

# **Interconnection Research & The Local Solar Access Fund**

October 29, 2024 – Water and Natural Resources Committee Presentation

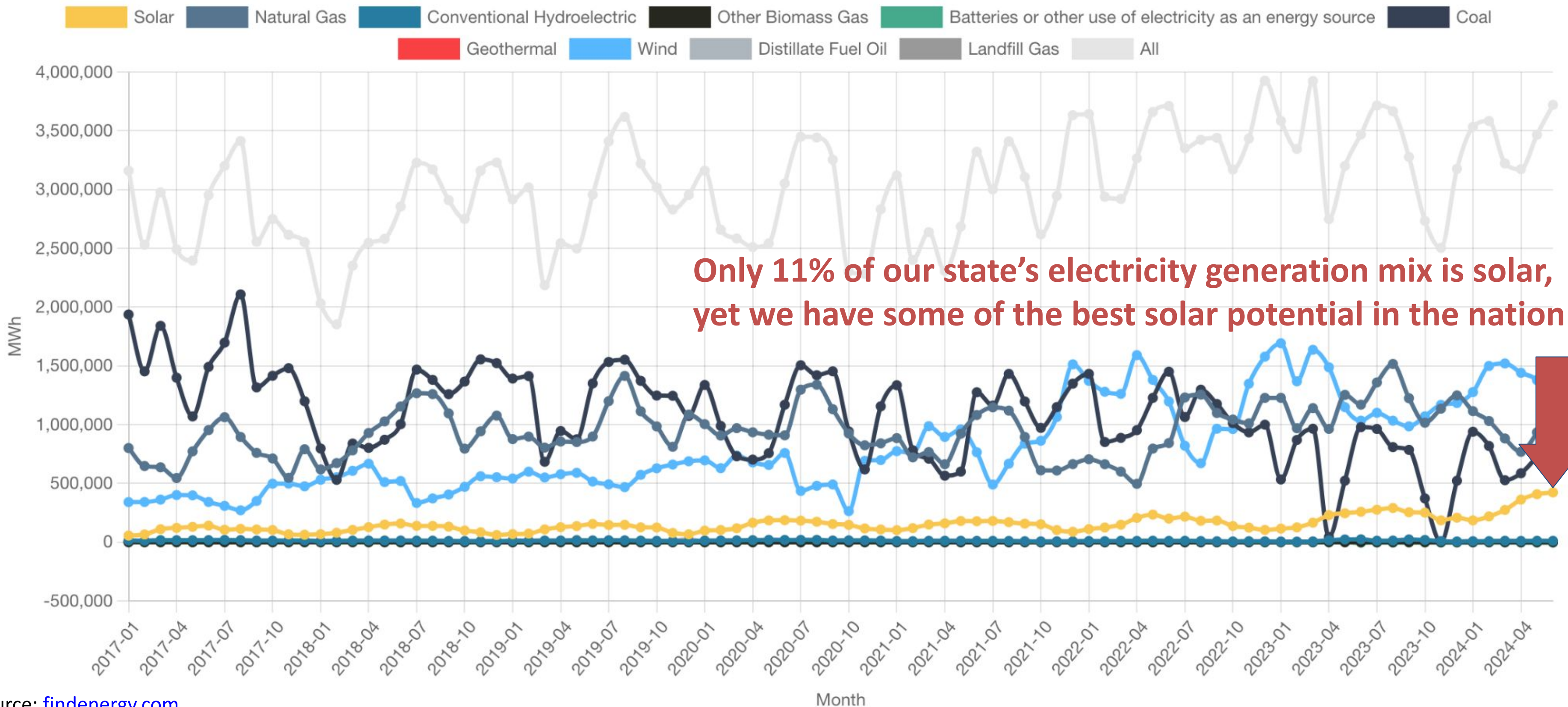
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# New Mexico Electricity Fuel Mix

Production

Consumption

Emissions



**Only 11% of our state's electricity generation mix is solar, yet we have some of the best solar potential in the nation**



Source: [findenergy.com](https://www.findenergy.com)



# **INTERCONNECTION CHALLENGES AND POLICY PATHWAYS FOR NEW MEXICO'S SOLAR FUTURE**

- Public Power New Mexico & Initiative for Energy Justice researched and authored report
- Investigated the barriers to interconnection for solar projects and policy solutions for equitable energy access and grid modernization
- Interviewed various stakeholders including PRC staff, local government staff, former regulators, solar industry professionals and advocates, community-based organizations, and community solar advocates
- Report focuses on interconnection challenges in investor-owned utility service areas



# WHAT WE LEARNED FROM OUR OUTREACH: **THE CHALLENGES**

- **Outdated Grid Systems:** Our aging grid infrastructure wasn't designed to handle distributed energy sources like solar, creating bottlenecks that delay projects.
- **Lack of Transparency:** Utilities lack clear data on hosting capacity and interconnection queues, impeding developers' ability to plan and budget. Access to real-time data on grid capacity and costs is crucial for smoother interconnection.



# WHAT WE LEARNED FROM OUR OUTREACH: THE CHALLENGES

- **Unfair Cost Burden:** Right now, solar developers and consumers bear the brunt of the costs for grid upgrades. We need fairer cost-sharing models that don't overburden small projects or ratepayers.
- **Weak Enforcement:** Despite good interconnection policies on paper, enforcement is weak. New Mexico has the only interconnection rule graded "A" by the Interstate Renewable Energy Council, yet none of the state's three investor-owned utilities are compliant with the state's interconnection rule. The rule needs more enforcement power, and there could be legislative fixes too.



# WHAT WE LEARNED FROM OUR OUTREACH: THE SOLUTIONS

- **Enhanced Transparency:** Introduce public hosting capacity maps and interconnection queues to improve project planning and reduce risks.
- **Performance-Based Incentives:** Shift to performance-based models that promote renewable integration and fair energy access, and encourage timely interconnection.
- **Improve Enforcement:** Update the rule to have better enforcement mechanisms, and/or address these issues in statute.



# WHAT WE LEARNED FROM OUR OUTREACH: THE SOLUTIONS

- **Diversify Grid Support Methods:** Integrate battery storage and alternative energy sources for grid stability and reduced upgrade costs. Incentive programs for storage could support this.
- **Distribution System Planning (DSP):** Adopt DSP practices to strategically manage capacity and ensure the grid can support more decentralized energy resources, as well as support community-engagement and equity.
- **Cost Sharing:** More equitable and fair mechanisms are needed for pricing and sharing costs for grid upgrades needed to accommodate interconnection that do not place too large a burden on ratepayers or smaller projects. These mechanisms for grid upgrades should be streamlined and clear to avoid any inequitable cost distribution.



# **NEW MEXICO LOCAL SOLAR ACCESS FUND**

***AN INVESTMENT IN OUR  
COMMUNITIES AND OUR  
CHILDREN'S FUTURE***

**Sponsored by House Majority Whip Reena Szczepanski and Senator Harold Pope**





# WHAT IS IT?

The Local Solar Access Fund is a proposed grant fund at the New Mexico Finance Authority, which will issue both planning and implementation grants to Tribes, Counties, Municipalities, and School Districts for solar and storage projects to power public buildings like libraries, schools, community centers, and fire stations, and infrastructure like water, wastewater, and street lighting.

Planning includes funding technical expertise like grant writers and federal funding experts, as well as solar experts who conduct feasibility studies and create plans for solar and storage systems.

Implementation includes funding construction, purchase, installation, and equipment of solar energy and storage systems.

# WHAT ARE THE BENEFITS OF SOLAR?

- **Cost savings and increased revenue** for local communities from repurposed energy dollars. Solar is cheaper than conventional energy and rates are fixed over 25–30 years. Solar protects communities from price gouging and market volatility.
- **Safety, security, and resiliency** through the creation of emergency cooling centers that maintain power when there are blackouts, brownouts, storms and wildfires.
- **Reduced carbon emissions** to support community health and help address climate change.

# **OUTREACH PERFORMED**

**FOCUS GROUP**

**PHONE CALLS &  
EMAIL OUTREACH**

**MEETINGS**

**STATEWIDE  
SURVEY**

# KEY FINDINGS

Read more of the survey at:  
[bit.ly/nm\\_solar\\_poll](https://bit.ly/nm_solar_poll)

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There is widespread support for renewable energy among New Mexico voters

01

Over 70% of New Mexico support the use of both solar and wind energy sources

02

Three in four voters agree that the state should maximize its renewable energy production

03

Nearly half of voters who do not already have rooftop solar would join a community solar program if it was available to them while ~30% are 'not sure'

04

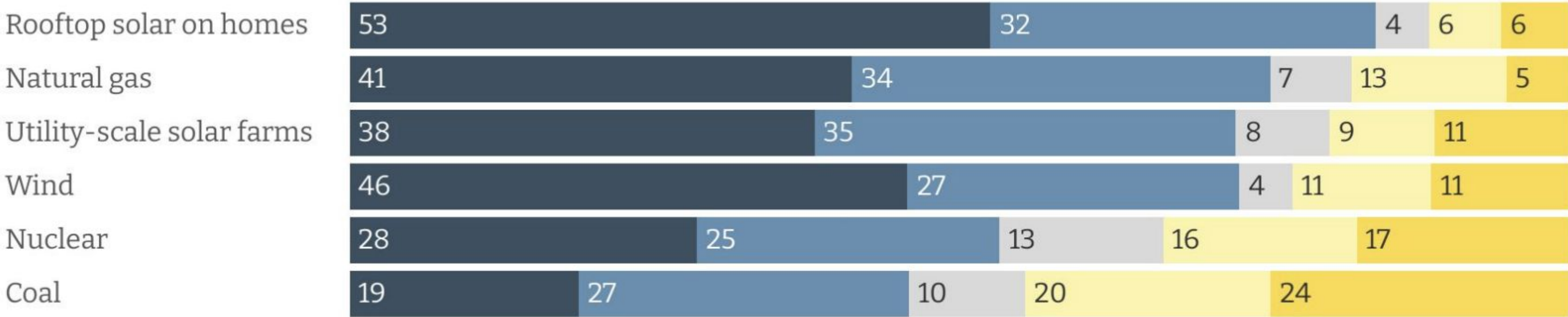
A majority of voters support the creation of a state solar fund to help local governments plan and build public solar projects

# Support for renewable energy sources far outweighs opposition among New Mexico voters

## Support for Electricity Sources

EMBOLD research

● Strongly support ● Somewhat support ● Not sure ● Somewhat oppose ● Strongly oppose



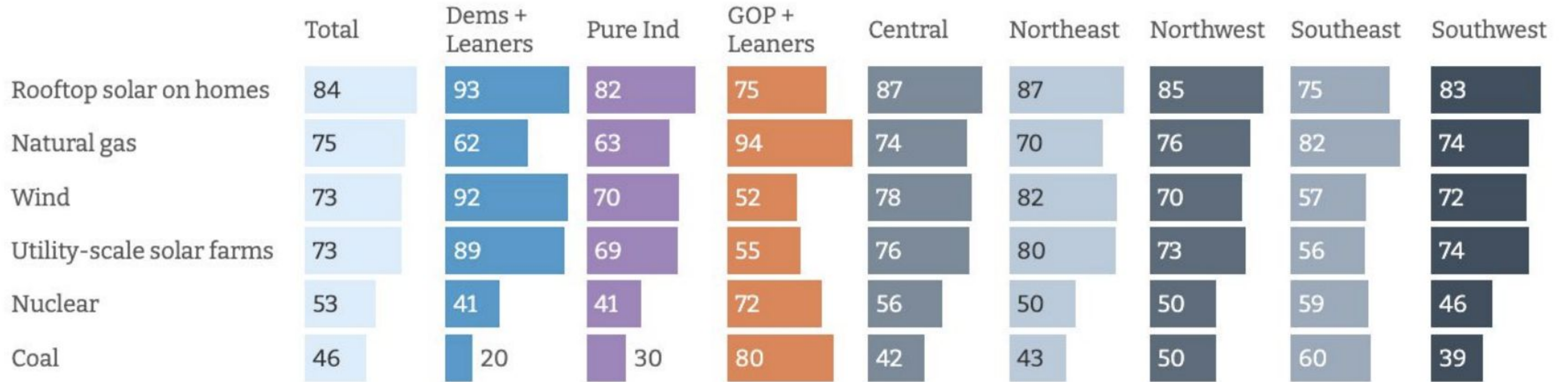
Q: Do you support or oppose the following types of electricity generation in New Mexico?



# A majority of New Mexico voters support renewable energy sources, regardless of partisanship

## Support for Electricity Sources

Numbers below represent total support.



Q: Do you support or oppose the following types of electricity generation in New Mexico?



## WHAT WE'RE HEARING FROM OUR COMMUNITIES



### Highlights from our outreach:

- There is widespread support for the fund, with more than 50 endorsing organizations including Tribes, School Districts, Local Governments, their state associations, and intersectional NGOs
- A majority of the Tribes and Counties we connected with are planning to build solar projects that could be supported by the fund.
- Many School Districts and Municipalities would like to develop solar but need the kind of support that would be provided by the fund to do so

## WHAT WE'RE HEARING FROM OUR COMMUNITIES



### We also found that:

- New Mexico communities have important public safety and resilience needs such as power and shelter for residents and first responders during emergencies and disasters that this fund could support.
- Many Tribes, Counties, School Districts, and Municipalities have projects like this and would like to develop more because of the resilience, sustainability, and cost benefits they receive.




## WHAT WE'RE HEARING FROM OUR COMMUNITIES



- Local and tribal governments can save up to \$10 million after 25 years by investing in 1 MW of solar.
- Solar is more accessible and affordable than ever. Between 2009–2019, solar costs fell more than 90%, and these trends are likely to continue with increased manufacturing and investment.

# HOW WILL THE FUND WORK?



**The fund will be structured to prioritize funding projects that:**

- benefit rural communities
- serve communities that wouldn't be able access solar and storage without this funding
- make essential community buildings and infrastructure resilient
- have significant long-term operating cost reductions
- support workforce development
- are geographically diverse and disbursed

# HOW WILL THE FUND WORK?



A Tribal Administrator wants to solarize their water treatment facilities to lower expensive utility bills and ensure that their infrastructure is resilient. With passage of this bill they could hire technical expertise to plan a solar and storage project to power their wells and water treatment infrastructure, as well as grant writers and funding experts to acquire funding and financing for the project. They could get financing from the Climate Investment Center, a Rural Energy for America grant from the USDA which requires a 50% match, a 50% match from the New Mexico Match Fund, and then after completion could apply for an Inflation Reduction Act cash subsidy that could cover 30–50% of the total project costs that were financed.

# HOW WILL THE FUND WORK?



A City Council is reviewing the budget and finds itself short \$100,000 for critical elder care programs. Utility bills for city facilities have been growing substantially each year and eating into every department's budget. Someone suggests adding solar panels to reduce these costs. Where would you even start the planning or funding with no room in the budget to hire that kind of expertise?

The Local Solar Access fund would help them hire experts to plan and fund solar projects that will save energy dollars and power critical facilities.

# WHY NOW?



**New Mexico has unprecedented, but temporary, budget surpluses from oil and gas revenue.** And there are **time-sensitive federal funding opportunities** on the table that we are at risk of missing out on if our communities can't access grant writers and technical expertise.

**Communities throughout our state want to build solar projects that will save money, make them safer and more resilient, especially in emergencies, and reduce dangerous climate emissions.** However, most local and Tribal governments do not have the capital to build these projects, nor the staff to access federal grants.

**The fund will help communities overcome obstacles to build the solar they need, investing in their future for decades to come.**



# CONCLUSIONS

Interconnection is expensive in New Mexico, and this needs to change now. There are many ways the Legislature can act on this.

Even with the challenges we face, accessible state funding will help more communities access the benefits of solar.

We need more solar, our communities want it, and the Local Solar Access Fund will capacitate our state to resolve interconnection challenges and make New Mexico the leader it can be in renewable energy development.

# LEARN MORE AND STAY IN TOUCH AT PUBLICPOWERNM.ORG

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