



# Sharing Solar Benefits with Multifamily Renters: A Mississippi Case Study

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October 30, 2024

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

# Webinar Logistics

We are using the newly updated version of GoToWebinar!

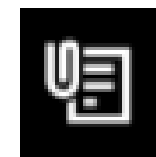
Thank you for your patience as we get used to this new platform. We encourage you to provide feedback in the post-webinar survey or via email.

All attendees are in “listen only” mode – your webcam and microphone are disabled.

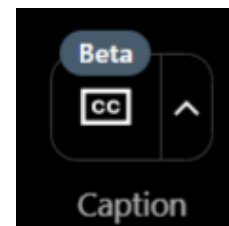
Submit questions and comments via the Questions panel



Speaker bios available in the “Materials” section



Automated captions are available



This webinar is being recorded. We will email you a webinar recording within 48 hours. This webinar will be posted on CESA’s website at [www.cleangroup.org/webinars](http://www.cleangroup.org/webinars)



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.

**USDN** | urban sustainability directors network

footprintproject.org™

AMERICAN MICROGRID SOLUTIONS



**ELEVATE**



GEMINI ENERGY SOLUTIONS



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



# CleanEnergyGroup

# TECHNICAL ASSISTANCE FUND

*Providing Support to Build Local Resilience*



# Webinar Speakers



**Aliya Bagewadi**

US Director of Strategic  
Partnerships  
*Allume Energy*



**Jennifer Welch**

CEO and Founder  
*Vesica Real Estate*



**Alicia Brown**

Director of Georgia BRIGHT  
*Capital Good Fund*



**Seth Mullendore**

President & Executive  
Director  
*Clean Energy Group*



Thank You



**Seth Mullendore**

President and Executive Director  
Clean Energy Group

[Seth@cleanegroup.org](mailto:Seth@cleanegroup.org)

# Upcoming Webinars

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Is Sodium the New Lithium? How Table Salt Might Save the Energy Storage Industry (11/7)

Demand Management: A Cost-Effective, Emissions-Free Alternative to New York City's Aging Peaker Power Plants (11/12)

Expanding Clean Energy Access and Benefits: Award-Winning Programs in Connecticut and Maryland (11/14)

Residential Solar+Storage: Weighing the Benefits of Bill Savings vs. Backup Power (11/20)

Read more and register at [www.cleangroup.org/webinars](http://www.cleangroup.org/webinars)



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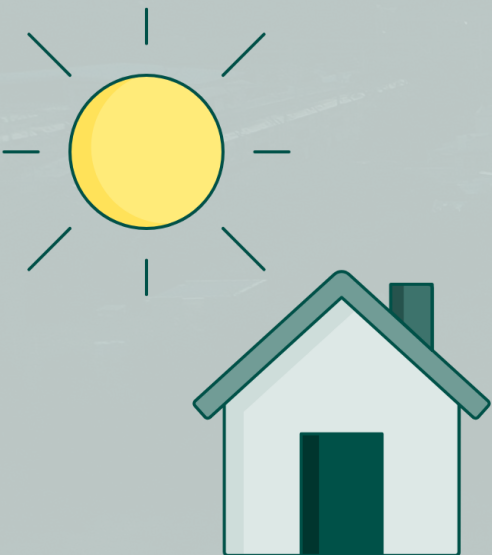


# Shared Solar for Multifamily Buildings **MS Case Study**

October 2024



# Rooftop solar is booming, but not everyone can join in.

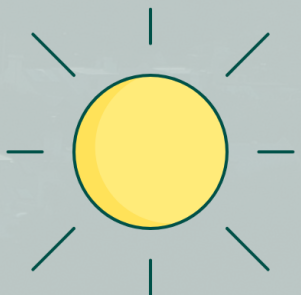


- ✓ Lower electricity bills
- ✓ Lower carbon footprint
- ✓ Access to renewables
- ✓ SRECs

Solar is rapidly being installed on single-family homes across the US



Limited ability to access solar electricity

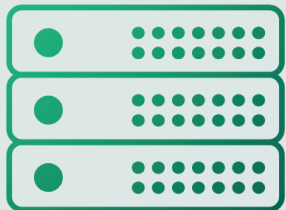


Representing 40% of US households, multifamily residents are missing out

# Historic Barriers for Multifamily Solar



Cost to asset owners without direct benefit



Cost of multiple systems



Difficulty tracking tenant energy data



Reliance on utility policies and programs



- ✗ More systems required & costly to install
- ✗ Excessive wall space necessary
- ✗ No ability to alter allocation

This gap creates major disparities for multifamily residents



## **Economic inequity**


Multifamily residents typically face higher energy burdens

## **Missed carbon reduction**

Missing out on reduced carbon emissions in densely populated areas

## **Lack of resilience**

More vulnerable to energy price increases and grid outages



**SolShare** unlocks  
solar for  
multifamily  
residents

“ Since I'm saving money on my utility bills, that allows me to invest back into my small business or put it in my savings account.

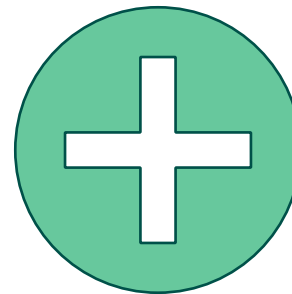
Curtis, SolShare tenant in Jackson, MS

”

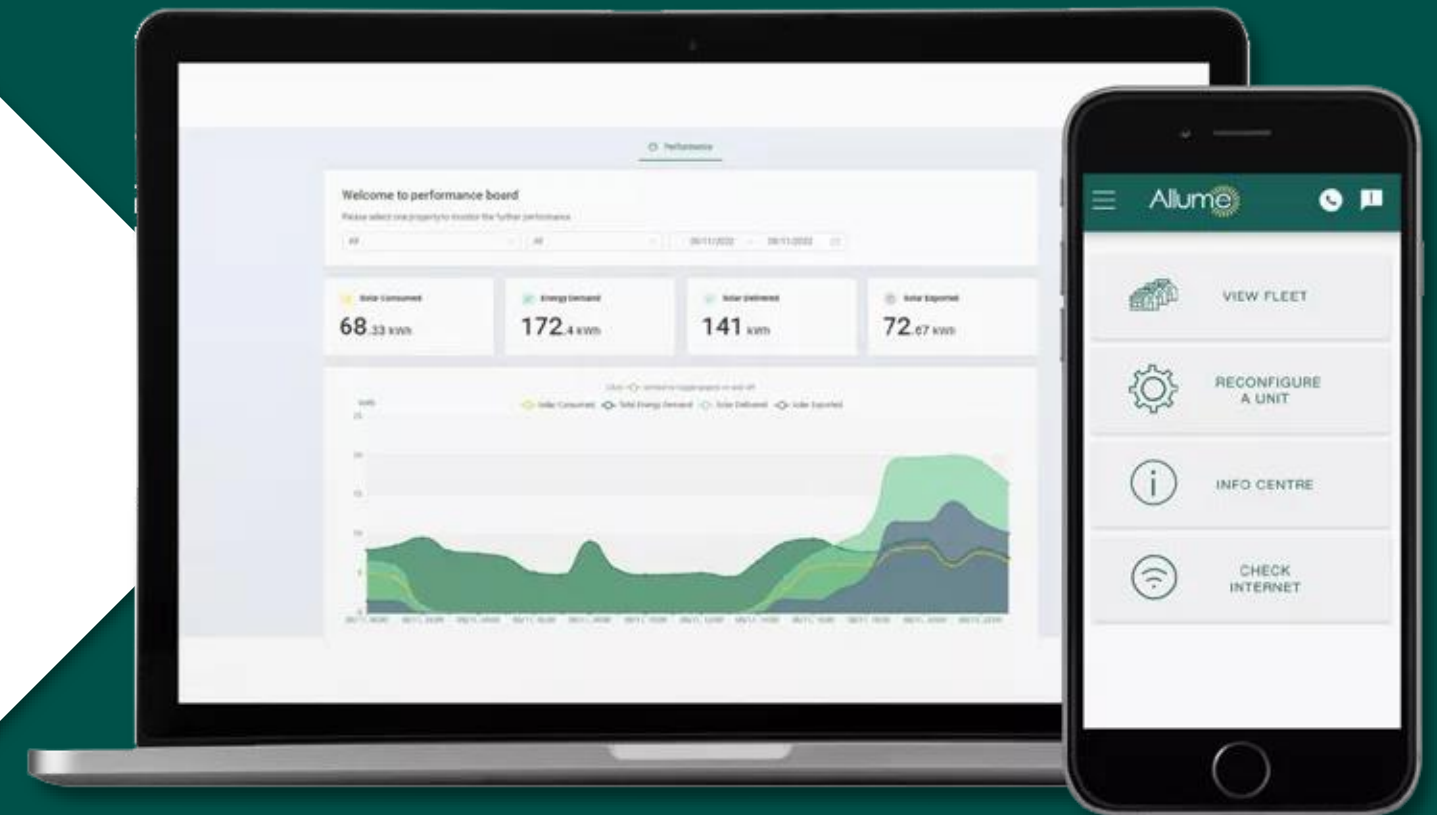
# SOLSHARE



Award-winning smart hardware, connecting multiple apartments to shared rooftop solar.



# SOLCENTER



Sophisticated software to monitor, control and bill for shared solar energy.

# SolShare Unlocks



Increases owners' NOI by \$200-300/apt/yr *and* lowers tenant utilities by \$30-\$60/mo



Sharing energy from a single system



Tracking building-wide energy data



Providing privately-owned infrastructure



- ✓ Simple to install, cost-effective & less space
- ✓ Energy distribution data
- ✓ Flexible real-time allocation

## Rooftop Solar

### Behind-the-meter

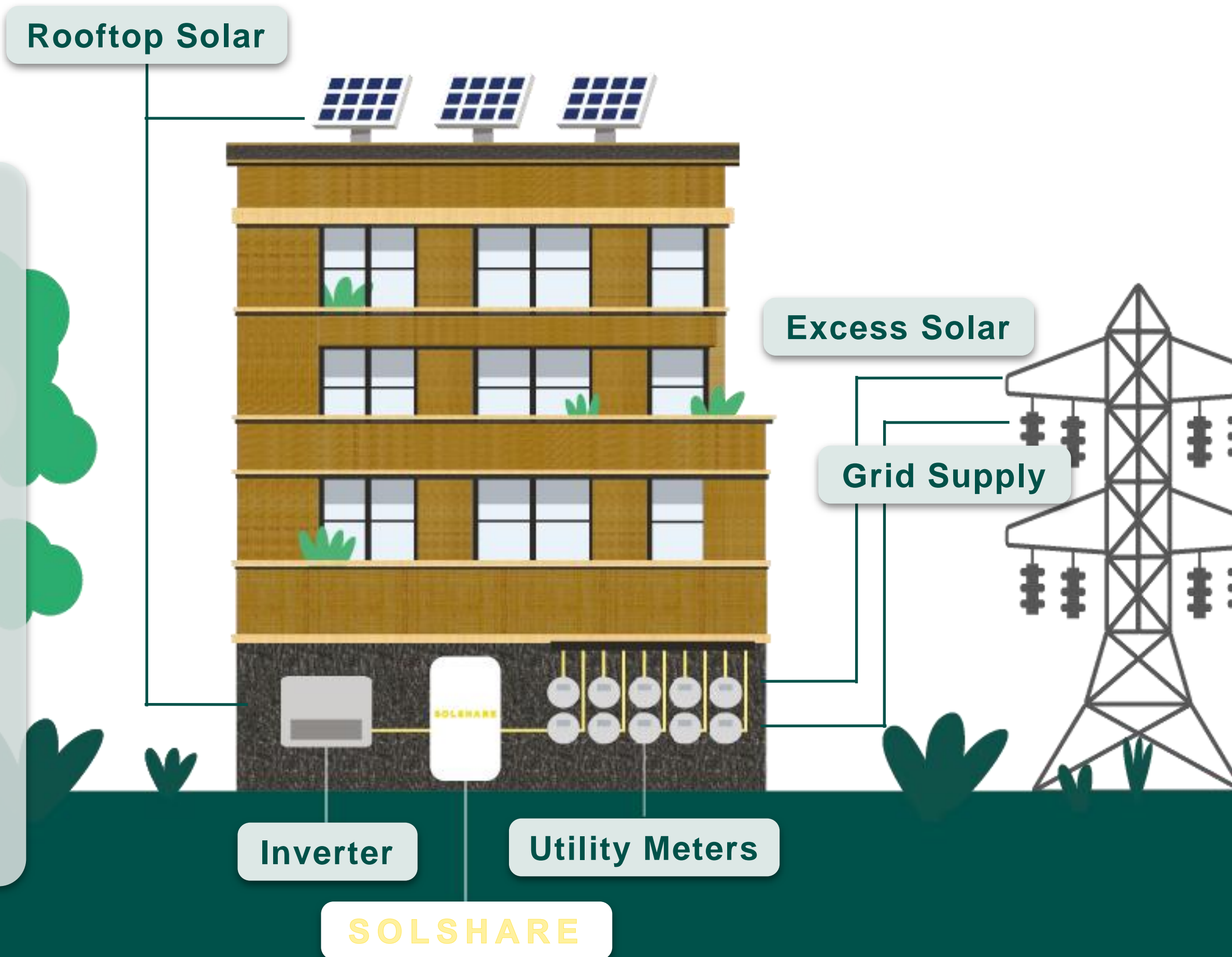
No need for the utility to change its billing system or create a new solar program.

### Distributes solar

Distributes solar from a single rooftop system to multiple 120/240v meters in a building.

### Connected centrally

Outputs wire at the building's meter bank, offering a non-invasive installation process for tenants.



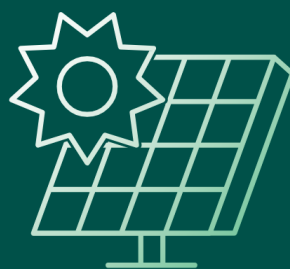




# BENEFITS FOR TENANTS



Reduces electricity bills and overall inflation-related rent burdens.



Protects communities from energy poverty via direct solar access.



Provides multi-family tenants access to the renewable energy transition.



Provides visibility into energy usage, creating tenant confidence in savings.



When I saw my new electricity bill for the first time I was like 'Ooh let's go get a steak!'

Darren, SolShare tenant in Jackson, MS



[Benefits for Tenants](#)



VESICA REAL ESTATE

Jennifer Welch, CFO & Founder

805 Madison Street

Jackson, MS

Solar Project Analysis

10-Unit Multifamily Property in the Belhaven  
Heights Historic District



# VESICA REAL ESTATE

805 Madison Street

Solar Project Analysis

- March 2021: Initial Discussion
- VRE's Mission/Objective
- Incentives/Analysis
- Execution
- June 2022: Project completed

# How it All Began

Like many of my stories, it all began with a PV Magazine article....

With the SolShare, I saw the opportunity to:

- Bring solar to a population with virtually no access to solar but very high energy burdens
- Explore how the load profile diversity of different apartment units could minimize exports to the grid and increase savings for participants
- Try to build a financial model for equitable solar in a state with low energy rates and no net metering

## Behind-the-meter solar sharing technology from Australia

Allume Energy's SolShare technology equitably spreads the solar love among residents of community housing and apartment buildings that can install PV on top. It has just achieved the certification that will let residents of "multi-family units" across America enjoy the benefits of renewable energy.

NOVEMBER 30, 2020 NATALIE FILATOFF

MARKETS MARKETS & POLICY AUSTRALIA UNITED STATES




Two SolShare systems by Allume Energy, installed on an apartment building. Each system can distribute solar to up to 15 separate apartments and systems can be connected to work in concert.

*Image: Allume Energy*

# The Ingredients

**ENERGY EFFICIENCY  
REVOLVING LOAN FUND**



The Mississippi Development Authority  
Energy and Natural Resources Division administers  
the **Energy Efficiency Revolving Loan Fund**  
with the goal of making for-profit businesses, State  
and local government entities, and non-profit  
organizations more energy efficient.

mississippi development authority  
**MISSISSIPPI**  
mississippi.org

## Financial

- Mississippi Development Authority Energy Efficiency Revolving Loan Fund
- Grant for the SolShare from Entergy MS
- 30% federal tax credit

## Collaborators

- Jennifer Welch (building owner)
- Solar Alternatives (solar installer)
- Allume
- Entergy MS
- Me as project manager

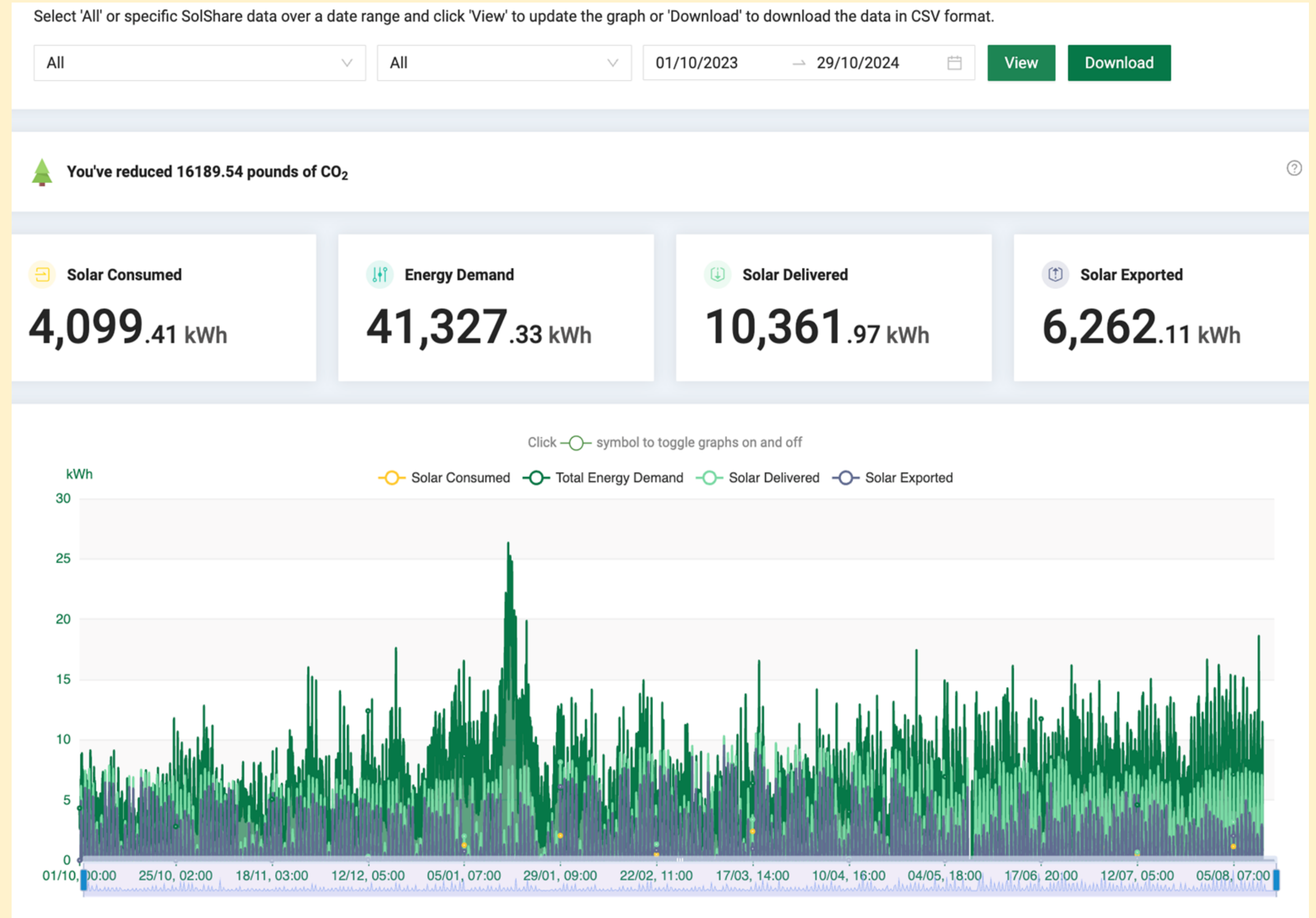
# The Impact

- 22 kW of solar
- 1 SolShare
- 10 apartments
- Tenant savings of 10-20%
- A replicable model!



# Allume portal provides a snapshot of solar distribution

- 25% solar offset
- 16,000 lbs of CO<sub>2</sub> reduction



# Lessons Learned

1. The product works!
2. System orientation matters
3. Probably need fewer apartments per SolShare to offer higher savings given AC output limit
4. Importance of having an external project manager to coordinate across stakeholders
5. Importance of utility education and involvement
6. Importance of low cost capital to success in “opportunity states”



# Now is the Time

- More Accessible and More Generous Federal Tax Credits
  - Adders
  - Direct Pay
- RECs
- Community Change Grants
- GGRF/Solar for All



The screenshot shows the EPA website's news release page. The header includes the EPA logo and navigation menus for Environmental Topics, Laws & Regulations, Report a Violation, and About EPA. The main headline reads: "Biden-Harris Administration Announces \$7 Billion Solar for All Grants to Deliver Residential Solar, Saving Low-Income Americans \$350 Million Annually and Advancing Environmental Justice Across America". The sub-headline states: "EPA announces 60 selectees under Greenhouse Gas Reduction Fund grant competition to deliver solar to more than 900,000 low-income and disadvantaged households nationwide through the President's Investing in America agenda". The date is April 22, 2024. A "Related Links" box on the left contains links to "Headquarters | Office of the Administrator (AO)" and "Read other EPA News Releases about Climate". A "Contact Us about News Releases" link is also present.



The screenshot shows the Solar Power World website. The header includes the "Solar Power World" logo and a "muRata" logo with the tagline "Empowering Medical Innovation". The navigation menu includes "TOP SOLAR CONTRACTORS", "ARTICLES", "POLICY", "MARKETS", "PRODUCTS", "SUBSCRIBE", and "RESOURCE". The main headline reads: "IRS receives more than 8 GW in low-income solar bonus credit applications". The sub-headline states: "The program saw massive demand during the initial 30-day application window." The author is "By Kelsey Misbrener | December 4, 2023".

# Thank You!

**Here to help**

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