattering 2016, the 13 GW expected still almost doubles 2015, the second largest year on record.
Why is Solar the Fastest Growing Industry?

Price of Technology ($)
Cost of Electricity ($)
Policy + Incentives ($)
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- Renewable Portfolio Standard (RPS)
- Net Metering
- Investment Tax Credit (Federal ITC 30%)
- Cash Rebates (IL)
- Solar Renewable Energy Credits (SRECs) (IL)
- MACRS Depreciation

Source: SEIA/GTM Research U.S. Solar Market Insight Q4 2015

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Midwest Solar Installed Capacity Growth Comparison

Illinois Annual Solar Installations

Iowa Annual Solar Installations

Missouri Annual Solar Installations

Arkansas Annual Solar Installations

SEIA/GTM Research U.S. Solar Market Insight
Modest MO Solar Growth Expected

State Solar Incentives Highlights:  Commercial & Residential PACE

Challenges:
- HB340: Levies a solar "penalty" by allowing utilities to charge up to 75% of the meter/connection charge to solar owners.
  • Has a reasonable chance of passing in the House this session. Similar challenges in other states (including failed attempt in IL in 2016).

+ HB439 & SB459: Authorizes a renewable energy facility owner (DG) to provide PPA. The current legal and regulatory rules allow only the utilities themselves to offer a PPA.

+ HB 916: Solar gardens still face an unusual set of legal and regulatory tax and securities obstacles that must be addressed legislatively. There are no such guidelines in place in Missouri yet.
Missouri Solar Outlook - By the Numbers

Solar Installed: 150.3 MW *(18.9 MW in 2016)*
National Ranking: 25th (29th in 2016)
State Homes Powered by Solar: 16,000
Percentage of State’s Electricity from Solar: 0.21%
Solar Jobs and Ranking: 2380 (29th in 2016)
Total Solar Investment in State: $434.69M ($43.65M in 2016)
Price Declines: 64% over last 5 years
Growth Projections and Ranking: 288 MW over next 5 years (ranks 29th)
Solar Companies in State: 134 companies total; 23 Manufacturers, 56 Installers/Developers, 55 Others

SEIA/GTM Research U.S. Solar Market Insight
Intense IL Solar Growth Expected: Future Energy Jobs Act

- $200M Allotted Annually (Wind/Solar)
- Funded by Rate Payers
- Effective June 1, 2017
- IL Solar For All Program
  + $750 million for low-income solar and job training
- Community Solar
- Creates Rebates for non-NEM customers
- 15-Year SREC Program for all customers
Illinois Solar Outlook - By the Numbers

Solar Installed: 70.1 MW (5.0 MW in 2016)
National Ranking: 32nd (39th in 2016)
State Homes Powered by Solar: 11,000
Percentage of State’s Electricity from Solar: 0.04%
Solar Jobs and Ranking: 3,718 (17th in 2016)
Solar Companies in State: 311 companies total; 63 Manufacturers, 115 Installers/Developers, 133 Others
Total Solar Investment in State: $212.17 million ($12.87 million in 2016)
Price Declines: 64% over last 5 years
Growth Projections and Ranking: 1,239 MW over next 5 years (ranks 18th)

SEIA/GTM Research U.S. Solar Market Insight
Solarize Illinois = 1 Megawatt in 2016!

IL = (5.0 MW in 2016)
Solarize Illinois = ? Megawatts in 2017?
Thank you
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