



# ***City of Racine Sustainability and Decarbonization Project***

Finance and Personnel Committee Meeting  
July 10, 2023



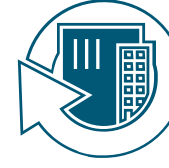
# About McKinstry

## VISION



Together, building a thriving planet.

## MISSION



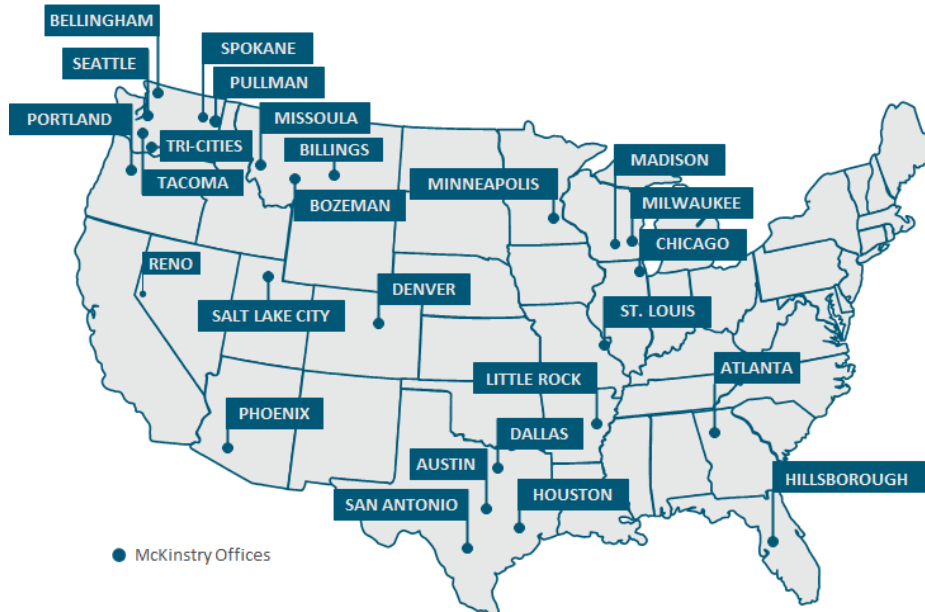
To make every building we touch more efficient.

### Our National Footprint

Local team backed by a deep bench

### Our Midwest Footprint

- National leader in designing, constructing, operating and managing high-performing facilities
- Founded in 1960
- 26 offices nationwide
- 2,100+ employees
- 90+ licensed Professional Engineers
- \$700M annual revenue



- **More than 80 projects worth over \$350 M in last five years**
- **Strong partnerships leading to legacy clients**
- **Local WI offices**

# City of Racine Partnership

- ✓ **Strong Commitment to the City of Racine**
- ✓ **McKinstry has 20+ years of WI and National experience - and is a leader in Guaranteed Energy Savings Projects in WI (\$350 Million in projects!) using State Statute 66.0133**
- ✓ **Extensive experience with Solar PV; Solar Canopy; Energy Efficiency and EV Charging**
- ✓ **Unique Experience with Federal Funding ENERGY Projects and Department of Energy**
  - Blue Earth County - In construction: currently working with DOE on Federal Application forms, project approval anticipated in July
  - SouthWest Transit Authority - In construction: currently working with DOE
- ✓ **WE Energies Collaboration**
- ✓ **De-risk Solar PV projects by design, install, maintain and operate**
- ✓ **Approach to leverage energy and operational savings - - guarantee results**

McKinstry's Renewable Energy Team has deployed:



150 MW+  
of solar



across  
200+ sites





# Racine Sustainability and Decarbonization Project

Achieve the 1<sup>st</sup> system in the State of Wisconsin to offset electric vehicle bus charging with renewable energy generated on-site from solar PV at the Storage Garage site.

- ✓ **Maximize Renewable Energy (Solar PV) to offset EV Bus charging on-site**
  - ✓ **1<sup>st</sup> in State of WI !!**
- ✓ **Create jobs, local workforce & economic development**
- ✓ **Showcase clean energy technologies - "Smart City"**
- ✓ **Accelerate City's sustainability and decarbonization goals - "Paris Climate Accord"**
- ✓ **Long term utility savings City-wide: Minimize impact on taxpayers**
- ✓ **Demonstrate readiness for EV charging in Racine**
- ✓ **Prepare City with a "shovel-ready project" - 50% funding from DOE**
- ✓ **Racine and RYDE continues a legacy of sustainability and innovation in Transit and City operations**

## Vision





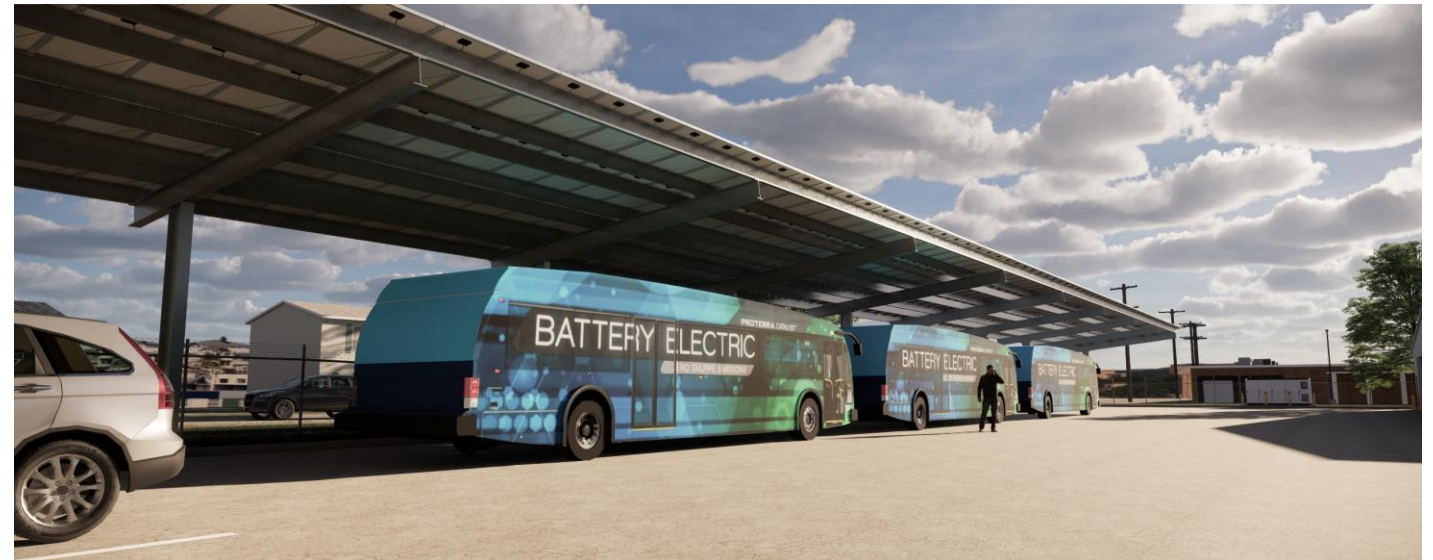
# City of Racine – Sustainability and Decarbonization Project



**\$2.6 Million**

## City of Racine – Transit & RYDE

Solar PV – Storage Garage  
Offset EV Bus Charging  
Multi Building Energy Upgrades  
Sustainability Energy Site





# Sustainability & Decarbonization Project Renderings





# Sustainability & Decarbonization Project Renderings





# Sustainability & Decarbonization Project Renderings



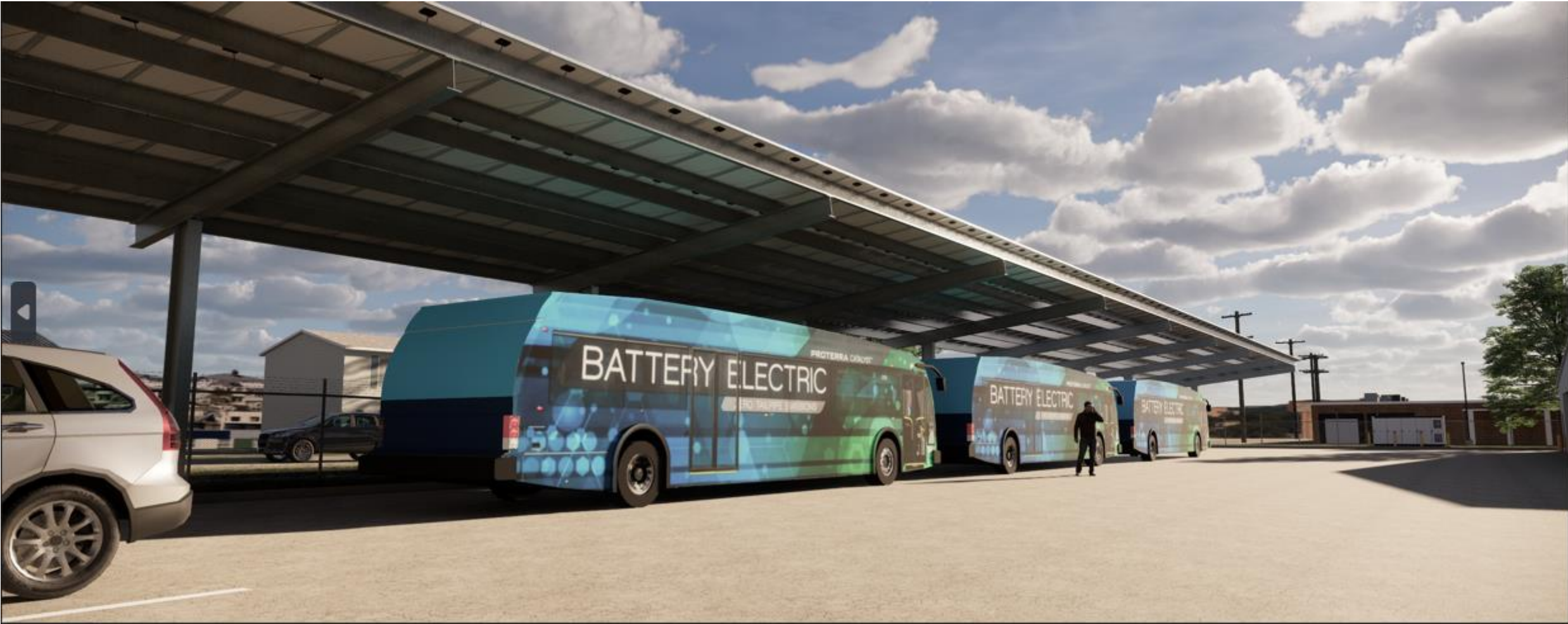


# Sustainability & Decarbonization Project Renderings





# Sustainability & Decarbonization Project Renderings





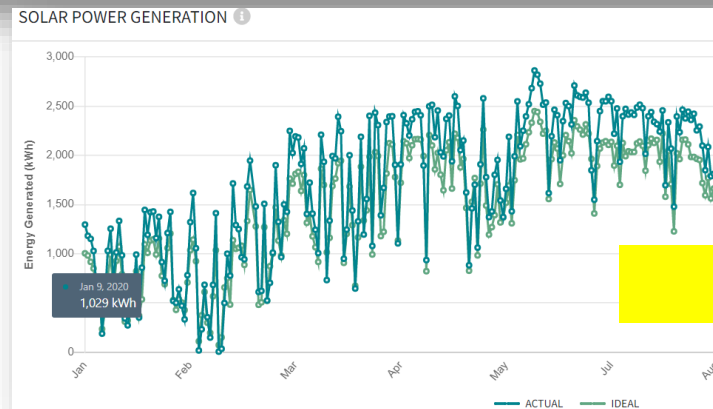
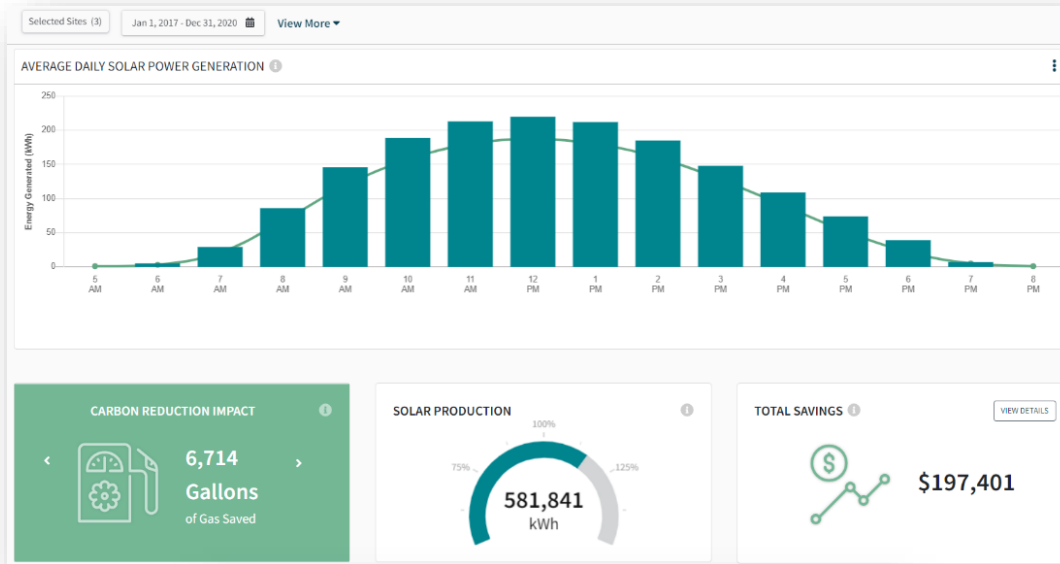
# Sustainability & Decarbonization Project Renderings





# Energy Conservation & Renewables

- 1 Displays real-time and historical production data
- 2 Compares actual values to predicted ideal values
- 3 Calculates equivalencies to measure impact of renewable energy production



SAMPLE DATA

## SOLAR PROJECT ENVIRONMENTAL BENEFITS

### Potential Environmental Offsets:



3.9 – 7.5 MWh of clean, renewable electricity in Racine over 30 years



20 - 38 passenger vehicles driven for one year



8,900 – 17,000 gallons of diesel consumed



111 – 211 acres of U.S. forests in one year



3,800 – 7,300 trash bags of waste recycled instead of landfilled



100,000 – 190,000 pounds of coal burned



11 million – 21 million smart phones charged



# City of Racine and McKinstry Partnership

<b><u>Sustainability and Decarbonization Project</u></b> <b><i>Work accomplished to prepare the City for a Guaranteed Energy Savings Agreement (WI State Statute 66.0133)</i></b>	<b><u>Deliverable Date</u></b>
✓ Preliminary Energy Evaluation for Federal Funding report delivered	Aug. 5, 2022
✓ Congressionally Directed Spending (CDS) Project Package for applying for CDS funds via Senator Tammy Baldwin’s office	May 4, 2022
✓ <b>Success!</b> <u>City notified that the Sustainability and Decarbonization Project was included in the FY23 CDS list of approved projects by the Federal Government as part of the Energy and Water Appropriations Bill (“City of Racine Storage Garage Site”)</u>	End 2022/ early 2023
✓ City selected McKinstry to provide an Investment Grade Audit	Oct 7, 2022
✓ <b>McKinstry delivered Investment Grade Audit report - detail required for Department of Energy for CDS projects</b>	<b>March 30, 2023</b>
✓ <b>City received initial pending award letter from the Department of Energy (DOE)</b>	<b>June 8, 2023</b>
✓ <b>One-Page Summary developed by City and McKinstry – delivered to DOE</b>	<b>June 19,2023</b>



# Funding the Sustainability and Decarbonization Project

## Goal: Minimize need for City Capital Contribution

- ✓ **Congressionally Directed Spending (\$1.235 Million)**
  - ✓ **ARPA Funds - per City's guidance**
  - ✓ **Leverage other local, state, utility grants**

**\$2.6 Million**

### City of Racine – Transit & RYDE

Solar PV – Storage Garage  
Offset EV Bus Charging  
Multi Building Energy Upgrades  
Sustainability Energy Site

=



+



+



**Congressionally  
Directed Spending**  
*(requires min 50%  
City match)*

**ARPA Funds**  
*(City's match per  
City's Guidance)*

**Additional  
Incentives &  
Rebates**

**Plus – Guaranteed Energy Savings Agreement**

**~ \$76,000 / yr in savings**



# Sustainability and Economic Benefits

Annually, over the life-span of the systems, this project will provide:



**1<sup>ST</sup>**

In WI to offset EV Transit Bus charging with renewable energy generated on-site



Produces  
**~350k**  
kWh  
per year



Equivalent to  
**5**  
Electric  
Transit Buses  
per year



Savings  
**~\$76k**  
Annual energy  
savings  
per year



Fuel Offsets  
**~24K**  
Gallons of  
diesel  
Consumed  
per year



Car Offsets  
**~54 cars /**  
**617k**  
Miles driven by gas  
powered passenger  
vehicle  
per year



Carbon Reduction  
**~249**  
metric tonnes  
Of Carbon  
per year

# City of Racine – Department of Energy Initial Letter and Upcoming Work

## Federal Funding Opportunities

CITY OF RACINE, WISCONSIN

## SUSTAINABILITY AND DECARBONIZATION PROJECT

REVISED SCOPE OF WORK – MAY 4, 2022



Department of Energy  
Golden Field Office  
15013 Denver West Parkway  
Golden, Colorado 80401

June 8, 2023

Paul Vornholt  
City Administrator  
City of Racine  
730 Washington Ave, Room 201  
Racine, WI 53404

Dear Paul Vornholt:

SUBJECT: FY23 Congressionally Directed Spending project entitled, "City of Racine Storage Garage Site",  
Pending Award No. DE-EE0010774

The Department of Energy (DOE), Golden Field Office, is responsible for processing an award for the subject Congressionally Directed Spending project identified for funding in the Energy and Water Development and Related Agencies Appropriations Act, 2023 under the heading "Energy Projects" through reference to the "Congressional Record – Explanatory Statement." To process your award in a timely manner, it is necessary for you to submit certain information about your project, as explained in more detail below.

Consistent with Congressional direction, DOE is reminding recipients that statutory cost share requirements may apply to this project. Depending on the nature of your project and applicable statutes, such as the Energy Policy Act of 2005, cost share on your part will likely be required. Cost share is defined as the amount of resources (e.g., cash, labor hours, equipment, etc.), expressed as a monetary value, that the recipient must contribute as part of the project. The cost share you may be required to provide could range from a minimum of 20% of total project costs for certain applied research or development projects to a maximum of 50% of total project costs for demonstration or commercial application projects. Cost share is not required for education and outreach activities. Your cost share will be added to the federal award funds to become the total cost of the project. DOE's regulations on cost share requirements can be found in the U.S. Code of Federal Regulations at 2 CFR 910.130 and cost share requirements applicable to all federal financial assistance awards are available at 2 CFR 200.130.

The first step in the award process is for you to submit a nonproprietary, one-page summary of your project so DOE may determine the amount of cost share that will be required for your project. The nonproprietary, one-page technical description of your project must include the project title, the pending award number as shown above, the purpose (why), the scope (what will be done), the approach (how), the project stage (research, demonstration, commercialization, education, or outreach activities), and the expected outcomes. Additionally, please submit the names, telephone numbers, and e-mail addresses for your primary technical and business points of contact. Cost share is dependent on the technology stage of your project; therefore, this summary should be detailed enough to determine whether your project involves research and development, demonstration, commercialization, or education and outreach activities. **Please submit your summary no later than fourteen (14) calendar days after receipt of this letter to [GFOCDP@ee.doe.gov](mailto:GFOCDP@ee.doe.gov).**

After receipt of a complete one-page project summary, DOE will send you a follow-up letter with a determination of the required cost share for your project and instructions for submitting a complete application package comprised of the forms and information shown below. Submission of the complete application package will be required within 30 calendar days of receipt of the follow-up letter. In order to expedite the process, it is suggested that you begin completing the steps identified below and the application

City of Racine DE-EE0010774 June 8, 2023

forms, which can be downloaded from the DOE website at <https://energy.gov/eere/funding/eere-funding-application-and-management-forms>.

A complete application package must include the following forms and information (Note: it is important to include the pending award number on all forms/submissions):

1. Pre-Award Information Sheet and all required attachments, including but not limited to: Current and Pending Support, Participants and Collaborating Organizations, and any other required disclosures, waivers, attachments or supporting documentation  
**NOTE: Complete the Pre-Award Information Sheet first and promptly email it under separate cover to [GFOCDP@ee.doe.gov](mailto:GFOCDP@ee.doe.gov) (the remaining forms should be completed after receiving the cost share determination from DOE)**
2. SF-424 Application for Federal Assistance
3. Certification and Assurances for use with the SF-424
4. Detailed Budget Justification
5. Copy of your approved Indirect Rate Agreement or a Rate Proposal supporting your proposed indirect costs in the Detailed Budget Justification
6. SF-LLL Disclosure of Lobbying Activities
7. Environmental Questionnaire, EQ1 (This form should be completed online at <https://www.pmc.energy.gov/nepa.asp>)
8. Statement of Project Objectives (SOPO)
9. Commitment Letters from Third Parties Contributing to Cost Share
10. Subrecipient/Subcontractor Information: for each subrecipient/subcontractor who is expected to perform work estimated to be more than \$250,000 or 25% of total award costs, provide: (1) separate detailed budget justification; and (2) description of work
11. Copy of the most recent independent Single Audit (for nonprofits, states, local governments, and educational institutions) or independent Compliance Audit (applicable to for-profit entities)
12. A short statement on whether the work will involve construction, alteration, maintenance or repair of publicly-owned infrastructure. Infrastructure includes but is not limited to: buildings and real property; dams, ports, harbors, and other maritime facilities; electrical transmission facilities and systems; utilities; and structures that generate, transport, and distribute energy (such as EV charging stations)

organization must also be registered in the System for Award Management (SAM). Applicants are required to register in SAM in order to do business with the federal government. To follow the process described at: <https://www.sam.gov>. Registrants must continue to maintain registration with current information at all times during which it has an active federal award. Registration by a federal awarding agency. As part of the registration process, SAM will use Entity Identifier (UEI) number. The UEI must be included in block 8.c. of the SF-424 Application for Federal Assistance. A UEI is required for all applicants.

**NOTE:** Due to the high demand of UEI requests and SAM registrations, entity legal and address verifications are taking longer than expected to process. Entities should start SAM registration process as soon as possible. If entities have technical difficulties with validation or SAM registration process they should utilize the HELP feature on SAM. SAM will work entity service tickets in the order in which they are received and asks that entities use multiple service tickets for the same request or technical issue. Additional entity verification can be found here: [GSAFSD Tier 0 Knowledge Base - Validating your Entity](https://www.gsa.gov/asset/knowledge-base/validating-your-entity).

organization must register in FedConnect at <https://www.fedconnect.net> to receive your awards. To create an organization account, your organization's SAM MPIN is required. It is recommended that you register as soon as possible. More information is available at <https://www.fedconnect.net>

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[https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect\\_Ready\\_Set\\_Go.pdf](https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf) Questions

regarding registration for FedConnect should be directed to [support.unis@lebl.com/support/home](mailto:support.unis@lebl.com/support/home).

**NOTE: ELECTRONIC AUTHORIZATION OF AWARD DOCUMENTS IS DONE IN**

**CONNECT.** Acknowledgement of award documents by the recipient is required by the Department of Energy, specifically FedConnect. The terms and conditions of the award. Acknowledgement and representative consent of the recipient's electronic signature

Financial Assistance Regulations, found at 2 CFR 200 and 2 CFR 201. Subrecipient information as an award recipient (See 2 CFR 200 – Uniform Administrative Requirements for Federal Awards; and 2 CFR 910.130).

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an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such funding. If you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share. Nothing contained in the pre-award cost reimbursement regulations or any pre-award costs approved from the Contracting Officer override the NEPA requirements to obtain the positive authorization from the Contracting Officer before taking any action

A complete application package must include the following forms and information (Note: it is important to include the pending award number on all forms/submissions):

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# Next Steps

- **Seeking approval from City Finance and Personnel Committee**
- **July 18<sup>th</sup> Common Council Meeting**
- **Enter into a Guaranteed Energy Savings Agreement with McKinstry**
  - Finalize project details for final design, implementation, project management, measure and verification
  - Guaranteed energy and operational savings (\$76 k/ year) - WI State Statute 66.0133
    - **Complete Forms for Department of Energy with McKinstry's assistance**
      - Pending Award Letter - Received June 8, 2023
      - Complete application package (12 ++ Forms)
      - DOE Project Manager Assigned
      - McKinstry to assist City as a liaison to the DOE (Blue Earth County current experience)
    - **Deploy a SHOWCASE PROJECT for the City of Racine and RYDE**



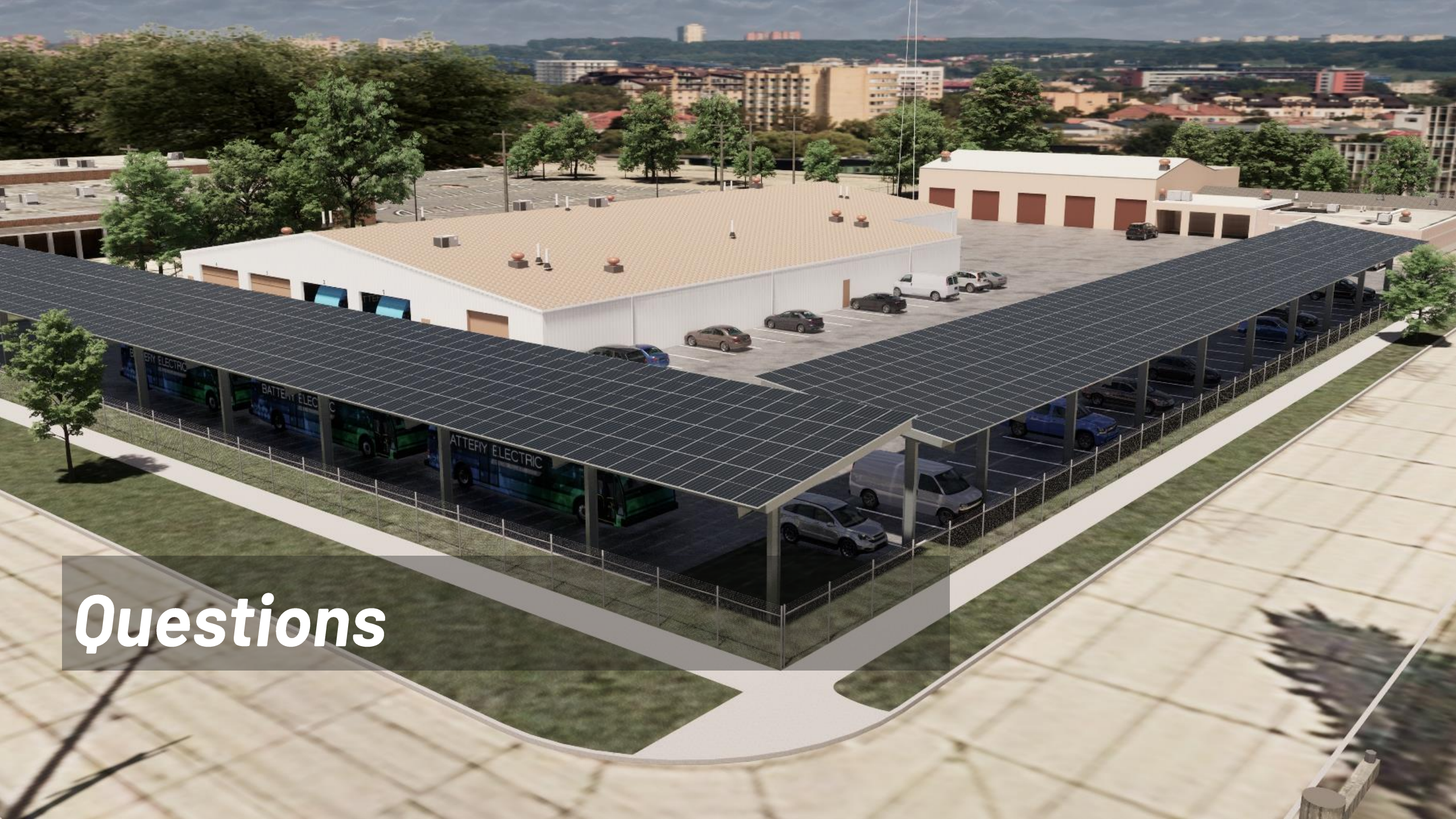
**1<sup>ST</sup>**

In WI to offset EV Transit Bus charging with renewable energy generated on-site

**Deploy a showcase project for the City of Racine Transit and RYDE**

**Go Electric! With Solar!**





# Questions