

# CATALYZING ENERGY ENGAGEMENT & LITERACY IN ILLINOIS

UZMA NOORMOHAMED  
@ISEIFFOUNDATION



Illinois Science & Energy  
Innovation Foundation

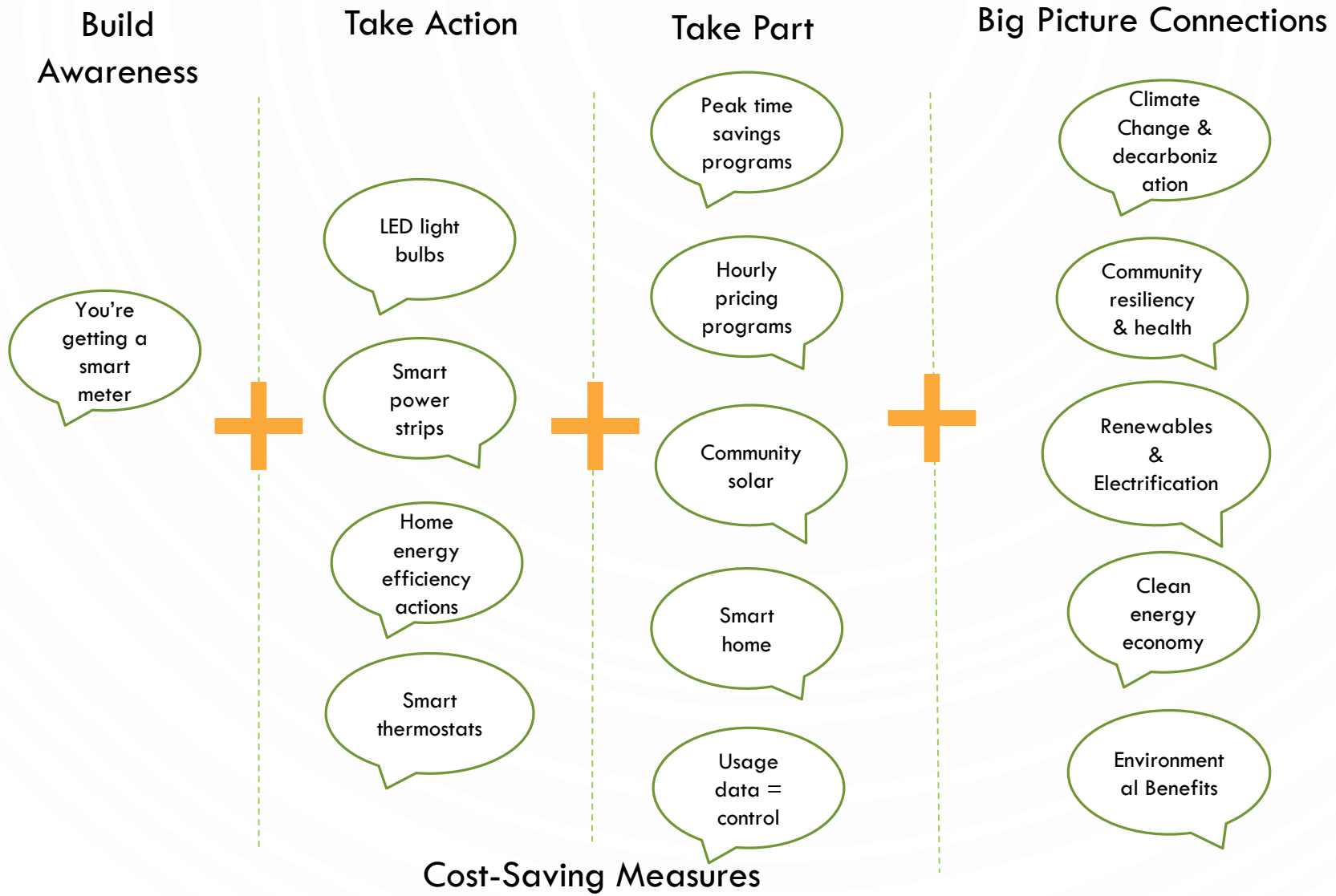
# ILLINOIS' SMART GRID LAW INVESTS IN ECONOMIC & EDUCATIONAL INFRASTRUCTURE

- Energy Infrastructure Modernization Act or Smart Grid Law passed in 2011. Authorized \$3.2 billion smart grid investment by state utilities Ameren Illinois and ComEd
  - Digitization of century-old electrical grid
    - Enhancements to delivery of electricity to consumers
    - How consumers can manage and measure their electricity consumption
- The law also established two funds
  - MARKET STIMULATION: A \$22 million venture fund for early-stage, energy and clean tech startups
  - EDUCATION: A \$50 million literacy and education fund for raising awareness of smart grid, smart meter, and AMI enabled technologies, 30% of which must reach low-income, senior, and hard-to-reach populations. A coalition led by consumer advocates negotiated amendments to the proposed legislation that required the utilities to invest in citizen education regarding the smart grid through the establishment of a foundation or trust

# ABOUT ISEIF

- Private, nonprofit, grantmaking organization
  - 2 annual grant cycles, \$5 million in funding per year for ten years
  - Funds transferred by ComEd and Ameren Illinois on annual basis
- Management of grantmaking process
  - Invite proposals, make recommendations, cultivate new nonprofit grantees
  - Review process includes a peer committee process and approvals from Board of Directors
- Coordinate grantee cohort – “community of practice”
  - 25 to 35 organizations per year
  - Share learnings from engagement activity
  - Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.
- Maintain communications and coordination with select utility departments

# GRANTEES HAVE SHIFTED AWAY FROM SMART METER AWARENESS TO BENEFITS



Cost-Saving Measures

# FUNDING AREAS: MIX OF HIGH AND LOW TOUCH ENGAGEMENT STRATEGIES

## Grassroots Engagement to meet demographic and geographic needs

- Identifying trusted organizations (in and out of energy domain)
- Highly conversational, deep interactions

## Research and technology

- Research and pilots that explore engagement and user experiences around home energy management technology, particularly in low-income and senior communities

## STEM and youth-serving education

- Support for energy education in a STEM context for K-12 students and educators
- Postsecondary career pathways in trades – electrical and construction (to date)

## Communications campaigns

- Intended as low-touch interactions
- Includes mass digital and TV campaigns, websites, museum exhibits

## Small Grants Program - Inserting Smart Grid Module

- Finding intersecting conversations
- Environmental examples are energy efficiency, renewables, EVs, smart home, climate change
- Non-environmental examples: housing, affordability, health, financial literacy

# OVER 60% OF OUR FUNDING SUPPORTS COMMUNITY-BASED OUTREACH EFFORTS

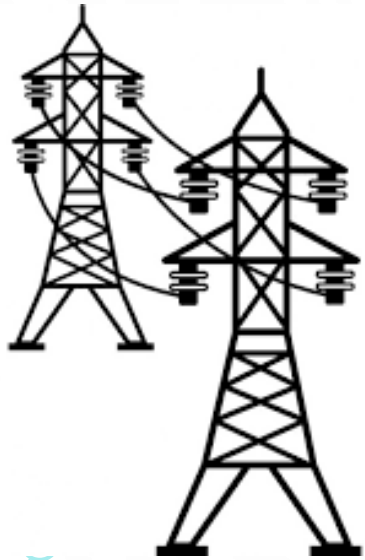
**Dedicated funds allow ISEIF to fund the types of public education efforts that have impact in underserved communities**

- Outreach must be strongly rooted in the community
  - Strong relationships with community leaders and community partners/institutions are essential to engagement
- Outreach is cost and time intensive
  - Locating social capital in low-density areas takes resources, so does establishing partnerships to gain community trust
- Outreach necessitates trust and prioritizes public benefit
  - People need to be reassured that services/programs/calls to action are in their interest
- Outreach benefits from reinforcement
  - Multiple messengers, multiple mediums

Expectation is that such efforts will change local knowledge, attitudes and ultimately behavior

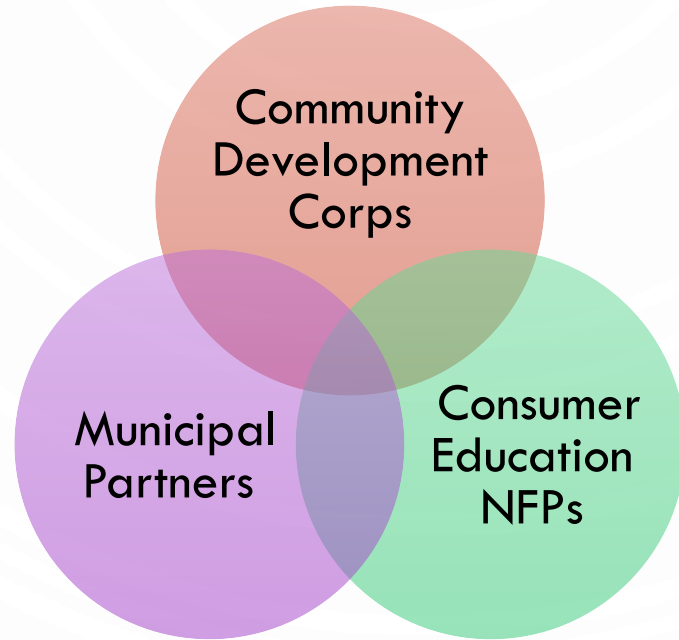
# TRADITIONAL UTILITY-COMMUNITY PARTNERSHIPS

## Utility



- *Funding*
- *Training*
- *Marketing Materials*

## Community Partners



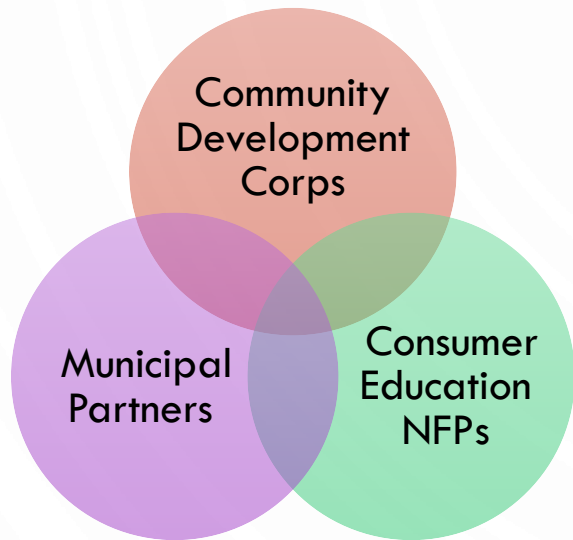
## Community Members



- *Program Specific Education*
- *Utility (co)branded marketing materials*
- *Utility program specific actions*
- *Dedicated community events*

# ISEIF FUNDED ENGAGEMENT PROGRAMS

## Community Partners



- *Self-defined context*
- *Self-generated engagement plan*
- *Messaging customized to context*
- *Choice of images and language*
- *No utility branding*



## Community Members



- *Energy literacy modules inserted into existing financial education, social services, homeownership, health, faith-based etc.*
- *Train the trainer models for groups such as real estate professionals, green builders, community organizers*
- *Action items include but not limited to utility programs*



# CHARACTERISTICS OF FUNDED ORGANIZATIONS

- Organization should be intimately familiar with the community's cultures, needs, geography, and resources.
  - Hire people who currently live, or have lived, within communities targeted for outreach
  - These staff are able to connect with community members based on shared experiences and mutual understanding, and are well positioned to communicate the benefits of energy management
  - These team members bring an understanding of the community that is critical to successful engagement
- Team members' skill sets more important than credentials
  - Though programs vary, they agree that effective outreach have key personality traits and skills
  - Strong interpersonal skills, excellent listening skills, empathy, and the ability to easily relate and quickly connect with people
  - Effective outreach staff are also creative thinkers who can problem-solve on the fly and adapt engagement strategies to an individual member's needs. It's important to have outreach staff who are multilingual
- Organization has either home energy management expertise or an area that intersects with it
  - Financial literacy, homeownership, budgeting, affordability

# ELEVATE ENERGY'S COMMUNITY CHALLENGES

- Each year, three different communities in Central & Southern Illinois were selected to compete with each other on achieving the highest energy savings. A point system was developed to attribute points based on various actions residents completed
- The winner of each challenge received a prize of \$5 -10,000, which was often put towards purchases that benefit the local high school or other community spaces
- Past year had the highest participation which was attributed to training high school students to be messengers in their families and communities
- 2017: Mason City, Petersburg, Virden | 2018: Beardstown, Carlinville, Pana | 2019: Canton, Havana, Taylorville





# FAITH IN PLACE

- Founded out of the idea that religious organizing around environmental issues should foster personal and collective transformation
- Outreach staff conduct energy workshops and are trusted allies in their faith local communities





Students interact with demonstrations involving the smart grid, transformers, renewable energy sources, smart home technology, and soon net zero homes

# SMART GRID FOR SCHOOLS

Teaches students (and adults) about the production, distribution, and use of energy from macro and micro standpoints.

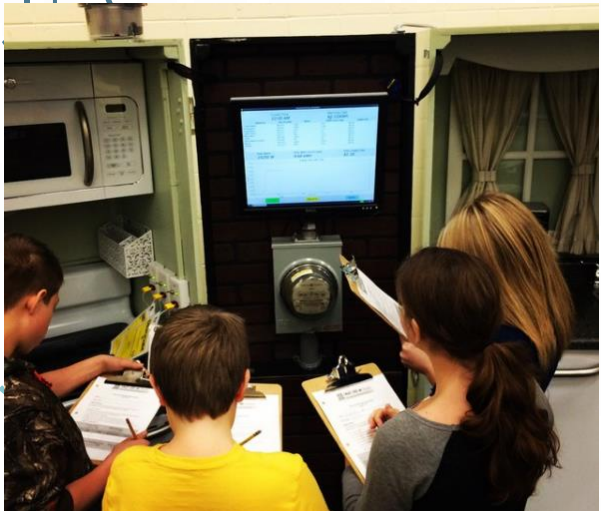
- Professional development for teachers to become a Certified Smart Grid Educator
- Stipend provided for attending and hosting interactive displays
- Lessons correlated with Next Generation Science Standards

CONFIDENTIAL





# SMART GRID FOR SCHOOLS K-12 STATEWIDE CURRICULUM



# CHICAGO LEARNING EXCHANGE POSTSECONDARY PATHWAYS TO ENERGY CAREERS

- Creating a pathway for students to gain knowledge, experiences, and connections for employment in the power and utilities sector
  - Plenty of one-off programs for students – need to connect, show evidence, and translate into an opportunity
- Pilot started with Overhead Electrical Line worker pathway, recruits were CPS students and training was at Dunbar Technical through CPS/CTE program. Second iteration adds construction pathway and solar
- Playlist and badging model provides access, credentials, and a plan to employment and gaining skills

Chicago Learning  
Exchange





# NON-FINANCIAL VALUE OF THIRD-PARTY FUNDING MODEL

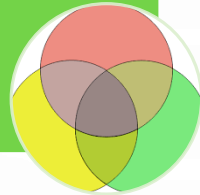
- Outreach is laborious
- Risk avoidance
- Prototype tech
- Extended reach into communities
- Higher enrollment rates and results

To utilities



- Ownership of program identity
- Autonomy of organization
- Strengthen connection
- Focus on human response
- Candor
- Capacity building

To community organizations



- Trusted messengers
- Accessible
- Translated, contextual
- Someone is listening and empathetic
- More of their needs are met

To people



- Shared information & networks
- Collaborating on education programs
- Coordination of organizations working on the same issues
- High impact due to connected approach and facilitation

To the community of practice



# RESEARCH & EVALUATION UNDERTAKINGS

## Validating a public education and bottom-up model – In Progress

- How does a public education campaign impact actions and behavior around energy literacy and consumption?
- Are people likely to share this information in their communities and immediate circles?

## Analysis of smart meter data post-outreach event attendance – In Progress

- Residential electricity usage data has never before been available in this manner
- Availability  $\neq$  accessibility
- Launched program to determine if attending an outreach event results in reductions in home energy usage

## Opportunity to test mix of methods – Under Consideration

- What mix of technology and information help move people to action?
- How does this differ geographically or demographically? Are there patterns or trends?



# CONSUMER ENGAGEMENT SUCCESS

- \$33.4 million in funding to energy literacy programs statewide
- 65% of funds applied to low-income and senior populations
- Nearly 8,000 statewide events
- Reached nearly 475,000 people through direct outreach events and 38 million through indirect TV/digital/social/cultural campaigns
- Educated over 70,000 schoolchildren and parents through curriculum
- Utility split: 78% ComEd, 22% Ameren



# 150+ ENERGY LITERACY / SMART GRID AWARENESS GRANTS IN 6 YEARS

## Municipal Education



## Community Outreach



**ELEVATE ENERGY**  
Smarter energy use for all



## Universities & Community Colleges



## Research & Innovation



## Youth STEM Education



## Museums



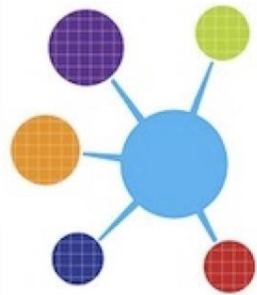
## Media Engagement



MIDWEST ENERGY NEWS

## Small Grants





ISEIF

Illinois Science & Energy  
Innovation Foundation

**Uzma Noormohamed**

U.NOORMOHAMED@ISEIF.ORG

4809 N Ravenswood, Chicago IL 60640

[www.iseif.org](http://www.iseif.org)