

# Solar Opportunities at Community Colleges

*IGEN Spring Conference 2024*





# Meet Your Presenter



## **Shannon Fulton**

*VP of Development*

Shannon joined StraightUp Solar as an installer and designer in 2013. She leads business development and marketing, advocacy, and the central Illinois office operations. She is Board Vice President of Illinois Solar Energy and Storage Association and the Parklands Foundation land trust organization, and is an Illinois State University alumnus in the areas of Geology, Geohydrology, and Renewable Energy.



## About StraightUp Solar

- Founded in 2006 & serves IL and MO
- 2800+ installations (54+ MW) to date
- Residential, Commercial & Industrial, Battery Storage, Smart Panels, EV Charging, Service & Maintenance provider
- Developer & Engineering, Procurement, and Construction (EPC) turn-key installer for projects up to 5MW
- Part of Amicus Solar Cooperative
- Certified B Corporation
- Asset management
- 122 employees - 50% have NABCEP Certification





# Using Business as a Force for Good

StraightUp Solar is proud to be a Certified B Corporation. To be a B Corp, StraightUp Solar must report on the sustainability of our business for our workers, customers, suppliers, community, and the environment.

*Every day we strive to make our business the best it can be for people and planet.*

Certified



Corporation

The logo features the word 'StraightUp' in a white, sans-serif font. Below it, the word 'SOLAR' is written in a smaller, orange, sans-serif font. A thin orange arc is positioned above the 'StraightUp' text.





# Today's Topics



- Why Solar Makes Sense
- Financing
  - PPA
  - Alternative Revenue Bond
- Example Projects
- Considerations
- Q&A





## Why Solar Makes Sense

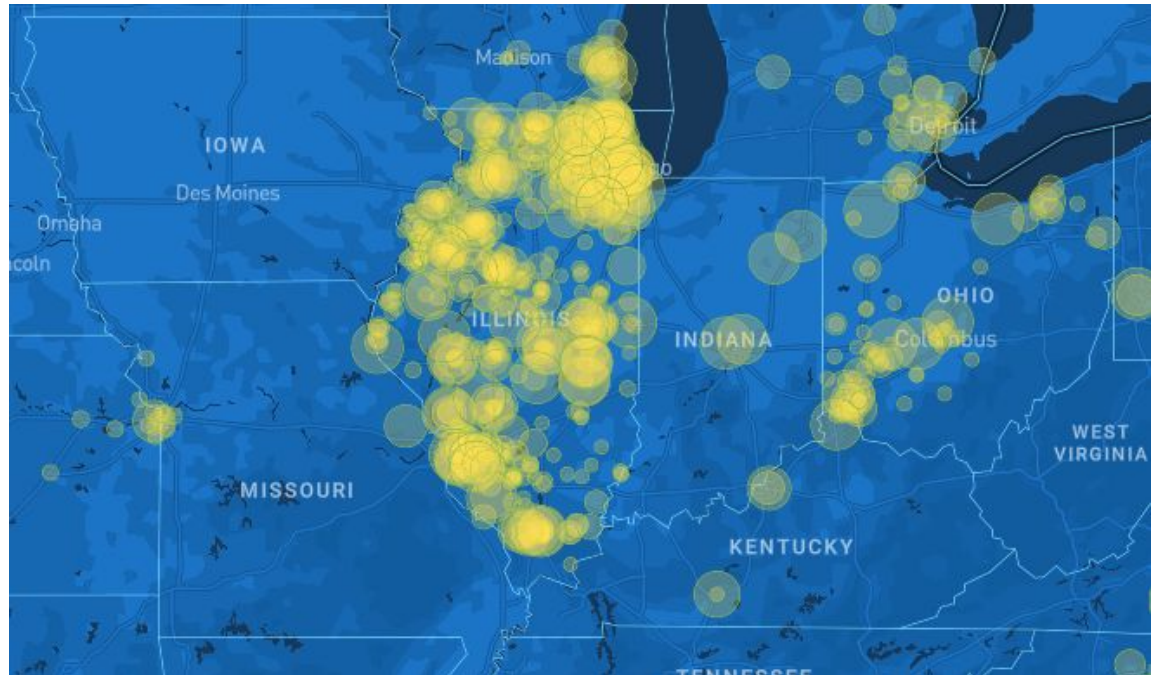
- Traditional energy supply and delivery costs continue to increase, impacting current and future budgets
- Illinois and federal incentives uniquely supportive
- Enhances relevant and timely student education and workforce development
- Reduces harmful air pollution and associated costs of addressing the health effects and environmental injustice
- Signals to the local community and students a paradigm shift toward cleaner energy production and energy independence





# Illinois Solar Incentives are Driving Access

- Illinois Shines Program  
(Solar Renewable Energy Credits)
  - Public Schools
  - Large DG
  
- Ameren/ComEd DG Rebate

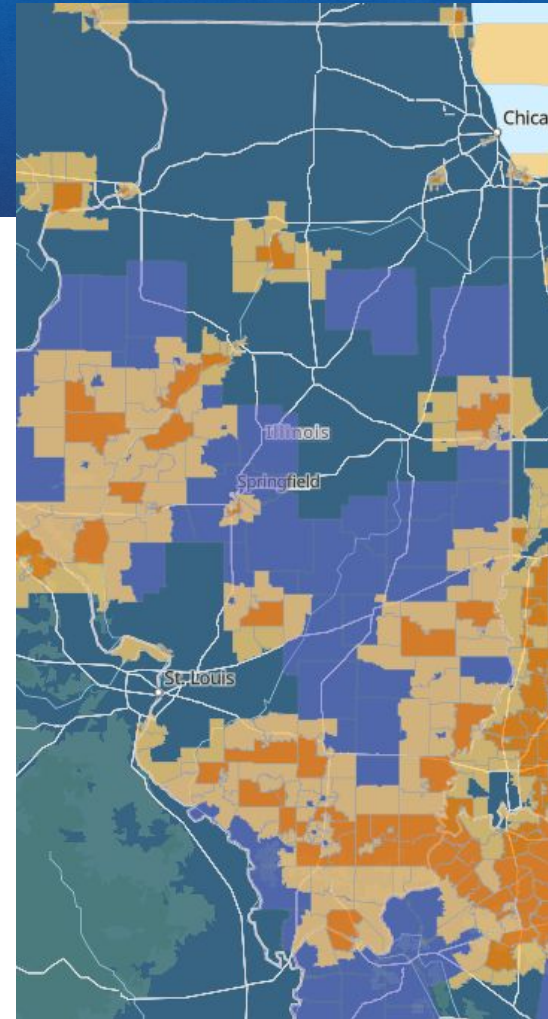




# Federal Solar Incentives are Driving Access

## Inflation Reduction Act (IRA)

- 30% Federal Income Tax Credit (FITC)
- FITC Adder Credits
  - Energy Community - 10% ([DOE Searchable Map](#))
  - Domestic Content - 10%
  - Low-Income Allocation (competitive application - DOE) - 10% to 20%
- Elective Pay (aka Direct Pay) option for tax-exempt organizations
  - Tax-exempt entities receive payment equal to the full value of ITC (and bonus adders)
  - Exempt from tax under Title A (any state or local govt, Indian tribal govt, rural coop, nonprofits)





## Financing – Solar Power Purchase Agreement



- PPA with Third Party Owner (TPO) of Solar Asset
- 100% financing
- Fixed or escalating kWh rate less than current Ameren/ComEd (or Alternate Supplier)
- 6 to 20+ year term, various buyout and extension options
- Buyout option at year 6 with transfer and reinvestment of remaining REC revenue
- TPO assumes insurance, maintenance, and performance for term of the PPA







## Financing – Alternative Revenue Bond

- 100% financing
- Cash incentives nearly 85% of project costs
- Interest rates lower by approximately 1–3% (varies)
- Double Tax-Exempt Bond
- Principal and interest paid back as incentive payments received and energy savings realized
- Insurance and O&M responsibility of Host





# Example Financial Comparison – 3.7 MW Solar Project

## PPA

- \$0.065/kwh PPA, 0% PPA Escalator
- No upfront cost or ownership requirement
- Est. buyout at Year 6: \$6,500,000 with remaining REC revenue reinvestment in years 7-20
- Cash flow positive after buyout in year 13
- 30-yr Cumulative Savings: \$12.42M

## ARB

- Bond Principal (Construction Cost + Projections for O&M yr 6 – 20): \$15,155,041
- Bond Interest: 3%
- Neutral cash flows / cash-flow positive year 1 and beyond
- 30-yr Cumulative Savings: \$16.8M





## Example Financial Stack

### 110 kW DC / 75 kW AC Solar Project

(Estimated costs and incentives)



- **\$320,000 System Cost**
- **+\$1,500 Illinois Shines Application fee**
- **-\$116,517 Illinois Shines REC Payments**
- **-\$33,615 Ameren/ComEd DG Rebate**
- **-\$96,000 Federal Tax Credit Elective Payment**
- **\$75,368 Net cost**







## Educational Benefits

- Annual presentation and field trip to teach solar electricity and the benefits to the environment and community
- Walk-through training and operational guides for facilities staff
- Informational monitors in student common areas







## Things to consider...Native Planting or mowing

- Consider native planting or mowing in place of aggregate and weed barrier to increase Elective Pay % and reduce overall cost







Things to consider...Request competitive proposals for the O&M Services Contract every 5 years

- Getting bids for O&M will help control costs and understand the service needs in reasonable increments of time







## Things to consider...Parking Canopies

- Consider parking canopy structures to expand solar energy offset when roof or ground space is limited







## Things to consider..Community Solar Subscriptions for remaining supply

- Community Solar subscriptions lock in 10-20% savings on energy bills to help buffer Ameren/ComEd supply rate volatility







## StraightUp Solar School, District, & Municipal Projects

- John A Logan College, Carterville
- Eureka College, Eureka
- Central City Schools, Centralia
- Unity Christian School, Decatur
- Kreitner Elementary School, Belleville (construction)
- Parkway School District (MO)
- Mehlville School District (MO)
- Chillicothe Public Library District
- Champaign-Urbana Public Health District
- Dixon Park District
- City of Carbondale
- City of Marissa
- City of Pinckneyville
- City of DuQuoin





Q&A

[Shannon@Straightupsolar.com](mailto:Shannon@Straightupsolar.com)

[Straightupsolar.com](http://Straightupsolar.com)