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ILLINOIS POWER AGENCY

Bring Solar to School-Benefits, Challenges, and Opportunities

August 31, 2023

Agenda

1. Housekeeping and Introductions
2. Solar for Schools- Benefits and Barriers
3. Illinois Shines and Public Schools
4. Understanding State, Federal, and Utility Incentives for Solar.
5. Solar Energy for Schools-Case Studies and Lessons Learned
6. Q&A

IPA Power Hour Webinars

- **Introduction and Scope**
- **Power Hour is a series of educational and informative presentations on a wide range of clean energy topics and emerging issues**
- **Today's Power Hour:**
    - **The speakers will highlight how public schools (K-12) can take advantage of state incentives to install solar. In addition, they will discuss challenges that schools face in going solar, as well as highlight opportunities and best practices for solar adoption. This presentation is intended for educational purpose only and does not represent a legal interpretation or statement of policy by the IPA or its staff.**
    - **Future IPA Power Hour Webinars will cover other topics related to the clean energy economy in Illinois**

Upcoming Webinar

IPA Hour 8: The Work Ahead: Staffing the Clean Energy Economy

Date: September 29, 2023

Time: 12-1pm CST

REGISTER HERE

The Illinois Power Agency

Vision:
"A clean, reliable, and cost-effective energy future for residents and businesses across Illinois"

- Independent State Agency created in 2007
- Responsible for the development of an annual Electricity Procurement Plan for customers of electric utilities
- Supports the Illinois Renewable Portfolio Standard (RPS) through the development and implementation of:
  - Long-Term Renewable Resources Procurement Plan
  - Competitive procurement for utility-scale projects
  - Solar incentive programs for homes and businesses

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Solar for Schools- Benefits and Barriers

WELCOME

IPA Power Hour

Illinois Public Schools

Dr. Matt Seaton, CFO

Equity • Quality • Collaboration • Community

Agenda

- Overview of School Construction Programs
- Challenges to Solar Implementation
- Resources Available through ISBE

School Construction Programs

- School Energy Efficiency Project Grants
  - May be used for new installation projects
  - Subject to Appropriation (have not been funded since 2014)
- School Maintenance Project Grants
  - May be used for repair/maintenance on solar installations
- Health and Life Safety
  - May be used for repair/replacement of solar installations
  - Cannot be used for new installations

Challenges to Solar Implementation for Schools

- Funding
- Knowledge of Solar Programs
  - Association(s) Partnerships
  - 3rd Party Consultants
- Abundance of Vendors
- Differences Between Solar Incentive Programs

Resources Available Through ISBE

- School Business Services
  - Michael Gum, Director mgum@isbe.net

- School Construction Website
  - https://www.isbe.net/Pages/School-Construction.aspx

- ComEd's Public Schools Carbon-Free Assessment
  - https://www.isbe.net/Pages/PSCFA.aspx

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Illinois Shines and Public Schools

Illinois Shines & Public Schools

Presented by Audrey Steinbach

08/31/2023

Illinois Shines | IPA ILLINOIS POWER AGENCY

Agenda

1. Illinois Shines Basics
2. History of Schools Projects in Illinois Shines
3. Public Schools Category
4. Benefits to Installing Solar on Schools Through Illinois Shines
5. Schools Projects by the Numbers
6. Challenges & Work to Come

Illinois Shines Basics

- Illinois Shines is a State incentive program that supports solar installation across Illinois
- Incentives are paid out per renewable energy credit (or REC) – which is a unit of energy produced by a solar system
- Illinois Shines has 6 program categories for different project types, including one specifically for Illinois public schools
- Incentives are paid out to pre-approved vendors (*not* to customers directly) that are sanctioned to participate in the program
- The incentive payout schedule for public schools projects is a 20-year long contract which incentives paid out as RECs are delivered (or power is produced) by the system

History of Public Schools Projects in Illinois Shines

January 2019
Illinois Shines opens to the public for applications

September 2021
Climate and Equitable Jobs Act passage

Prior to the passage of the Climate and Equitable Jobs Act, there was **no carve out in the Program for public schools projects.**

After the passage of the Act, the Public Schools category was established within the Program:

- Over 10% of capacity is set aside for solar built on public schools
- Prioritizations for schools in need and schools located in Environmental Justice Communities

Public Schools Category

The Public Schools Category in the Illinois Shines program creates a carve out for solar development on Illinois public schools.

Prioritizations

To ensure that schools in need are prioritized within the Program, public schools that are Tier 1, Tier 2, or located in an Environmental Justice Community are offered priority capacity for the first 180 days of each Program Year. Tier 3 and 4 schools are still offered capacity in the Program, just less capacity than Tier 1 and 2 schools.

Requirements

Public schools projects must be located on school or district owned land.

For community solar projects participating in the Public Schools category, the school must act as an Anchor Tenant to the project – or subscribe to 10-40% of the project's capacity.

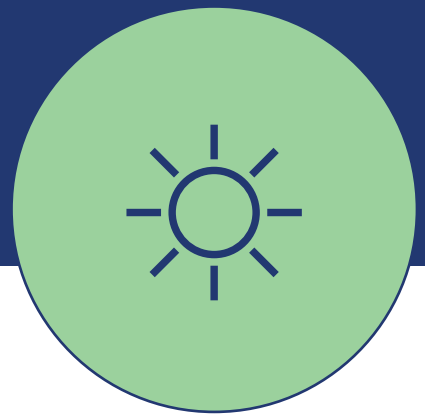
Benefits to Installing Solar on Schools Through Illinois Shines

Savings – Net Metering

Net metering measures extra electricity a solar project produces and sends to the electric grid, and credits you for it on your electric bill.

Learning Resource

Once installed, the solar project can act as a learning resource for students and community members alike.



Savings – Solar Power

With the school utilizing solar power as its primary electricity source, energy costs are reduced.

Schools Projects By the Numbers

Solar projects have been developed on schools in the State through the Illinois Shines program prior to the passage of the Climate and Equitable Jobs Act (CEJA) – which created the Public Schools category.

Uptake in the Public Schools category has been slower since the passage of CEJA, likely due to lack of Program awareness.

	Pre-CEJA (Jan. 2019- Sept. 2021)	Post-CEJA (Sept. 2021-Aug. 2023)
Distributed Generation	~100 projects*	10
Community Solar	0	6

**Assumption based on project names related to schools*

Challenges and Work to Come

While the Public Schools category in Illinois Shines provides set aside capacity for solar on schools, barriers to participation persist and must be addressed to increase participation.

Challenges

- Ownership/access to land is a large obstacle for schools.
- Anchor tenant requirements for community solar projects
- Time needed for district approval
- Older infrastructure that requires updating (roof and electrical systems)
- Lack of awareness of Illinois Shines program
- 20 year REC incentive contract

Work to Come

- Targeted outreach to schools and district officials
- Increased resources that are school-specific to ensure benefits of Program are known

Thank you!

Audrey Steinbach
Senior Program Manager – Illinois Shines
Illinois Power Agency

For questions regarding the Illinois Shines program, please email schools@illinoisshines.com

Illinois Shines

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Understanding state, federal, and utility incentives for solar

INVESTING IN SOLAR SCHOOLS

MIA KORINKE, CLIMATE JOBS ILLINOIS

Understanding state, federal,
and utility incentives for solar.

CLIMATE JOBS ILLINOIS

We are a coalition of labor organizations advocating for a pro-worker, pro-climate agenda in Illinois.

SOLAR ENERGY SAVINGS

30%

New federal incentives can cover 30% to 50% of school solar costs.

10 yrs

Solar power systems can pay for themselves in 10 years or less.

HOW MUCH MONEY ARE WE TALKING ABOUT?

The average Illinois school district could save

$6 MILLION

by investing in solar and energy efficiency.

SCHOOL SOLAR INCENTIVES

1

RENEWABLE ENERGY CREDITS

As described by the IPA, school districts can apply for Illinois Shines to recieve state incentives for installing solar.

2

CLEAN ENERGY TAX CREDITS

Schools can now claim clean energy tax credits on a "direct pay" basis, which can cover 30% to 50% of solar costs.

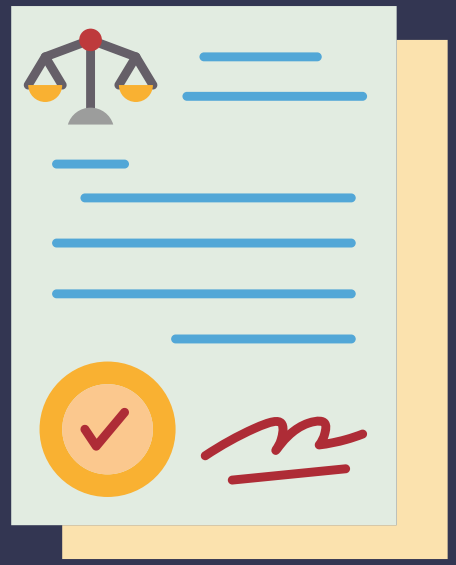
3

REBATES & COMPETETIVE GRANTS

Competetive grants for school solar will be available again in 2024. ComEd and Ameren also offer solar rebates for schools.

CLIMATE & EQUITABLE JOBS ACT

- Landmark climate law passed in 2021
- Builds Illinois' clean energy future
- Decarbonizes school buildings
- Prioritizes environmental justice
- Invests in workforce development



PUTS US ON THE PATH TO BE 100% CARBON-FREE BY 2050

INFLATION REDUCTION ACT

- Largest climate investment in U.S. history
- Increases Investment Tax Credit to 30%
- Creates "direct pay" for local governments and nonprofits without a tax burden.
- 10% bonuses for low-income communities, domestic content, and energy communities.

COVERS 30% TO 50% OF PROJECT COSTS.

DIRECT PAY TAX CREDITS

PROJECT PLANNING

PRE-FILING REGISTRATION

- Details on the project and tax credits you intend to claim.
- Generates a unique project ID that you will keep for tax time.

FILE REQUIRED ANNUAL TAX RETURN

- Complete Form 990-T and enter your project ID.

ADDITIONAL RESOURCES

- IRS Publication 5817: Overview of eligibility and filing.
- IRS Direct Pay FAQs

SOLAR SCHOOLS IN ILLINOIS

WILLIAMSFIELD SCHOOL DISTRICT 210

- 864-panel "solar garden" installed in 2020
- Student-led initiative with district support

LAKE PARK HIGH SCHOOL DISTRICT 108

- 1.9 MW project completed in 2017
- $5.1 million projected savings
- Invested energy savings in HVAC upgrades

HUNTLEY SCHOOL DISTRICT 158

- 5.5 MW ground-mount project installed in 2020
- Largest school solar installation in Illinois
- Supplies 80% of district energy usage

SUPPLEMENTAL FUNDING

STATE

- Illinois Climate Bank
- K-12 Solar Schools Grant (ICECF)
- Cook County Solar Schools Grant

FEDERAL

- Renew America's Schools Grant (U.S. Department of Energy)

UTILITY

- ComEd Rebates
- Ameren Rebates

FOR MORE INFORMATION ON CARBON FREE HEALTHY SCHOOLS

Mia Korinke
Carbon Free Healthy Schools Director
Climate Jobs Illinois

mkorinke@climatejobsillinois.org

WWW.CLIMATEJOBSILLINOIS.ORG/SCHOOLS

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Solar Schools-Best Practices and Lessons Learned

Photo: Courtesy Cook County

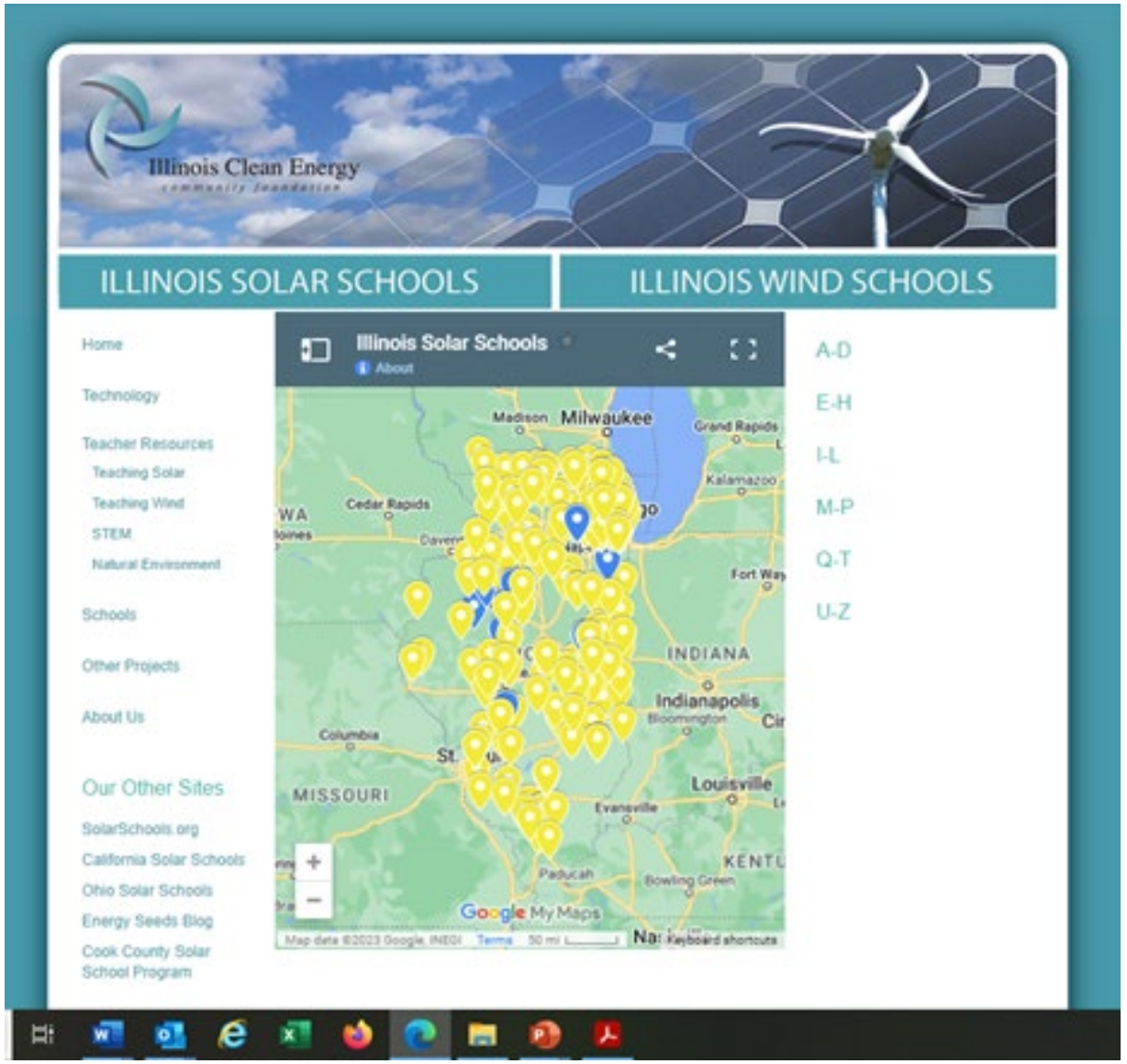
Photo: Courtesy Butterfield Elementary School

Photo: Robert Shaw

Illinois Clean Energy
community foundation

Supporting Energy Efficiency,
Renewable Energy, and
Preserving Natural Areas since 1999

IllinoisSolarSchools.org



Over 450 Solar School Grants!

Farmington Central CUSD #265
Farmington, IL

Photo: Courtesy Famington Central CUSD #265

Photo: Gabriela Martin

John Asplund, Superintendent
Farmington Central School District, Illinois

[Pushing a Rural District to Take Risks – Meet John Asplund, 2016 Leader to Learn From]

Adlai E. Stevenson High School
Lincolnshire, IL
Net Zero Energy Addition

Photos: Connor Steinkamp

Lessons Learned

- Have a project champion
- Assemble inclusive team: superintendent, principal, facilities, IT, teachers, students
- Do your research!
  - Consider hiring consultant for larger projects
  - Evaluate ownership and financing options

St. Philip the Apostle School, Addison, IL

Lessons Learned (cont.)

- Reach out to electric utility right away
- Learn from other solar schools
- Consider performance guarantee, longer warranties, track record
- Make installation highly visible

Illinois Math and Science Academy, Aurora, IL

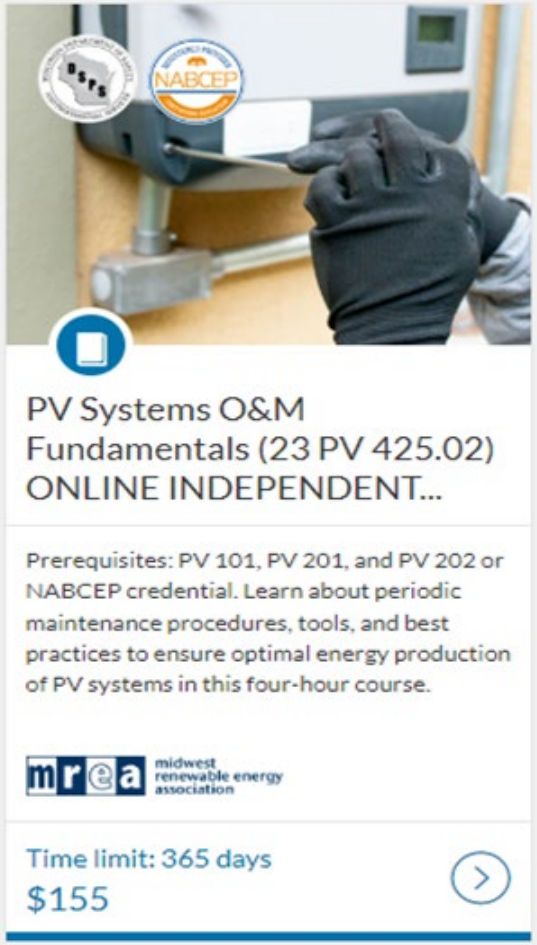
Lessons Learned (cont.)

- Monitor Performance and Savings
  - Facilities
  - Teachers
  - Students
- Budget for
  - Equipment repairs
  - IT issues
- Povide training and tools

NEED Teacher Training Workshop

Resources

- Find Incentives:
  DSIRE-USA.org
- Find certified installers:
  NABCEP.org
- Find Teacher Workshops/Resources:
  NEED.org
- Find PV Training:
  courses.midwestrenew.org



Adlai E. Stevenon HS
Carbon-Neutral AP Environmental Science Classroom

Dundee-Crown High School Shop Class

Mother McAuley High School
AP Studio Art

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Illinois Clean Energy Community Foundation

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Q&A

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