



Micro-Financing and Locally Led Development: A Scalable Model for Resilient Power in Rural Communities

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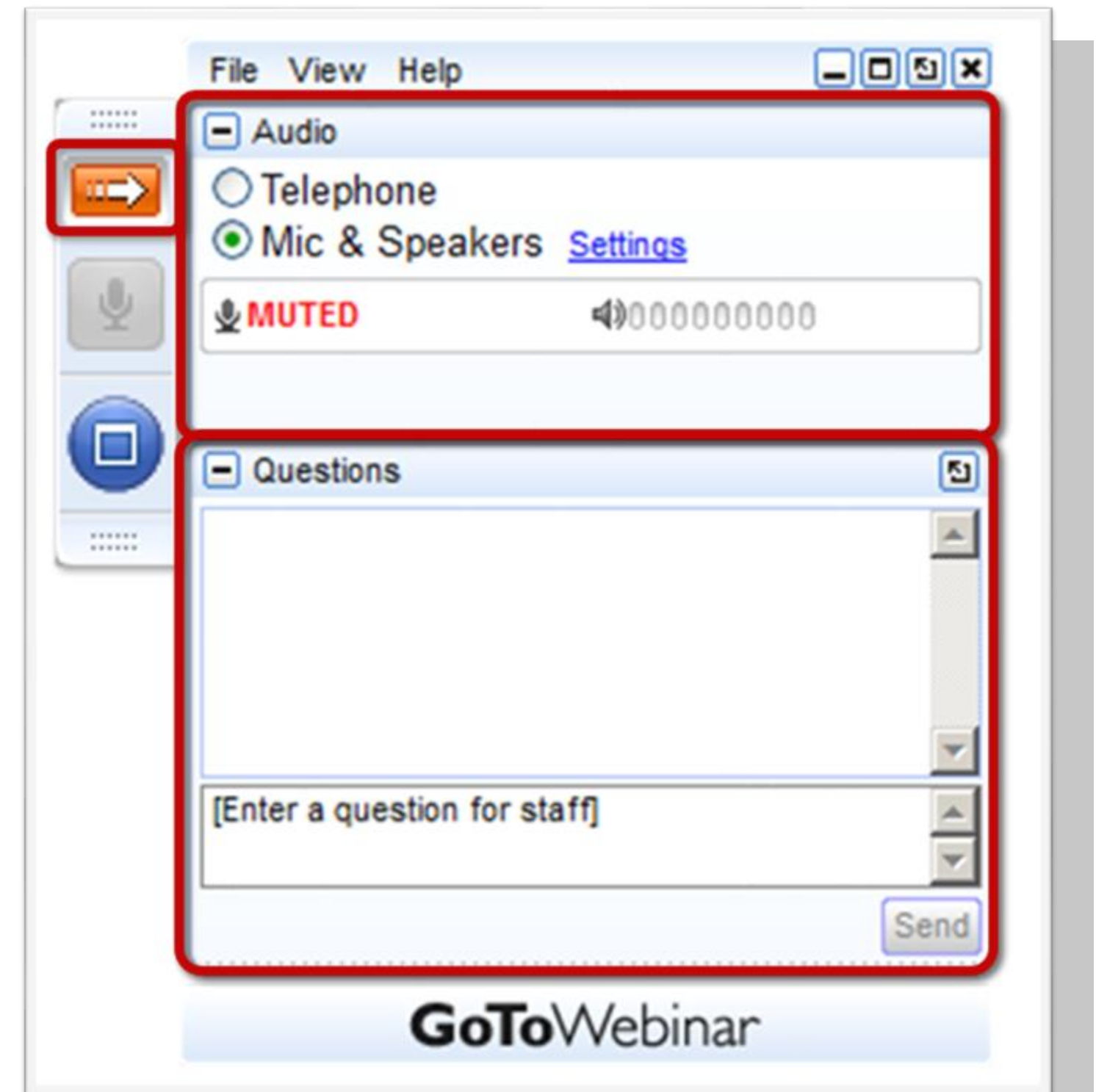
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Affordable, reliable, clean energy for all.



**Climate Resilience and
Community Health**



**Distributed Energy Access
and Equity**



**Energy Storage and Flexible
Demand**



Fossil Fuel Replacement

Resilient Power Project

Building the foundation for energy resilient communities.



Rooftop solar installation in Dorchester, MA. Credit: Resonant Energy

Technical Assistance Fund

Providing technical support to build local resilience.



Solar installation in Puerto Rico. Credit: Solar Responders



CleanEnergyGroup

TECHNICAL ASSISTANCE FUND

Providing Support to Build Local Resilience



Resilient Power Leadership Initiative

Building community-based capacity for more energy resilient communities.



Photo Credit: Queen Shabazz, United Parents Against Lead (UPAL)

The Resilient Power Project Impact: 2013 - 2023

**\$1.5 million in
Grants Awarded**



**175 Community
Service Partners**



**255 Community
Facilities**



Webinar Speakers

Micro-Financing and Locally Led Development: A Scalable Model for Resilient Power in Rural Communities



Anna Adamsson

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Clean Energy Group



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SOLAR VILLAGE PROJECT



Thank You



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Upcoming Webinars

Energy Storage Interconnection – Challenges and Solutions (May 21)

Batteries 101, Part 2: Benefits and Applications of Battery Energy Storage in Massachusetts (May 30)

Read more and register at www.cleangroup.org/webinars



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EMPOWERING RURAL COMMUNITIES WITH SOLAR+STORAGE

HARNESSING RESILIENT POWER FOR
HEALTH, EDUCATION, AND
ECONOMIC DEVELOPMENT

www.solarvillageproject.org



AGENDA

Exploring Solar+Storage
Solutions for Rural Communities



Introduction

Short History of SVP

Our Work in Puerto Rico

Women in the Solar Workforce

Micro-Finance for Homes and Businesses

Fundraising and Grant Strategy

Micro-Finance Investors

Investor Returns Sketch

Replicating Our Work

What We Need

Q&A Session



SHORT HISTORY OF SVP

- Founded with a vision to combat energy poverty and climate change.
- Distributed over 6,000 solar lanterns, powering 70 rural schools and clinics, thereby enhancing livelihoods in rural villages. Additionally, we have powered 150 homes through microfinance initiatives.
- Impact: Empowering communities with clean energy for health, education, and economic development.
- Expansion efforts: From India to Puerto Rico, with plans for further global expansion.

THE IMPACT

Transforming Communities through Sustainable Energy Solutions



Increased access to education: Students benefit from extended study hours and an improved learning environment with access to digital tools



Improved healthcare services: Clinic equipped with solar power for medical equipment.



Community Resilience: Solar + Battery Systems for Uninterrupted Power During Grid Outages and Emergencies.



SOLAR INITIATIVES IN PUERTO RICO

- Post-Hurricanes Maria and Irma, we swiftly responded by shipping solar lights to various organizations across Puerto Rico, aiding in immediate relief efforts.
- Collaboration with Local Organizations: Built on initial relief efforts by partnering with local grassroots organizations to install solar arrays on community centers, enhancing long-term resilience and energy independence.

SVP IN PUERTO RICO

- Bringing sustainable energy solutions to Puerto Rico.
 - Providing sustainable and affordable power for homes, schools, and community centers.
 - Improving energy access and fostering education, healthcare, and economic development.
 - Establish disaster relief resilience centers.
- Objectives and Progress.
 - Enhancing energy resilience, reducing dependency on fossil fuels, and empowering communities.
 - Successful completion of 4 solar electrification projects, impacting numerous communities.





DISASTER-RESILIENT PARTNERSHIPS

- Importance of Disaster-Resilient Power Solutions:
 - Ensuring reliable power supply during emergencies and natural disasters.
 - Enhancing community resilience and preparedness for future challenges.
- Partnerships and Community Involvement:
 - Highlighting collaborative efforts with Solar United Neighbors (SUN) and local mutual aid groups.
 - Demonstrating the power of collective action in advancing sustainable energy solutions in Puerto Rico through these strategic partnerships.

RECENT INITIATIVES AND FUTURE DIRECTIONS IN PUERTO RICO

- Recent Successes:
 - Deployed an 8 kW solar system with battery storage at Buen Pastor Clinic, enhancing healthcare reliability in partnership with SUN.
- Ongoing Assessments:
 - Continuously assessing needs to identify high-impact opportunities for future solar projects in community centers and schools.



EMPOWERING WOMEN IN THE SOLAR WORKFORCE

Promoting Gender Equality
and Community Development



TRAINING INITIATIVES

- Training programs tailored to women, focusing on technical installation and sales roles within the solar industry.
- Providing women with essential skills and opportunities for career advancement in traditionally male-dominated sectors.

Impact on Gender Equality and Community Development

- Promoting gender equality by breaking down barriers and challenging stereotypes within the solar workforce.
- Enhancing family income and economic empowerment through increased female participation, leading to broader community development.

SOLAR MICROFINANCE

- Micro-Finance:
 - For Homes and Small Businesses: Small loans facilitate solar installations with flexible repayment terms tailored to the borrower's income.
 - Enhanced Energy Independence: Battery storage allows for surplus solar energy storage, ensuring reliable power during outages and peak times.



MICROFINANCE IN ACTION

Empowering Homeowners with
Accessible Solar Financing



Empowering Communities: Microfinance enables access to reliable and sustainable power solutions, transforming lives and livelihoods in rural areas.



Energy Accessibility: Microfinance helps individuals and communities gain access to clean energy technologies, enhancing their quality of life and economic opportunities.



Sustainable Development: Microfinance facilitates the adoption of solar power, promoting environmental sustainability while addressing energy poverty in underserved areas.



MICRO-FINANCE INVESTORS: EMPOWERING SOLAR SOLUTIONS

- Strategic approach: Highlighting social impact and financial returns.
- Outreach efforts: Showcasing scalability, sustainability, and positive outcomes.
- Investors provide crucial funding, while communities benefit from clean energy and economic empowerment.

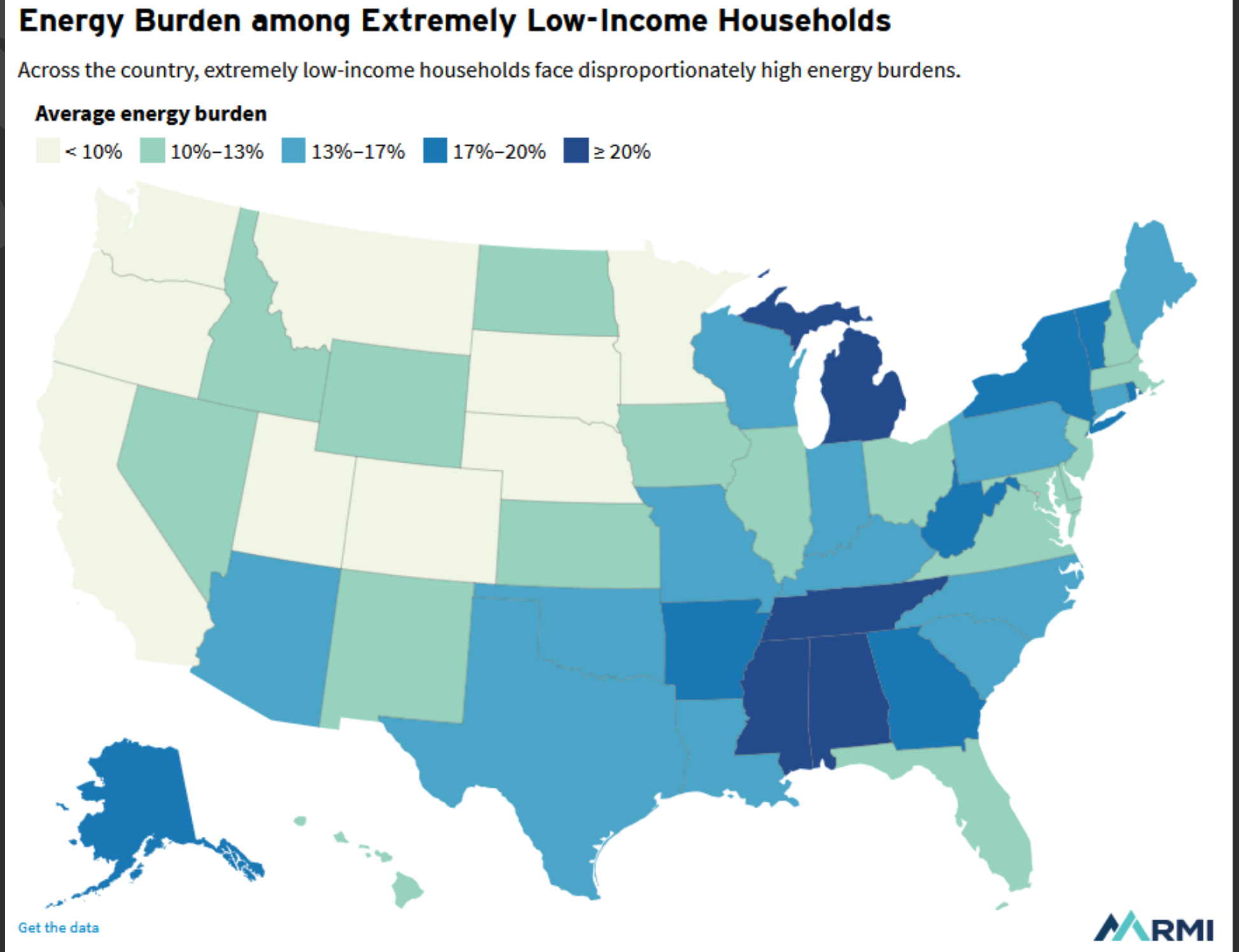
INVESTOR RETURNS BALANCING PROFIT WITH PURPOSE

- Financial and Social Returns:
 - Investors in the Microfund see both financial returns, provided through an annual ROI, and social returns, contributing to combating energy poverty and climate change.
- Impact Investment Model:
 - The Microfund operates on an impact investment model, balancing profit with purpose. It targets energy poverty and climate change in rural India by financing solar system installations, delivering sustainable energy, and reducing carbon emissions.



COMBATING ENERGY POVERTY IN AMERICA

- **Energy Burden in the U.S.:**
 - 1 in 7 families live in energy poverty, struggling with the high cost of electricity and fuel.
- **Impact of Energy Poverty:**
 - In 2020, nearly 34 million households sacrificed essentials like food or medicine to pay energy bills.



*Rocky Mountain Institute

ENHANCING ENERGY RESILIENCE IN MARGINALIZED COMMUNITIES

The Impact Of Solar + Storage



- **Essential Energy Access:**

- Small-scale solar systems (1–2 kW) with battery backup designed to meet critical power needs.
- Enables access to essential services like lighting, refrigeration, and communication in under-resourced communities.



- **Impact Over Cost:**

- Focus on providing reliable power sources to enhance community resilience, especially during emergencies or grid failures.
- Prioritizes impactful benefits over mere cost savings.

EMPOWERING UNDER SERVED COMMUNITIES IN AMERICA WITH SOLAR

Lessons Learned and Steps for
Replication

Potential for Solar Projects

- Solar projects have significant potential in US rural areas, offering opportunities for clean energy adoption, economic development, and resilience.
- Lessons learned from Solar Village Project's (SVP) experience can inform and guide similar initiatives in rural America.

Steps and Resources

- Identify community needs and priorities through engagement and assessment.
- Develop partnerships with local organizations, governments, and stakeholders.
- Access resources such as funding opportunities, technical assistance, and training programs to support project implementation.
- Leverage SVP's expertise and resources to kickstart and scale up initiatives in rural America.

CURRENT NEEDS

- Financial support to fund ongoing projects and expand our initiatives.
- Equipment donations to enhance our capabilities and reach more communities.
- Expertise in areas such as renewable energy, project management, and community engagement to drive our mission forward.

CALL TO ACTION

- **Get involved:** Volunteer your time and skills to support our projects and initiatives.
- **Donate:** Make a contribution to help us continue our work in combating energy poverty and climate change.
- **Partner:** Collaborate with us to leverage resources and expertise, amplifying our impact and reach.
- **Soliciting support** from donors and investors, including both individuals and corporations, for outreach efforts.

SVP RESOURCES: JOIN US IN MAKING A DIFFERENCE

Website, Videos, Donations, and
Contact Information



- **Visit our website:**
www.solarvillageproject.org
- **Watch our videos:**
[SVP Youtube Channel](#)
- **Support us:**
<https://solarvillageproject.org/take-action/>

THANK YOU

FOR ATTENTION

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