

# State of Wisconsin Energy Independent Communities: Initial Findings



Survey and Analysis by  
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# Energy Independent Communities

## Purpose of Survey

**In 2019, with 6 years left for EI Communities to reach their 25% renewable energy locally by 2025 milestone, this survey was designed and administered so that UW-Madison Extension and the Office of Energy Innovation can:**

- **Gauge the status and level of activity statewide toward energy independence**
- **Assess use and helpfulness of funding and programs from 2012-2018 from OEI, Focus On Energy, and other resources**
- **Determine how Extension and OEI can help EI Communities be successful based on evaluative data to target programming, resources, and funding**
- **Share the results with communities statewide to spur further action**

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# Energy Independent Communities

## Background

## Energy Independence

**“Generate **25%** of Wisconsin power and transportation fuels from **renewable resources locally** by **2025**”**

- **150 Energy Independent Communities**
- **50 Communities** received grant funding for creating sustainable energy plans for government operations in 2009 and 2010. More have since.
- **Encompasses 3.41 million people**
- **58.7% of Wisconsin's population**







# Energy Independent Communities

## Our Sample



**49 EI Communities responded to the survey from across the state**

**28 Cities**

**10 Counties**

**9 Towns/Villages**

**2 Tribal Nation**

List of Communities in Appendix



**Among municipalities, towns, and villages**

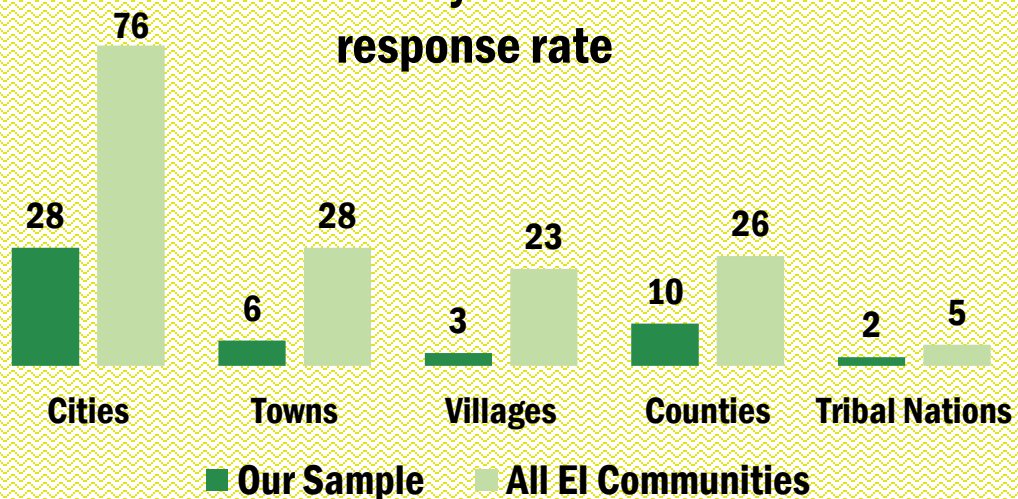
**5 Large Municipalities (pop > 40,000)**

**21 Medium Municipalities (2,501 - 40,000)**

**11 Small Municipalities (pop < 2,500)**

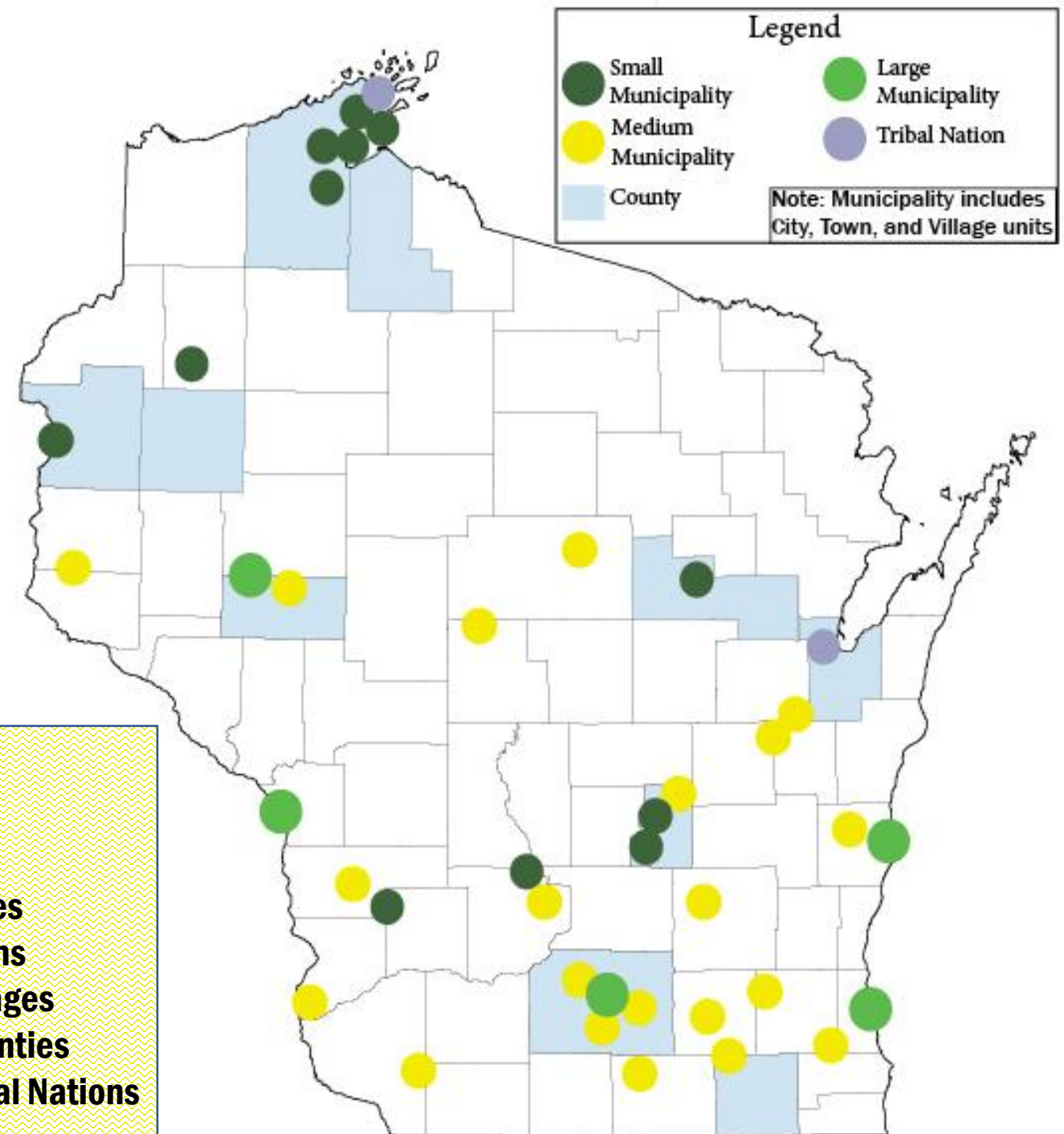
Population Cut-Offs identified by Wisconsin Department of Health Services

**Survey results based on a 30% response rate**



**37% of Cities**  
**21% of Towns**  
**13% of Villages**  
**38% of Counties**  
**40% of Tribal Nations**

## Map of Respondent EI Communities





# Energy Independent Communities

## Key Initial Findings

### El Community Survey Respondents

49 El Communities statewide completed the survey including counties, tribal nations, and municipalities.

60% of El Communities who responded remained actively working toward their goal, while 33% were no longer actively working.

Half of the El Communities in our sample made an Energy Independence Plan to guide implementation of their resolution. Half of those that had not created a plan expressed interest in doing so.

Just over half of the El Communities in our sample had a staff person assigned to work on El, most were sustainability positions, but also many in facilities or public works related positions.

El Communities survey respondents ranged widely in their levels of progress; as of 2019, 2 communities were within 5% of the goal and 3 communities had met the goal already.

Communities who made plans were more likely to be active today, have staff working on the goal, and be further along in generating electricity from renewable sources.

*These are initial findings. Advanced analysis of survey data coupled with follow up research with the El Communities will be done to inform the final report in September 2020*

### Tracking and Monitoring

- Just **over half** of the sample **were tracking their energy usage**, but most were not using the EPA portfolio manager tool, instead favoring other tools like internal spreadsheets.
- A lack of staff and other resources were the primary reasons communities were not tracking their energy usage.
- Communities that made plans are more likely to be tracking their energy usage, and communities that track their energy usage are more likely to know how much they spend on energy usage annually.



# Energy Independent Communities

## Key Findings

### Grants and Funding

About **half** of EI communities had **received energy efficiency grants** and about **30%** had **received renewable energy grants**. 20% were unsure whether they had received grants.

### Energy Efficiency and Renewable Energy Projects

- **Three out of four** EI Communities implemented policies or practices to reduce energy consumption with nearly 90% of those that did implementing Energy Efficiency projects, most commonly to buildings, street and parking lot lights.
- Nearly half of the EI communities completed solar projects, while fewer than 10% had completed landfill gas, bioenergy, geothermal, or wind projects.

### Community Engagement

Just over **one third** of EI communities **engaged residents and businesses** in energy efficiency programs and C-PACE.

Schools and non-profits were engaged at lower rates.

These groups were engaged by between 10 and 20% of communities on solar group buy, community solar gardens, and climate resiliency.

### Factors Impacting Progress

- Over **two thirds** of communities **identified a lack of staff and a lack of resources as key barriers** to meeting their goal. Around **40%** of communities **identified turnover of staff, not having a plan, or change in elected officials** as barriers.
- The **top factors contributing to progress** toward their goal were **grants and funding, government leadership, and dedicated staff**, which were selected by nearly half of communities.
- The most desired forms of assistance were plan templates, educating local officials, data management, measuring or remeasuring their energy baseline, and grant writing assistance, but no form of assistance generated more than 50% support.

# Energy Independent Communities



## Section 1 About EI Community Respondents

### Key Questions:

Are EIC's still active? Where are they on Independence? How are EI efforts staffed and informed?

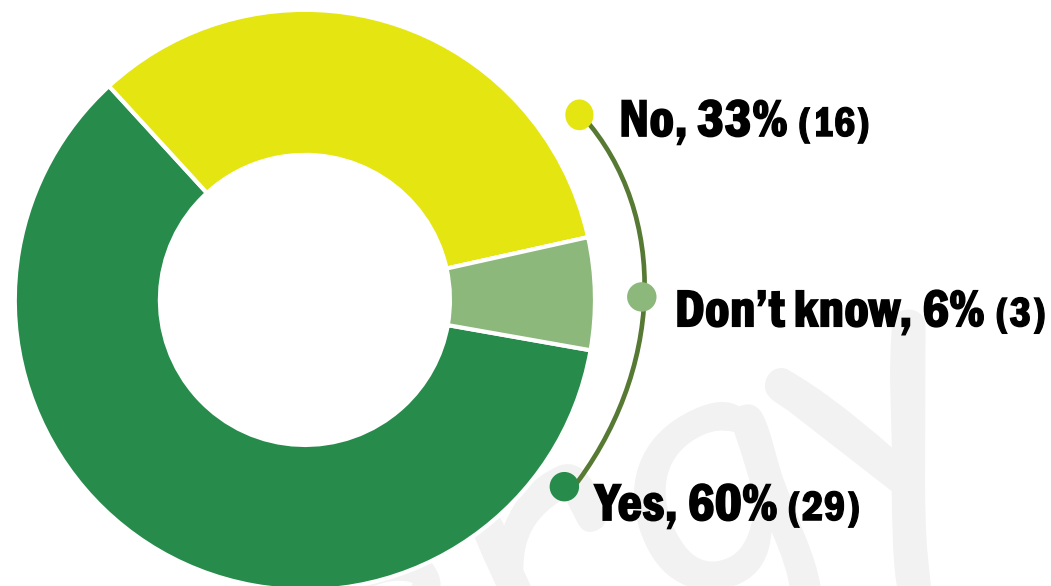




# Energy Independent Communities

## Section 1: About EI Community Respondents: Activity

Is your EI Community actively working toward its energy independence goal?



**60% of EI Communities reported still being active**

**6% of EI communities were unsure if they were still active**

### Active EI Communities:

#### MUNICIPALITIES

Altoona  
Bayfield  
Beaver Dam  
Eau Claire  
Evansville  
Fitchburg  
Jefferson  
Kaukauna  
Madison  
Middleton  
Milwaukee  
Monona  
Oconomowoc  
River Falls  
Sheboygan  
Viroqua  
Washburn  
Whitewater  
Oconomowoc  
Town of Bayfield  
Town of Berlin  
Town of La Pointe  
Village of Fox Crossing  
Village of Gresham

#### TRIBES

Oneida Nation

#### COUNTIES

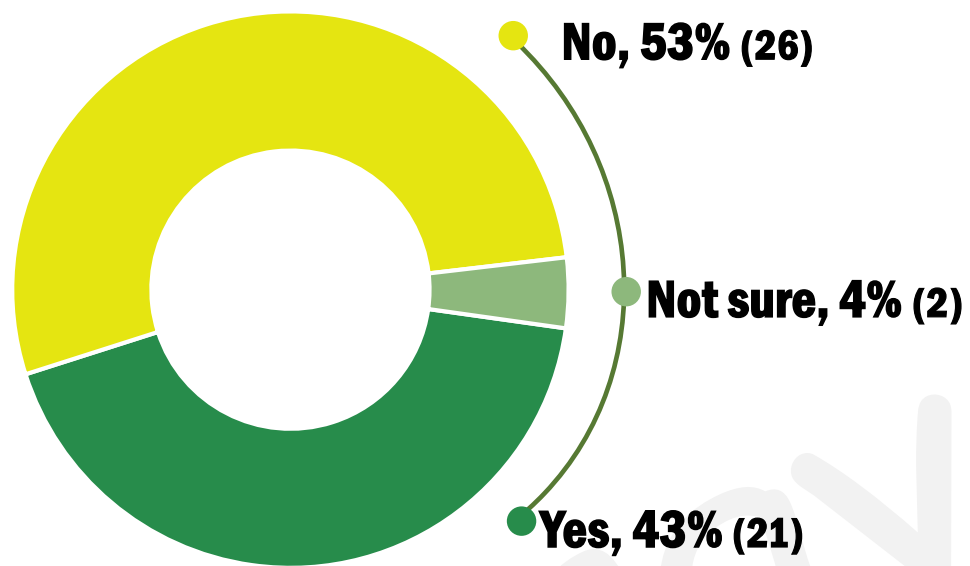
Ashland County  
Bayfield County  
Brown County  
Dane County  
Eau Claire County



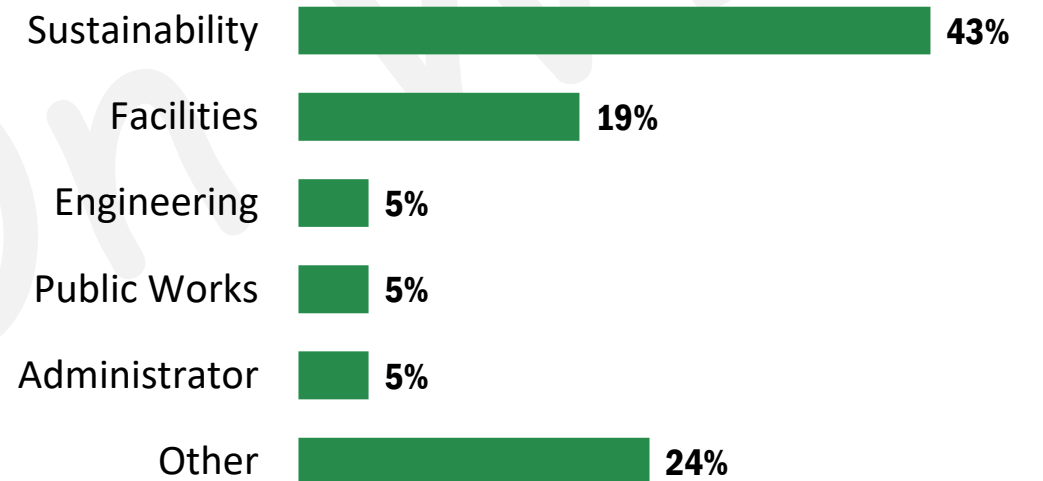
# Energy Independent Communities

## Section 1: About EI Community Respondents: Program Staffing

Does your EI Community program have a staff person assigned to it as either a stand-alone position or part of a staff person's responsibilities?



What is their position?



**Slightly over half** of respondents indicated their EI Communities **does not have a staff person**.

**Of the 21 EI Communities** with dedicated staff, **43% have a sustainability position**.

**Facilities, engineering and public works are responsible for energy independence in 30% of remaining communities**

**Other staff positions include:**

Utility Representative  
Planning Director  
Environmental Justice Specialist  
Office Assistant  
Utility Clerk  
Director of the Office of Energy and Climate Change



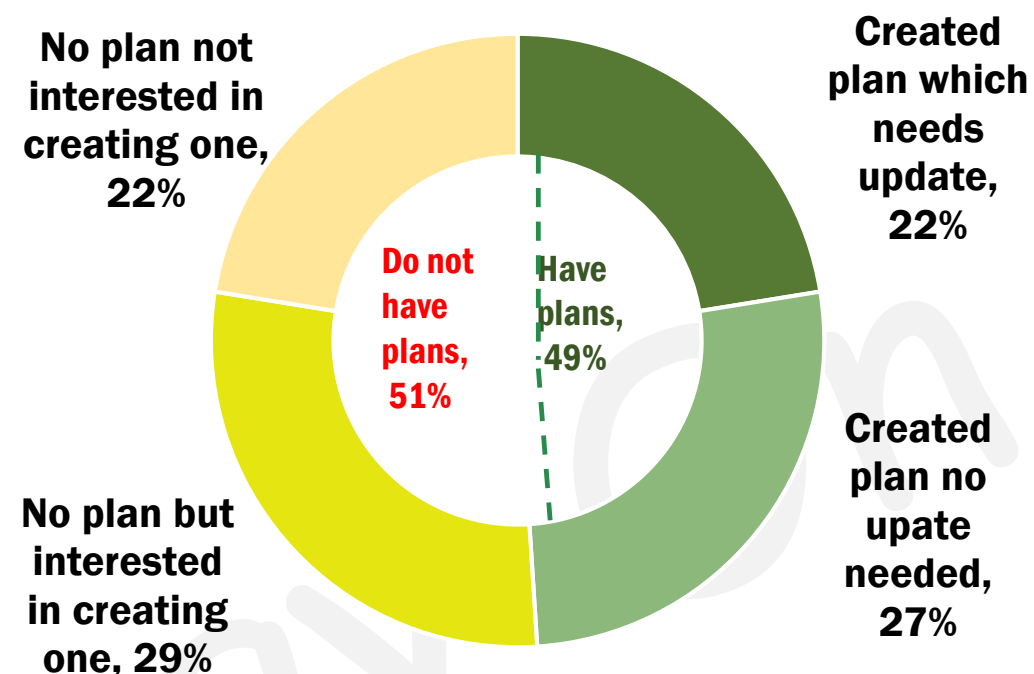
# Energy Independent Communities

## Section 1: About EI Community Respondents: Plans

### Did your EI Community create a plan after signing the resolution?

**51% of EI Communities** indicated they **did not create a plan**.

**56% of these communities** are interested in **exploring options to create a plan**.



**49% of EI communities** indicated they **did create an EI plan**.

**45% of these communities** believe their plan **will need to be updated**.

### Overall, 51% of EI communities want to create or update a plan

#### Communities interested in creating a plan:

City of Baraboo	
City of Jefferson	
City of Plymouth	
City of St. Croix Falls	
City of Sheboygan	
City of Wausau	
Town of Gresham	
Town of Bayfield	
Town of Fairfield	
	Town of La Pointe
	Village of Marquette
	Shawano County
	Eau Claire County
	Walworth County

#### Communities wanting to update a plan:

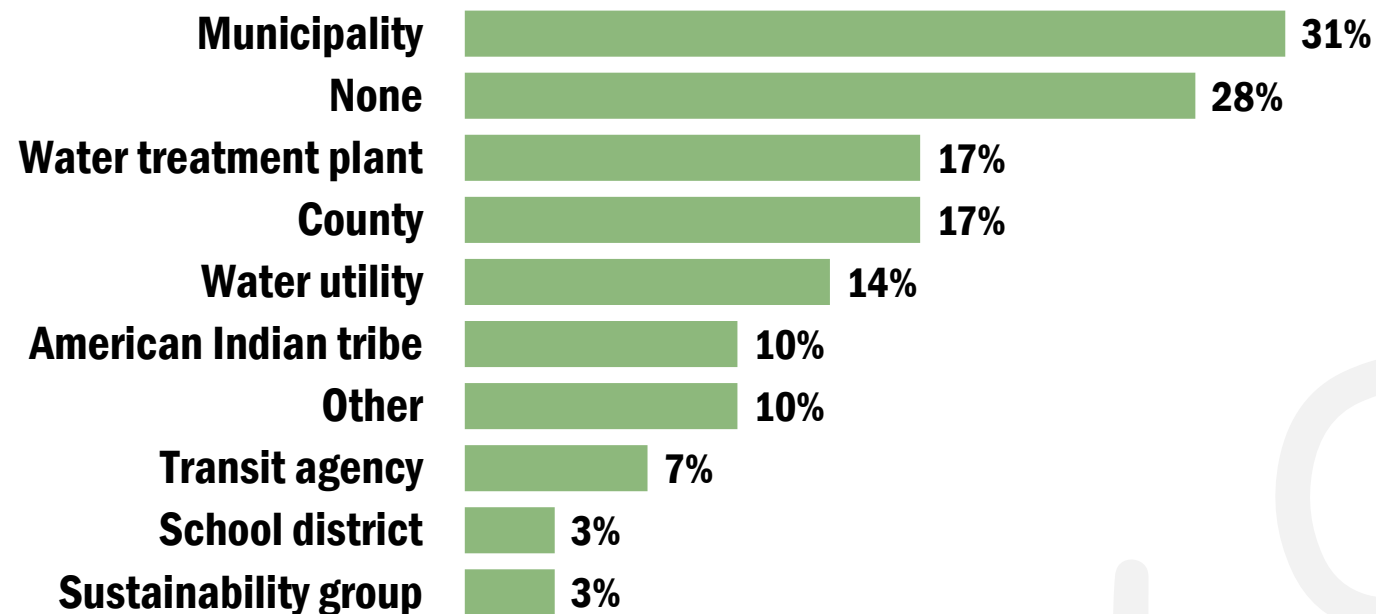
City of Altoona	
City of Bayfield	
City of Eau Claire	
Prairie du Chien	
River Falls	
City of Viroqua	
Village of Fox Crossing	
	Brown County
	Green Lake County
	Polk County
	Oneida Nation



# Energy Independent Communities

## Section 1: About EI Community Respondents: Partners

### Are you part of a group EI Community with other partners?



- **31%** of EI communities partner with a municipality, while another **28%** have no partners.
- **17%** of EI communities partnered with a County government, and **10%** with an American Indian Tribal Nation

### Group EI Communities:

#### **Chequamegon Bay EI Community:**

City of Ashland  
City of Bayfield  
City of Washburn \*  
Town of Bayfield \*  
Town of La Pointe \*  
Ashland County \*  
Bayfield County\*  
Red Cliff Tribe\*  
Bay Area Regional Transit Authority

#### **E3 Coalition includes:**

City of Fennimore  
Village of Gays Mills  
City of Prairie du Chien\*  
City of Viroqua  
Village of Ferryville \*  
Village of La Farge  
Village of Soldiers Grove  
Village of Viola \*  
Crawford County  
Vernon County

#### **Osceola and Osceola School District**

**Green Lake County and Green Lake School District\***

**\* Indicates those that responded to the survey**



# Energy Independent Communities

## Section 1: About EI Community Respondents: Committees

### Does your EIC have an energy or sustainability committee?



**41% of EI communities have an energy or sustainability committee.**

#### Committee Names:

Sustainable La Crosse Commission

Sustainability Committee - *Fox Crossing, Monona, Middleton*

Sustainable Madison Committee

Sustainability Advisory Committee – *Eau Claire*

Energy Independent Communities Committee - *Evansville*

Energy Committee - *La Pointe*

Oneida Nation Energy Team

Resource Conservation Commission - *Fitchburg*

City of Wausau Sustainability, Energy and Environment Committee

City-County Climate and Economic Equity Task Force - *Milwaukee*

City of Sheboygan Green Team

County Executive Committee – *Bayfield County*

Office of Energy and Climate Change – *Dane County*

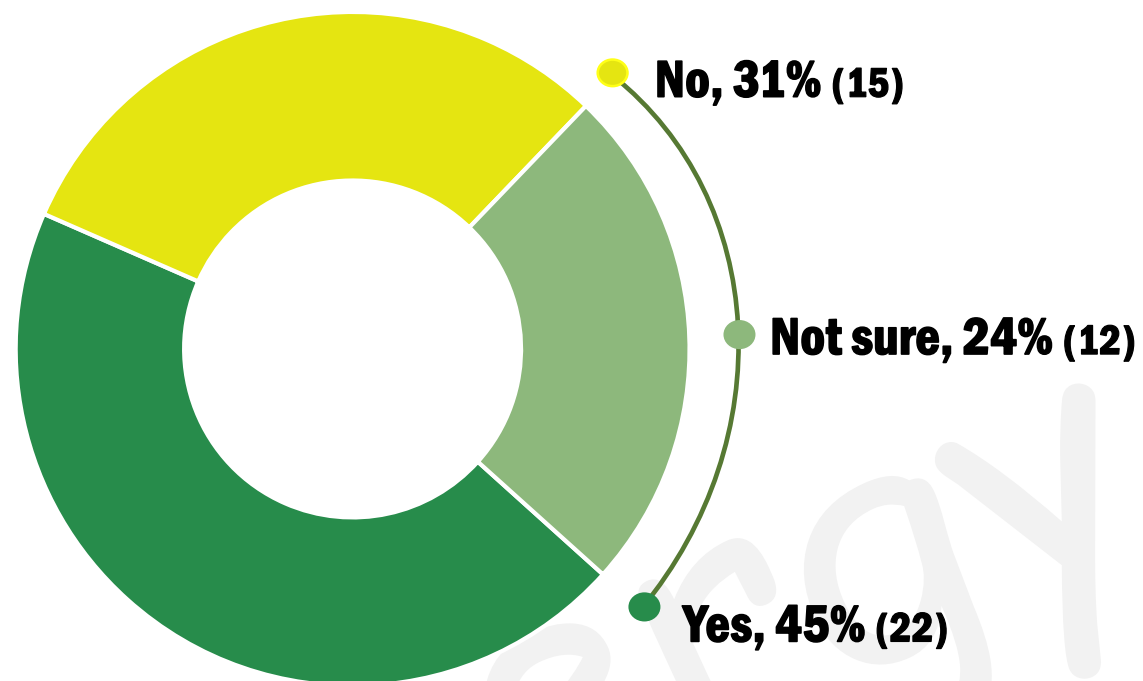




# Energy Independent Communities

## Section 1: About EI Community Respondents: Renewable Energy Estimates

### Do you know what portion your EI community's energy comes from renewable sources?



**Just under half of EI communities had confident estimates for their renewable energy share.**

Measuring renewable energy generation is an important factor in making progress toward energy independence. We asked respondents if they had reliable estimates on the portion of all their energy consumption (including fuel and other non-electric energy sources) that came from renewable sources. They could respond in three ways:

1. If respondents had a reliable estimate of this portion, we asked them to report it as a point estimate.
2. If they did not, we asked them to provide an informed estimate of their renewable energy consumption in the form of a range.
3. Respondents could indicate they did not have an informed estimate.

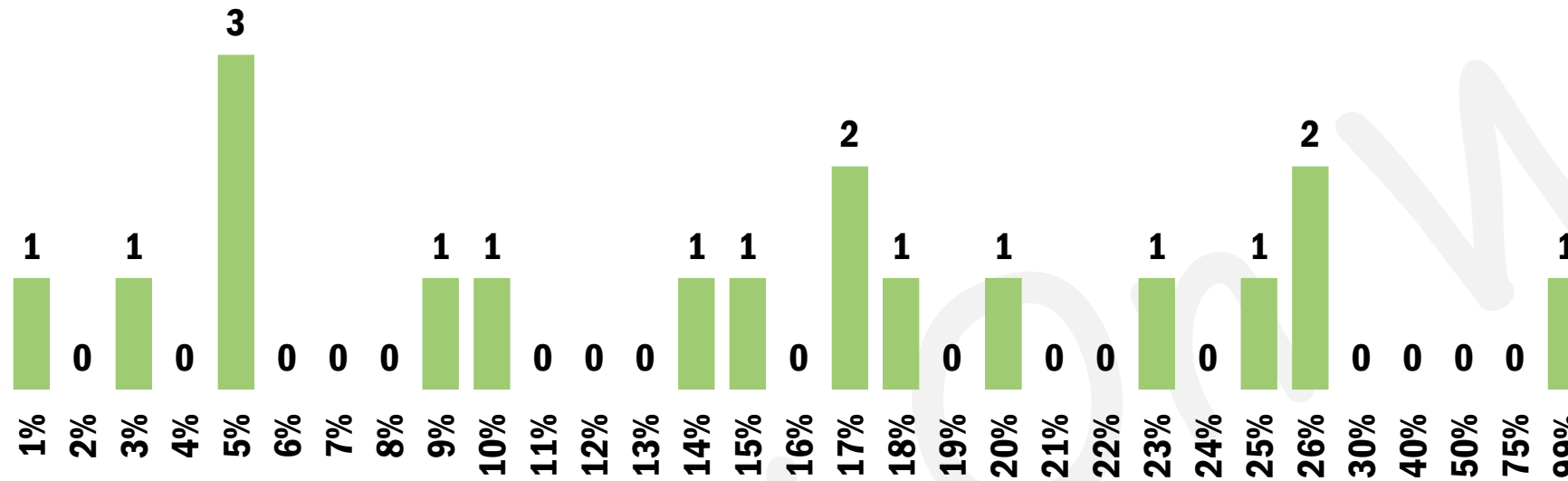
Researchers made and continue to make follow up calls to verify the point estimates reported.



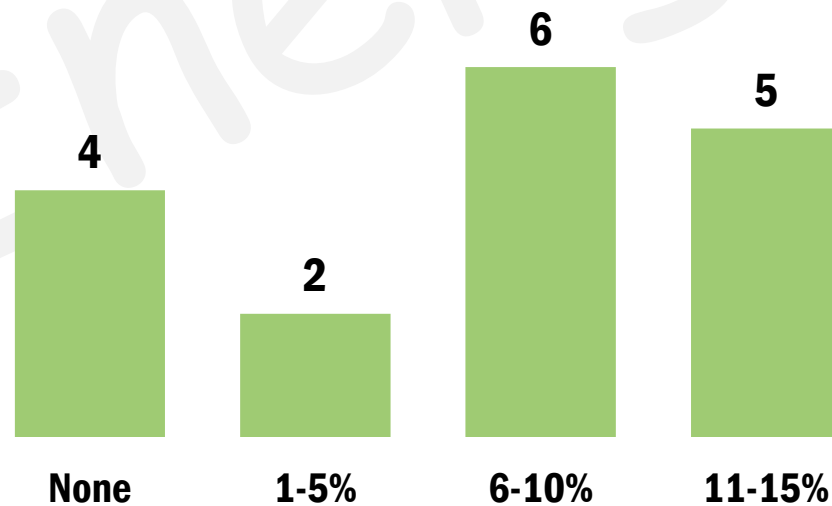
# Energy Independent Communities

## Section 1: About EI Community Respondents: Renewable Energy Estimates

Of the 18 EI Communities that reported having precise estimates, shares of renewable energy reported were:



Of the 17 EI Communities that did not have precise estimates, shares of renewable energy reported were:



10 EI Communities indicated they did not have a reliable estimate

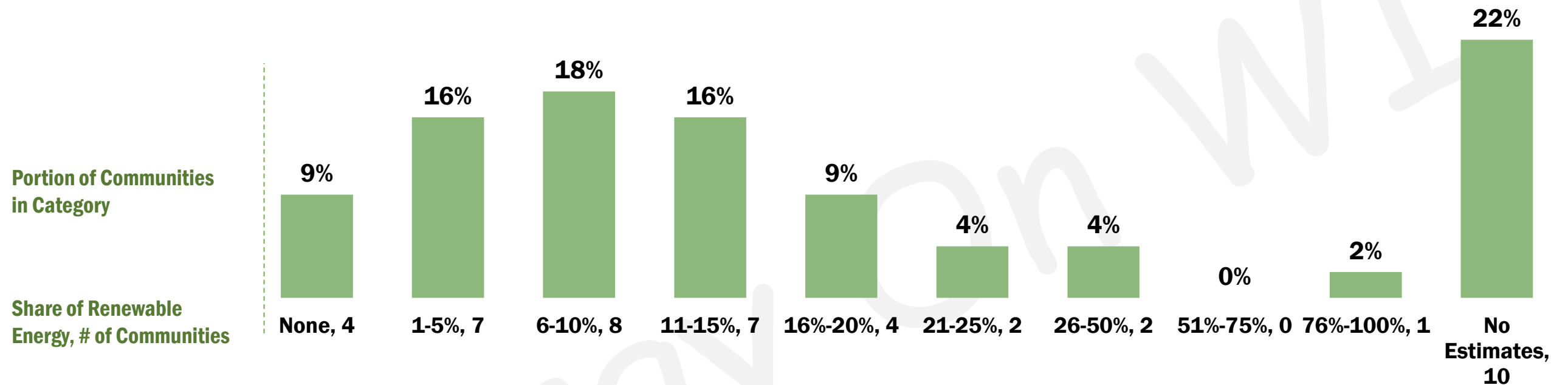
NOTE: ESTIMATES SHOWN ARE AS REPORTED; THEY ARE NOT VERIFIED



# Energy Independent Communities

## Section 1: About EI Community Respondents: Renewable Energy Estimates

What portion of your energy consumption comes from renewable sources as of 2019?  
Combined Range and Point Estimates



**6% (3) have met their goal**



**10% (5) have more than 20% renewable energy**



**43% (19) have less than 10%**



**22% (10) are unsure of their renewable share**



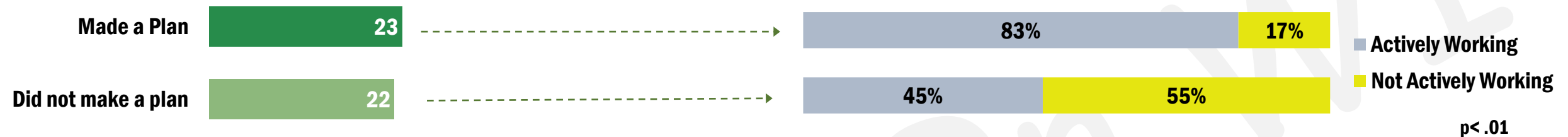
# Energy Independent Communities

## Section 1: About EI Community Respondents: Plans Improve Outcomes

### Telling the Story: Plans associate with more measurement, activity, and staffing Advanced Analysis

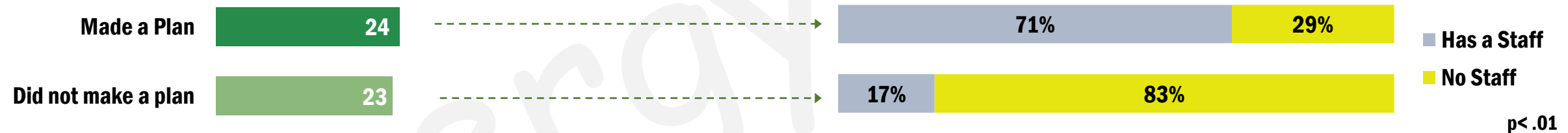
#### Communities with plans are more likely to be actively working towards their goals

\* Unsure responses excluded from analysis

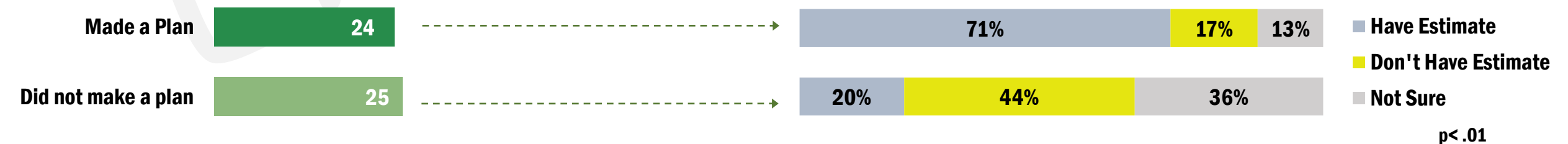


#### Communities with plans are more likely to have staff designated to work on energy independence efforts

\* Unsure responses excluded from analysis



#### Communities with plans are more likely to have estimates for renewable energy use



**A driving indicator for continued action toward Energy Independence is having a plan.  
Plans keep communities on track, organize activities, and require good data be collected.**



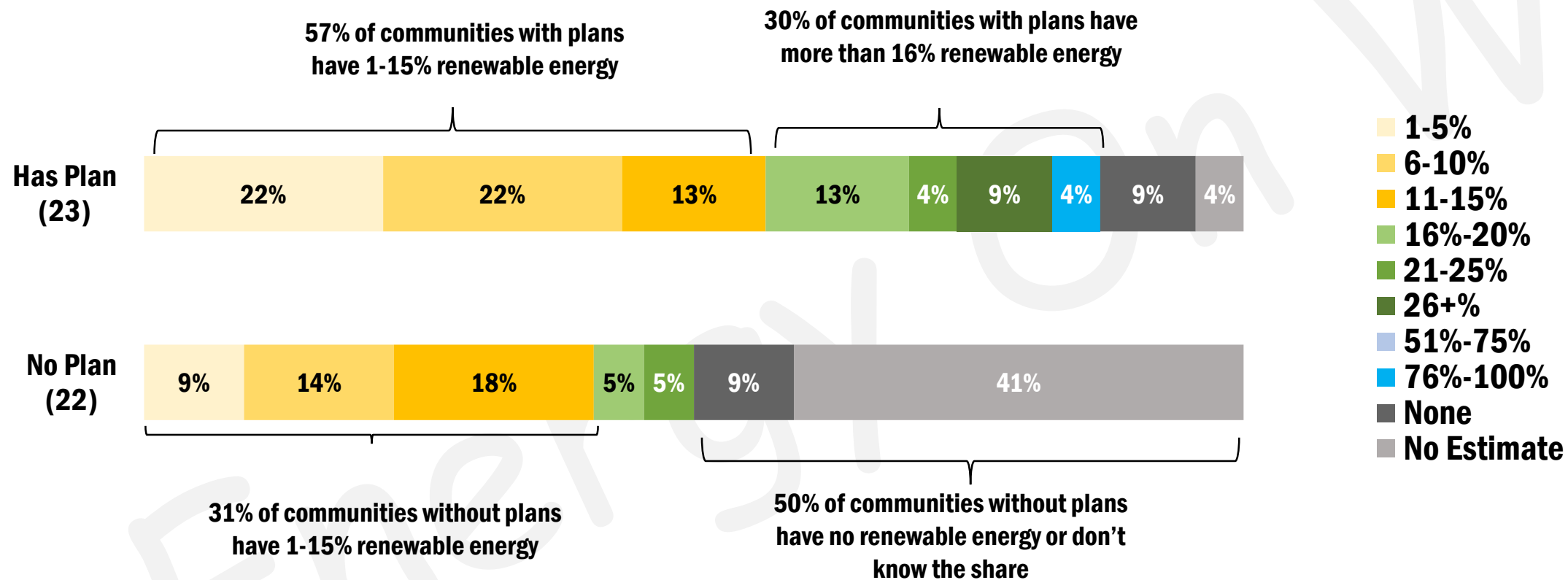
# Energy Independent Communities

## Section 1: About EI Community Respondents: Plans Improve Outcomes

### Telling the Story: Plans help produce progress

#### Advanced Analysis

**Communities with plans have made more progress toward the goal**







# Energy Independent Communities

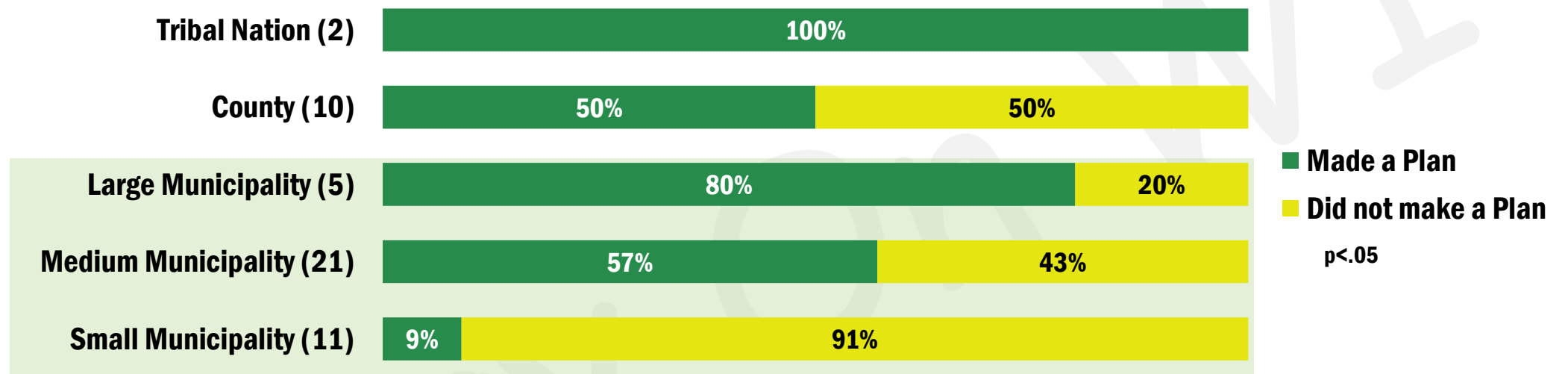
## Section 1: About EI Community Respondents

### EI Community size and type influence planning rates

#### Advanced Analyses

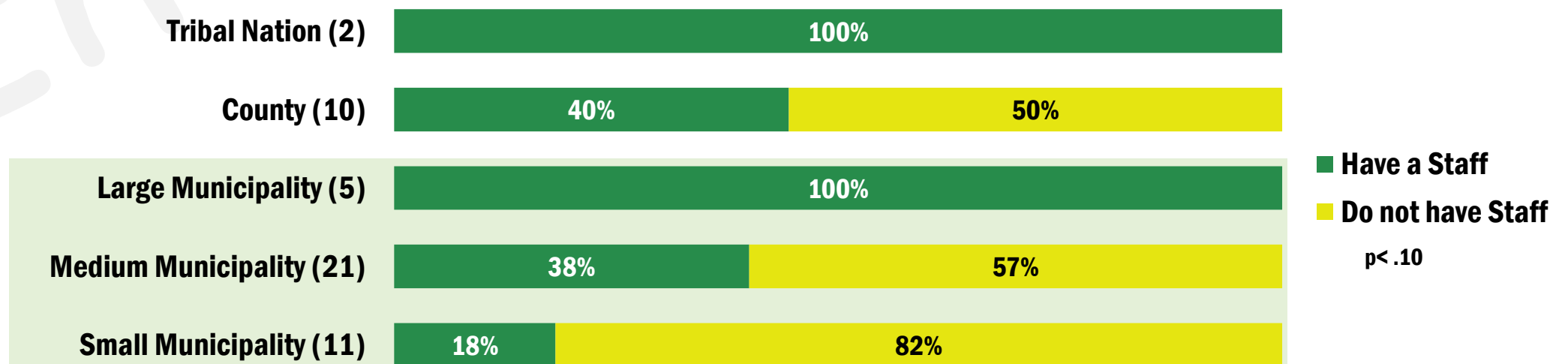
**Larger municipalities were more likely to make plans than smaller ones. 50% of counties made plans.**

**Municipal Size**  
Large (pop > 40,000)  
Medium (2,501 - 40,000)  
Small (pop < 2,500)



**Larger municipalities were more likely to have staff than smaller ones. 40% of counties had staff.**

\*unsure responses excluded



# Energy Independent Communities



## Section 2 Monitoring and Tracking

Key Question:  
Are EIC's tracking their energy usage?



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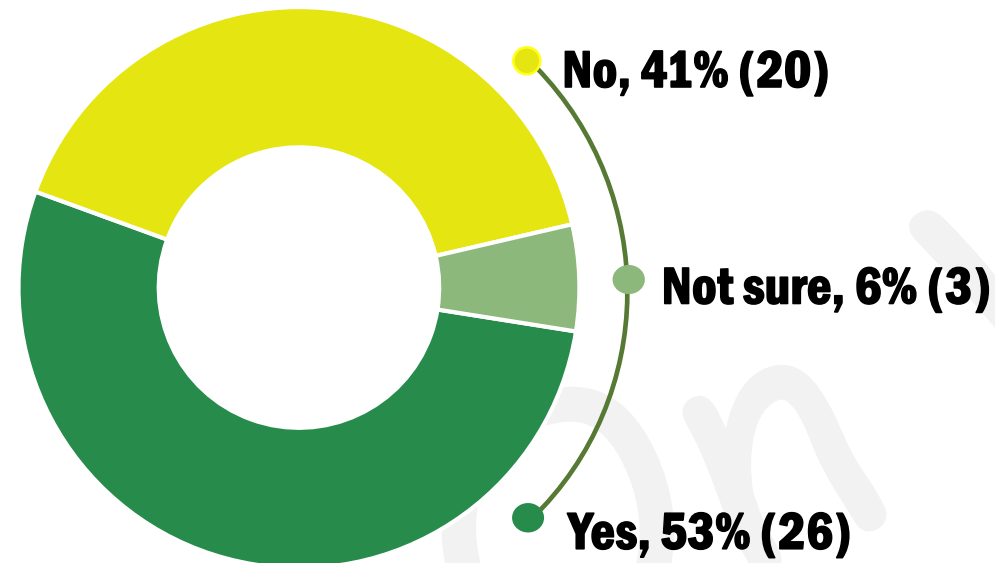


# Energy Independent Communities

## Section 2: Tracking and Monitoring: Tracking Activity

Does your EI Community track energy used in your operations?

**53% of respondents reported tracking their energy usage**

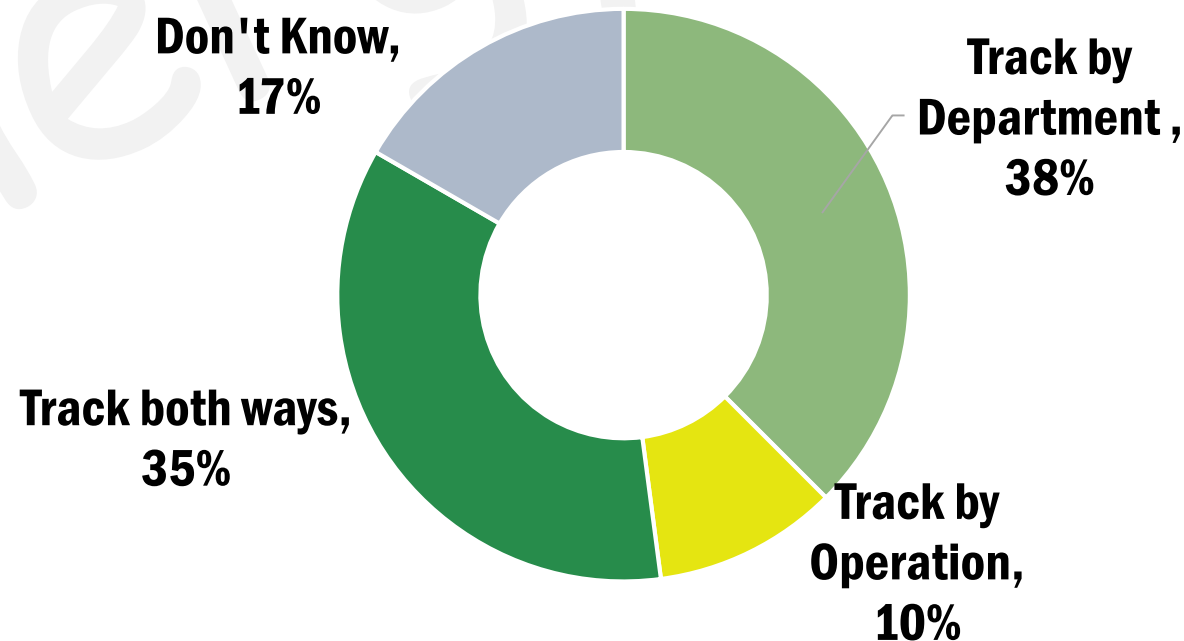


“We use solar installations mostly to chart our progress towards our goal and energy star portfolio manager to track savings (which is helpful), **but we could do a much better job of telling the story to the public and also internally- to gain momentum for greater progress.**”

Are transportation fuels tracked by department, by operations as a whole, or both?

**45%, or 22, communities tracked by operations while 73%, or 35, tracked by department.**

**35% (17) EI communities track fleet fuel both ways**

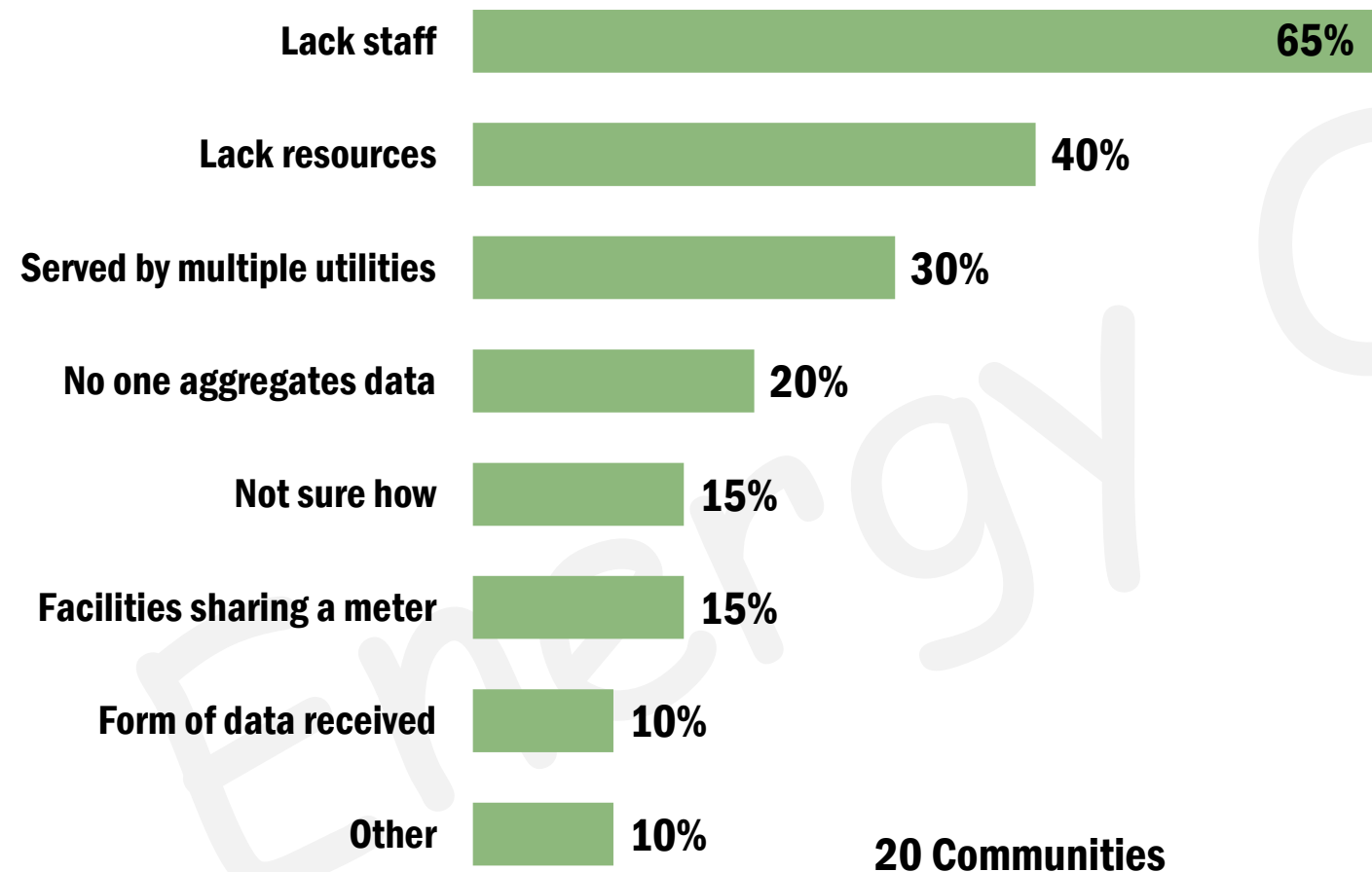




# Energy Independent Communities

## Section 2: Tracking and Monitoring: Reasons for Not Tracking

Of communities who are not tracking: why does your EI Community not track energy used?



**66% (13)** of EI communities, indicate a **lack of staff** as the reason they do not track energy use. A **lack of resources** and serviced by multiple utilities were other predominant factors.

The **15%** of EI communities who are unsure how to measure their energy use present an **opportunity for training**.



# Energy Independent Communities

## Section 2: Tracking and Monitoring: Tracking Tools

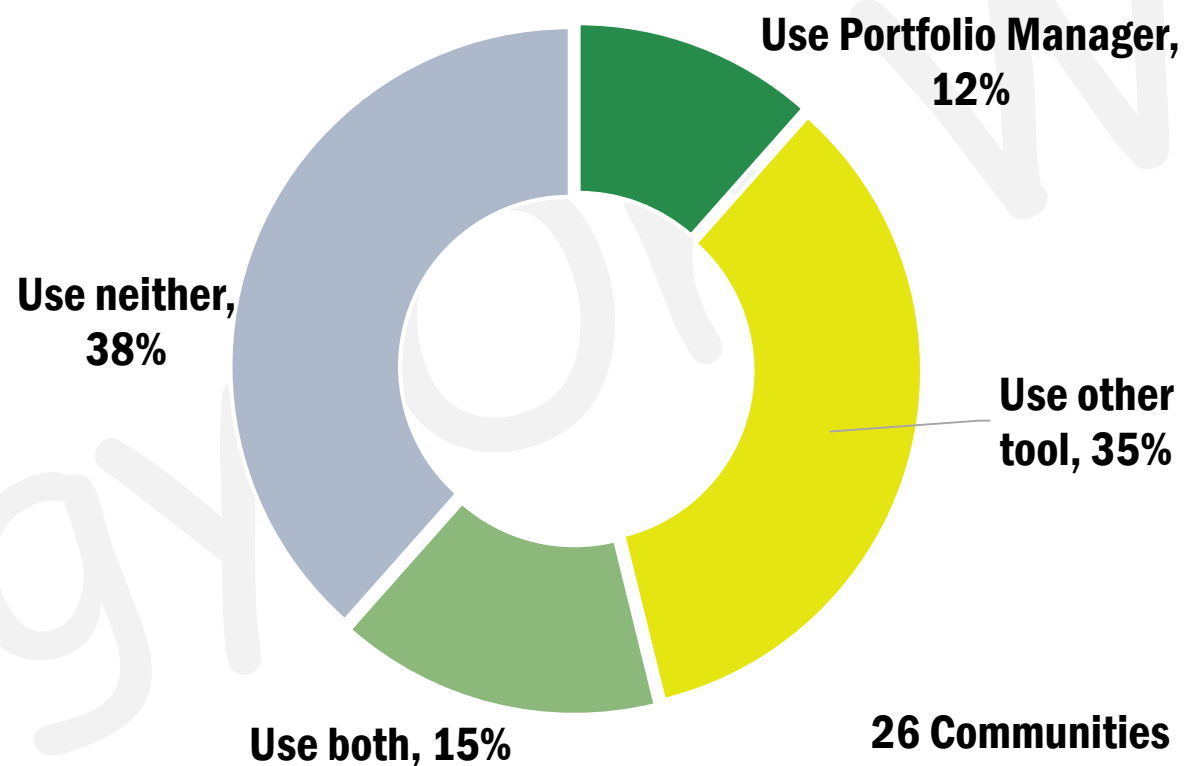
**Of communities who are tracking: Does your EIC or utility enter building energy use data into the EPA Energy Star Portfolio Manager, another tool, both, or neither?**

**53% (26)** of respondents are tracking their building energy data. **27% (7)** use **EPA Energy Star Portfolio Manager** either solely or with another tool.

**Other tools were much more utilized than Portfolio Manager, most commonly Excel Spreadsheets.**

Nearly **40%** of the tracking communities reported using **neither tool** to track energy, or **10 communities**.

Among the **communities who said they do not track**, **2 communities** reported using **another tool** while the remaining **18** reported using **neither tool**.



### Other Tools:

Spreadsheet (8)  
CDP

ClearPath ICLEI tool

Wisconsin Public  
Service reporting

EnergyCAP (x2)

Energy Stewards

help from Chequamegon Bay Renewables in assessing our current electricity use for the purpose of determining what size solar panel unit to install next year.

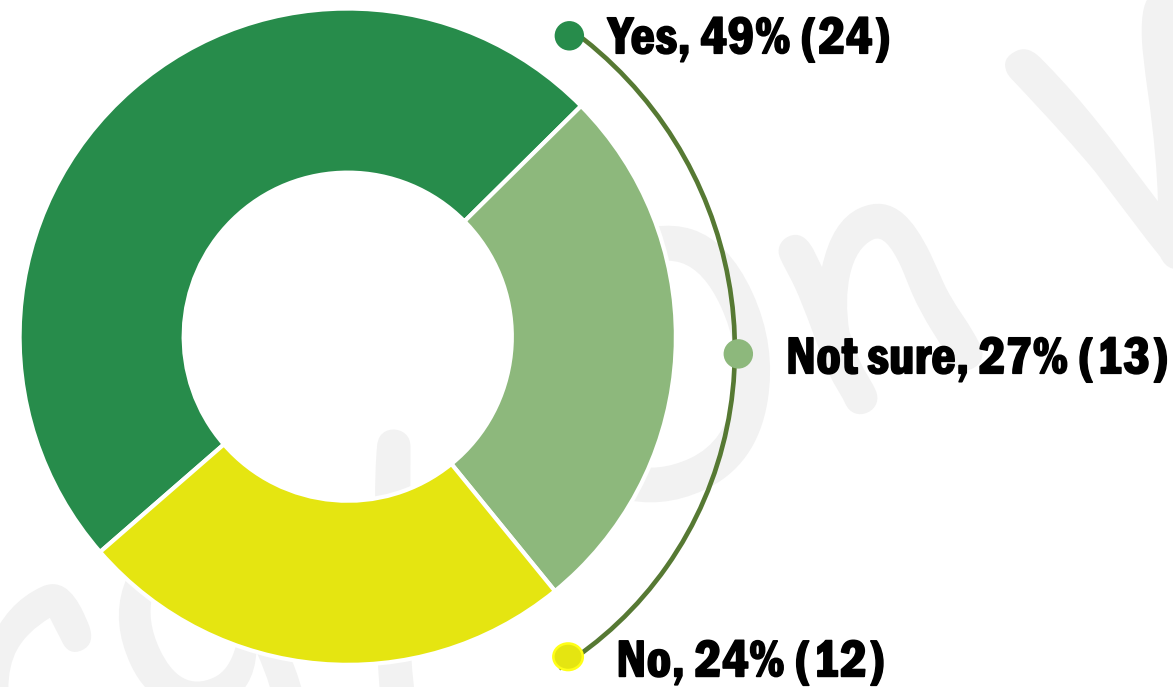




# Energy Independent Communities

## Section 2: Tracking and Monitoring: Energy Spending

Do you know how much your EIC spends annually on energy?



**Half of the EI communities know what they spend on energy**

**About a quarter each don't know their spending OR are unsure whether they know the spending.**



# Energy Independent Communities

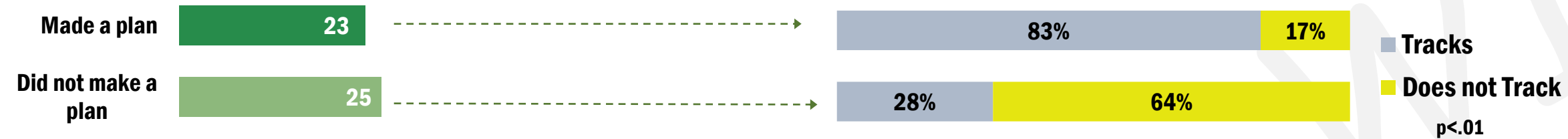
## Section 2: Tracking and Monitoring

### Telling the Story: Investments in Plans and Staff Yield Measurement

#### Advanced Analysis

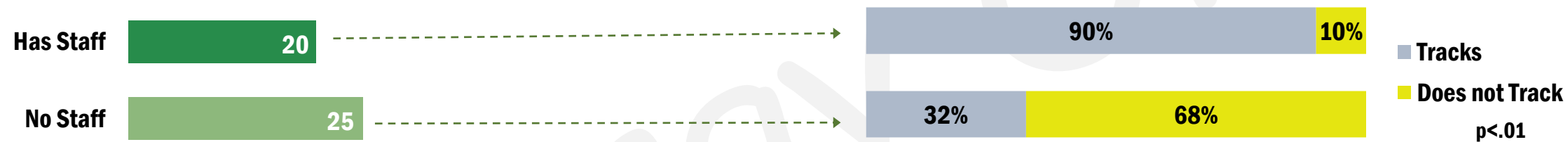
**83% of EI Communities with plans are tracking energy use compared to 28% of those without a plan.**

\*Unsure responses excluded



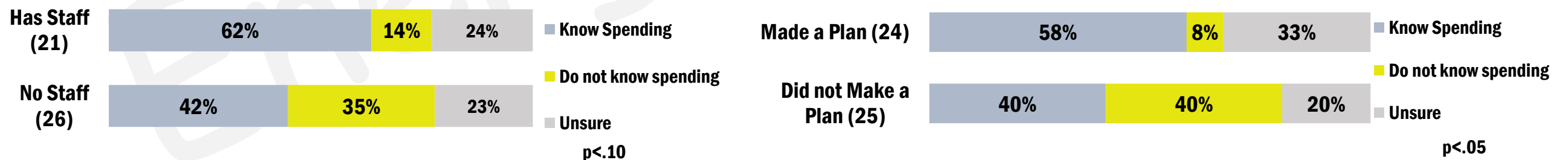
**90% of EI Communities with partial or full dedicated staff track their energy use compared to 32% of those without dedicated staff.**

\*unsure responses excluded

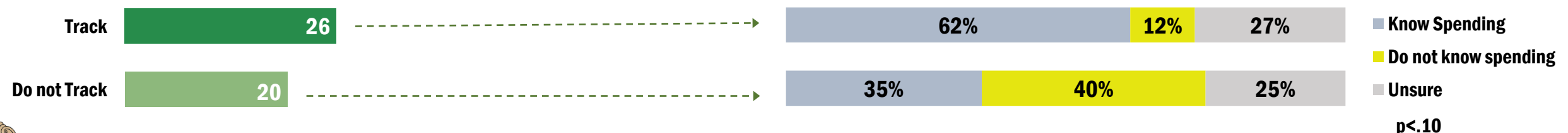


“There is not a dedicated staff for sustainability and energy related matters, which has resulted in little tracking of energy savings.”

**Those with staff or a plan are more likely to know their energy expenditures than those without**



**Communities who track their energy usage are more likely to know how much they spend annually on energy**

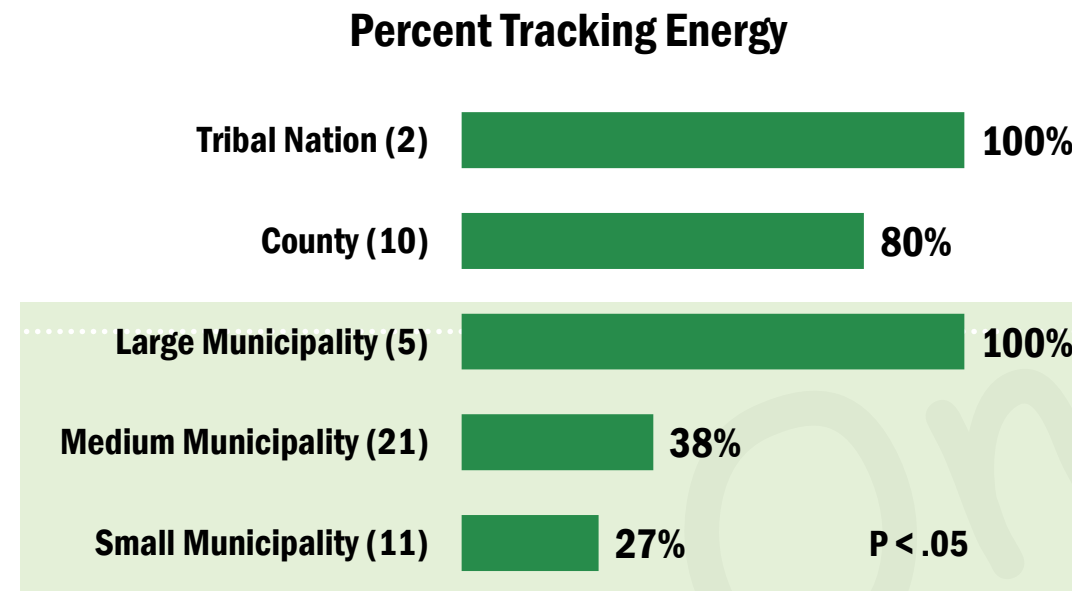




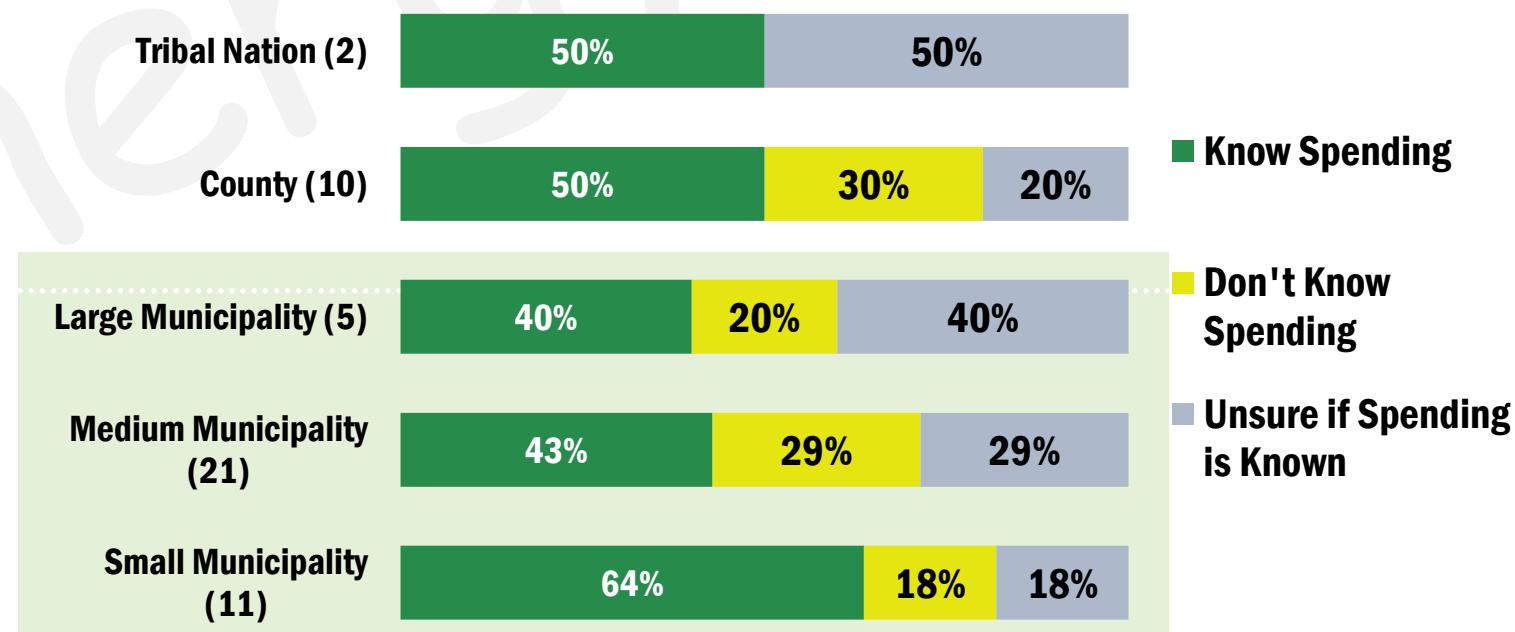
# Energy Independent Communities

## Section 2: Tracking and Monitoring

### Telling the Story: Larger Communities are more likely to be tracking



### Smaller communities are more likely to know their annual energy spending



# Energy Independent Communities



## Section 3 Renewable Energy and Energy Efficiency Projects

### Key Question:

What projects have EI communities worked on to improve their energy independence?



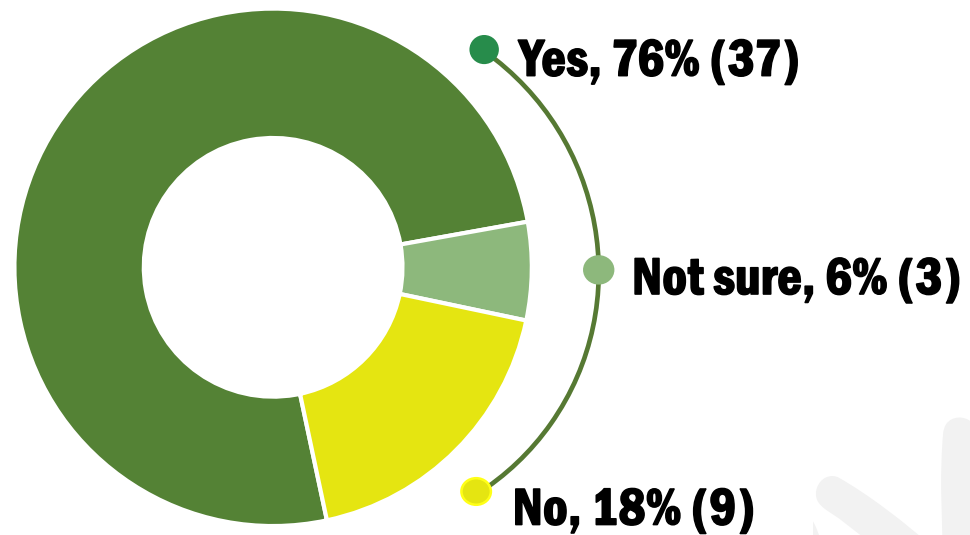
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# Energy Independent Communities

## Section 3.1: Energy Efficiency: Policies and Practices

Have you implemented policies and practices in your daily operations to save energy?



**Three quarters** of respondent communities have implemented energy saving policies or practices.

“There is value from energy savings, and cost savings, but there is also value that isn't captured when we make a good decision - for reduced carbon emissions, health outcomes, etc.”

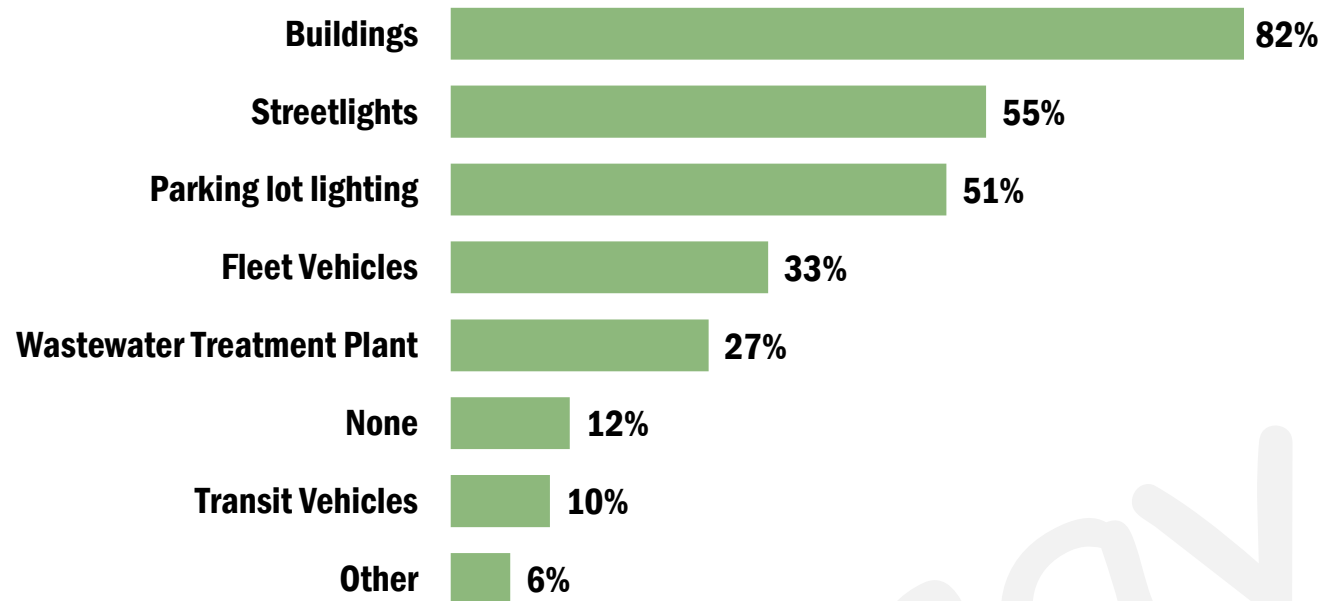




# Energy Independent Communities

## Section 3.1: Energy Efficiency: Projects

Have you completed any energy efficiency projects? Select all that apply.



**88% of EI communities have completed at least one energy efficiency project.**

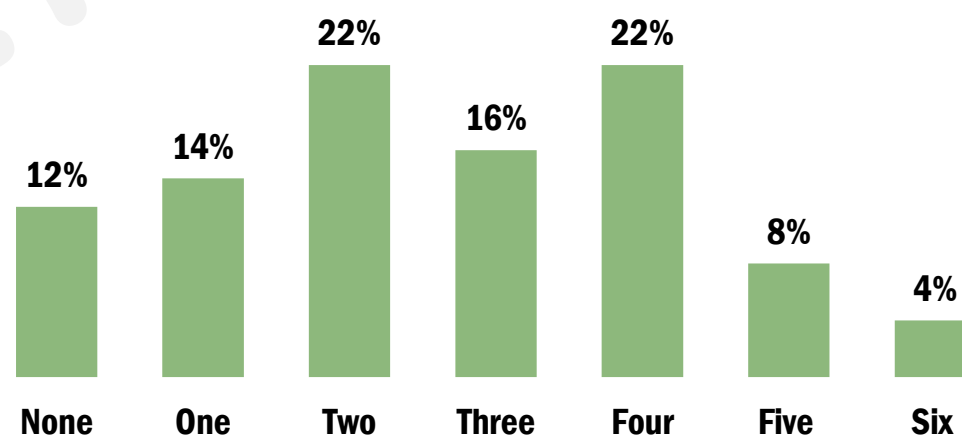
**4/5 EI communities have completed building upgrades.**

**Over half completed Lighting projects, both to streetlights and parking lot lighting.**

**1/3 EI communities upgraded fleet vehicles, but were less likely to pursue transit vehicle upgrades, Some communities may not have transit vehicles.**

**More than one quarter of EI Communities have undertaken energy efficiency projects at their water treatment plants.**

How many project types has your EI community made energy efficiency upgrades to?



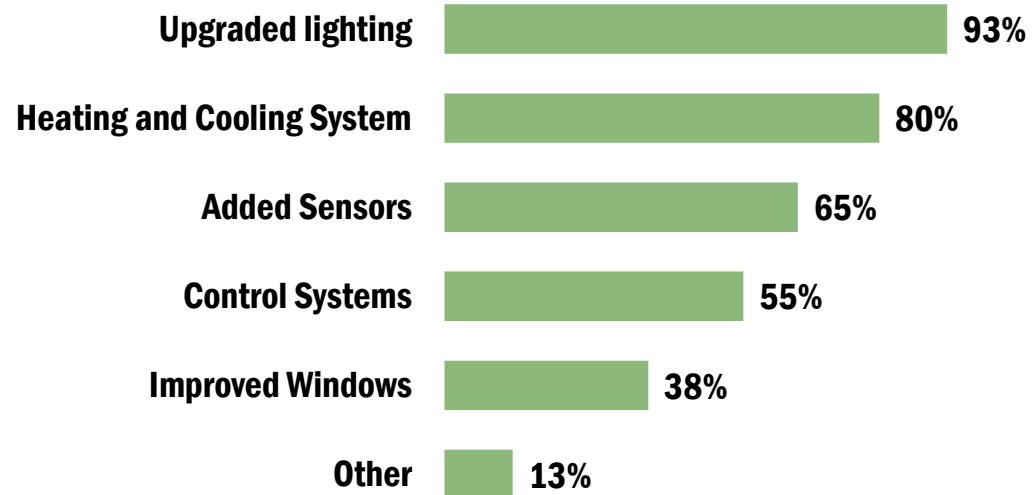
**EI Communities made upgrades to several areas of operations. Half of the respondents made changes to three or more areas.**



# Energy Independent Communities

## Section 3.1: Energy Efficiency: Building and Vehicle Projects

### What building-related projects were done?

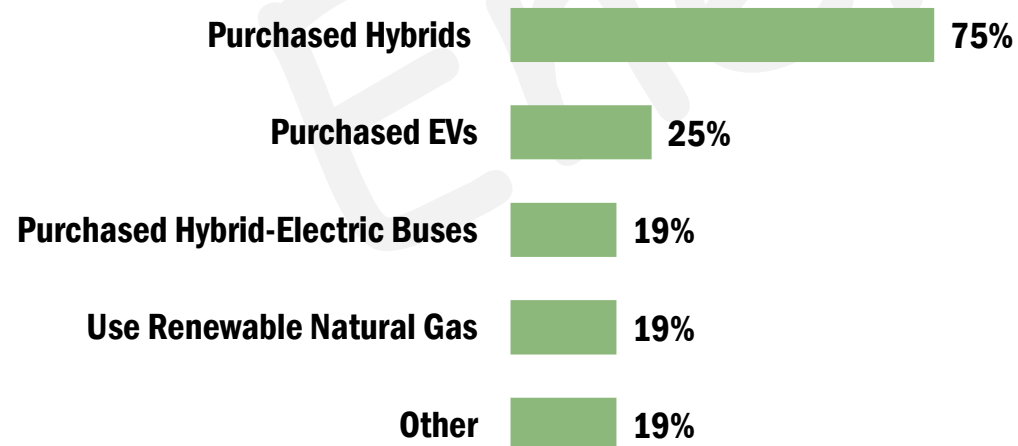


Of the 40 EI communities that made building upgrades, **93% (37) upgraded the lighting.**

**Heating and cooling system** upgrades were completed by **80%** of these EI communities.

**Sensors and controls** were added by **more than half to 2/3** of these EI communities

### What vehicle-related projects were done?



Of 16 EI communities that purchased fuel efficient vehicles, **12 added hybrid vehicles** and **4 added electric vehicles.**

**Three communities purchased hybrid-electric buses** and three added **RNG powered vehicles.**

#### Communities upgrading vehicles:

##### Fleet Vehicles

Barron County  
Bayfield County  
Dane County  
Green Lake County  
Polk County  
Walworth County  
City of Eau Claire  
City of Jefferson  
City of La Crosse  
City of Madison  
City of Milwaukee  
City of Monona  
City of Sheboygan  
City of Shell Lake  
City of Wausau  
Red Cliff Band of Lake Superior Ojibwe

##### Transit Vehicles

City of Eau Claire  
City of La Crosse  
City of Madison  
City of Sheboygan  
City of Monona



# Energy Independent Communities

## Section 3.1: Energy Efficiency: Building and Vehicle Projects

**We asked communities to report the energy and money saved from their energy efficiency upgrades if they had the data available**

### Total Savings from Energy Efficiency Projects

31 Responses

#### Energy Saved

7,000 KW	2%	5-10%	Some buildings were 50% saved.
~90,000 kWh annually	15%-20%	20%	Lighting upgrades - about 10 to 20%.
565,762 kWh/year - Wausau			
At least 1,811,807 kWh - Oconomowoc			
10,820,567 kwh annually – City of Madison			
	“[Our EI Community] went from a total of 27,471,611 kWh consumed in 2013 down to 23,676,272 kWh as of Dec 31, 2018”		

#### Money Saved

About \$11,000	\$100,000
~\$15,000	At least \$126,370 is saved annually
\$30,000	Approximately \$226,000 per year.
\$40,000	\$40,000-\$50,000
\$50,000 - \$75,000	\$1,327,417 –Total Annual Savings since 2013
\$80-100k	

**16 respondents could not provide information.**

**Several others provided partial estimates.**

The average WI household consumed 7,000 kwh of electricity per year in 2018.

EI communities reported annual savings of as many as 900 households.

**Half of the EI communities with estimates were saving over \$50,000 annually.**

**Three communities were saving over \$100,000.**

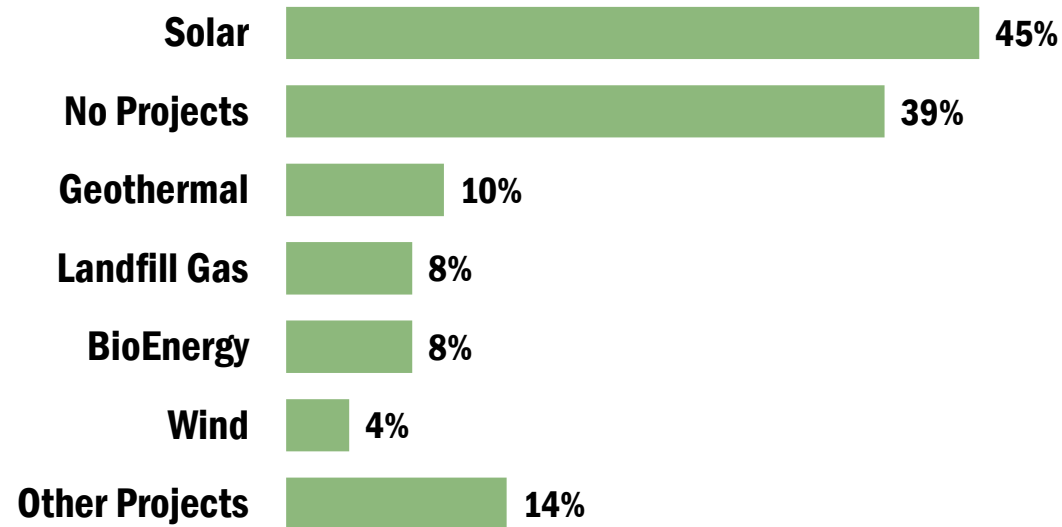
**One at a quarter million dollars saved annually.**



# Energy Independent Communities

## Section 3.2 Renewable Energy: Projects

### What renewable energy projects have you installed?

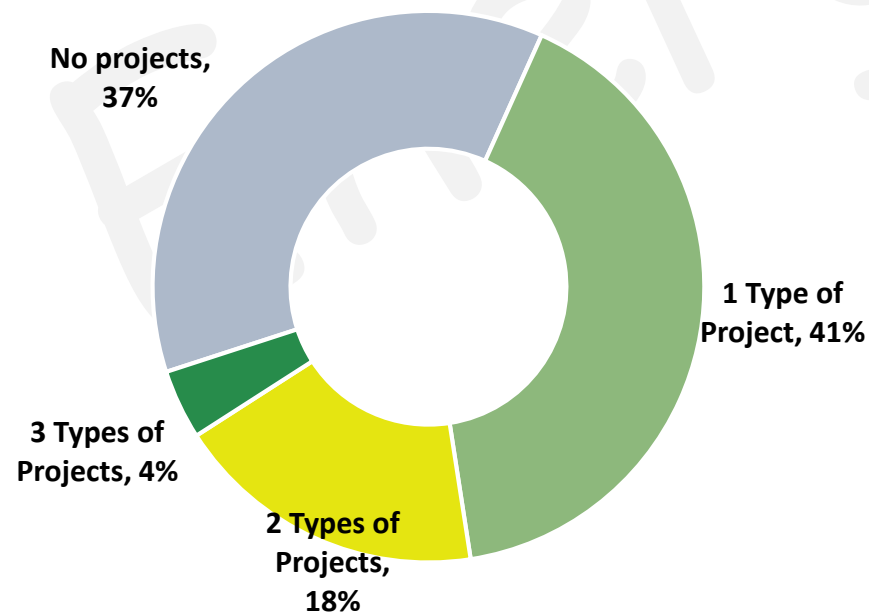


**Solar Projects** are the **most common**. Almost **half of the respondents**, **22 communities**, have installed **at least one solar project**.

**40%** of communities, **19 communities**, had **not installed any renewable energy** as of December 2019

**Only a few communities** have installed **other types of renewable energy**, with wind being the least undertaken project

### How many types of projects have communities installed?



**40%**, or 20 communities, completed a project in **one source of renewable energy**.

**18%**, or 9 communities, completed **two sources of renewable energy**.

Only **2 communities** installed **three types of renewable energy**.

#### Communities with multiple renewable energy projects

**Bayfield County** installed Solar PV and Compressed Natural Gas projects

**Brown County** installed Solar PV, solar thermal, and Landfill Gas projects

**Fitchburg, Kaukauna, and Madison** installed solar and geothermal projects

**Milwaukee** installed solar and wind

**Plymouth, La Crosse, and Beaver Dam** installed solar and bioenergy projects

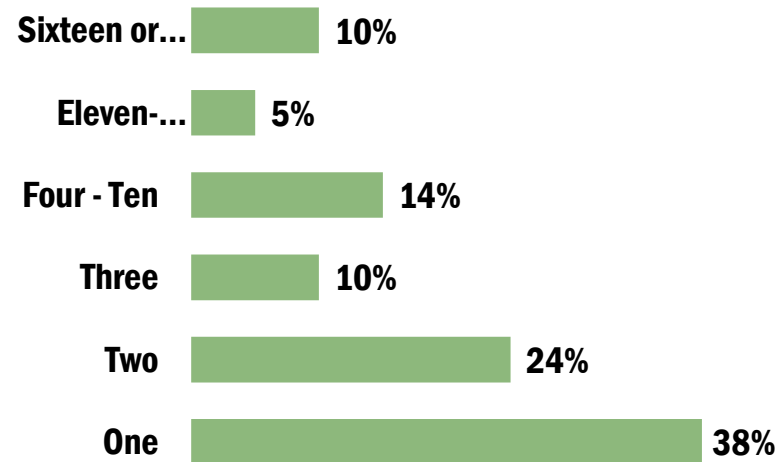
**Dane County** installed solar, geothermal, and landfill gas projects



# Energy Independent Communities

## Section 3.2: Renewable Energy: Solar Projects

### Number of Solar Projects

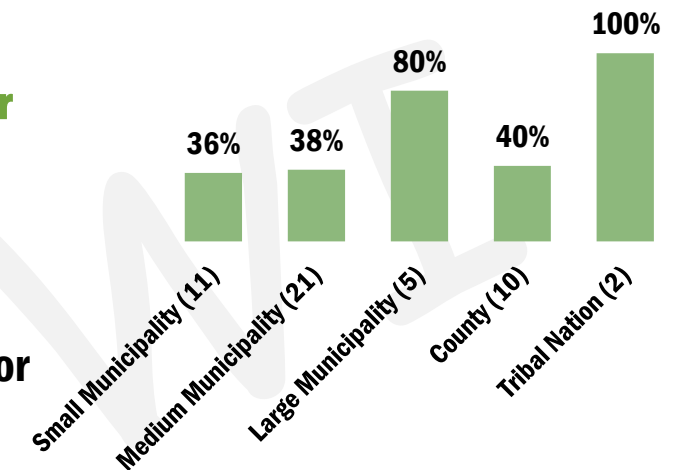


**Madison and Dane County** installed the most solar projects (16+); and **Bayfield County** installed 11-15 projects

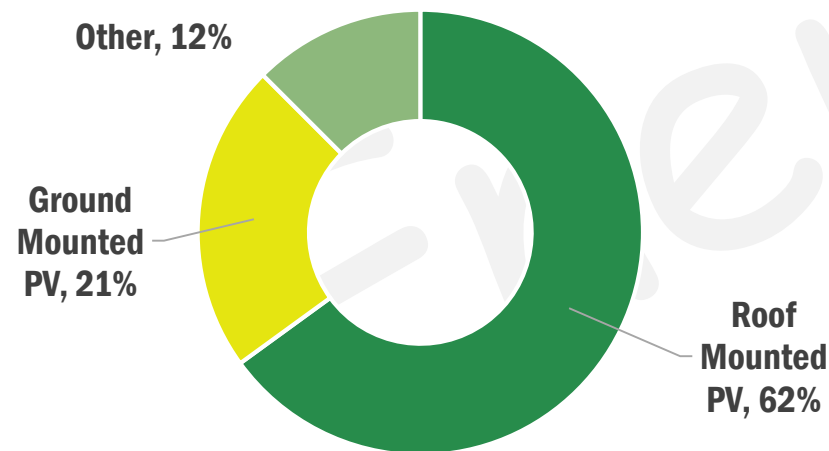
**40%** of EICs that installed solar projects **installed three or more**

Around **40%** of **counties and small and medium municipalities** completed solar projects, while **80%** of **large municipalities** and **both tribal nations** completed 1 or more solar projects.

### Portion of Community Types completing solar projects



### What type of project is it?



**Out of 40 projects, 62% were roof-mounted PV**

### How large are the projects?

Of 24 projects reported on where data was provided, projects ranged from **6 kW** to **356 kW**, with an average of **130 kW**

**25%** of the projects were under 55 kW and **25%** were over 185 kW

### Where are they/What are they powering?

**Projects were located at and powered a range of buildings :**

- "Energy sold back to (utility) under rate schedule PG-4"
- "It powers our jobs center"
- "On a county courthouse"
- "Hot water for county jail"
- "Municipal Swimming Pool"
- "it powers our southeast campus which primarily a main highway garage and the medical examiners office and the RNG fueling station"
- "Hot water for (a) Neighborhood Center"
- "Municipal building operations"
- "Fire stations"
- "On a health center"
- "On a nursing home"
- "On public libraries"
- "Bus garage"
- "On a community/bingo center"





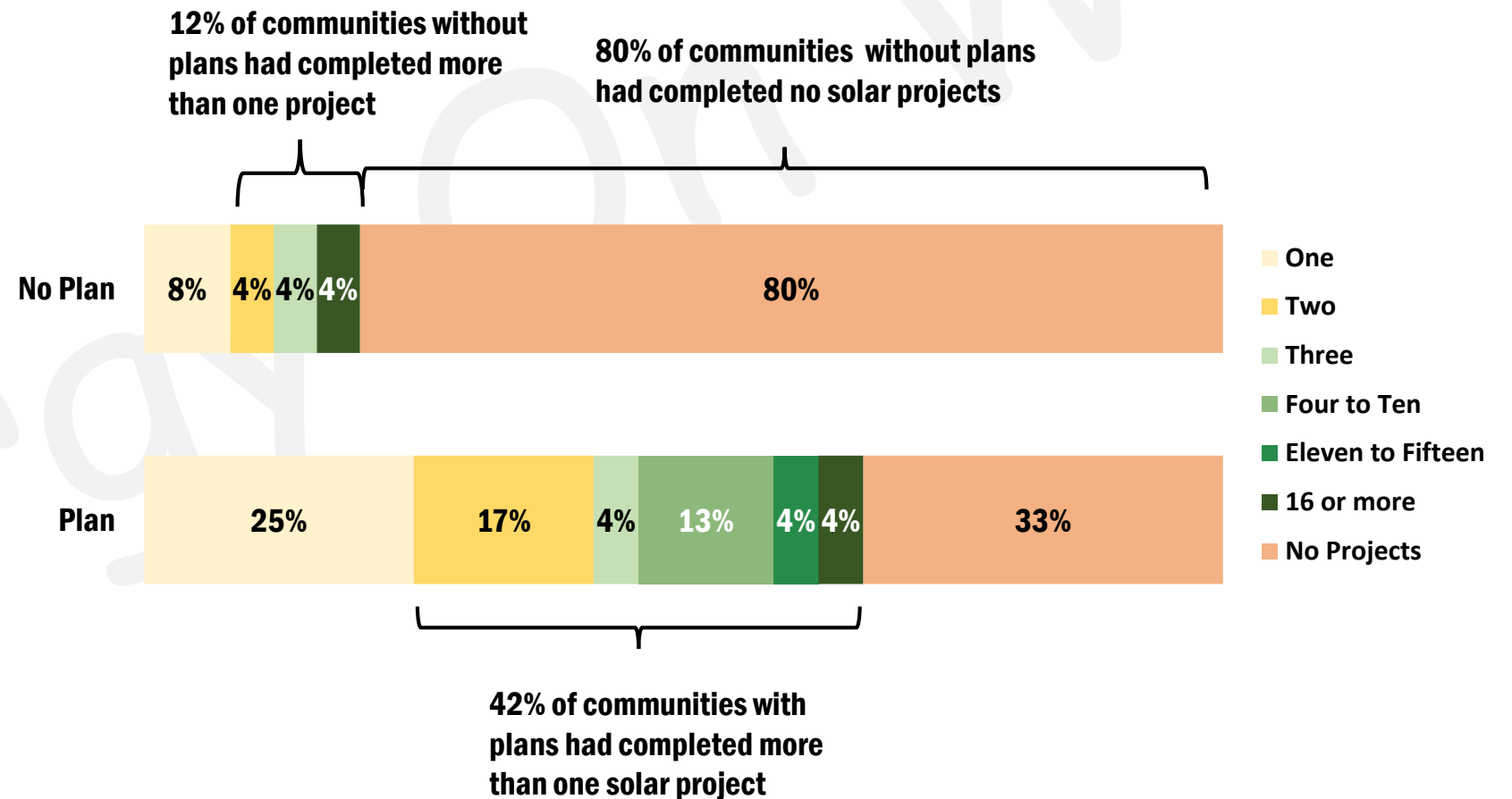
# Energy Independent Communities

## Section 3.2: Renewable Energy: Plans and Solar Projects

### Solar Projects: Advanced Analysis

Of communities **without a plan**: **80%** have **not completed any solar projects** compared to **33%** of communities **with plans**.

**25%** of communities **with a plan** have installed **3 or more** solar projects, versus just **8%** of communities **without a plan**.







# Energy Independent Communities

## Section 3.2: Renewable Energy: Wind and Geothermal Projects

### About the Wind Projects

In the two wind projects reported on, **both communities had plans**

**City of Evansville in 2010 built one turbine on a Wastewater Treatment Plant generating 100 kW of electricity.**

**City of Milwaukee built one turbine in 2012 on city land generating 100 kW of electricity.**

**NOTE: Answers did not include utility-scale wind in region**

### About the Geothermal Projects

**Three communities provided brief descriptions of their geothermal projects. Of the 4 communities with these projects, 3 had plans.**

“Kaukauna **municipal building & Fire Department** both have their own Geothermal GSHP”

“Geothermal HVAC system for Fitchburg **Public Library**, completed in 2011, comprising **52 vertical wells** and Geothermal HVAC system for **Fire Station** completed in 2017”

“Pinney **Library, Fire Stations & Library Support** [geothermal systems in Madison]. Typically **80%-100% reduction in gas use** and -10% to +10% in electric use”



# Energy Independent Communities

## Section 3.2: Renewable Energy: Bio-Energy and Landfill Gas Projects

### About the Bio-Energy Projects

Four communities provided descriptions of their bio-energy projects. **Only one of the four communities had a plan.**

“**WWTP** biogas system - **120 KW**”

“**Methane capture** from sludge digesters at the **wastewater treatment plant**. Methane is burned to **generate electricity** or spin the turbines at the plant.”

“While we don't own either of them, we funded, and continue to play a role in the operations of two **manure bio-digesters** in the County that each have a electric **generating capacity of 2 MW of power**. One of them is in the process of transitioning from providing electric generation to providing clean compressed **renewable gas vehicle fuel**.”

“Wastewater Anaerobic Pretreatment-\$200K/year at \$.09/kw”

### About the Landfill Gas Projects

Four communities provided information on their landfill gas projects. **Two of these communities had plans**

“The gas is piped to a nearby **hospital for heating**”

“The local landfill sends it **gas to [A school district]**”

1.85 MW landfill gas to electric project at the East Landfill site beginning in 2009; \$4.0 Million project cost; Had a ten-year power purchase agreement with WPS ending June 30, 2019; **Produced 868,932 kW January thru June 2019... Now decommissioned.**

“We have historically operated 6 generators at the Dane County landfill which had a combined capacity of **7 MW of electric generating capacity**. When these generators were most recently in use (2018 and the first quarter of 2019), we **produced as much renewable electricity as we consumed in all Dane County facilities**. The methane gas from the landfill that fueled those generators is now **injected in interstate gas pipeline** and **sold as clean RNG vehicle fuel**. We also generate a much smaller amount of electricity at landfill in Verona that has been closed for approximately 20 years. That system **powers a senior living center, a community center** and a **food pantry** and food recovery operation.”

# Energy Independent Communities



## Section 4 Grants and Funding

### Key Questions:

How many communities have received outside funding?

What was the source of that funding?

What projects have they helped support?



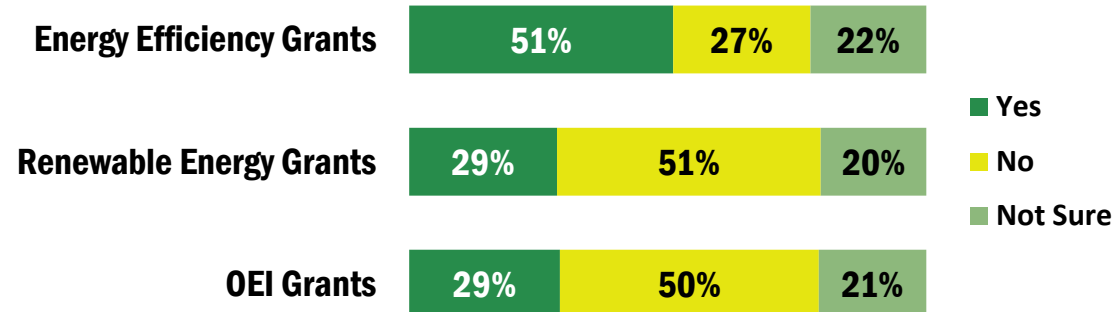
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# Energy Independent Communities

## Section 4: Grants and Funding: Grants Summary

### Has your EI Community received the following grants?



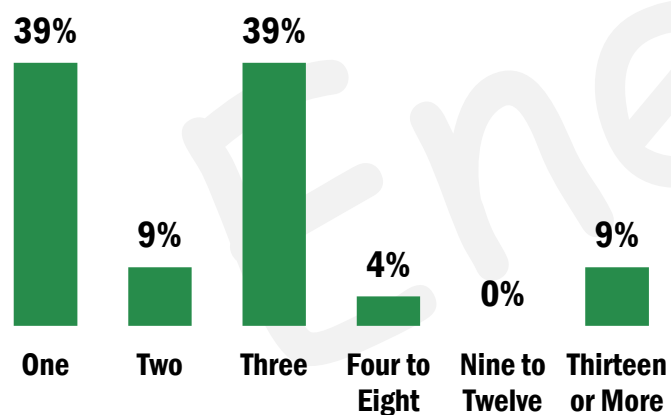
Half of the respondents had received **energy efficiency grants**.

30% had received **renewable energy grants**.

Consistently, **20%** of the sample were **unsure about whether they had received a grant or not**

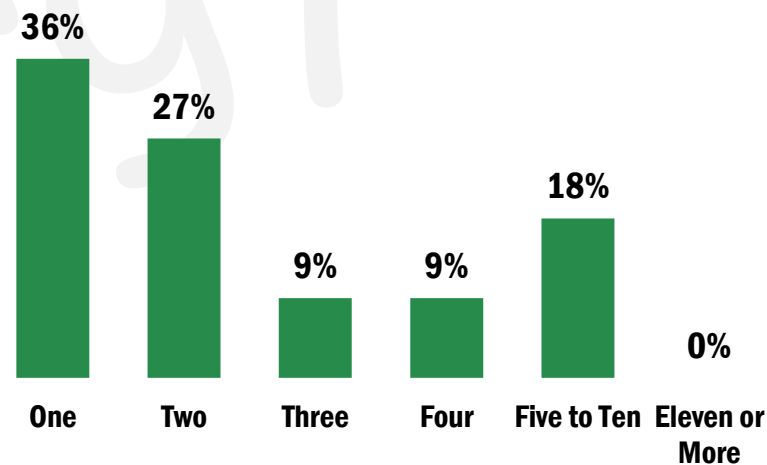
### How many grants did you receive?

**Energy Efficiency Grants**  
25 Recipients



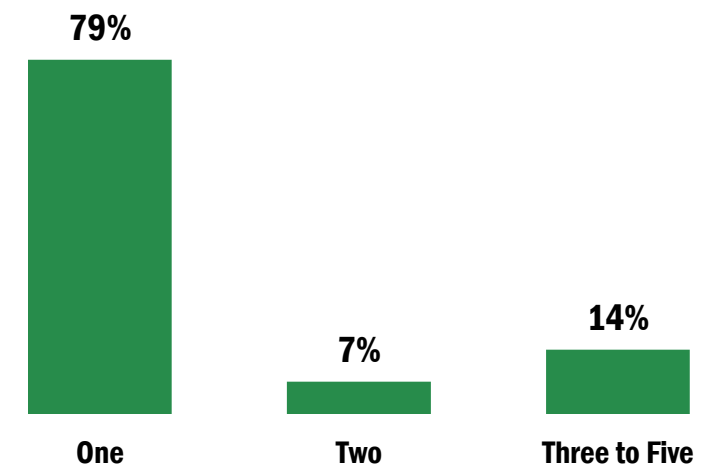
60% received more than one energy efficiency grant, 39% received three grants. 13% (3 EICs) received four to more than thirteen grants, amounting to about 3 communities.

**Renewable Energy Grants**  
14 Recipients



36% of renewable energy grants recipients received one grant, and more than a quarter received two. 3 communities received 5-10 renewable energy grants.

**Office of Energy Innovation Grants**  
24 Recipients



Communities that received grants from the OEI tended to only receive one. Often when communities received multiple, at least one of the grants was for planning.



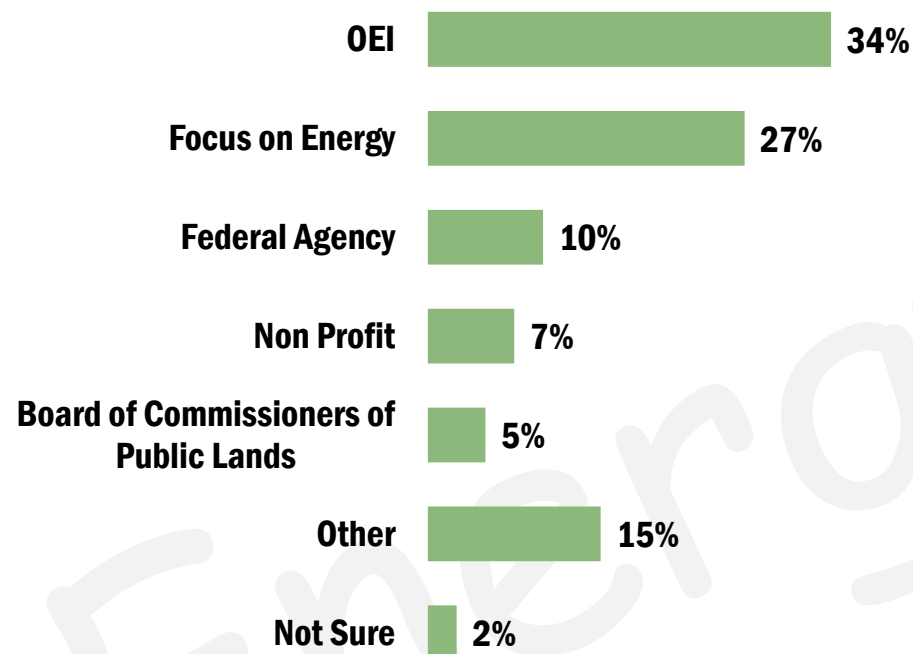
# Energy Independent Communities

## Section 4: Grants and Funding: Energy Efficiency Grants

### Has your EI Community Received Energy Efficiency Grants? Provide Details

#### Source

We gathered information on **41 energy efficiency grants**. **34%**, or 14 of the grants came from OEI. Focus on Energy provided the next highest portion.

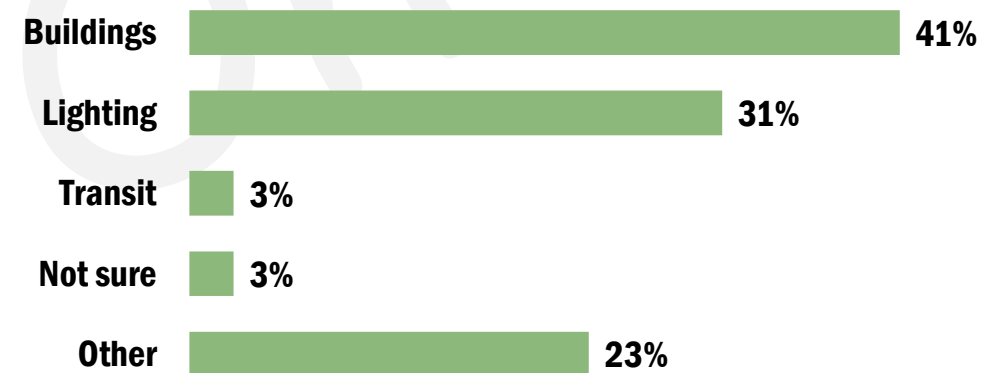


#### Other responses included:

WPPI Energy  
EECBG  
WPS Grant

#### Use

16 of the grants, or **41%**, supported **building related projects**. 12, or **30%**, supported **lighting projects**. Only **one grant** supported **transit projects**. EI communities indicated that some of these grants supported renewable energy projects.



#### Other responses included:

Solar	Track energy usage
Treatment Plant Blowers	Planning
HVAC, lighting	Lighting and Sub
New photovoltaic system	metering installation
Four photovoltaic systems and one thermal solar system	



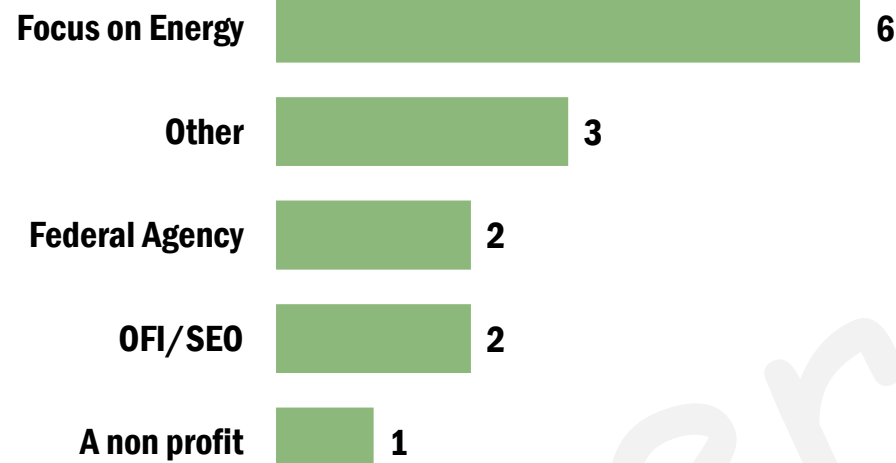
# Energy Independent Communities

## Section 4: Grants and Funding: Renewable Energy Grants

### Has your EI Community Received Renewable Energy Grants? Provide Details

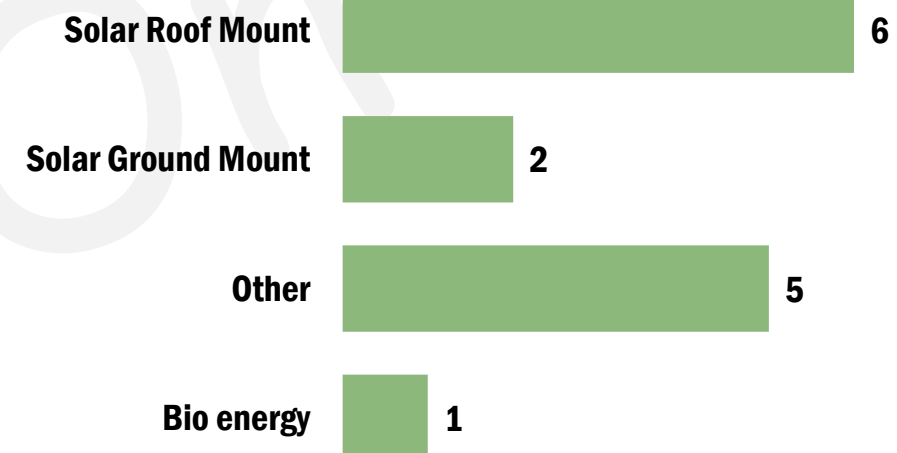
#### Source

Out of the 14 Renewable Energy Grants reported on, **Six** were from **Focus on Energy**, **Two** came from **OEI**.



#### Use

These grants **generally supported solar projects**, but a few supported either **bio-energy, wind, and energy conservation**.



#### Other responses included:

Wind      Energy conservation projects      Community solar

Four roof & ground mounted PV systems; one thermal solar system; and numerous energy conservation projects





# Energy Independent Communities

## Section 4: Grants and Funding: OEI Grants

### Office of Energy Innovation Grants – More Detail

Of the 17 OEI grants we collected more detailed information on, **ten were at least partially dedicated to planning.**

Other grants were used for **educational series, energy efficiency upgrades** like lighting, establishing **baselines**, and a **solar PV system.**

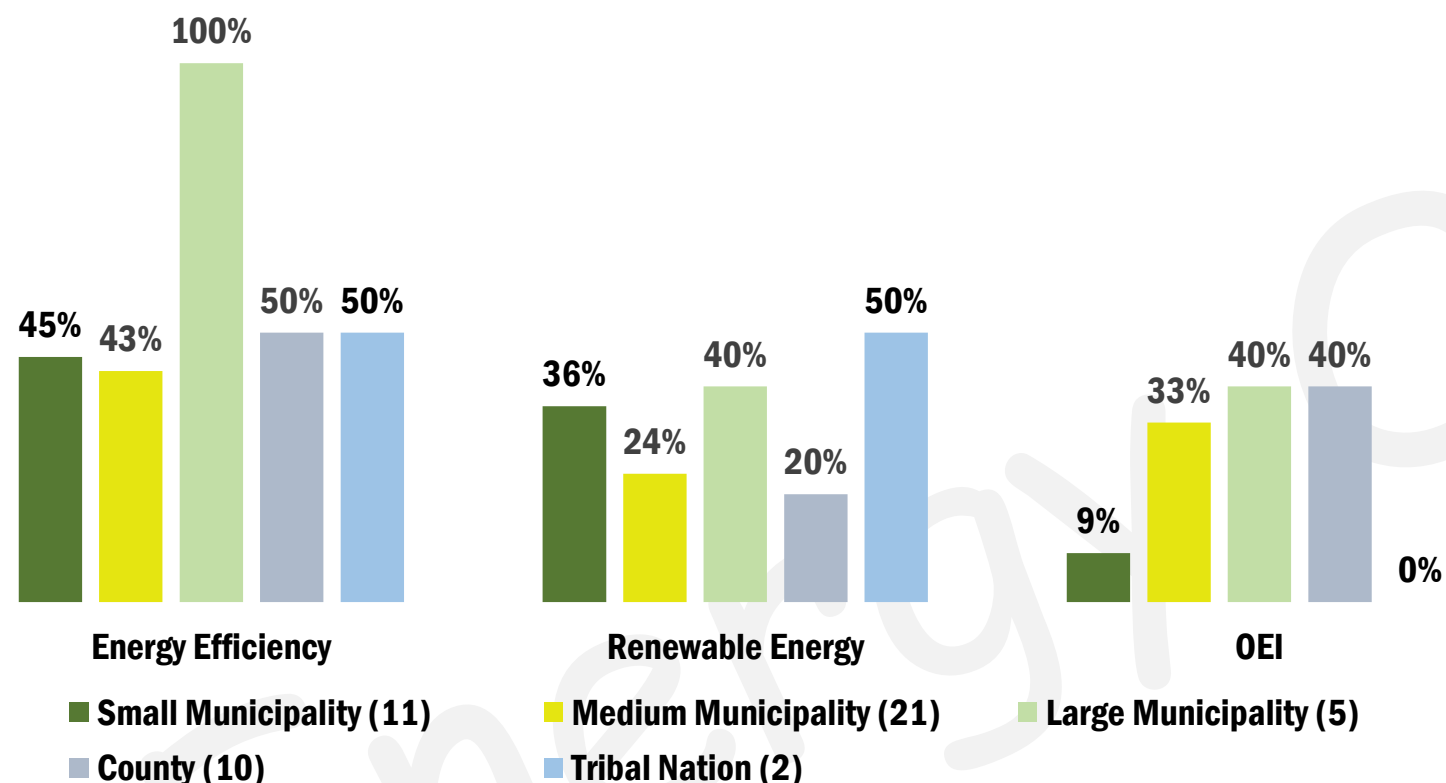
Energy On WI



# Energy Independent Communities

## Section 4: Grants and Funding: OEI Grants

### Telling the Story: Grant receipt by size of community Advanced Analysis



**Municipal Size**  
Large (pop > 40,000)  
Medium (2,501 - 40,000)  
Small (pop < 2,500)

For the most part, there **are not wide differences** between the EI community types/sizes and the rate at which they received grants.

About **half of the communities in each type** received **energy efficiency** grants, except for **large municipalities that all received this type of grant**.

About **one quarter of medium municipalities and counties** received renewable energy grants, while **one third of small municipalities and 40% of large municipalities** received these grants.

**Small municipalities** were **less likely** than other community types to receive **OEI grants**. About **10%** of small municipalities received this grant compared to **30% - 40%** of other community types. **Neither tribal nation reported receiving OEI grants**.

# Energy Independent Communities



## Section 5 Factors Impacting Progress

### Key Questions:

What has prevented or aided EI communities on making progress toward their energy independence goal?

What assistance would be beneficial to them?

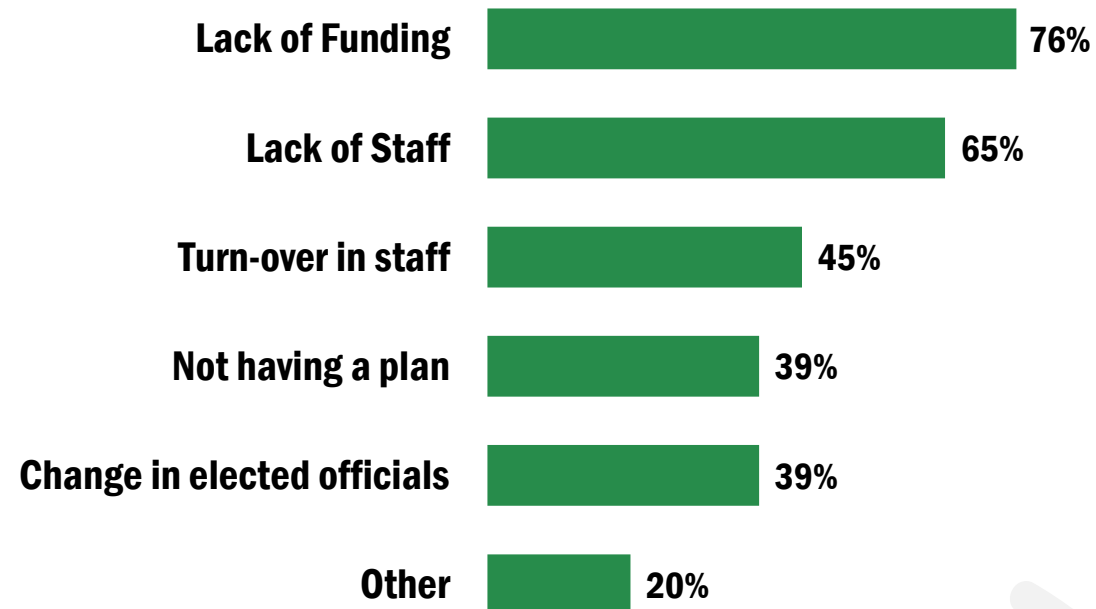


# Energy Independent Communities

## Section 5: Factors Impacting Progress: Limiting Factors

### What factors have limited progress toward your goal?

Select all that apply



**Lack of funding and staff** were the most significant barriers for the EI Communities **affecting three-fourths (37) and two-thirds (32) of the communities**, respectively.

**Change in elected officials** and turn-over in staff accounted for 84% of the barriers

**Not having a plan was a barrier for 40%**, even though a larger proportion of the sample did not have a plan. In another question, **51% of EI communities** indicated they want to create or update a plan.

#### Other limiting factors identified included:

“Not having an active committee that knows about this goal and works directly to act on it. We hope to address the lack of committee soon.”

“Resolution was in support for the county to be funded by this program. We do not receive direct access to funds.”

“Lack of buy in by elected officials”

“Restrictive state laws on renewable energy procurement”

“Budget cycles – timing”

“Interest/buy in”

“Other priorities”

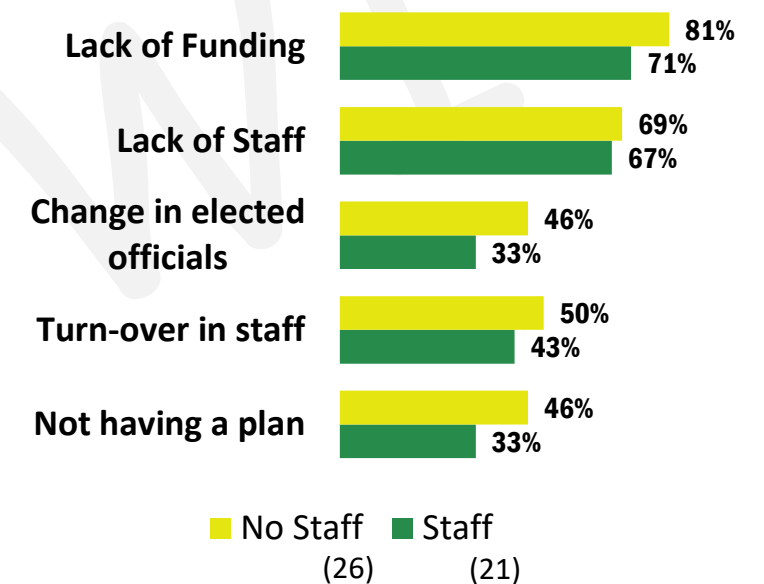
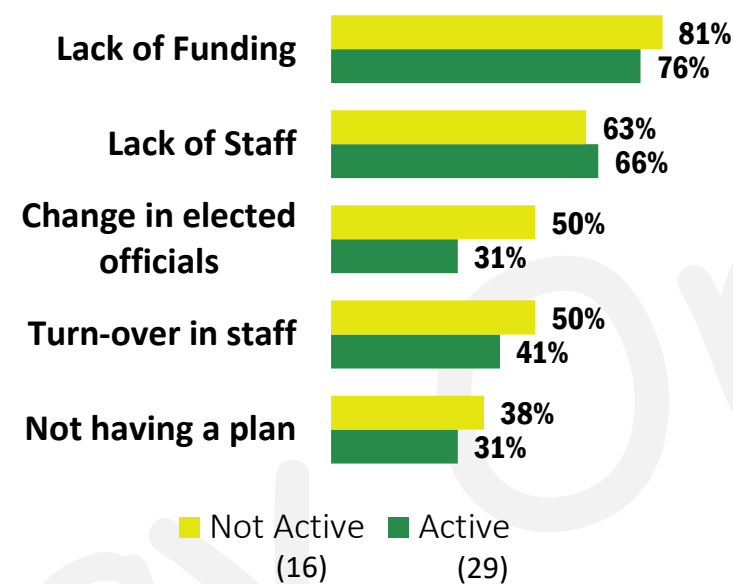
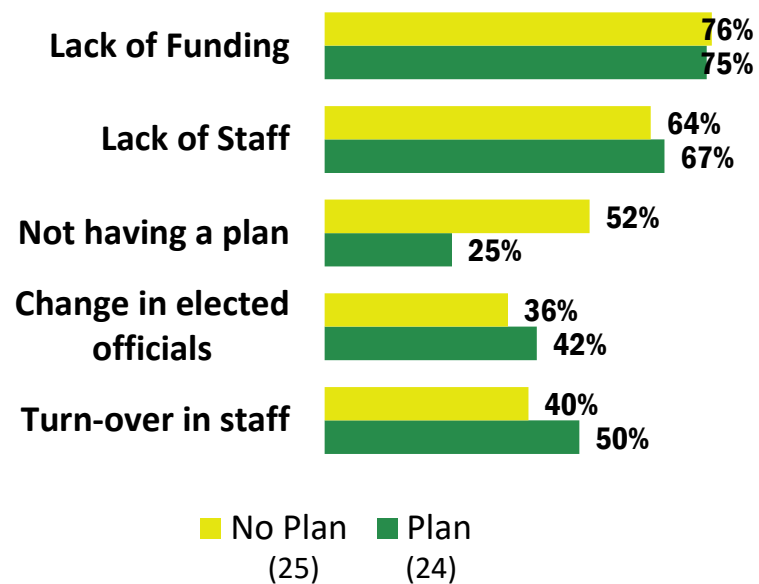
“Lack of State and Federal support”



# Energy Independent Communities

## Section 5: Factors Impacting Progress: Limiting Factors and Communities

### Telling the Story: How limiting factors differ by planning, staffing, or activity Advanced Analysis



Communities tended to **find the factors to be limiting at similar rates** whether or not they had a plan

Communities **without plans** were **twice as likely to indicate not having a plan** was a limiting factor.

Communities **with plans** were slightly **more likely** to indicate that staff **turnover** was a limiting factor

There were **larger differences** between **active and inactive communities** in the limits they faced

More **inactive** communities tended to see, **turnover in staff, change in elected officials, and not having a plan** limiting factors than active communities

Communities **with and without staff** were **even more differentiated** in how they perceived limits.

Communities **without staff** found nearly **all of the factors to be more limiting by at least 10%**, except for a lack of staff where both groups were about equal.



# Energy Independent Communities

## Section 5: Factors Impacting Progress: Reasons for Inactive Communities

El communities that were no longer active, were asked why they were not active.

### Lack of Institutional Structure (5 responses)

- *Significant transition within my position since resolution was signed and the program was not being managed nor influencing county decision-making.*
- *The governing body present at the time of the resolution never put in place a long-term committee to oversee its progress.*
- *Turnover of staff. We no longer have a Sustainable committee*
- *We have no committee and the interest has dropped off mostly talk except for facilities and grounds/parks and recreation department*

### Prioritized Energy Efficiency, not Renewable Energy (3 responses)

- *We installed three renewable energy projects after initial resolution. In recent years, our funding has been focused on energy efficiency projects.*
- *Most of the focus has been on reducing energy use through efficiency. There has not been a coordinated municipal effort on renewable energy until recently.*
- *Currently pursuing energy conservation first before investing in renewable energy sources.*

### Cost Concerns (4 Responses)

- *It is not cost effective*
- *Lack of funding*
- *Given the low cost of current usage, the alternatives were cost prohibitive.*
- *funding restrictions by State Legislature on local governments.*

### Other Responses

- *Not sure what we can do to achieve this goal.*
- *[The EI Community] is working towards transitioning towards renewable energy, but do not have concrete commitments of 25% by 2025.*





# Energy Independent Communities

## Section 5: Factors Impacting Progress: Comments on Limiting Factors

### Space was provided for comments on limiting factors

#### Lack of a Plan or Guiding Strategy

- *The town is not opposed to working on this and the 25 by 25 goal, we just need help organizing.*
- *The original EIC group was coordinated by a part-time person under a grant to a nonprofit group, which has since ended. There is no one person coordinating progress.*

#### Tracking-Related Issues

- *The annual tracking and data entry is a fairly heavy lift for a person not dedicated to energy efficiency*
- *It is hard to track savings (energy and dollar amounts) across departments on all energy efficiency upgrades or policies that have saved us energy and money. There is so far no central spot where all that information is kept or calculated to tell the whole story.*

#### Lack of Commitment or Prioritization

- *Having a lot of other projects/needs going on at any time also takes away from the ability of our Town Board and Plan Commission to work on this type of initiative in an aggressive way.*
- *[Our EI Community] has so many other problems that this has become a low priority.*
- *Lack of County government imperative, funding and political priority.*
- *It is not seen as practical by the majority of the elected officials in office.*

#### State Laws or Other Policies

- *Restrictive energy procurement laws and interconnection mean we are limited by what our utilities will allow*
- *Up front costs cannot be absorbed with tax restrictions set by the State.*



# Energy Independent Communities

## Section 5: Factors Impacting Progress: Comments on Limiting Factors

### Other comments about limiting factors

#### A Lack of Capacity or Other Staffing Barriers

- Huge turnover is staff after the initial resolution was adopted and the information not being forwarded to the new staff.
- Our time is spent with FEMA and WEM and anything else that is not a priority to get done we do not have the staff or time to do.
- Lack of a certified energy manager and full-time sustainability coordinator to take things farther
- With a small staff team that has recently turned over - and a large number of projects and tasks to complete, the City simply has not given it the attention it deserves.

#### Funding Issues

- We [tried] to work with several renewable energy developers... to find a project that would work for us, but the developer[s] was unable to find a project large enough to work for their PPA model.
- Financing for large capitol improvements.
- Funding for major equipment replacement.

#### Prioritization of Energy Efficiency over Renewable Energy

- There has not been the political will as of yet to do a municipally financed renewable energy project that has a payback period of around 20 years or more, particularly while there are still energy efficiency improvements for municipal operations that have a faster ROI.
- We have always recognized that energy conservation is the best first-step towards energy independence and we've put a lot of effort into projects that will reduce demand and save energy.
- The City would like to move toward reducing its energy consumption - both for sustainability and cost-efficiency reasons

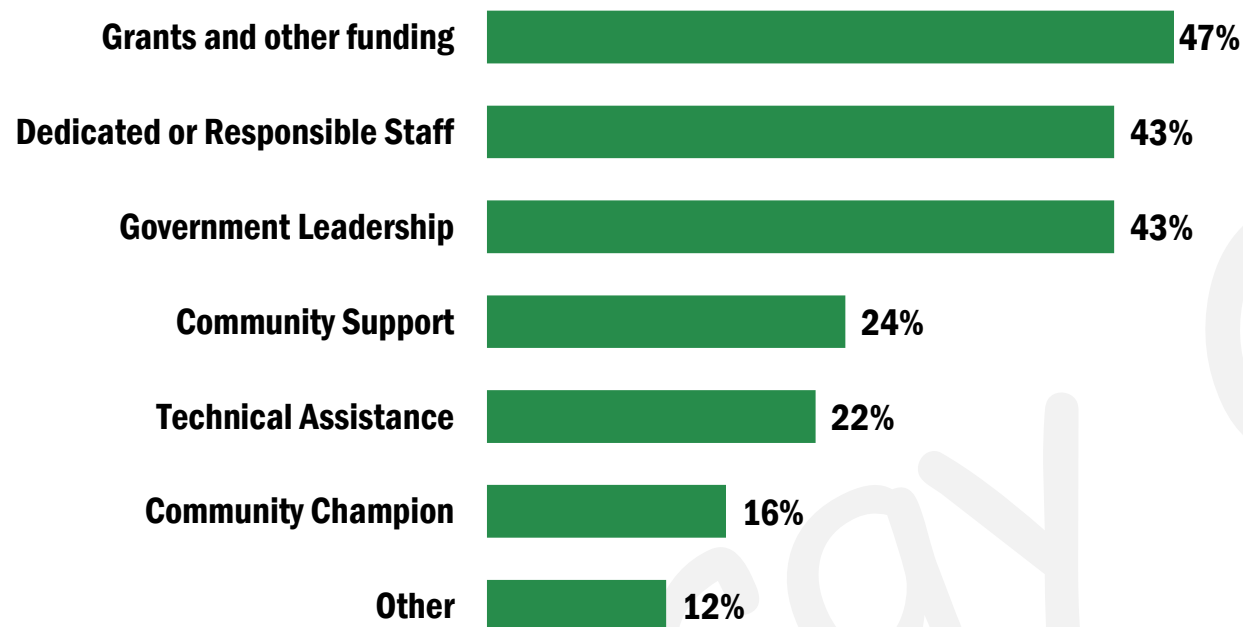


# Energy Independent Communities

## Section 5: Factors Impacting Progress: Helpful Factors

**What factors have been the most helpful to your EI community in making progress towards its goal?**

Select up to three



**No single factor stood out as most helpful** by a majority of the EI communities

**Grants and funding, staff, and government leadership** were **equally the most helpful** factors, each helping around **45%** of the communities

**Community Support and Technical Assistance** were helpful to just under **one quarter** of EI communities.

### Other helpful factors identified included:

**Electric Utility**

**Technology upgrades**

**Help from Chequamegon Bay Renewables and Next Energy Solutions in examining our power bills and helping us come up with a solar installation budget**

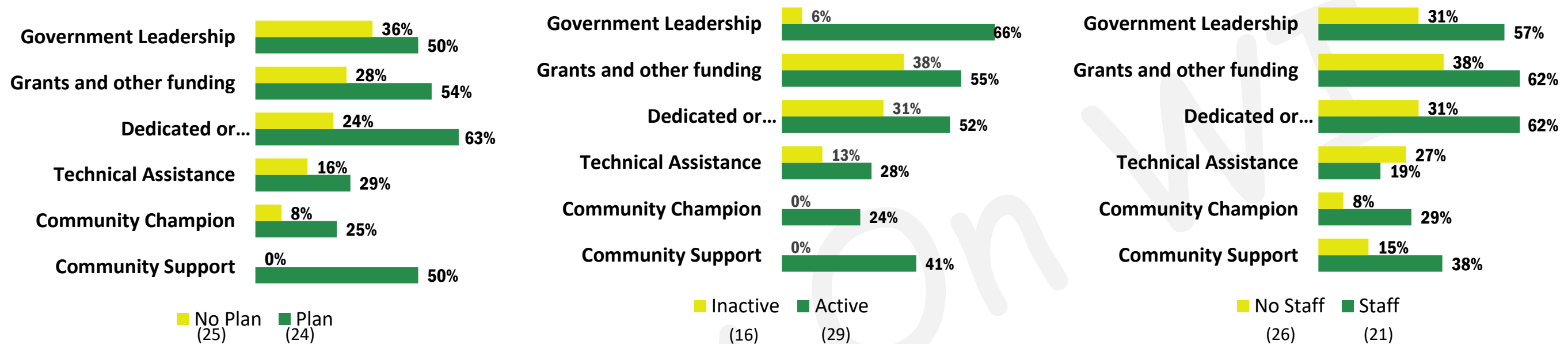


# Energy Independent Communities

## Section 5: Factors Impacting Progress: Helpful Factors and Communities

### Telling the Story: How helpful factors differ by EI communities that have plans, staff, and are active

Advanced Analysis (% of communities identifying factor as helpful)



Communities **without a plan** found all the factors to be **less helpful** than those with a plan.

**No communities without a plan** identified **community support** as helpful.

Communities **with a plan** found **dedicated or responsible staff** to be the **most helpful** factor, **followed by** grants, leadership, and community support.

Communities **without a plan** had a different most helpful factor, of **government leadership** followed by grants, staff, and technical assistance.

**Inactive** communities were much **less likely** to find all of these **factors helpful**. **No inactive** communities found **community support** or **community champions** to be helpful factors.

The **most helpful** factors for **inactive communities** were **grants** and **dedicated staff**, which helped 38% and 31% of inactive communities, respectively.

**Government leadership** was identified as the **most helpful** factor by **active communities**, with **two-thirds** identifying it as helpful. **Grants and staff** were the next two helpful factors, followed by **community support**, which aided **40%** of communities.

EI communities **without staff** found **all the factors** to be **less helpful** than communities with staff, **except for technical assistance** which was far less helpful for communities with staff.

The **most helpful** factors for communities **without staff** are **grants and funding**, identified by nearly **40%** of communities, followed by **government leadership** and **dedicated or responsible staff**, identified by **31%** each.

Communities **with staff** were most aided by **staff** and **grants**, identified by **62%** of these communities. The next most helpful was **government leadership**. The other factors were somewhat less helpful.



# Energy Independent Communities

## Section 5: Factors Impacting Progress: Comments on Helpful Factors

In space for other comments, EI Communities elaborated on several supporting factors

### Assistance from Partners

- *[Our] utility is committed to the goal*
- *Xcel Energy's shift in renewable energy required no local assistance to reach the goal*
- *The help received from Focus on Energy has been instrumental in helping our staff determine the most efficient energy improvements for their respective departments.*
- *Focus on energy site visits are critical.*

### Funding Support

- *Understanding funding mechanisms is critical*
- *State grants have helped find the money*
- *Brown County would do more renewable energy projects with more grant funding.*
- *Grants for projects make it much easier to sell projects.*
- *No funding or effort to support allowance for increased taxes to make upgrades at state level.*

### Government Stewardship...

*Our Mayor and Common Council are supportive...*

*There is a level of community support and government leadership here....*

*Strong leadership by the past two county executives has been key.*

*We simply need to re-establish a leadership structure who will forward this initiative.*

### ... often is not enough

*....However, we have fiscal limitations and state regulatory policy barriers.*

*....but it has not been enough to overcome some of the fiscal barriers to take up projects that don't also improve municipal costs in the short to medium term.*

*Town Board agreed that solar is a good idea as long as financially beneficial to the Town.*

### A Model for Building Support:

**“It helped to build a foundation in sustainability** first through: creating a Sustainability Committee, creating a **Sustainability Plan** with a lot of public engagement, a climate **referendum showing community support**, a climate resolution for 100% renewable energy, **hiring a half time and then full time sustainability coordinator**, and then receiving a **large OEI grant** that includes collaboration and a **creation of a roadmap** to meet goals. Each step built upon the last one, and we **used each step as leverage for the next ask or action.**”





# Energy Independent Communities

## Section 5: Factors Impacting Progress: Desired Assistance

What kind of assistance would be helpful in moving toward your goal?

Select all that apply



**None of the factors stood out** across all of the communities.

**Planning templates** and **educating local officials** were reported to be **most helpful overall**, by **over 40%** of EI Communities

**Data management/reestablishing energy baseline** and **grant writing assistance** were selected by just **under 40%** of the EI Communities.

**Other types of assistance identified include:**

*Time      Funding      Staff*

*Change in Federal and State support*

*A powerful state energy office, fully funded and who works with Extension to carry out a lot of technical assistance statewide*





# Energy Independent Communities

## Section 5: Factors Impacting Progress: Comments on Desired Assistance

In space for other comments, EI communities reported several different types of assistance

### Educating Officials

“If someone would come talk to our Town Board and or Plan Commission to give us information about how other communities are working towards this goal, it would be helpful. There are lots of areas where we could reduce energy use if we had help knowing how to do it.”

“Educating local officials about the importance of this program would likely help stress the importance of reducing energy use, even if there is not a short-term payback for doing so.”

“How to create a climate action plan and model emission goals- maybe via a state plan and down to locals?”

### Helping Overcome Staff and Funding Limitations

“The other types of assistance would help to overcome the issues of limited staff resources and the funding component of these projects.”

“Grant writing is rough!”

“Any and all help would be beneficial especially grant funding opportunities”

“Ask the State Legislature to allow local governments to exceed levy limits to support EIC program without the need for a referendum.”

“Lack of staffing to complete upgrades and projects is the biggest obstacle due to lack of time.”

### Demonstrate Fiscal Benefits

“All energy solutions need to bring in a cost benefit to the community. We are a small community and very tight budgets.”

“Making the business case for a muni CEM staffer and/or sustainability manager”

### Cooperation

“I would like to see local governments band together to more effectively push renewable energy policies with our utility, Public Service Commission and other state policy makers”

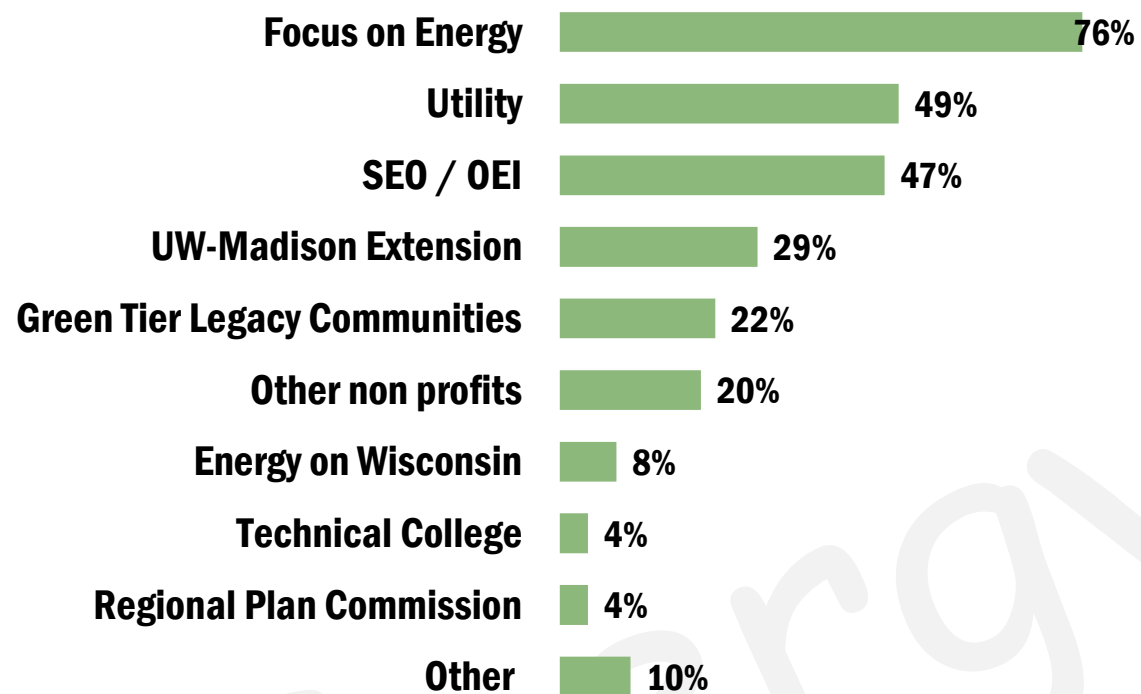
“Administrative strategies for executing group purchases of renewable resources or energy efficiency or fleet resources.”



# Energy Independent Communities

## Section 5: Factors Impacting Progress: Partners

### Who have you partnered with on energy initiatives?



**Focus on Energy** was the most frequent partner, aiding  $\frac{3}{4}$  of EI communities.

**Half** the communities worked with a **utility** and **OEI**

**1/3** of EI communities partnered with **UW-Madison Extension**

# Energy Independent Communities



## Section 6 Community Engagement

### Key Question:

How do EI communities engage non-government members of the community in achieving energy independence for the community?



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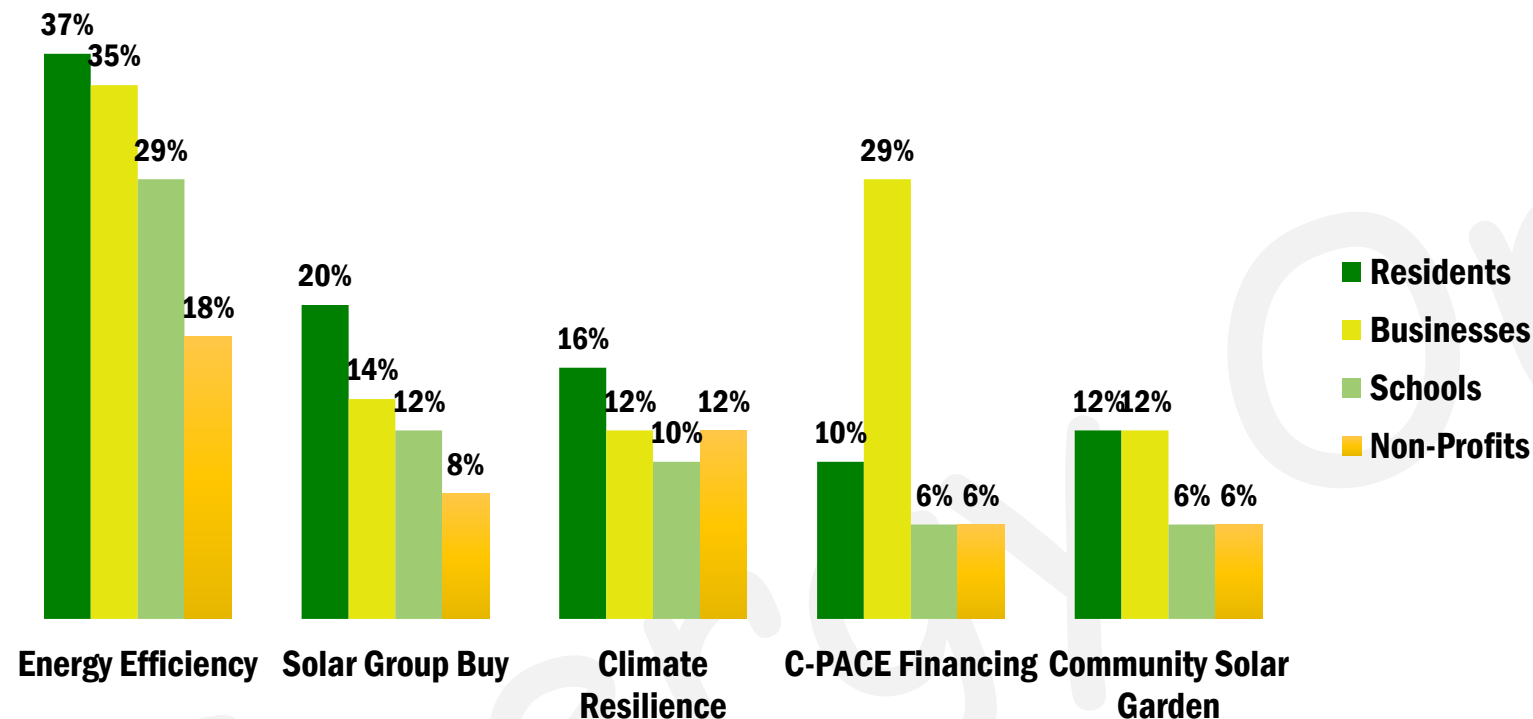


# Energy Independent Communities

## Section 6: Community Engagement: Facilitating Engagement Summary

Has your EI Community facilitated community member involvement in any of the following?

(percent reporting yes)



While EI Communities focus on energy used in government operations, **37%** of EI Communities **did outreach to residents** and **35%** to businesses on **energy efficiency**

A **fifth** of EI communities **engaged residents** in a **Solar Group Buy program**

Nearly **1/3<sup>rd</sup>** of EI Communities **engaged businesses** on **Commercial PACE financing**.

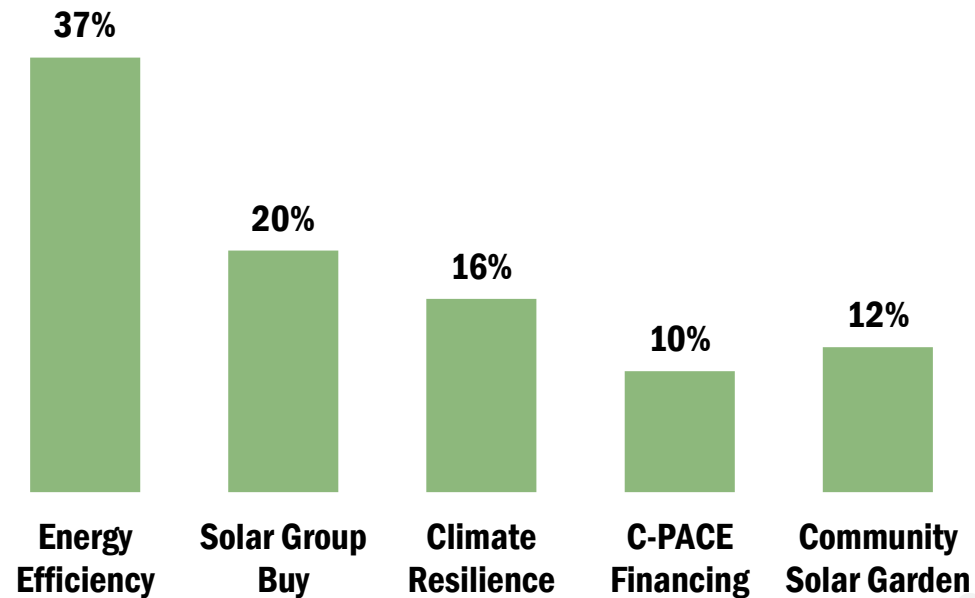
EI Communities **generally did not facilitate non-profit involvement**, but they **were more inclined** to do so on **energy efficiency** and **climate resiliency**



# Energy Independent Communities

## Section 6: Community Engagement: Facilitating Residents and Businesses

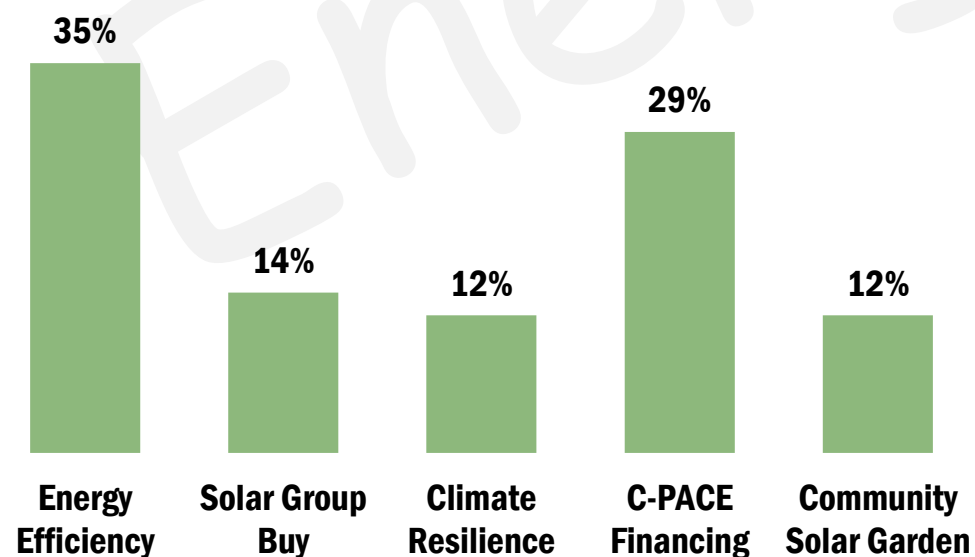
Does your EI Community facilitate resident involvement in the following?



EI Communities facilitated resident involvement **most** with **energy efficiency** activities.

Fewer than **1 in 5** communities facilitated involvement in **solar group buy opportunities** or **climate resilience**, and **1 in 10** in **Community Solar Gardens**.

Does your EI Community facilitate business involvement in the following?



Around **30%** of EI communities facilitated involvement for **businesses** with **energy efficiency** and **C-PACE financing**.

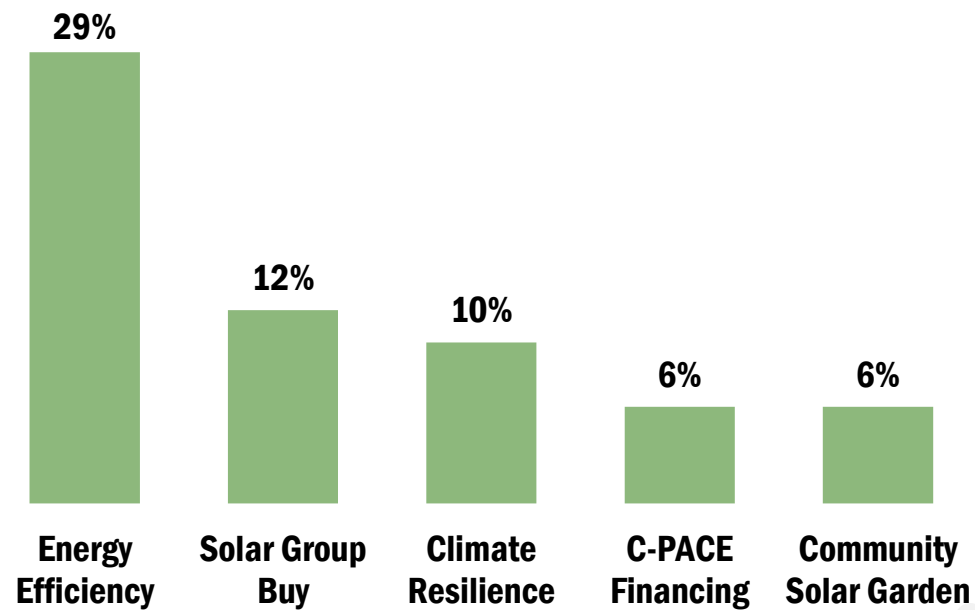
Fewer than **15%** facilitated business involvement in **climate resilience** or **solar-power opportunities**.



# Energy Independent Communities

## Section 6: Community Engagement: Facilitating Schools and Non-Profits

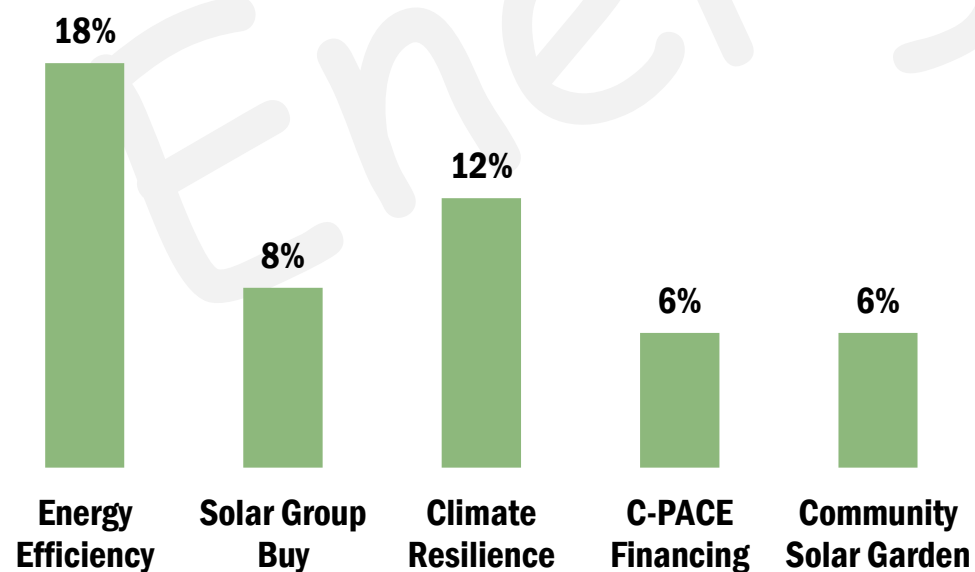
Does your EI Community facilitate school involvement in the following?



**30%** of EI Communities facilitate schools involvement with **energy efficiency**.

Around **1 in 10** communities facilitate involvement in **solar group buys** or **climate resilience**.

Does your EI Community facilitate non-profit involvement in the following?



**18%** of EI communities facilitate involvement of non-profits in **energy efficiency**.

**12%** of EI communities involve non-profits in **climate resilience**, but **only 8%** involve them with **solar opportunities**.

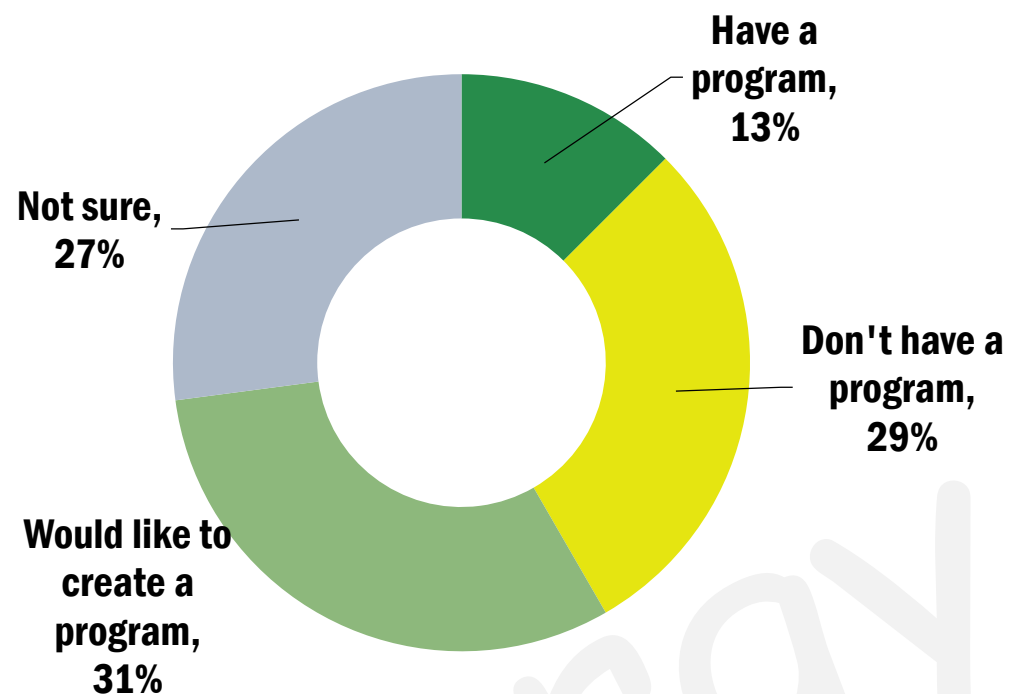




# Energy Independent Communities

## Section 6: Community Engagement: Low-Income Assistance Programs

For Energy Efficiency or Renewable Energy Adoption, does your EI community have any programs that help low-income individuals move towards Energy Independence?



About **1 in 10** communities **have a program** to help Low-Income individuals, or 6 communities. **6 in 10** do not.

About **half** of the EI communities that do not have one **are interested in creating** one.

**One quarter** are **unsure** if they have a **program** for low-income individuals.

### Communities with Programs:

City of Monona  
Dane County  
Prairie Du Chien  
River Falls  
City of Sheboygan  
City of Milwaukee

### About the Programs

*Putting solar power on affordable housing.*

*We supported solar projects with our Housing Authority. We tried to get the utility to offer community solar to low income residents, but they declined.*

*PACE for buying community solar*

*Renew Monona Loan Program*

CDBG

*Housing Rehabilitation Loan Programs*



# Energy Independent Communities

## Section 6: Other Comments on EI Program

### What other comments do you have on your EI community?

"No one was tracking this resolution and commitment until your program representatives reached out to me. Ignorant of the commitment, I was already implementing an Energy Efficiency policy to reduce costs and various facilities-related burdens put upon the staff to regulate the building temps. I would be interested in some support but there is plenty of work internal to the county just educating the 900+ staff to be more energy efficient."

"With the SEEC now established we are working on ways to improve energy independence more than in the past. We are planning to join the DNR Green Tier Legacy Community Charter to set a framework to work toward sustainability."

"The City of Milwaukee has robust clean energy and energy efficiency programs through our Environmental Collaboration Office. We have Wisconsin's first Commercial PACE program, a Milwaukee Shines solar program with group buys and other projects, the Better Buildings Challenge energy efficiency program for commercial buildings, and the Me2 home energy efficiency loan program. We've done a \$2m energy saving performance contract with our Central Library, will have a municipal energy efficiency plan done by January 2020, we've pursued innovative financing for solar, and we are trying to work collaboratively with We Energies to construct solar through their programs. It's all in our most recent ReFresh Milwaukee 2018 Progress Report." [milwaukee.gov/eco](http://milwaukee.gov/eco) [milwaukee.gov/climate-action.htm](http://milwaukee.gov/climate-action.htm)

"There are members of our town that have achieved 25/25, Leopold Legacy Center, Intl Crane Foundation. Public School sold to private school. County does our roads. We have and will change our lighting fixtures when available. Utility charges are so low that cost effective projects are not currently feasible."

"I believe that there is and will be future support behind these initiatives. As of the survey, this is the first time the current Mayor, most Council members, or I had ever heard of the resolution we passed and thus the commitment we made. However, I anticipate that the Council, staff, and community members would show a renewed commitment. Staff time and capacity will likely remain a barrier that we will have to overcome."

"We have many solar projects coming online this year that aren't reflected in our 2019 statistics. Three solar installations will go on municipal buildings this year and our first RER utility agreement with MGE (from a local solar array at our airport) will be energized in 2020. By the end of 2020 we've calculate that we will supply 50% of our city's electricity use with renewable energy. We also provide TIF incentives for solar and geothermal for private and commercial developments in our two TIF districts. So far we've incentivized 814kW of solar in private development through our city's TIF policy."

"The EIC concept was/is a brilliant platform to normalize actions state-wide and glad is it gaining greater traction again."

"Brown County received an EPA Energy Star rating for the following county-owned office buildings: Sophie Beaumont Building Northern Building UW-Extension Building (sold in 2018) Brown county has completed the following LEED rated new buildings: Community Treatment Center – LEED Gold (2009) Airport Snow Removal Equipment Storage Bldg – LEED Gold (2010) 911 Communication Center – LEED Silver (2009 ) Aircraft Rescue Fire Fighting Facility – LEED Silver, (2012) Sheriff's Office – LEED certified (2012) STEM Innovation Center LEED Silver equivalent, (2019) Brown County has seriously investigated bio-diesel fuel and natural gas for its Highway and Sheriff vehicle fleets without success."

"Thank you so much for this survey! Some of the information provided is estimated or limited at this time. Please reach out for more details on any of the particulars. I'd love to help move WI communities forward on energy independence efforts."

"Grant funding is essential for capitol improvements to meet our energy goals. Long range planning for the region via Office of Energy Innovation and UW-Extension."

"We would like to be involved going forward."

# Energy Independent Communities



## Initial Conclusions



### **10 years later, the status of EI communities' progress toward energy independence is mixed:**

- ❖ **The vast majority of communities are making progress toward their goal of developing local renewable energy and improving energy efficiency**
  - 76% of EI communities had implemented policies and practices to save energy
  - 88% of EI communities had made energy efficiency upgrades to at least one usage area, while 50% had made upgrades to at least 3 areas
  - 45% of communities had installed solar projects
- ❖ **But progress toward the goal of 25 by '25 is highly varied and not uniform in how measured and reported. Further data gathering and standardization needs to occur to report accurately.**
  - 25% were below 5% renewable energy
  - 10% were above 20% renewable energy
  - 22% didn't know their renewable energy
- ❖ **At least one third of communities have not sustained their efforts and invested in local renewable energy and have many energy efficiency improvements left to make**
  - 40% of communities have not invested in any renewable energy
  - 22% of EI Communities installed more than one source of renewable energy
  - 67% of communities have not upgraded fleet vehicles, but only 18% have not made upgrades to buildings



### The successful EI communities had one or more of the following ingredients:

#### ❖ An Energy Independence Plan

- Communities with plans were twice as likely to be actively working towards the goal, 83% versus 45%
- Communities with plans were nearly 3x as likely to track their energy, 83% versus 28%, and were more likely to know their energy spending.
- Communities with plans were 3x more likely to have completed at least one solar project and 3.5x more likely to have completed more than one;
- 80% of communities without plans had no solar project versus 33% of communities with plans
- Findings support the adage: *You can't manage what you don't measure*

#### ❖ Having a plan associated with having a staff person, which improves capacity and focus of the EI program

- 70% of communities with a plan had a staff person, versus just 17% of those without a plan

#### ❖ These factors may be influenced by community level factors

- Communities without a plan did not identify community support as helpful, while 50% of communities with plans did
- 36% of communities without a plan identified government leadership as helpful, while 50% of communities with plans indicated government leadership as helpful





### **Inactive Communities commonly faced these barriers:**

#### **❖ Inactive Communities reported several themes of barriers:**

- The many benefits of energy independence became out-weighted by the near-term problems facing the communities
- EI efforts were not institutionalized through committees, staffing, or passed down during transitions and were forgotten over time
- Government leaders are hesitant about the cost and cost effectiveness of these efforts and do not make them a priority
- 52% of communities without plans reported that not having a plan was a barrier, versus 25% of communities with plans

#### **❖ A few communities noted state energy procurement laws restricted their options with utilities**

#### **❖ EI Communities put more work into energy efficiency upgrades and were not as far along with developing local renewable energy**

- Energy Efficiency first reduces the amount of renewable energy needed to power operations
- Energy Efficiency projects are often more feasible and require less land or other conditions that make renewable energy projects more difficult
- Some EI communities felt that their utilities efforts to increase renewable energy would be enough for them to achieve their goal





### Other Key Conclusions

- ❖ Few EI Communities were facilitating community engagement in their efforts
- ❖ Communities invested primarily in solar PV renewable energy projects rather than a breadth of project types
- ❖ Communities of different sizes presented different pictures
- ❖ Communities cite funding and staffing shortages as most common and significant barriers, but want assistance with sample plans, education for local officials, and help in creating energy baselines

### Areas for Improvement Going Forward

- ❖ Communities need help with measurement, tracking, and standardized reporting of their renewable energy status
- ❖ Communities need assistance sustaining these efforts so that changes in staff, elected officials, or other priorities do not stifle progress

# Energy Independent Communities



## Recommendations



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# Energy Independent Communities

## Initial Recommendations

### Measurement and Data Tracking

#### ❖ Standardize Measurement & Reporting

- ❖ **Create formula** with specified inputs to assess % renewable energy used by each EI or other Community to ensure consistent and comparable data
  - Track and Include % renewables in utility mix annually
- ❖ **Collect data annually** to track progress toward initial 25% x '25 Renewable Energy goal locally, then 100% electricity goals, heating and transportation fuels & carbon, for government operation and community-wide

#### ❖ Provide Data Management Assistance

##### Options:

- ❖ State hires a staff person to work with communities
- ❖ Focus on Energy trade allies provide assistance in regions
- ❖ OEI issues RFP for competitive bid on providing data collection & tracking assistance
- ❖ Utilities assist with barriers to data compilation- a significant opportunity

#### ❖ Report Data Annually

- ❖ **Report Results** annually statewide in media to sustain momentum
- ❖ **Recognize Communities** that reach benchmarks – Governor's Awards



# Energy Independent Communities

## Initial Recommendations

### ❖ Provide Funding and Assistance

- ❖ Creating or updating Energy Independence Plans
- ❖ Grant writing
- ❖ Educating local officials
- ❖ Creating programs to help low-income communities access energy efficiency and renewable energy

# Energy Independent Communities



## Appendices



# Energy Independent Communities

## Appendix 1: Full List of EI Communities Survey Respondents

### Counties

Ashland County  
Barron County  
Bayfield County  
Brown County  
Dane County  
Eau Claire County  
Green Lake County  
Polk County  
Shawano County  
Walworth County

### Cities

#### LARGE CITIES

City of Eau Claire  
City of La Crosse  
City of Madison  
City of Milwaukee  
City of Sheboygan

#### SMALL CITIES

City of Bayfield  
City of St. Croix Falls  
City of Shell Lake  
City of Washburn

#### MEDIUM CITIES

City of Altoona  
City of Baraboo  
City of Beaver Dam  
City of Evansville  
City of Fitchburg  
City of Jefferson  
City of Kaukauna  
City of Marshfield  
City of Middleton  
City of Monona  
City of Muskego  
City of Oconomowoc  
City of Platteville  
City of Prairie Du  
Chien  
City of Plymouth  
River Falls Municipal  
Utilities  
City of Viroqua  
City of Wausau  
City of Whitewater

### Town and Villages

Town of Bayfield  
Town of Berlin  
Town of Fairfield  
Town of Gresham  
Town of La Pointe  
Town of Princeton  
  
Village of Fox Crossing  
Village of Marquette  
Village of Viola

### Tribes

Oneida Nation  
Red Cliff Band of Lake Superior Ojibwe





# Energy Independent Communities

## Appendix 2: Attribution

### Communities permitting public attribution of their progress:

Bayfield County  
Green Lake County and School District

City of Altoona  
City of Bayfield  
City of Evansville  
City of Milwaukee  
City of Prairie Du Chien  
City of St. Croix Falls  
City of Sheboygan

Village of Fox Crossing

### Communities wishing to be contacted prior to public attribution of their progress:

Ashland County  
Barron County  
Brown County  
Dane County  
Eau Claire County  
Polk County

City of Beaver Dam  
City of Eau Claire  
City of Fitchburg  
City of Kaukauna  
City of La Crosse  
City of Madison  
City of Middleton  
City of Monona  
City of Muskego  
City of Oconomowoc  
City of Plymouth  
River Falls Municipal Utilities  
City of Viroqua  
City of Washburn  
City of Wausau

Town of Bayfield  
Town of La Pointe

Oneida Nation  
Red Cliff Band of Lake Superior Ojibwe

### Communities not permitting public attribution of their progress:

Shawano County  
Walworth County

City of Baraboo  
City of Jefferson  
City of Marshfield  
City of Platteville  
City of Shell Lake  
City of Whitewater

Town of Berlin  
Town of Fairfield  
Town of Gresham  
Town of Princeton

Village of Marquette  
Village of Viola



# Energy Independent Communities

## Appendix 3: Survey Questions\* (The survey was administered digitally through Qualtrics, looping respondents to various sections based on their responses)

### Energy Independent Communities Survey

#### Start of Block: Introduction and Screening Section|

Hello,

Your municipality/tribal government/school district is among approximately 150 that passed an Energy Independent Community (EIC) Resolution. The resolution committed your community to **generate at least 25% of energy used for local government operations from renewable energy locally by 2025**. It was referred to as the 25 by '25 goal and includes electricity, heat, and transportation fuel.

There are six years until 2025 to reach your 25% milestone. You are receiving this survey so that we can: 1) gauge the level of activity statewide toward energy independence; and 2) learn how UW-Madison Extension and the Office of Energy Innovation can help your community to be successful.

If you are unsure of why you are receiving this survey, or are not familiar with the Energy Independent Communities (EIC) program, you may be able to learn more by contacting Megan Levy at [Megan.Levy@Wisconsin.gov](mailto:Megan.Levy@Wisconsin.gov) or by visiting here: <https://energyonwi.uwex.edu/energy-independent-communities> or here: <https://psc.wi.gov/Pages/Programs/OEI/EnergyIndependentCommunities.aspx>

#### About the Survey

The survey asks for information regarding your community's efforts to measure energy consumption, make improvements on energy efficiency, install renewable energy systems, obtain funding, and other items related to your energy independence goals. The survey will ask about the character of your EIC including its structure and activities. We will inquire about actions that may have been taken as many as 10 years ago.

#### Survey Time

Due to the level of detail we are seeking in this survey, it will take around 30-60 minutes to complete. Several questions may require some searching for documents or asking other staff about the impact of specific projects. **Due to its length, you will be able to save and exit the survey to resume at another time.** We hope you will dedicate the necessary time to identifying and reporting this information. The results will help us target funding and develop outreach that **will help your community to achieve your energy independent community goals.**

#### Confidentiality and Anonymity

The responses from this survey will be shared with team members from UW-Madison Extension to representatives from the State Office of Energy Innovation, and/or other partners, in order to develop programming and materials. The identity of your Energy Independent Community and its progress may be attached to those materials which may be posted for public consumption on program websites, or in other capacities. Your contact information may be saved in order to follow up regarding how we may learn from your experience, or assist you in your goals. Your contact information, however, will NOT be posted publicly. The survey asks about your comfort with this information being shared, and if you have other concerns you may reach out to our team through the channels posted below.

If you have any questions about the survey, please reach out to Sherrie Gruder; (608) 262-0398; [sherrie.gruder@wisc.edu](mailto:sherrie.gruder@wisc.edu) or Megan Levy; [Megan.Levy@Wisconsin.gov](mailto:Megan.Levy@Wisconsin.gov)

We thank you very much for your participation.

Page Break



# Energy Independent Communities

## Appendix 3: Copy of Survey

### Screening Section

The first section will help ensure that you are the most appropriate person to fill out this survey. We are seeking a respondent who is knowledgeable about your **Energy Independent Community's (EIC)** efforts, including grants and funding sources, since 2009.

If you believe you are not the most appropriate person, please complete this screening section and we will be in touch with the appropriate person. PLEASE DO NOT FORWARD IT TO THE PERSON YOURSELF, as we will be tracking the status of the surveys.

By "**Energy Independence**", we mean efforts to increase renewable energy and improve energy efficiency to reduce dependence on fossil fuel sources.

By "**Community**" we are referring to local government operations i.e. buildings, streetlights, and fleet fuel. This is NOT about commercial and residential energy use.

What municipality, tribe, or school district are you with?

---

Are you familiar with your EIC's efforts to generate 25% of your energy from renewable energy sources locally by 2025 as an EIC?

☐ Yes (1)

☐ No (2)

If you are not familiar, please provide us with the name, email, and position for the person who is and we will send the survey to them.

---

Given that the purpose of the survey is to learn about the status of your EIC program and how we can help you to meet your clean energy goals, are you the best person to fill it out?

☐ Yes (1)

☐ No (2)

If you are not the best person, please provide us with the name, email, and position of the person who is and we will send the survey to them.

---

Are you part of a group EIC with other partners? If yes, which type of partners? Choose all that apply.

- ☐ School District (1)
- ☐ Water Treatment Plant (2)
- ☐ Water Utility (3)
- ☐ Transit Agency (4)
- ☐ Community College or Tech School (5)
- ☐ American Indian Tribe (6)
- ☐ County (7)
- ☐ Municipality (8)
- ☐ Sustainability Group (9)
- ☐ Other (10) \_\_\_\_\_
- ☐ None (11)



# Energy Independent Communities

## Appendix 3: Copy of Survey

Is your EIC actively working toward the goal of generating at least 25% of its energy from renewable energy sources locally by 2025?

- ☐ Yes (1)
- ☐ No (5)
- ☐ Don't know (6)

If you don't know, could you please provide us with the name, email, and position of the person who may know?

\_\_\_\_\_

Please briefly example why your EIC not working on the goal of generating at least 25% of its energy from renewable energy sources locally by 2025?

\_\_\_\_\_

Do you know what percent of your EIC's energy is generated from renewable energy sources currently?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not Sure (3)

What percent of your EIC's energy will come from renewable sources by the end of 2019? (This includes electricity, gas, and fleet fuel)

0 10 20 30 40 50 60 70 80 90 100

Percent Renewable ()



To the best of your knowledge, what is the percent of your EIC's energy that will come from renewable sources by the end of 2019? If you do not have an informed best guess, that is okay.

- ☐ None (1)
- ☐ Between 1% and 5% (2)
- ☐ Between 6% and 10% (3)
- ☐ Between 11% and 15% (4)
- ☐ Between 16% and 20% (5)
- ☐ Between 21% and 25% (6)
- ☐ Between 26% and 50% (7)
- ☐ More than 51% (8)
- ☐ I do not have an informed guess or estimate (9)

Does your EIC program have a staff person assigned to it either as part of their duties or as a stand alone position?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (8)



# Energy Independent Communities

## Appendix 3: Copy of Survey

What is her/his position?

- ☐ Clerk (1)
- ☐ Public Works (2)
- ☐ Engineering (3)
- ☐ Facilities (4)
- ☐ Streets (5)
- ☐ Sustainability (6)
- ☐ Administrator (7)
- ☐ Elected Official (council-person, alder, etc) (8)
- ☐ Other (9) \_\_\_\_\_

Did your EIC create a plan in connection to your Energy Independent Community Resolution? (This plan would include *measuring* government baseline energy use for: buildings, fleet and infrastructure (ex: traffic signals, street lights) plus *actions* to take, including energy efficiency upgrades, to get to 25% renewable energy locally by 2025). (Example plans may be found [here](#).)

- ☐ Yes (1)
- ☐ No (2)

Would you be interested in exploring options to create an energy independent community plan?

- ☐ Yes (1)
- ☐ No (2)

Does your plan need to be updated in order to get to 25 by '25 in the next 5 years?

- ☐ Yes (1)
- ☐ No (2)

Does your municipality/community have an energy or sustainability committee? If yes, please provide the committee or organization name.

- ☐ Yes (1) \_\_\_\_\_
- ☐ No (2)

End of Block: Introduction and Screening Section

Start of Block: Monitoring and Tracking Section

### Monitoring and Tracking Activities Section

This section asks questions about how your **Energy Independent Community (EIC)** accounts for energy use on an ongoing basis and what kinds of information are tracked.

Does your EIC track energy used in your operations?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not Sure (3)





# Energy Independent Communities

## Appendix 3: Copy of Survey

Why does your EIC not track energy use? Choose all that apply.

- ☐ We do not have the staff to track regularly (1)
- ☐ We are not sure how to track energy use (2)
- ☐ We don't get energy data in a useful form from our utility (3)
- ☐ We are served by multiple utilities (8)
- ☐ We have multiple facilities on one meter (6)
- ☐ Each department gets their own energy information that no one aggregates (7)
- ☐ We don't have the resources to put the data into EPA Energy Star Portfolio Manager (4)
- ☐ Other (5) \_\_\_\_\_

Does your EIC or utility enter your building energy use data into EPA's Energy Star Portfolio Manager?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not Sure (3)

Does your EIC enter energy use data into any other tracking tools?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not Sure (4)

What other tracking tools is energy data entered into?

\_\_\_\_\_

Is your transportation fuel tracked by department or by operations as a whole?

- ☐ By department only (1)
- ☐ By operations as a whole only (2)
- ☐ Both ways (3)
- ☐ Not sure (4)

Do you know how much your EIC spends annually on energy?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

End of Block: Monitoring and Tracking Section

Start of Block: Energy Efficiency and Renewable Energy Section





# Energy Independent Communities

## Appendix 3: Copy of Survey

### Improvements to Energy Efficiency and Renewable Energy Section

This section asks about projects and investments your **Energy Independent Community (EIC)** has made to increase energy efficiency and renewable energy for your government, tribal, or school operations.

Note: We will be asking for specific information about projects you have done, including their size, number of installations, and year of completion, so please utilize any documents or reports which may specify the relevant information. Remember, you may save and exit the survey to resume [at a later time](#) if these materials are not immediately available to you.

Has your EIC installed, or broken ground on any renewable energy generation projects?  
Choose all that apply.

- ☐ [Solar](#) (1)
- ☐ [Wind](#) (2)
- ☐ [Geothermal](#) (3)
- ☐ [Landfill gas](#) (4)
- ☐ [Bio-Energy](#) (5)
- ☐ [Other](#) (6) \_\_\_\_\_
- ☐ No, we have [not](#) (7)

Page Break

### Solar Energy Projects

How many solar energy projects has your EIC installed?

- ☐ [1](#) (1)
- ☐ [2](#) (2)
- ☐ [3](#) (3)
- ☐ [4](#) (4)
- ☐ 5 to [10](#) (5)
- ☐ 11 to [15](#) (6)
- ☐ 16 or [more](#) (7)

We will now ask for more detail about the project(s). For those with multiple projects, we will ask about up to three of them.

Consider the project, was this project... (Note: If there are multiple projects, please consider the one with the largest energy impact)

- ☐ Roof-Mounted Solar PV [System](#) (1)
- ☐ Ground-Mounted Solar PV [System](#) (2)
- ☐ Solar Thermal [system](#) (3)
- ☐ Renewable Energy Certificate (RECs) from Wisconsin Solar Project or through Renewable Energy [Rider](#) (5)
- ☐ [Other](#) (4) \_\_\_\_\_



# Energy Independent Communities

## Appendix 3: Copy of Survey

In what year was this project completed, or in what year is it expected to be completed? (If completion year is not included, respond with the nearest year.)

20092011201220142015201720192020202220232025

Completion Year ()

What is the size of this project or purchase in kilowatts (kW) and what building or infrastructure does this solar help power?

Page Break

Consider the second project. Was this project... (Note: if there are multiple then consider the remaining project with the largest energy impact.)

- ☐ Roof-Mounted Solar PV Solar [System](#) (1)
- ☐ Ground-Mounted PV Solar [System](#) (2)
- ☐ Solar Thermal [System](#) (4)
- ☐ Renewable Energy [Certificates](#) (6)
- ☐ [Other](#) (5) \_\_\_\_\_

In what year was this project completed, or in what year is it expected to be completed?

20092011201220142015201720192020202220232025

Completion Year ()

What is the size of this project or purchase in kilowatts (kW) and what building or infrastructure does this solar help power?

Page Break

Consider the third project. Is this project... (Again, if there are multiple, consider the remaining project with the largest energy impact.)

- ☐ Roof-Mounted PV Solar [System](#) (1)
- ☐ Ground-Mounted PV Solar [System](#) (2)
- ☐ Solar Thermal [System](#) (4)
- ☐ Renewable Energy [Certificate](#) (6)
- ☐ [Other](#) (5) \_\_\_\_\_

In what year was this project completed, or in what year is it expected to be completed?

20092011201220142015201720192020202220232025

Completion Year ()



# Energy Independent Communities

## Appendix 3: Copy of Survey

What is the size of this project or purchase in kilowatts (kW) and what building or infrastructure does this solar help power?

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Page Break

If there are remaining solar projects, please briefly describe them here including type, year completed, size, etc.

---

Page Break

### Wind Energy Projects

How many wind projects has your EIC installed?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 or more (3)

Consider the first project, in what year was the project completed? (If there are multiple then consider the project with the largest energy impact. If the year of completion is not included on the timeline, please select the closest year).

20092011201220142015201720192020202220232025

Year of Completion ( )



Where was this project constructed? (i.e.: unused public land, farms in the county, utility project in our county we buy power from, etc)

---

What is the size of this project in kW?

---

How many turbines are in this installation?

---

Page Break

Consider the second project, in what year was this project completed? (If there are multiple then consider the remaining project with the largest energy impact. If the project completion is not included in the timeline, please select the closest year)

20092011201220142015201720192020202220232025

Year of Completion ( )



Where was this project constructed? (i.e.: unused public land, farms in the county, utility project in our county we buy power from, etc)

---

How many kilowatts (kW) is this project?

---



# Energy Independent Communities

## Appendix 3: Copy of Survey

How many turbines are in this installation?

\_\_\_\_\_

Page Break

### Geothermal Energy Projects

How many geothermal energy projects has your EIC completed or broke ground on?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 or more (4)

Describe the project(s) briefly, including what building the is co-located with and any estimates of energy savings (please specify the units).

\_\_\_\_\_

Page Break

### Bio-energy Projects

How many bio-energy projects have your community completed?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 or more (4)

Describe the project(s) briefly, including the source of the bio-energy (i.e. wastewater treatment facility, manure digester, wood, and lake weeds, etc.) and any estimates of the amount of energy created (please specify the units).

\_\_\_\_\_

Page Break

### Landfill Gas Projects

Describe the project(s) briefly, including any estimates of the energy generated (please specify the units) and what the energy is being used for.

\_\_\_\_\_

Page Break



# Energy Independent Communities

## Appendix 3: Copy of Survey

Have you implemented policies and practices in your daily operations to save energy (for example: installed computer power saving software, use purchasing practices that require Energy STAR or energy saving products, purchased task lighting, set thermostat temperatures lower or higher depending on the season)?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

Have you completed any energy efficiency projects (i.e. projects that reduce energy consumed by your EIC)? Choose all that apply.

- ☐ Buildings (1)
- ☐ Streetlights (2)
- ☐ Parking Lot Lighting (8)
- ☐ Wastewater Treatment Plant (3)
- ☐ Fleet Vehicles (4)
- ☐ Transit Vehicles (5)
- ☐ Other (6) \_\_\_\_\_
- ☐ The community has not made energy efficiency improvements (7)

What efficiency upgrades have you made to buildings? Choose all that apply.

- ☐ Improved heating and/or cooling systems (1)
- ☐ Improved windows (2)
- ☐ Upgraded to LED lighting (3)
- ☐ Added sensors (i.e. motion, occupancy, CO2) (4)
- ☐ Added control systems (5)
- ☐ Other (6) \_\_\_\_\_

Do you have an estimate for the aggregated (total) annual energy saved by these upgrades?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

How much energy has been saved by these upgrades (in kWh and/or therms)?

\_\_\_\_\_

What do you estimate are the average annual financial savings per year from implementing these energy upgrades?

\_\_\_\_\_



# Energy Independent Communities

## Appendix 3: Copy of Survey

How have you reduced fossil fuel use in your fleet and/or transit?

- ☐ Added hybrid vehicles (1)
- ☐ Added electric vehicles (2)
- ☐ Added hybrid-electric buses (3)
- ☐ Use renewable natural gas (4)
- ☐ Other (5) \_\_\_\_\_

Do you have an estimate to the reduction in fuel use by fleet and/or transit vehicles from these upgrades?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not Sure (3)

How much energy has been saved as a result of these upgrades? Please specify the units.

\_\_\_\_\_

Please provide any additional comments or plans to reduce fossil fuel use in fleet and/or transit (carbon and emissions reductions, number of electric buses on order for what years, etc).

\_\_\_\_\_

Page Break

Consider the whole of energy efficiency upgrades your EIC has completed. How much energy has been saved from these upgrades?

\_\_\_\_\_

How much money is being saved each year from these upgrades?

\_\_\_\_\_

End of Block: Energy Efficiency and Renewable Energy Section

Start of Block: Funding Section

### Funding Section

This section will ask about grants you have received from the state or other parties to support your **Energy Independent Community (EIC)** efforts.

Has your EIC received grants for energy efficiency projects since passing its resolution?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

Has your EIC received grants for renewable energy system(s) since passing its resolution?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)





# Energy Independent Communities

## Appendix 3: Copy of Survey

Has your EIC received a grant(s) for energy independence planning from the State Energy Office / Office of Energy Innovation since passing its resolution?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

Page Break

Consider the **Energy Efficiency grant(s)** you received. How many grants has your EIC received?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4-8 (4)
- ☐ 9-12 (5)
- ☐ 13 or more (6)

What was the source of the most impactful grant (kWh or ~~therms~~ terms, and dollars saved per year)?

- ☐ Office of Energy Innovation/State Energy Office (PSC/DOA) (1)
- ☐ Focus on Energy (2)
- ☐ WI Board of Commissioners of Public Lands (BCPL) (3)
- ☐ A Federal Agency (i.e. USDOE, EERE, AARA, and Bureau of Indian Affairs, etc.) (4)
- ☐ A Non-Profit Organization (5)
- ☐ Other (6) \_\_\_\_\_
- ☐ Not sure (7)

Did this grant support one of the projects you listed in the previous section?

- ☐ Yes (1)
- ☐ No (2)

What type of project did it support?

- ☐ Buildings (1)
- ☐ Lighting (2)
- ☐ Fleet Vehicles (3)
- ☐ Transit (4)
- ☐ Other (5) \_\_\_\_\_
- ☐ Not sure (6)



# Energy Independent Communities

## Appendix 3: Copy of Survey

How much did you receive from the grant?

\_\_\_\_\_

What was the impact of the project in terms of estimated dollars saved per year and annual energy savings (kWh's)?

\_\_\_\_\_

Page Break

What was the source of the second grant? Again, consider State grants first if there were multiple.

- ☐ Office of Energy Innovation/State Energy Office (PSC/DOA) (1)
- ☐ Focus on Energy (2)
- ☐ Wisconsin Board of Commissioners of Public Lands (BCPL) (6)
- ☐ A Federal Agency (i.e. USDOE, EERE, AARA, and Bureau of Indian Affairs, etc) (3)
- ☐ A Non-Profit Organization (4)
- ☐ Other (5) \_\_\_\_\_
- ☐ Not sure (7)

Did this grant support one of the projects you listed in the previous section?

- ☐ Yes (1)
- ☐ No (2)

What type of project did it support?

- ☐ Buildings (1)
- ☐ Lighting (2)
- ☐ Fleet Vehicles (3)
- ☐ Transit (4)
- ☐ Other (5) \_\_\_\_\_
- ☐ Not sure (6)

How much did you receive from the grant?

\_\_\_\_\_

What was the impact of the project in terms of estimated dollars saved per year and annual energy savings (kWh's)?

\_\_\_\_\_

Page Break

What was the source of the third grant?

- ☐ Office of Energy Innovation/State Energy Office (PSC/DOA) (1)
- ☐ Focus on Energy (6)
- ☐ WI Board of Commissioners of Public Lands (BCPL) (7)
- ☐ A Federal Agency (i.e. USDOE, EERE, AARA, Bureau of Indian Affairs, etc.) (2)
- ☐ A Non-Profit Organization (4)
- ☐ Other (5) \_\_\_\_\_



# Energy Independent Communities

## Appendix 3: Copy of Survey

Did this grant support one of the projects you listed in the previous section?

- ☐ Yes (1)
- ☐ No (2)

What type of project did it support?

- ☐ Buildings (1)
- ☐ Lighting (2)
- ☐ Fleet Vehicles (3)
- ☐ Transit (4)
- ☐ Other (5) \_\_\_\_\_
- ☐ Not sure (6)

How much did you receive from the grant?

\_\_\_\_\_

What was the impact of the project in terms of estimated dollars saved per year and annual energy savings (kWh's)?

\_\_\_\_\_

Page Break

Consider the **Renewable Energy grant(s) or incentives** you received. How many of these grants has your EIC received?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 (4)
- ☐ 5 to 10 (5)
- ☐ 11 or more (6)

What was the source of the most impactful grant (kWh and dollars saved per year or the life of the project)?

- ☐ Office of Energy Innovation/State Energy Office (PSC/DOA) (1)
- ☐ Focus on Energy (6)
- ☐ WI Board of Commissioners of Public Lands (BCPL) (7)
- ☐ A Federal agency (USDOE, EERE, AARA, and Bureau of Indian Affairs, etc.) (2)
- ☐ A private organization (3)
- ☐ A non profit organization (i.e. RENEW, Couillard Foundation, MREA, etc.) (4)
- ☐ Other (5) \_\_\_\_\_

Did this grant support a project you listed in the previous section?

- ☐ Yes (1)
- ☐ No (2)



# Energy Independent Communities

## Appendix 3: Copy of Survey

What type of project did the grant support?

- ☐ Solar Roof Mounted PV System (1)
- ☐ Solar Ground Mounted PV System (4)
- ☐ Geothermal (2)
- ☐ Bio-energy (6)
- ☐ Other (3) \_\_\_\_\_

What did the renewable energy power?

- ☐ Building (include name) (1) \_\_\_\_\_
- ☐ Facility (include name) (9) \_\_\_\_\_
- ☐ Vehicle (specify type) (4) \_\_\_\_\_
- ☐ Other (3) \_\_\_\_\_
- ☐ Not sure (7)

How much did you receive from the grant?

\_\_\_\_\_

What was the size of project (if solar, how many kW)?

\_\_\_\_\_

What was the impact of the project in terms of dollars saved (per year or over the life of the project or both)

\_\_\_\_\_  
\_\_\_\_\_

Page Break

What was the source of the second grant? Again, consider State grants first.

- ☐ Office of Energy Innovation/State Energy Office (PSC/DOA) (1)
- ☐ Focus on Energy (6)
- ☐ WI Board of Commissioners of Public Lands (BCPL) (7)
- ☐ A Federal agency (i.e. USDOE, EERE, AARA, and Bureau of Indian Affairs, etc) (2)
- ☐ A not for profit organization (i.e. RENEW, Couillard Foundation, MREA, etc.) (4)
- ☐ Other (5) \_\_\_\_\_

Did this grant support a project you listed in the previous section?

- ☐ Yes (1)
- ☐ No (2)



# Energy Independent Communities

## Appendix 3: Copy of Survey

What type of project did the grant support?

- ☐ Solar Roof Mounted PV System (1)
- ☐ Solar Ground Mounted PV System (4)
- ☐ Geothermal (5)
- ☐ Bio-energy (6)
- ☐ Other (3) \_\_\_\_\_

What did the renewable energy power?

- ☐ Building (provide name) (6)  
\_\_\_\_\_
- ☐ Facility (include name) (10)  
\_\_\_\_\_
- ☐ Vehicles (provide vehicle use) (7)  
\_\_\_\_\_
- ☐ Other (8) \_\_\_\_\_
- ☐ Not sure (9)

How much did you receive from the grant?

\_\_\_\_\_

What was the size of project (if solar, how many kW)?

\_\_\_\_\_

What was the impact of the project in terms of dollars saved (per year or over the life of the project or both)

\_\_\_\_\_

Page Break \_\_\_\_\_

What was the source of the third grant? Again, consider State grants first.

- ☐ Office of Energy Innovation/State Energy Office (PSC/DOA) (1)
- ☐ Focus on Energy (6)
- ☐ WI Board of Commissioner's of Public Lands (BCPL) (7)
- ☐ A Federal agency (i.e. USDOE, EERE, AARA, and Bureau of Indian Affairs, etc) (2)
- ☐ A not for profit organization (RENEW, Couillard Foundation, MERA, etc.) (4)
- ☐ Other (5) \_\_\_\_\_

Did this grant support a project you listed in a previous section?

- ☐ Yes (1)
- ☐ No (2)



# Energy Independent Communities

## Appendix 3: Copy of Survey

What type of project did the grant support?

- ☐ Solar Roof Mounted PV System (1)
- ☐ Solar Ground Mounted PV System (4)
- ☐ Geothermal (5)
- ☐ Bio-energy (6)
- ☐ Other (3) \_\_\_\_\_

What did the renewable energy power?

- ☐ Building (provide name) (1) \_\_\_\_\_
- ☐ Facility (include name) (9) \_\_\_\_\_
- ☐ Vehicles (provide vehicle use) (7) \_\_\_\_\_
- ☐ Other (4) \_\_\_\_\_
- ☐ Not sure (8)

How much did you receive from the grant?

\_\_\_\_\_

What was the size of project (if solar, how many kW)?

\_\_\_\_\_

Page Break

What was the impact of the project in terms of estimated dollars saved (per year or over the life of the project, or both)

\_\_\_\_\_

Page Break

Consider the **State Energy Office / OEI grant(s)** you received. How many of these grants did your EIC receive?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3-5 (6)

In what year did you receive this grant? If multiple, consider the earliest grant you received.

20092010201120122013201420152016201720182019

Year of Grant ()



How much was this grant?

\_\_\_\_\_

What was the grant for? (i.e. planning and energy baseline, specific efficiency project, renewable installation, upgrades to a building or facility, etc)

\_\_\_\_\_





# Energy Independent Communities

## Appendix 3: Copy of Survey

Page Break

In what year did you receive the second grant?

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Year of Grant ()

How much was this grant?

What was the grant for? (i.e. planning and energy baseline, specific efficiency project, renewable installation, upgrades to a building or facility, etc)

End of Block: Funding Section

Start of Block: Factors Affecting Progress and Assistance Section

### Factors Affecting Progress and Assistance Section

This section will ask you about the factors that affect the progress of your **Energy Independent Community (EIC)** efforts and any assistance you may need to reach your 25 by '25 or higher goals.

What factors have limited your progress toward your 25 by '25 goal? Choose all that apply.

- ☐ A lack of staff (1)
- ☐ A lack of funding (2)
- ☐ Not having an energy independent community action plan (3)
- ☐ Change in elected officials (4)
- ☐ Turn-over in staff (6)
- ☐ Other (5) \_\_\_\_\_

Please share any comments you have regarding factors limiting progress towards your clean energy goals?

Page Break



# Energy Independent Communities

## Appendix 3: Copy of Survey

What has been the most helpful to you in making progress toward 25 by '25? Choose up to 3.

- ☐ Community [support](#) (1)
- ☐ Government [leadership](#) (2)
- ☐ Dedicated or responsible [staff](#) (3)
- ☐ Community [champion](#) (4)
- ☐ Grants and other [funding](#) (5)
- ☐ Technical [assistance](#) (6)
- ☐ Other (7) \_\_\_\_\_

Please share any comments you have regarding factors helping you toward your clean energy [goals](#)?

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Page Break

What kind of technical assistance would be helpful in moving to your goal? Choose all that apply.

- ☐ Educating local officials on the EIC program and its [benefits](#) (1)
- ☐ Input on forming a local or regional energy [team](#) (2)
- ☐ Data management and establishing or re-establishing your energy [baseline](#) (3)
- ☐ Energy plan template and examples of successful [plans](#) (4)
- ☐ Grant writing [assistance](#) (5)
- ☐ Solar Energy Financing Guide: Empowering Wisconsin Local [Governments](#) (6)
- ☐ Other, please [describe](#) (7) \_\_\_\_\_

Please share any comments you have regarding assistance that would be [helpful](#)?

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Page Break



# Energy Independent Communities

## Appendix 3: Copy of Survey

Has your municipality signed onto support the Paris Climate Commitment or any other climate reduction pledge like the Mayors' Climate Pledge?

- ☐ Yes (please specify) (4) \_\_\_\_\_
- ☐ No (2)
- ☐ Not sure (3)

Page Break

Who have you partnered with in energy initiatives? Choose all that apply.

- ☐ UW-Madison Extension (1)
- ☐ State Energy Office / Office of Energy Innovation (2)
- ☐ Energy on Wisconsin (3)
- ☐ Technical College (4)
- ☐ Focus on Energy (5)
- ☐ Non-Profit Organization(s) (please specify) (6) \_\_\_\_\_
- ☐ Utility (7)
- ☐ Green Tier Legacy Communities (8)
- ☐ Regional Plan Commission (9)
- ☐ Other (please specify) (10) \_\_\_\_\_

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Would you be interested in working collaboratively with others in your region to move to your goals?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

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Have there been any efforts to set goals beyond 25 by '25?

- ☐ We are considering a resolution to go beyond 25% renewables (1)
- ☐ We have already passed a resolution going beyond 2025 (2)
- ☐ We have not yet considered any possible goals beyond 2025 (4)

What are the new goals you adopted?

\_\_\_\_\_

End of Block: Factors Affecting Progress and Assistance Section

Start of Block: Community Engagement Section

### Community Engagement Section

This section asks questions about how Community members, including residents and businesses, who are associated with you **Energy Independent Community (EIC)** efforts are involved in activities.

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# Energy Independent Communities

## Appendix 3: Copy of Survey

In addition to clean energy upgrades to local government operations, has your EIC facilitated community member involvement in any of the following? (Indicate which ones)

	Residents (1)	Businesses (2)	Schools (3)	Non-Profits (4)
Energy Efficiency (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Solar Group Buy for individual solar PV installations (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community Solar Garden (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PACE - Commercial Energy Efficiency & Renewables Financing (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate Resilience (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In what other ways are community members involved in energy independence work?

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For either energy efficiency or renewable energy adoption, does your community have any programs that help low income individuals move towards energy independence?

- ☐ Yes (1)
- ☐ No (2)
- ☐ No, but we are interested in creating these sorts of programs (3)
- ☐ Not sure (4)

What programs does your community have to help low income individuals access clean energy?

End of Block: Community Engagement Section

Start of Block: Concluding Section

### Conclusion Section

The concluding section asks if your community would like to be involved with us going forward and for any final comments you have on your **Energy Independent Community (EIC)** efforts.

If there is any other information you want to share about your EIC, please write it here.



# Energy Independent Communities

## Appendix 3: Copy of Survey

Do we have permission to attribute/share your EIC's progress and information you have provided in publicly posted documents and materials?

- ☐ Yes, you may attribute to our community on [materials](#). (1)
- ☐ Please contact us before attributing our community on [materials](#). (2)
- ☐ No, You may not attribute our community on [materials](#). (3)

Would you be willing to engage in follow up discussions with UW-Madison Extension and help us develop a case study of your EIC?

- ☐ [Yes](#). (1)
- ☐ [No](#). (2)
- ☐ Not [sure](#). (3)

Please provide the following contact information if you would like to discuss the potential to develop a case study of your EIC or if you would like us to contact you before attributing your community on materials.

- ☐ [Name](#). (4) \_\_\_\_\_
- ☐ [Email](#). (5) \_\_\_\_\_
- ☐ [Telephone](#). (6) \_\_\_\_\_

Thank you very much for your participation!

End of Block: Concluding Section