

green
town

GreenTown Rockford

November 12 | Embassy Suites Rockford Riverfront



Trajectory
Energy
Partners

Solar Options for Communities & Organizations

2021



In September 2021 Illinois passed the **Climate and Equitable Jobs Act (CEJA)** which builds on the success of the **Future Energy Jobs Act (FEJA)** passed in 2016. These groundbreaking bills bring the benefits of a clean energy economy to residents and businesses across Illinois, and will rapidly expand access to the savings, clean energy, and job benefits of solar power.

The Future Energy Jobs Act: A Win for Illinois
The Future Energy Jobs Act (FEJA) strengthens the Illinois economy by taking important steps toward our state's clean energy future and preserving competitive rates. FEJA will:

- Stimulate** job creation with new investments in energy efficiency, renewables, and energy innovation
- Enhance** Illinois' position as a leader in the clean energy economy, attracting investment and new companies to Illinois
- Preserve** Illinois' low energy rates for residents and businesses



CEJA



Illinois Solar for All

Across Illinois, solar is creating jobs, driving economic development and lowering utility costs.

Whether you are a business interested in solar to power your buildings, or a landowner looking to lease land for a solar project, **there are many ways to go solar.**

Behind the Meter

A home, business, or organization can install solar on their roof or on their land that directly powers their home or building.

Community Solar

Landowners can host these projects, which open up solar access for homeowners, businesses, and organizations that can't install solar on their roof or property.

Utility Scale Solar

Large solar systems covering hundreds of acres of land and are connected directly to higher voltage utility lines.



ABOUT US

Trajectory Energy Partners brings together landowners, electricity users, and communities to develop solar energy projects with strong local support.

Our team brings together a deep background in **solar development, financing, policy, and community engagement** that makes us the right partner for solar in your local community.



Rockford Solar



Trajectory developed the 2MW Rockford Solar project in coordination with the City of Rockford who owns the property, the Rockford Housing Authority, and a broad group of community organizations that supported the project.

“Development of solar farm projects take commitment and adaptability to bring initial concept to reality. **Trajectory Energy continues to earn industry respect for delivering the highest quality projects for customers, Trajectory is a true partner throughout the process.**”

— Paul Fosler
President of Fosler
Construction Company

Rock River Solar



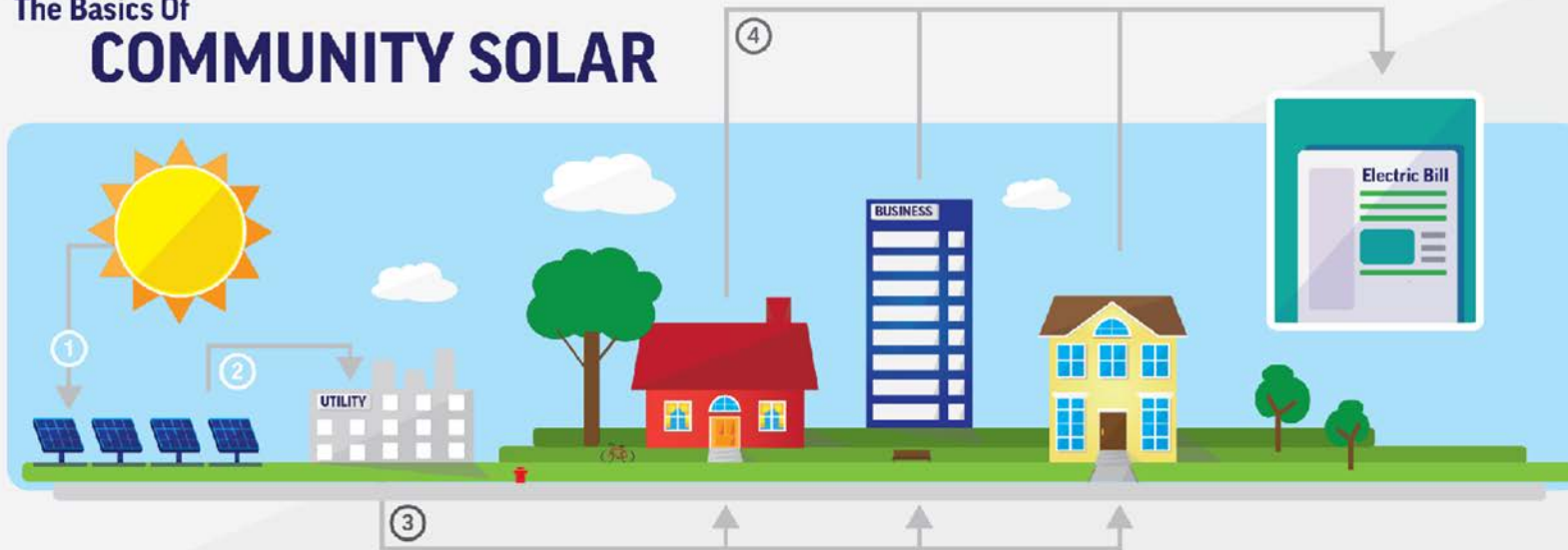
Rock River Solar is a 420kWac rooftop system that will serve the UW-Health Sports Factory facility, a recreation center run by the Rockford Park District. The solar project will provide over 40% of the electricity used by the Sports Factory, and construction is expected in 2022.

“We at Fondulac Township in East Peoria, have been extremely pleased with the honesty and professionalism in developing our project. **I would not hesitate for a moment to partner with Trajectory** and would encourage you to do so.”

— Rick Swan
Fondulac Township Supervisor

The Basics Of

COMMUNITY SOLAR



Community solar opens up access to residents, non-profits, communities, and public sector entities that can't install solar on their roof or property. They can participate in a community solar project and receive community solar credits on their utility bill for the energy produced by their share of the solar installation.

The 2021 Climate and Equitable Jobs Act (CEJA) and the Illinois Solar for All (ISFA) program support behind the meter projects for non-profit and public sector entities.

- Must have available roof space or land to host a project.
- Customer pays for electricity through a PPA

A power purchase agreement (PPA) is a contract between two parties - one generates electricity (system owner) and the other purchases electricity (customer).

A PPA between Trajectory and a facility owner (customer) provides:

- No upfront cost to the customer to install or operate the system, only charge is for kWhs produced.
- Savings – PPA charges are lower than the savings on the customer's utility bill, resulting in an immediate savings.
- Length of initial term – typically 20 years.
- System owner is responsible for developing, financing, constructing, and maintaining the project. PPA includes terms for utilization of roof, installation, maintenance and repair of system.





CEJA PROGRAMS

The Climate and Equitable Jobs Act (CEJA) has multiple programs to support solar projects. Trajectory Energy Partners will identify the best fit for your project and manage the program application process.

Illinois Solar for All

IL Solar for All is targeted at low-income and environmental justice communities. It supports community solar and behind the meter projects up to 5MWac in size and targeted at non-profit and public sector organizations.

Public Schools Program

CEJA has a fund specifically for projects located at Illinois public schools. It supports community solar and behind the meter projects up to 5MWac in size and targeted in environmental justice communities.

Non-Profit Behind the Meter

CEJA has a fund specifically for behind the meter projects serving non-profits. Projects can be up to 5MWac in size.

Community Driven Community Solar

CEJA has a fund specifically for community solar projects designed to closely serve the communities in which they are developed. The program is targeted for non-profit and public sector landowners and projects with close involvement and ownership from community members.



The Climate and Equitable Jobs Act ensures that an equitable share of the jobs and wealth generated by this new energy economy happen in disadvantaged communities and those traditionally left behind.

- Creates 16 new workforce hubs, coupled with contractor incubator hubs, and a pre-apprenticeship program to train and create a pipeline for communities that qualify
- Creates a training program for soon-to-be-released incarcerated persons for jobs in the solar and energy efficiency sectors
- Generates billions of dollars in new renewable energy projects that will create good-paying jobs in communities throughout our state

HIRE360



HIRE360 is collaborating with the Trajectory Energy Partners to recruit candidates into union trades apprenticeship programs and prepare them for work opportunities in upcoming construction projects. We are committed to serving individuals who are serious about a career in the trades. Interested in learning more? Complete the assessment form below. Once completed, a HIRE360 representative will reach out to you about next steps.

First Name*

Middle Name

<https://hire360chicago.com/tep/>



Jon Carson
Managing Partner
Trajectory Energy Partners

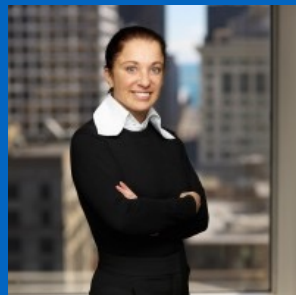


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CPS Goes Solar!

Chicago Public Schools Energy and Sustainability Program – Renewable Initiatives



**Sandrine Schultz,
CPS Director of
Energy and
Sustainability**

CPS Energy and Sustainability Program

Provide a high-quality public education for every child, in every neighborhood, that prepares each for success in college, career, and civic life.

Part of providing a high-quality education to every child in our district is teaching them **about** and **in** healthy and sustainable environments.

Our Goals Are To:

Reduce district wide school Site Energy Use Intensity* by 12% by 2025 (2019 baseline)

Transition to 100% renewable electricity energy by 2025

Reduce our overall greenhouse gas emissions by 45% by 2030 and 100% by 2050

Reach net-zero emissions of carbon dioxide by 2050

Engage and educate students through classroom and real-world learning opportunities related to energy efficiency, solar energy, and climate change

CPS is committed to Conserve, Protect, and Sustain our natural resources by implementing programs that help increase our efficiency, reduce our electric and natural gas consumption. minimize the generation of waste and recycle more, and increase the renewable resources used throughout the district

CPS Energy and Sustainability Programs

Energy Accomplishments at CPS

Chicago Public Schools lowered overall energy spend from FY19 to FY20 by more than \$4M (5.7 percent), with more anticipated for FY21 and FY22.

The Breakdown:

Since implementing a holistic energy management framework in 2018, CPS has achieved...

- kWh Reduced: **\$6,188,372**
- Pounds of CO2 Reduced: **60,346,312**
- Acres of Trees Planted: **33,381.3**
- Cars Removed From the Road (annually): **5,950.6**
- Metric Tonnes CO2: **27,372.7**
- # Homes Powered for 1 Year: **6,494.3**

Our Energy Projects:

These programs contributed to CPS' energy accomplishments while partnering with ComEd and Peoples Gas.


Lighting Retrofit Project Savings: \$3,066,209

- CPS has installed efficient lighting in buildings through the ComEd Public Buildings in Distressed Communities Program.
- Projected savings by program completion (Sept. 30): 178,840,061 kWh savings or \$3,066,209 in cost and material savings
- Project aligns with the Mayor's initiative *INVEST.SW.*


Energy Efficiency Project Savings: \$3,172,305

- Since the start of 2021, CPS has initiated 341 natural gas efficiency projects across school buildings with the People's Gas Energy Efficiency Program.
- Savings to Date (as of July 22): 1,660,907 therms or \$3,172,305 in savings from rebates/project costs, study costs, and a staffing grant
- Projects include:
 - Boiler tune-ups at 214 schools
 - Steam trap testing and replacement projects at 92 schools
 - Insulation projects at 17 schools
 - BAS upgrades scheduled at 6 schools

For more information about the CPS Goes Solar program, contact Sandrine Schultz, CPS Director of Energy & Sustainability at sschultz2@cps.edu



In partnership with


Utilities Management
(Electricity & Natural Gas)



- Power Outages (planned and unplanned)
- Major Projects (Capital meetings)
- Energy Efficiency Projects (Incentives)
- Utility Data Management (Capturing monthly consumption for usage and cost)



Facilities Operations and
Maintenance Efficiencies



- Virtual Commissioning Projects™ (PTO) – *Melinda (meeting notes)*
- Lighting Retrofit (ComEd)
- Mechanical Systems Improvement or Replacement (Lane Tech) and Other Projects
- Actionable Information (PTO)
- Measurement and Verification (AP and BM)



Facilities Building
Automation Systems and
Metering



- Solar Panels (check your roofs)
- Solar Mobile Unit
- Developing short and long term plan (Mather and Doolittle)



Renewable Energy



- Solar Panels (check your roofs)
- Solar Mobile Unit
- Developing short and long term plan (Mather and Doolittle)



Waste Management and
Recycling



- Increasing Recycling and Composting across the District – Application – Flyer



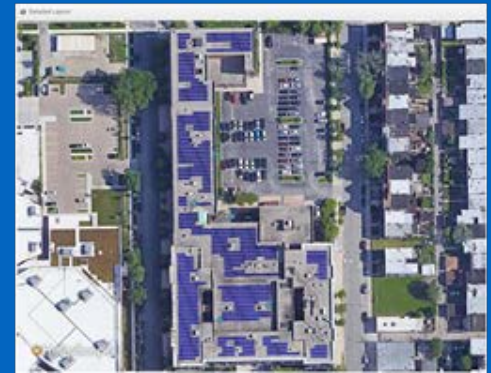
CPS Goes Solar! Project

Project Objective:

- Assist CPS in its effort to meet its goal of 100% renewable energy procurement by 2025
 - Reduce GHG by 45% by 2030
- Educational through classroom and real-world learning opportunities

Project Goals:

- Meeting our goals (above and to include consumption reduction)
- Align with the Illinois Renewable Portfolio Standard
- Develop on-site solar arrays that supply solar energy for CPS sites
- Equip teachers to implement climate change topic as part of their curriculum



CPS Goes Solar! Project - Team

- Develop teams of CPS, non-profit and for-profit advisors
- Develop strategy and timeline

Core Team

High level topics are discussed and decided on based on committees input and findings.

Solar Community

Focus on data analytics to include solar feasibility, size, cost, and location.

Funding

Focus financial mechanism and project plan development.

Education

Focus on educating teachers and students in renewable energy. Provide tools and information.

Communication

Sharing information about CPGGS via social media, meetings or other avenues.

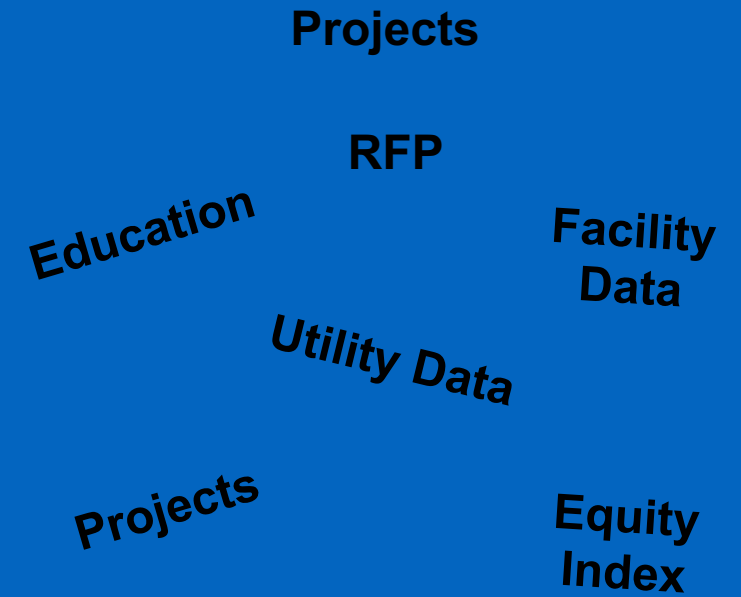
CPS Facilities

Meeting with CPS stakeholders (Facilities, Capital, Budget, Procurement, Treasurer) to validate the projects based on established criteria.

- Weekly and monthly meetings

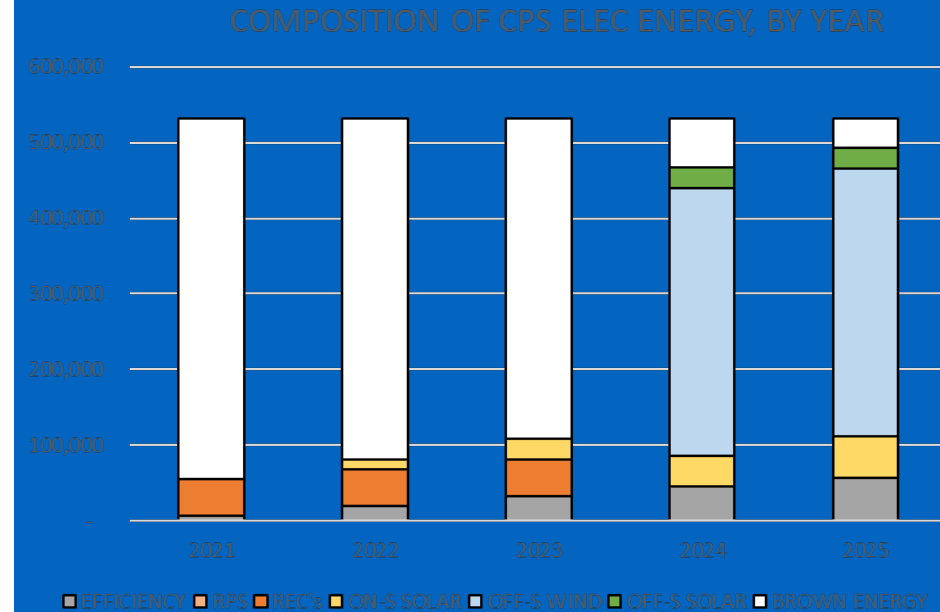
The Plan

- ✓ Reached out to several stakeholders
- ✓ Data Analytics – utility consumption
- ✓ Developed list of criteria – Building type, Asset Condition Index, Short and Long Term plan, Projects, Facility Year Built, Roof Condition, Roof Past and Future Projects, Roof Warranty, **Equity Index**
- ✓ Preparing project pipeline – Based on Roof CI and future projects on CPS buildings that will provide energy directly to the host school
- ✓ Developing community solar models that enable schools to purchase solar energy from sites outside of CPS
 - ✓ Funding mechanism - Power Purchase Agreement, District Ownership, Energy Savings Performance Contract or Renewable Energy Credits from existing solar and wind projects
- ✓ To release Request For Proposal (RFP) – Start with a handful of schools
- ✓ Develop a resource guide and webinar trainings for K-12 teachers focused on the climate crisis and renewable energy. Materials and tools will connect students to the solar energy installation at their school as well as information about opportunities and jobs in renewable energy.



Potential Project Size

- Using base of Calendar 2019 (pre-Covid19) CPS used 495 million kWh (annual)
- Elevate Energy Cook County Solar Map – estimate generate up to 201,000 MWh from 168MW of capacity (or 40% of CPS electricity)
- Another look adding more variables (infrastructure, locations, vacant schools) reduce to 83 MW of capacity (or 20% of CPS electricity) – 80% would need to come from off-site sources.



Challenges - Benefits

Challenges –

- Buy-in from leadership and other internal stakeholders
 - Agencies approve third party financing mechanism
- Internal processes impeding on progress and meeting deadlines
 - Operation and maintenance agreements
- Proven to be equitable, economically and environmental viable

Benefits –

- Reducing emissions
- Economic development and job creation
 - Fostering technology innovation
- Educational opportunities for students
- Impact City of Chicago renewable goal



As leaders, we have an obligation to not only listen to the students' thoughts and concerns about the climate crisis, but also educate them on the science, technologies, and strategies for reducing greenhouse gas emissions and support their own efforts to mitigate climate change.



IT'S OUR FUTURE

OCTOBER 31ST - NOVEMBER 7TH

MATHER RANGERS

MATHER HIGH SCHOOL 1959

Mikva Challenge

MATHER IS GOING TO THE UNITED NATIONS CLIMATE CHANGE SUMMIT IN SCOTLAND!

OUR MATHER RANGERS ARE MAKING A DIFFERENCE IN CHICAGO AND BEYOND!



Thank you for listening
Are there any questions?

Email - sschultz2@cps.edu

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