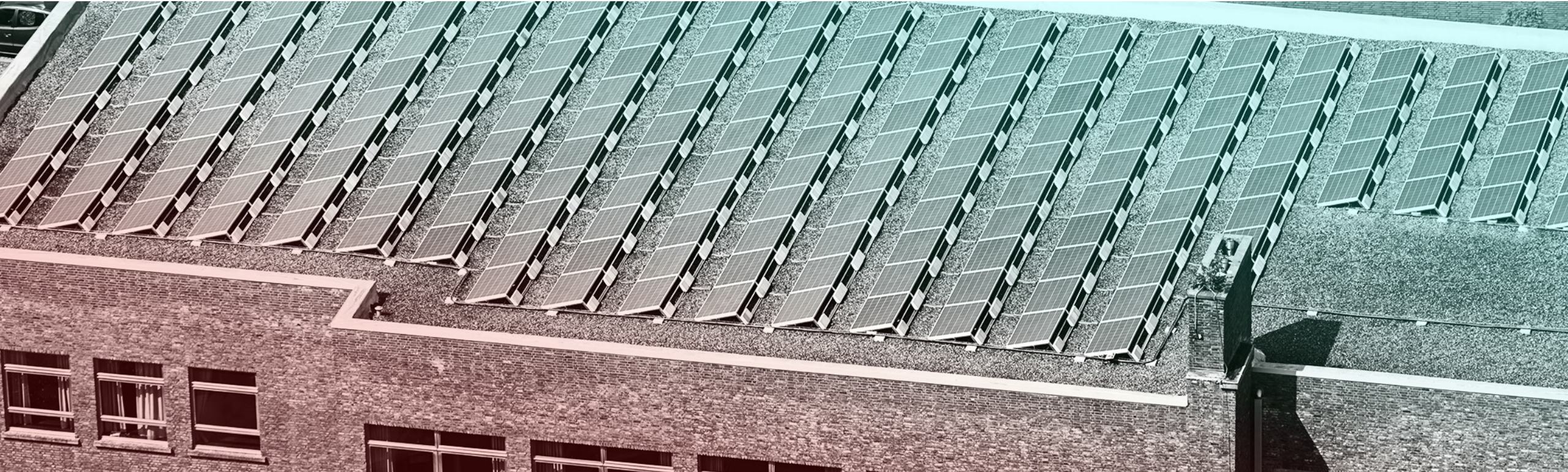


ILLUME



# Illinois Solar for All

PY4 and PY5 Evaluation Plan Webinar



October 31, 2023

Hello!

It's Nice to See You

# Agenda

Overview

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Participatory Evaluation Approach

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Evaluation Plan

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Timeline

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Next Steps

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Appendix

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A person wearing a brown jacket is working on a large array of solar panels. The person's hands are visible, and they appear to be adjusting or connecting a component on the panel. The background is a clear, bright sky. A teal horizontal band is overlaid across the middle of the image, containing the word "Overview" in white text.

# Overview

# Project Introduction

ILLUME team will be researching program impacts and performance for the 2021–2022, 2022–2023, and 2023–2024 program years.

IPA must “select an **independent evaluator** to review and report on the **Illinois Solar for All Program** and the performance of the third-party **program administrator**”

“The evaluation shall be based on **objective criteria** developed through a **public stakeholder process**”

–Illinois Power Agency Act

## Stakeholder Objective Criteria:

- Number of projects installed
- Total installed capacity in kilowatts
- Average cost per kilowatt of installed capacity
- Number of jobs or job opportunities created
- Economic, social, and environmental benefits created
- Total administrative costs

# Webinar Objectives

Gather feedback on what the evaluation should look like **focusing on the 2021-2022 program year** and **previewing the plan for the 2022-2023 program year**

- We are planning in-depth research with a variety of program actors, stakeholders, and participants where we will collect in-depth feedback about experiences with the program.

**As we are presenting, consider the following questions:**

- Is there anything from the 2021-2022 program year our team should keep in mind or research more in-depth?
- What questions or issues are top of mind for the study overall?
- How do you intend to use the evaluation?

Note, that we will not be collecting information on the draft Long-Term Renewable Resource Procurement Plan (LTRRPP) during this webinar.

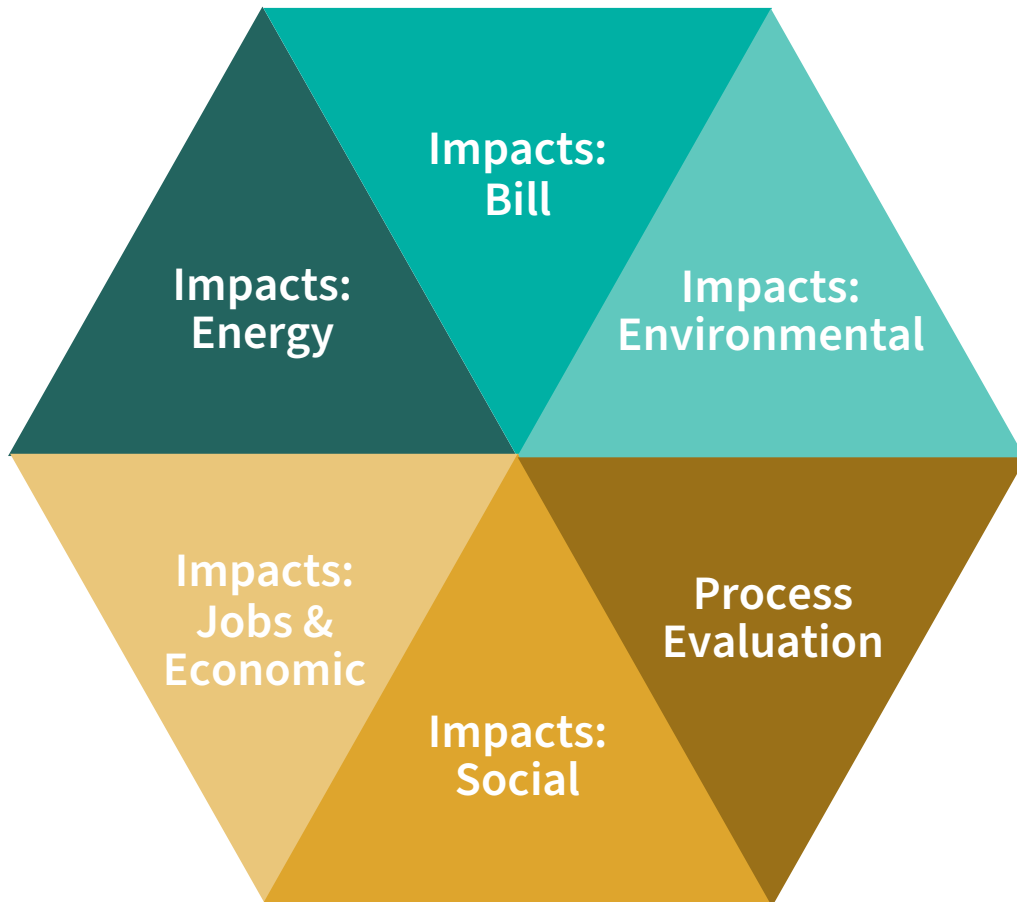
# Ways to Provide Input

- Enter questions or comments into the chat
- We will have a 20-minute Q&A period at the end of our call
- In addition to the webinar, stakeholders can submit comments on the Evaluation Plan to [ILSFA@illumeadvising.com](mailto:ILSFA@illumeadvising.com), comments must be submitted by November 3, 2023 at 5:00 pm CST. Comment submissions should include “ILSFA Evaluation Planning Webinar Response to Comments – [Commenters Name]” in the email subject line.





# Project Overview



## **Impacts: Energy**

Assess quantity of projects, capacity, average system cost, energy produced, and peak load reduced for approved and energized projects.

## **Impacts: Bill**

Evaluating participants' annual bill savings in dollars compared to the cost to acquire solar.

## **Impacts: Environmental**

Evaluating reduced pollutants, including greenhouse gases, NO<sub>x</sub>, SO<sub>2</sub>, Hg, and Pb.

## **Impacts: Jobs & Economic**

Evaluating workforce and economic impacts, including but not limited to, jobs created, trainings, reduced energy burden, and access to other programs.

## **Impacts: Social**

Assess extent to which communities are directly benefitting from investments.

## **Process Evaluation**

Evaluating the overall program operations and participants' experiences.

# Our Team Organization

Trusted and Ready Partners

**ILLUME**

**ILLUME** is the Prime Contractor and point of contact for the Agency for the contract, data, stakeholder management. ILLUME will lead the process evaluation and reporting.

## **Subcontractors:**

 **VERDANT**

**Verdant** will lead energy, environment, and bill impacts activities.

# ILLUME Team



**Bahareh van Boekhold**  
Process Evaluation  
Senior Managing Consultant



**Leigh Michael**  
Societal Impacts  
Senior Managing Consultant



**Mallika Jayaraman**  
Project Manager  
Managing Consultant



**Eileen Hannigan**  
Executive-in-Charge  
Vice President



**Anne Dougherty**  
Executive Sponsor  
Founder & Co-Owner



**Sergio Olalla Ubierna**  
Analysis Team  
Senior Consultant



**Arianna Zrzavy**  
Analysis Team  
Senior Analyst



**Miriam Stein**  
Analysis Team  
Analyst

# Verdant Team



**William Marin**

Energy & Bill Impacts Expert  
Verdant Co-Founder



**Lauren Robinson**

Energy & Bill Impacts  
Verdant Senior Consultant and  
Project Manager

# PY 2021-2022 Timeline



## June 2021

- **June 7–18:** Project submission windows open for the low-income distributed generation and the non-profit/public facilities subprograms
- **June 21:** A rolling submission window was opened for the low-income distributed generation program

## August 2021

- **August 11:** Non-profit/public facilities final list of selected projects is announced
- **August 23–September 3:** Community solar subprogram project submission window opens

## October 2021

- **October 27:** Program administrator announces final list of selected projects

## March 2022

- Program administrator approves projects on the non-profit/ public facility and community solar subprogram waitlists using additional funds from CEJA
- **March 21:** Program administrator opens a rolling submission window for non-profit and public facilities projects

# Planned Data Collection Activities

## Annual Evaluation Report

	2021-2022	2022-2023	2023-2024
Stakeholder Interviews	9-12	9-12	9-12
Approved Vendor Surveys		Census	Census
Participant Focus Groups (4 owners, 4 community)		8 groups	8 groups
Grassroot Educator Interviews		Census	Census
Trainer interviews	8-10	8-10	8-10
Trainee surveys/interviews		Census	Census

# Mid-Year Reports

Topic	Timeframe	Research Questions
Residential Solar (Small)	June - November 2023	<ul style="list-style-type: none"><li>• What are opportunities to generate greater interest in the Residential Solar (Small) Subprogram?</li><li>• What are barriers to entry and participation for small installers in the program?</li><li>• How might we increase the geographic reach of the program?</li></ul>

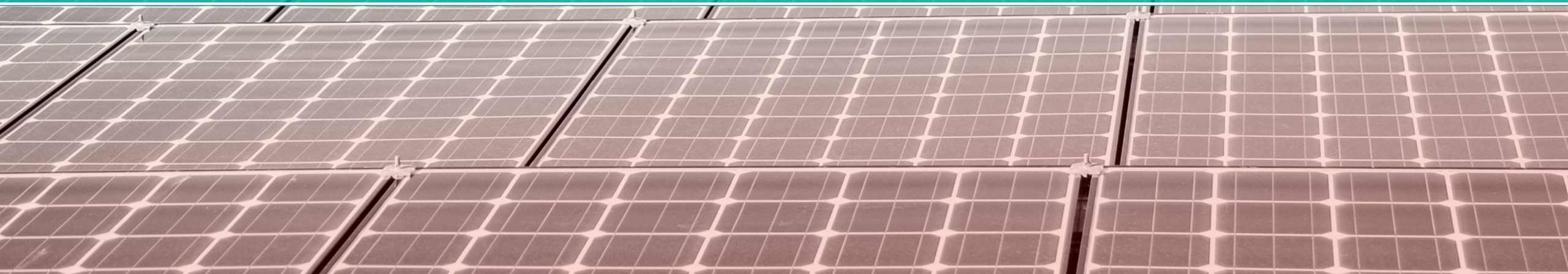
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Other proposed topics:

- Customer bill impacts, leveraging actual customer bills
- Opportunities to increase community resilience through ILSFA
- Ways to simplify the income verification process
- Other topics or areas of interest?



# Participatory Evaluation





# Participatory Evaluation Approach

**PARTICIPATORY EVALUATION** = *ILSFA program stakeholders help to define evaluation priorities*

**Goal of a participatory evaluation:** Stakeholder input helps to shape and inform the ILSFA evaluation

**Activities to date:** ILLUME conducted 10 interviews with stakeholders to inform PY4 evaluation plan

**Stakeholder engagement coming up:** ILLUME will conduct interviews with community-based organizations and other stakeholders to better understand the ongoing needs, perspectives, and priorities of their communities



**We want to hear from you!**

Scan this code to share your contact information and we will reach out to you for future interview efforts.

# Stakeholder Engagement To Date

## Data We Have Collected

- 10 interviews
- Vendors, community-based organizations (CBOs), and members of the ILSFA Advisory Committee
- Conducted via Microsoft Teams
- Approximately 1 hour

## What We Have Learned

- ILSFA materials are not always accessible to individuals who do not speak English as their first language.
- Participation in smaller, residential distributed generation projects is low.
- Customers are wary of the legitimacy of the ILSFA program.
- Some vendors struggle with the technical systems with the program (e.g., the Portal).
- Stakeholders are very interested in the results of this evaluation.

A photograph of solar panels on a roof, viewed from a low angle. The panels are dark with a grid pattern. A teal-colored horizontal band is overlaid across the middle of the image, containing the text 'Evaluation Plan'.

# Evaluation Plan

# Social Impacts

## Primary Research Objectives:

- Identify indicators make up the ILSFA Environmental Justice Community (EJC) criterion, compare these to other state- and federal-level criterion being used to identify priority populations.
- Map how ILSFA program participation overlays this criterion.
- Identify which geographic areas our team should prioritize to help define social impacts that are meaningful to their communities for PY5 and PY6 evaluations.

Disadvantaged Communities' Criteria We Will Review	Source
Environmental Justice Communities (EJCs)	Illinois Power Agency
Equity Investment Eligible Communities (EIEC)	Climate and Equitable Jobs Act (CEJA)
Restore Renew Reinvest (R3) Zones	2019 Cannabis Regulation and Tax Act (CRTA)
Disproportionately Impacted Areas	Illinois Department of Commerce and Economic Opportunity (DCEO)
Historically Redlined Grade C and Grade D	National Community Reinvestment Coalition
Justice40 Disadvantaged Communities (DACs)	Justice40 Initiative

# Social Impacts

## Key PY4 Research Activities:

1. Conduct landscape analysis of priority population criterion and indicators.
2. Map priority disadvantaged communities' criterion in use.
3. Map Illinois Solar for All participation on the *disadvantaged communities' criterion* map.

## Expected PY5 Research Activities:

1. Conduct data needs analysis
2. Define social impacts for analysis
3. Measure social impacts
4. Map social impacts

## *Social Impacts we could analyze:*

- Proximity of jobs created to income eligible communities
- Reduced energy burden
- Reduced total fixed expenses
- Increased access to electric transportation
- Increased access to energy efficiency programs
- Changes in community attitudes, beliefs, perceptions
- The longevity of program market effects (primarily jobs)

*What social impacts are meaningful to you and/or the communities you serve?*

# Energy Impacts

Category	Primary Research Topics	Source/Approach
Project Summary	The # of projects, total capacity (KW <sub>AC</sub> ), average system cost per KW <sub>AC</sub> of capacity	Tracking Data
Energy Impacts	Total energy produced in a typical meteorological year	PVWatts API simulations based on tracking data
Demand Savings	Avoided peak load in top 100 hours due to project generation	Simulation results; MISO and PJM historical hourly load

## Metrics will be reported by:

- **Approved Projects** – Projects that applied for the ILSFA program in PY4 and received Part I approval by 5/31/2022 (including all subsequent project stages)
- **Energized Projects** – Projects that applied for the ILSFA program in PY1-PY4 and received Part II approval by 5/31/2022

\*\*\* Reporting groups are not mutually exclusive

# Bill Impacts

Primary Research Topics	Source/Approach
Expected bill savings due to project generation	Bills will be estimated based on the estimated PV production from the energy impact analysis, using load profiles from NREL's end-use load profile database.
Bill reductions compared to project costs	20-year cash flows will be modeled using Verdant's DER CAT model; The estimated bill savings and project cost information from tracking data will be leveraged.

## Metrics will be reported for:

- **Energized Projects** – Projects that applied for the ILSFA program in PY1-PY4 and received Part II approval by 5/31/2022

# Environmental Impacts

Primary Research Topics	Source/Approach
First-year and lifetime emissions reductions associated with projects	<ol style="list-style-type: none"><li><b>1) EPA 2021 eGRID</b> – First-year avoided emissions of CO<sub>2</sub>-equivalent, SO<sub>2</sub>, and NO<sub>x</sub></li><li><b>2) NREL 2022 Cambium and Standard Scenarios Datasets</b> – First-year and lifetime avoided emissions of CO<sub>2</sub>-equivalent, SO<sub>2</sub>, and No<sub>x</sub></li></ol>

## Questions to consider

- What environmental impacts are meaningful to you and/or the communities you serve?
- What are easy to understand ways to communicate environmental impacts for you and/or the communities you serve?

## Metrics will be reported by:

- **Approved Projects** – Projects that applied for the ILSFA program in PY4 and received Part I approval by 5/31/2022 (including all subsequent project stages)
- **Energized Projects** – Projects that applied for the ILSFA program in PY1-PY4 and received Part II approval by 5/31/2022

\*\*\* Reporting groups are not mutually exclusive



# Job and Economic Impacts

## Primary Research Objectives:

1. Assess the impact of IL SFA projects on jobs and earnings in Illinois. This includes direct (attributable to construction), indirect (supply chain), and induced (local expenditures) and net impacts from energy savings.
2. Identify how jobs and economic impacts distributed among the labor force and whether impacts differ by region within Illinois?
3. Identify the wages, skills, and positions needed to serve the market.
4. Assess how well the training programs are meeting the needs of Approved Vendors.
5. Assess how well are the training programs meeting the needs of trainees.

## Key Metrics for Reporting:

- Jobs and job opportunities created
- Economic benefits created
- Trainings performed
- Metrics by sub-program and geography

# Job and Economic Impacts

## **Key PY4 Research Activities:**

- Review program materials
- Secondary research from sources such as National Renewable Energy Laboratory (NREL) and solar industry associations
- Trainer Interviews: Interviews with 10 participating and nonparticipating trainers
- Develop IMPLAN inputs from the above activities

## **Additional PY5 Research Activities:**

- Approved Vendor interviews
- Trainee survey

# Process Evaluation

## Primary Research Objectives:

- **Roles and responsibilities** of program actors – approved vendors, grassroots educators, job training organizations, and related efforts) – and how they work together
- **Goals of ILSFA program in PY4** and did the program achieve those goals?
- Program implementation **successes** and **challenges**
- Identify any parts of the program processes that may be **inefficient** or **confusing** for potential participants
- Provide **context for PY4 impact findings**
- Document **changes or updates** to the program in PY4

## Purpose of the Process Evaluation:

- Understanding whether program activities have been implemented as intended and if the program is easy to participate in from the participant and vendor perspective.
- Providing a context behind the results we see in the impact data

# Process Evaluation

## Evaluation Research Activities:

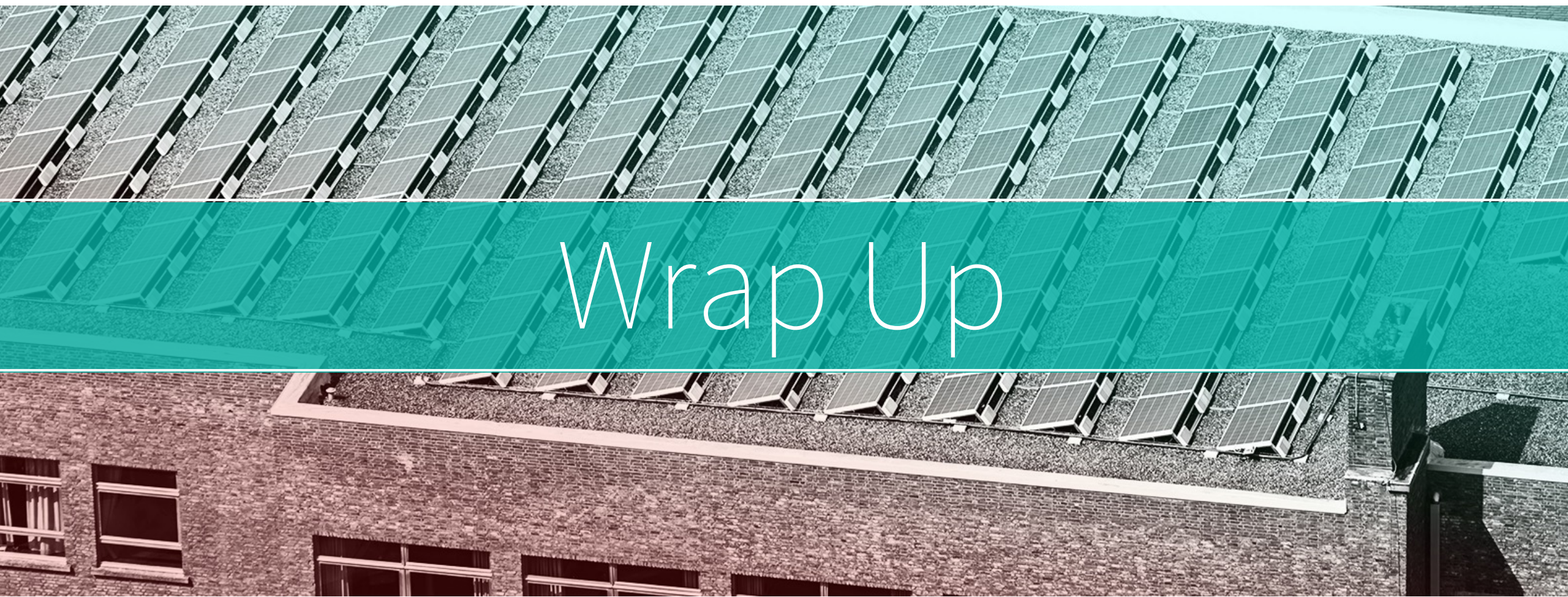
- Review program materials (including website, approved vendor manual, and previous reports)
- Review the data that the program tracks
- Interview staff from the IPA and Elevate Energy

## PY4 Deliverable:

- Diagrams of the PY4 program process flows for all three sub-programs
- Documenting of PY4 process evaluation findings, CEJA impact, and identification and recording of pain points and inefficiencies
- Recommendations for areas of research for future years' evaluations

## Expected PY5 Research Activities:

1. Approved vendor surveys
2. Participant focus groups
3. Grassroots educator interviews
4. Job trainee surveys or interviews



# Wrap Up

# Program Year 2021-2022 Evaluation Timeline

PROJECT	2023										2024		
	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR
PROJECT KICK-OFF AND ONBOARDING	—●												
IPA/ELEVATE/STAKEHOLDER INTERVIEWS			—●										
PROGRAM MATERIALS & TRACKING DATA REVIEW			—●										
EVALUATION PLAN AND STAKEHOLDER WEBINAR			—●										
MID-YEAR REPORT			—●										
IMPACT ANALYSES (ANNUAL REPORT)							—●						
PRIMARY DATA COLLECTION (TRAINER INTERVIEWS)									—●				
ANNUAL REPORT DRAFT										—●			
ANNUAL REPORT REVIEW PERIOD AND UPDATES											—●		
STAKEHOLDER WEBINAR & FINAL UPDATES												—●	

# Next steps

- In addition to the webinar, stakeholders can submit comments on the Evaluation Plan to [ILSFAevaluation@illumeadvising.com](mailto:ILSFAevaluation@illumeadvising.com), comments must be submitted by November 3, 2023 at 5:00 pm CST. Comment submissions should include “ILSFA Evaluation Planning Webinar Response to Comments – [Commenters Name]” in the email subject line.
- Evaluation results webinar and a condensed report summary are scheduled to be released March 2024

# Questions to Consider

## **Questions we're looking for input on:**

- Is there anything from the 2021-2022 program year our team should keep in mind or research more in-depth?
- What questions or issues are top of mind for the study overall?
- How do you intend to use the evaluation?
- What social impacts are meaningful to you and/or the communities you serve?
- What environmental impacts are meaningful to you and/or the communities you serve?
- What are easy to understand ways to communicate environmental impacts for you and/or the communities you serve?



# Questions?

We've Got Answers

# Contact



## **Mallika Jayaraman**

Managing Consultant

[mallika@illumeadvising.com](mailto:mallika@illumeadvising.com)

## **Eileen Hannigan**

Vice President

[eileen@illumeadvising.com](mailto:eileen@illumeadvising.com)

