

CLEAN ENERGY for OUR COMMUNITIES: ELECTRIC CAP Micro-Grids

Panel



Lynne Harwell Algrant
Greater Bergen Community Action
NCAP Board, Region II



Joe Evans
The Kresge Foundation



Steven Leitner
CAP Solar

The Fierce Urgency of Now

The Inflation Reduction Act is going to jump-start a revolution in clean and green energy across the nation. And so goes CA, so goes the nation.

What does this mean for our organizations and our communities?



WHAT DOES THE GREEN FUTURE HOLD FOR CAA's?

HOMES



JOBS



TRANSPORTATION



REVENUE



Community Resilience

- **SOLAR & STORAGE** will make our agencies places of refuge and continuity during climate episodes.
- **WE** can be the source of the micro-grid for our neighborhoods.



Ensuring our clients are not left out

- If we miss this moment, our communities will be the only ones left using fossil fuels.
- Our communities will be on the hook for maintaining all that infrastructure.



OUR CHALLENGE

- Educate Ourselves & Our Neighbors
- Prepare Leadership & Boards for Decisions
- Prepare Our Organizations for New Technologies
- Embrace Innovation

eCAP

Ensuring CAP Agencies and their communities are not left behind in the transition to a cleaner future.



Joe Evans, Portfolio Director, Social Investment Practice



- Established 100 years ago in Detroit by Sebastian S. Kresge *"to promote human progress"*
- Successful S.S. Kresge Co. five and dime retail business expands nationally
- Until his death at age 99, serves on board and contributes $60 million to the foundation
- Four generations of Kresge family have served the foundation
- More than $5B in grants and $0.5B in social investment commitments which have leveraged more than $1B from the private market



- National private foundation
- **Expand Equity and Opportunity in Cities Across America**
- Invests more than $160 million annually to foster economic and social change
- Seven program areas and a Social Investment Practice

Climate change impacts us all but some more than others — and the communities that Community Action Agencies exist to serve are those hardest hit

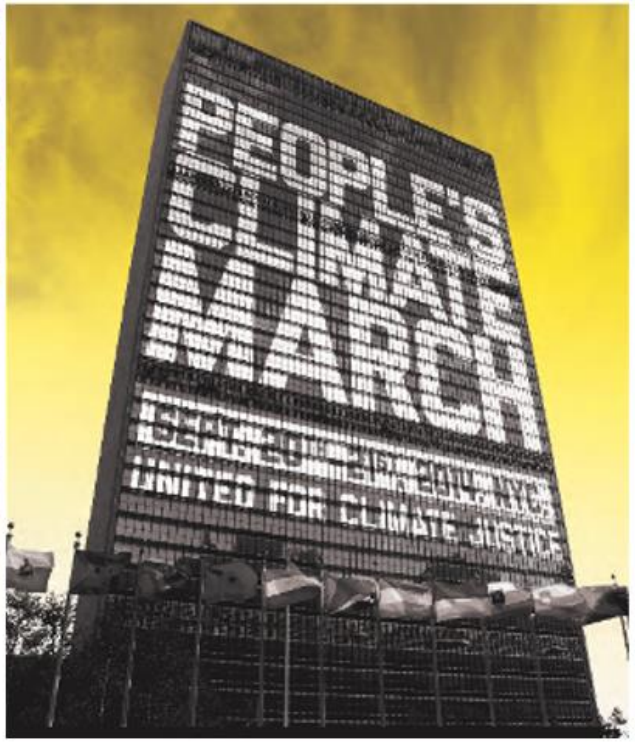






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Inflation Reduction Act

Extension of 30% Solar Investment Tax Credit

- Two new ways to monetize Direct Pay & Transfer
- "Adders" can increase credit to 40% or more

$27 Billion Greenhouse Gas Reduction Fund

- Mostly focused on lending intermediaries
- Green Banks & CDFIs

Justice 40 says 40% of benefit for LMI

Getting Buildings Ready

THE HILL

News Policy Business Opinion Events

THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

Environmental justice investors: It's the demand-side, stupid!

BY JOE EVANS, OPINION CONTRIBUTOR - 03/01/23 1:30 PM ET

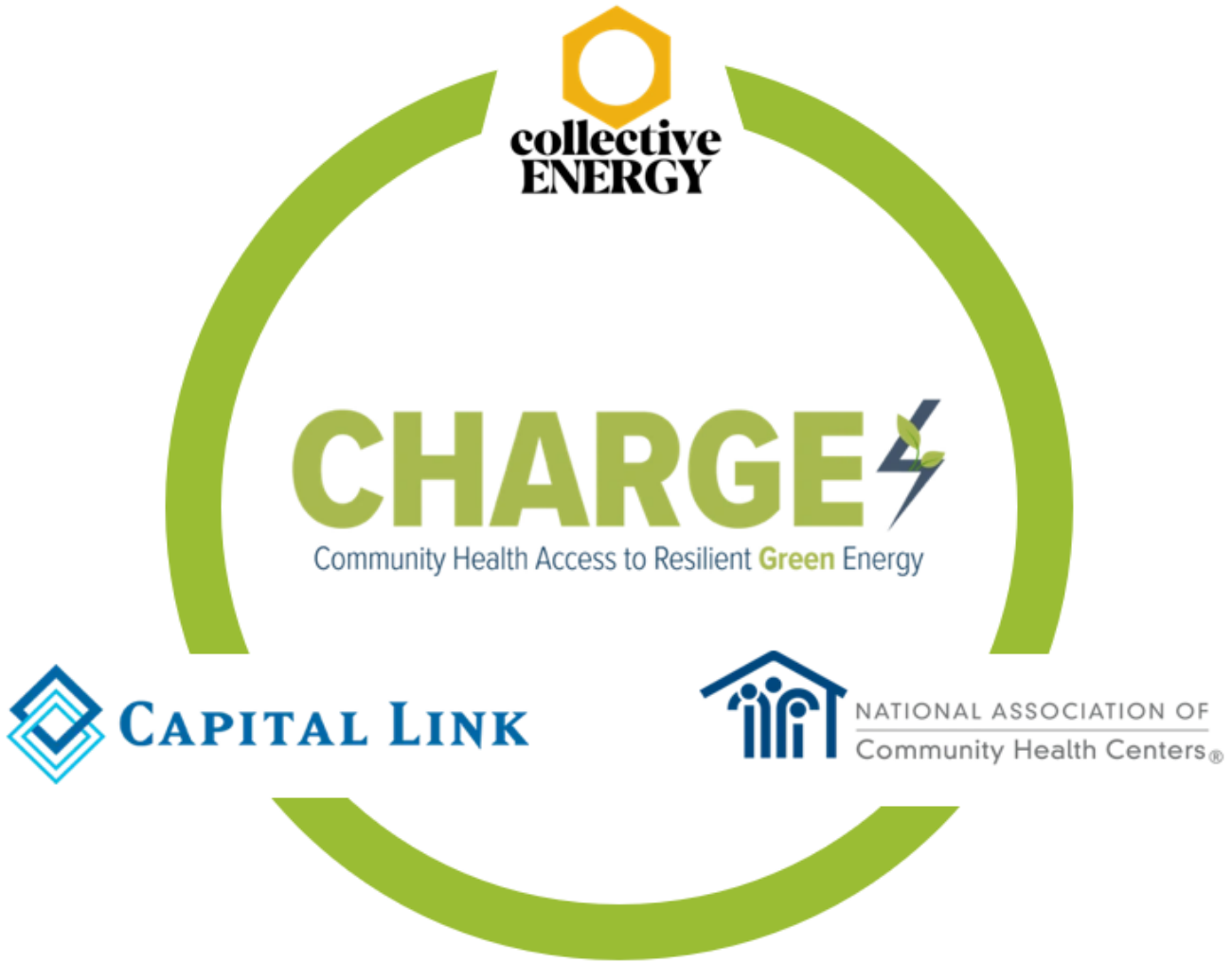


FILE – Gen Nashimoto, of Luminalt, installs solar panels in Hayward, Calif., on April 29, 2020.

Many of us want to see clean energy, energy efficiency, climate resiliency and sustainability take root in communities of color and low-wealth communities.

We could get there quickly if the Biden administration, the Environmental Protection Agency (EPA) and the Greenhouse Gas Reduction Fund invest as much in project readiness as in direct financing.

A partnership between three mission-oriented organizations.



CHARGE offers education, assessment, design, installation, and financing options to make clean and reliable energy easy and affordable for health centers.

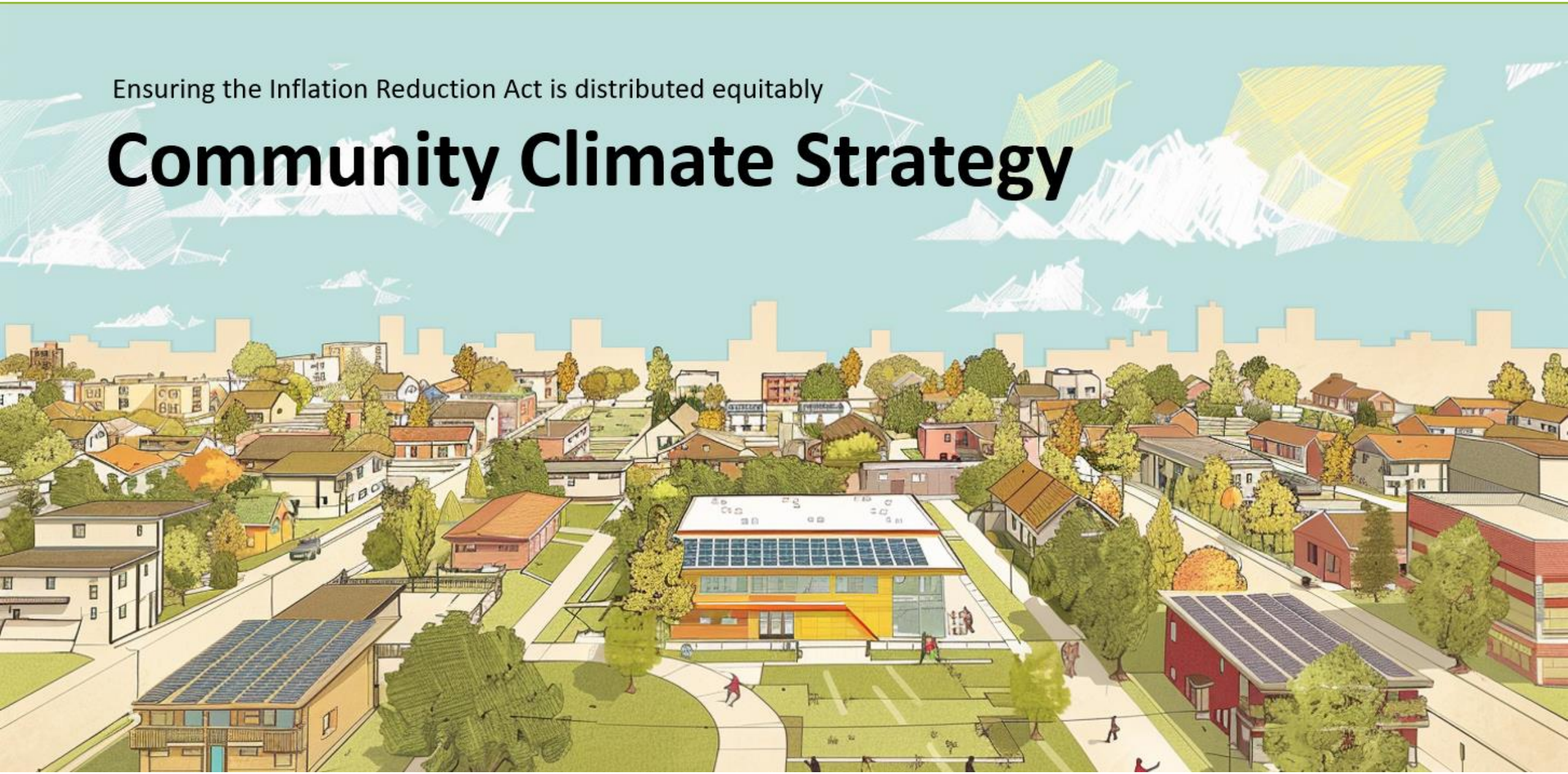
Simplifying green energy, so that health centers can focus on caring for patients.

CHARGE community benefits:

- Access to power during grid outages
- Avoid significant financial losses due to closures
- Remain open to care for patients
- Serve as community resiliency hubs
- Reduced carbon footprint
- Lead effort in fighting climate change

Ensuring the Inflation Reduction Act is distributed equitably

Community Climate Strategy

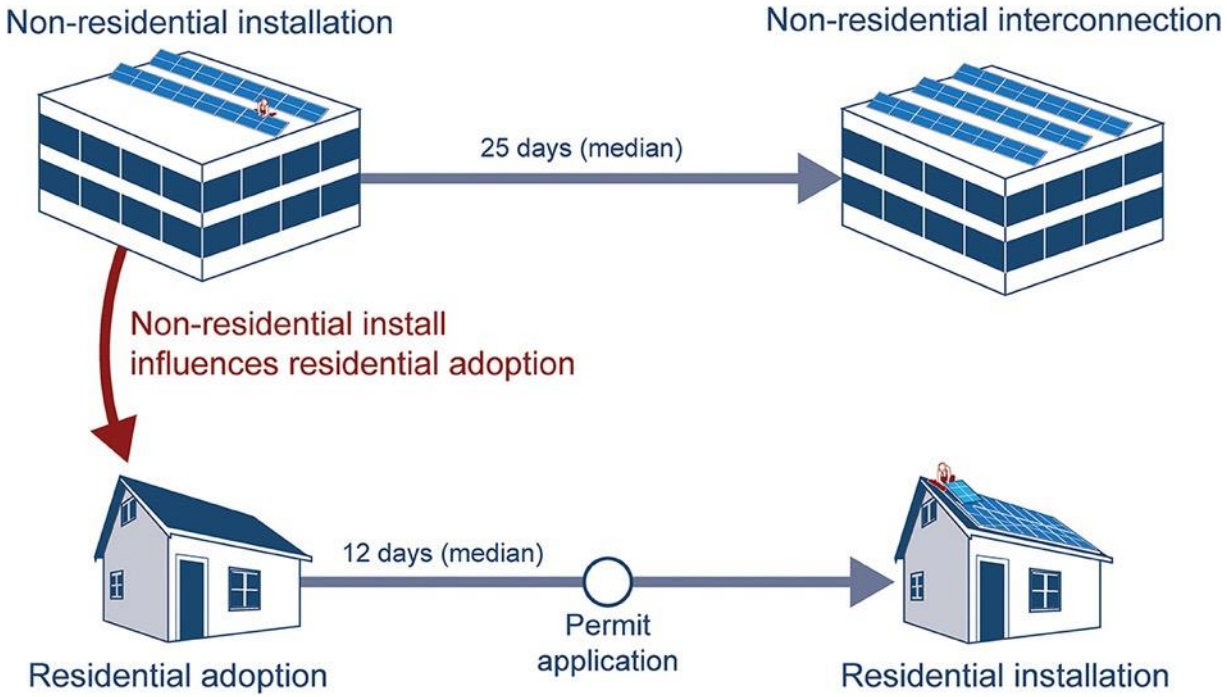


THE KRESGE FOUNDATION

Lawrence Berkeley National Laboratory

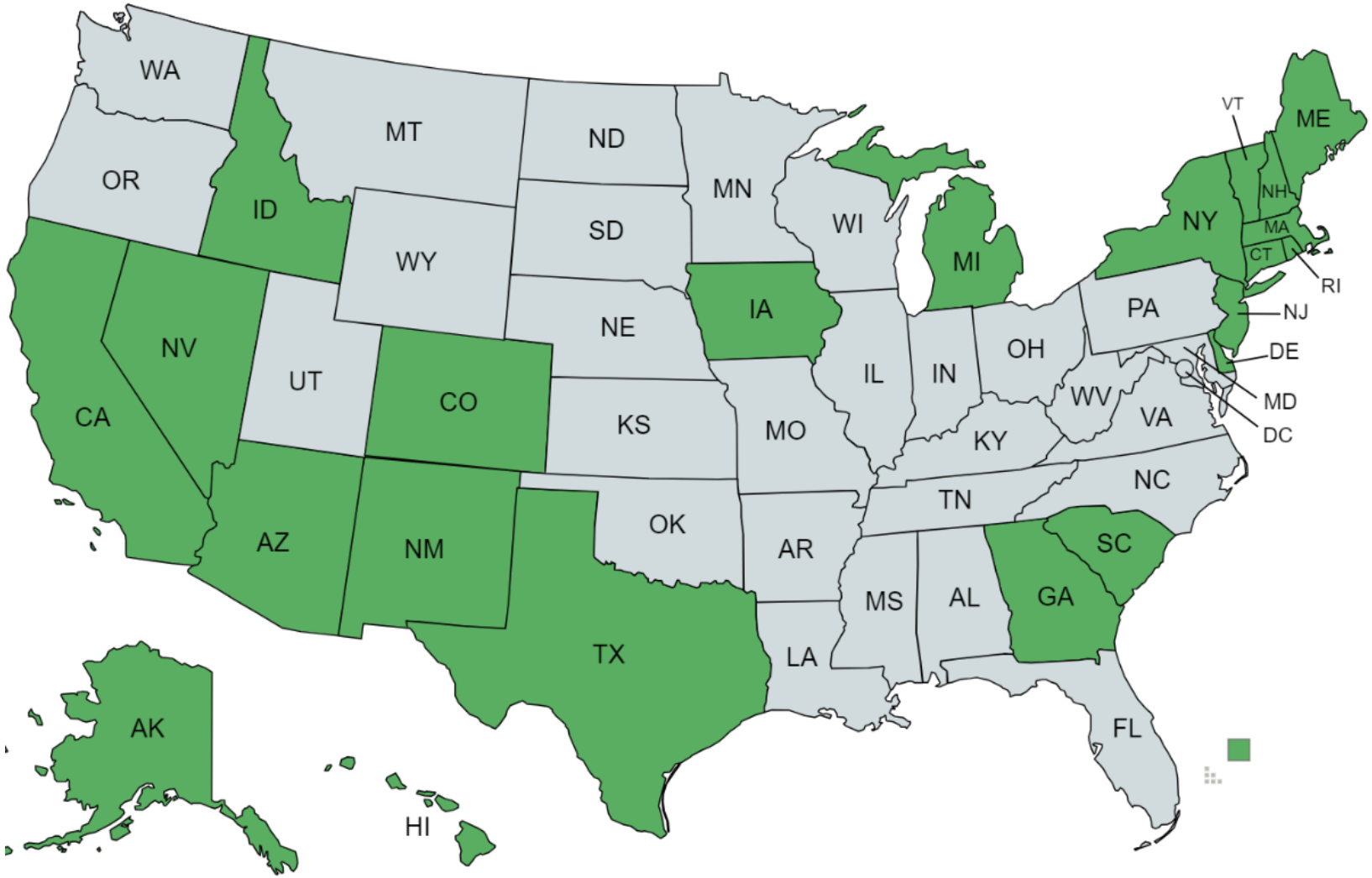
A U.S. Department of Energy National Laboratory
Managed by the University of California

If we normalize carbon reduction in the communities we serve people will follow.



See the full research report here: https://www.frontiersin.org/articles/10.3389/fsuep.2023.1203517/full

States where it is “easier” to do



Replicating the CHARGE Partnership

Other networks of community-serving organizations

- Community Action Agencies
- Planned Parenthoods
- Foodbanks in the Feeding America Network
- The Black Church and other religious orgs
- Goodwills, YWCAs etc

Key Ingredients

- National Membership Organization
- Regional or state level membership organizations
- CDFI Capital Provider
- Developer
- Technical Assistance Provider



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Electric CAP

Steven Leitner
Chief Operating Officer
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T: 201-473-4480

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A Member of Community Action

Cap Solar is a non-profit solar developer which is part of the Community Action Network through its relationship with Greater Bergen Community Action.

Experienced in Renewable Energy

Cap Solar has experience navigating the complex structures of renewable energy development, construction and financing.

Mission Driven

Cap Solar focuses on low-income, non-profit and community facing clients. Cap Solar also provides services to municipal and corporate clients who want to give back to their communities.

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The Kresge / NCAP / Cap Solar Partnership

Our mission is to commit to leading the Community Action Network into the forefront of the renewable energy movement, demonstrating our leadership and innovation in sustainable energy.

We will aggregate a Community Action solar portfolio into a finance-ready pipeline to approach the awardees of the Green House Gas Reduction Fund as well as other financial entities. We will build impactful, scalable and equitable solar solutions for our communities.

Scan to Register
https://www.capsolar.org/reg

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OUTCOMES

FINANCIAL AND OPERATIONAL

Reducing Operational Costs: The savings by implementing renewable energy will lower energy expenses for CAAs, allowing more funds to be directed towards community.

CLIMATE CHANGE

Protection Against Climate Change Impacts: CAAs need resilient infrastructure to cope with the increasing frequency and intensity of climate-induced disasters.

BROAD IMPACT AND SCALABILITY

Model for Other Non-Profits: Successful implementation in CAAs could serve as a replicable model for other non-profit organizations seeking to transition to renewable energy.



ENVIRONMENTAL JUSTICE AND COMMUNITY EMPOWERMENT

Addressing Disparities: Given that low-income communities often face disproportionate environmental burdens, this initiative would be a step towards rectifying these disparities.

ENHANCED ENERGY RESILIENCE

Reliable Power for Critical Services: Many CAAs provide essential services like food pantries, utility bill assistance, and emergency support.

CAPACITY BUILDING AND EDUCATION

Community Engagement and Job Creation: This transition could also create local employment opportunities in the renewable energy sector, offering training and job placement for community members, particularly in green technologies.

Why Electric CAP?

What Electric CAP is:

- We understand the unique requirements of Community Action Agencies.
- Electric CAP's process is fully transparent.
- We can assist you at all levels throughout the process from registration to implementation and management of the solar system.

What Electric CAP is not:



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What can I do right now?

1. Go to: https://www.capsolar.org/reg
    1. Name of Organization
    2. Your Name
    3. Email
    4. Phone
    5. Enter each building address

And / or

2. Get in touch to schedule more time for discussion.

Steven Leitner
Chief Operating Officer
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The eCAP Pipeline

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Which buildings qualify for eCAP?

All CAA and CAA partners' buildings qualify for the eCAP program

- Head Start
- Admin
- Community Centers
- Food banks
- Leased or Owned*
- Low-Income Housing**
- Housing Authority
- Etc..

*Leased buildings must have landlord agreement to the project.

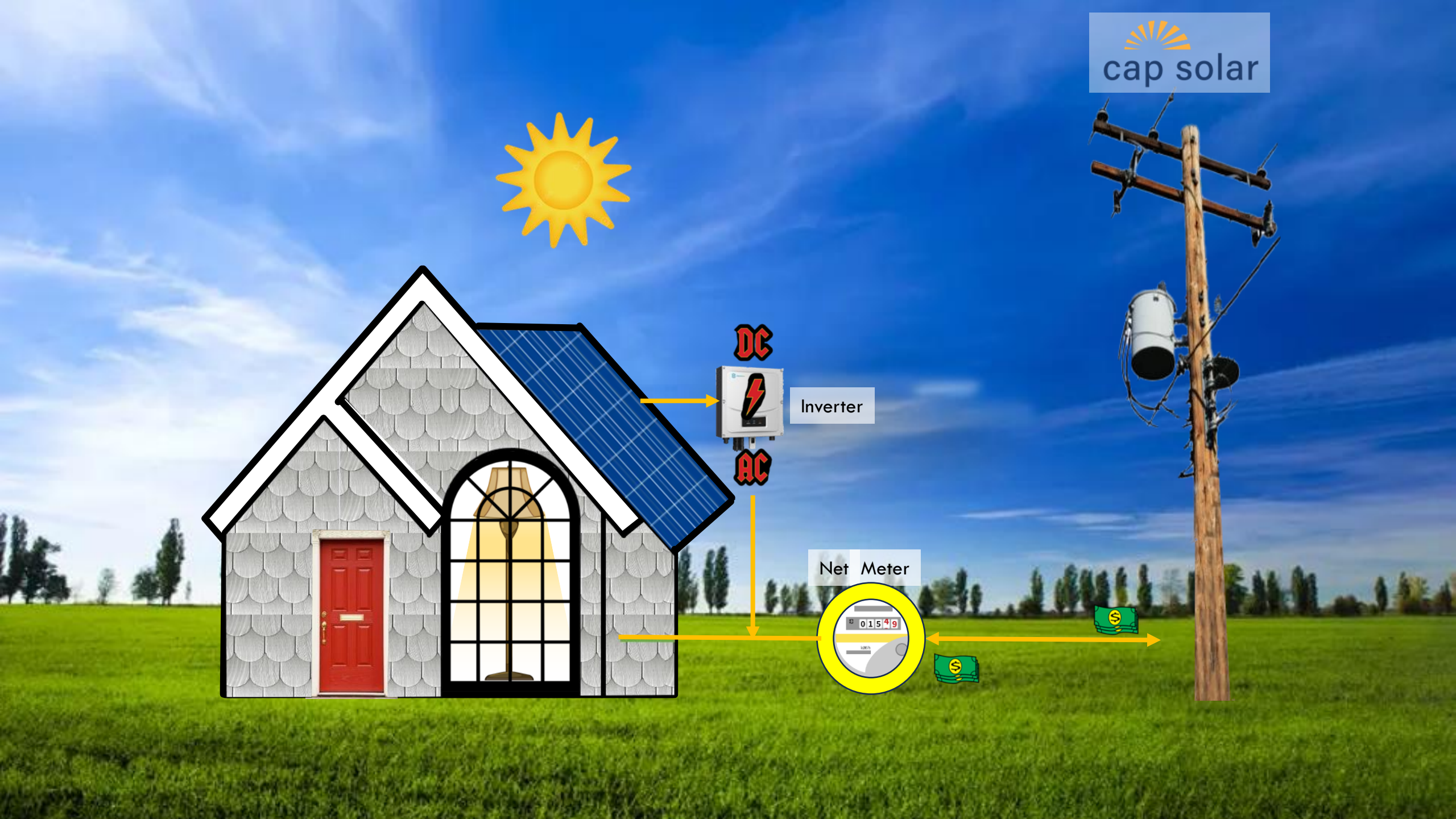
**Master Metered or 1 meter per physical building.

When will my project get started?

Building	Pipeline Position	Description
Good Roof & Electrical	1	Early Adopter
Needs a New Roof	2	Financing (GGRF)
Needs Roof & Electrical	3	Ongoing Pipeline

Leased buildings qualify for eCAP but must have landlord agreement to the project.

How does a solar + battery Resiliency Hub work?


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DC
AC
Inverter
Net Meter


cap solar
DC
Inverter
AC
Battery
Net Meter

Type of Ownership Roles

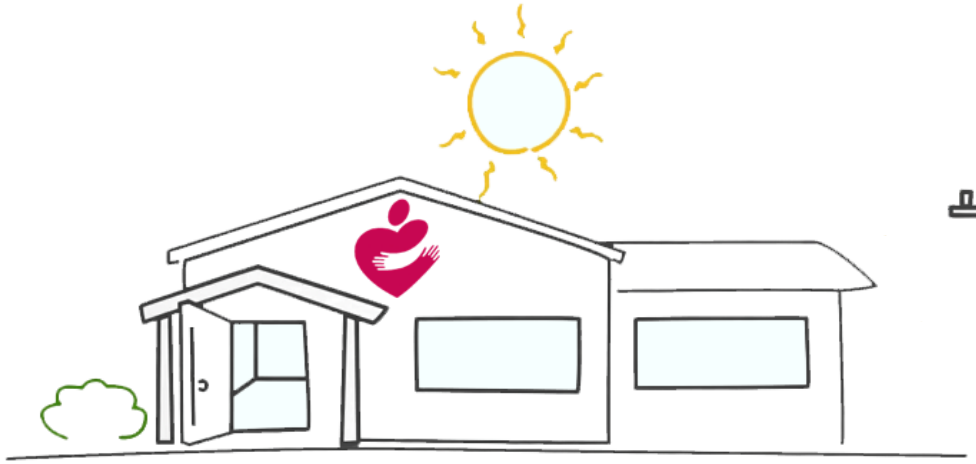
- Power Purchase Agreement (PPA)
- CAP Ownership

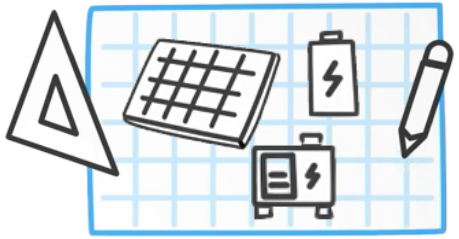
Scan to Register

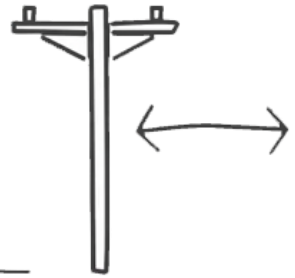
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Roles in a Power Purchase Agreement (PPA)







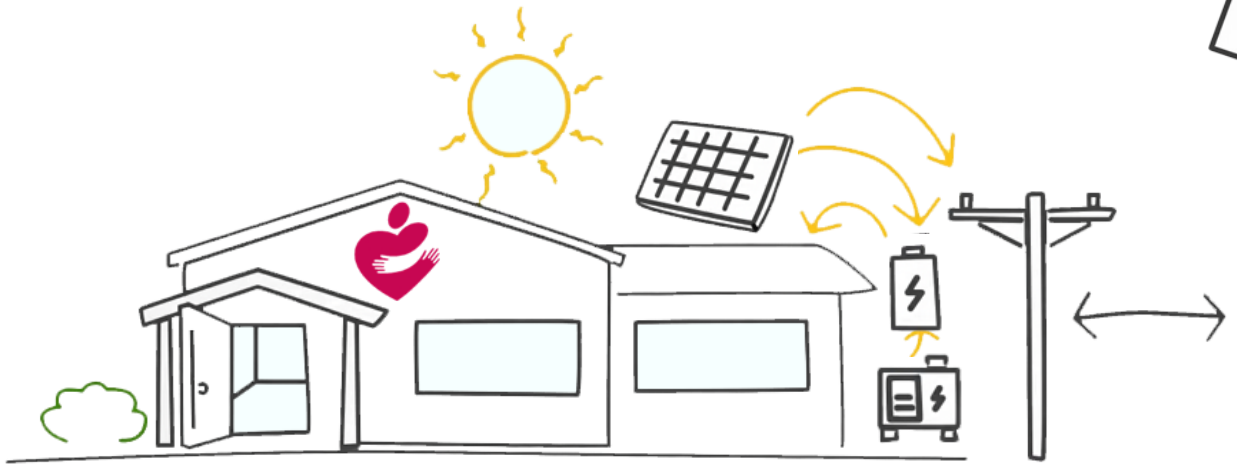
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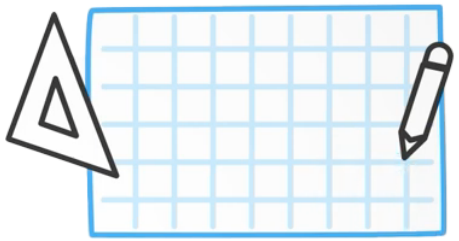
- ✔ Monthly power payments
- ✔ No upfront costs
- ✔ No risk
- ✔ Minimal time investment

- ✔ Fund
- ✔ Design
- ✔ Install
- ✔ Connect
- ✔ Operate

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Roles when a CAP buys a Solar System



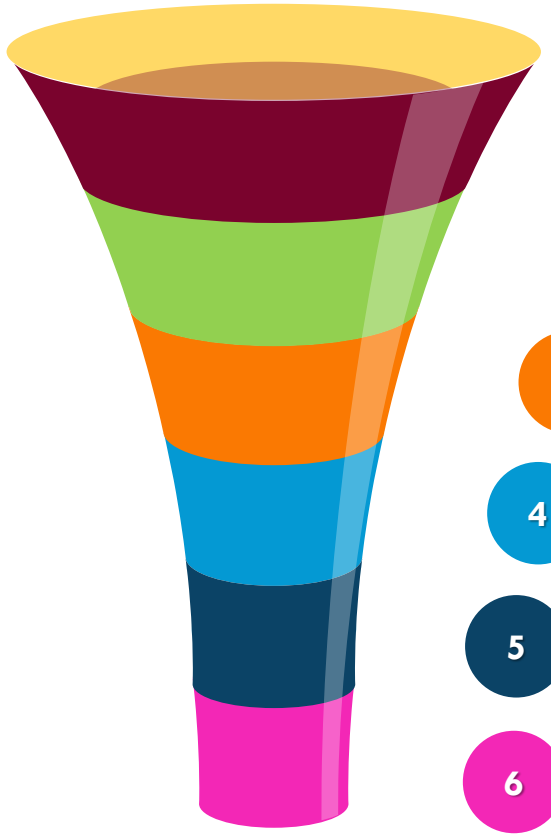


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- ✔ Fund
- ✔ Pay to Maintain
- ✔ Project Manage
- ✔ Insure

- ✔ Finance
- ✔ Design
- ✔ Install
- ✔ Connect
- ✔ Operate

The Electric CAP Process



1. CAA registers with the Electric CAP Program.
2. CAA's prepare answers for readiness worksheet. CAP Solar conducts the initial feasibility study.
3. Cap Solar conducts an on-premise site survey.
4. CAP Solar Produes a Proposal
5. Cap Solar identifies contractors, oversees construction, gets necessary permits and facilitates connection to the grid.
6. Cap Solar maintains the project for its lifetime.

The CAA registers with the Electric CAP Program



All you will need:

1) Organization Name
2) Your Name
3) Email Address
4) Phone number
5) Building Addresses

Scan to Register

https://www.capsolar.org/reg

The CAA registers with the Electric CAP Program

Electric CAP Building Survey

1. Does the CAP own or lease the building?
2. Does the building need a new roof?
3. What is the age of the roof?
4. Does the building need to upgrade its electrical system?
6. 1 month of electric bills for each building.

Cap Solar will email you a worksheet and a link to input the data.

eCAP – The Virtual Site Survey

New Opportunities Inc, 360 Technology Park Drive, Torrington CT 06790

SAMPLE

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PHOTOVOLTAIC SITE REVIEW

58.685KW (DC) Roof Mounted Photovoltaic Power Plant

For
New Opportunities Inc.
360 Technology Park
Drive, Torrington,
CT 06790

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DESIGN

New Opportunities Inc.
360 Technology Park Drive , Torrington, CT 06790

System Specifications	
Power Plant Design	Roof - 105° azimuth @ 7° pitch
Solar Module	Q.PEAK DUO XL-G10.3 485W – 121 modules
System Size	58.685 KW (dc) – 51.9 KW (ac)
Year 1 PV Electricity Production	67,967 kWh
Year 1 Yield	1,158
PV Power Plant Year 1 Electricity Offset	100%
Inverter(s)	SOLAREDGE 17.3KW – 208V 3-PH
Monitoring	Solar Data Array CATM1 3P



YOUR ANNUAL IMPACT

9.4	796	123,479	16.7
Homes' Electricity Offset	Trees Planted	Miles not driven by a car.	Tons of waste recycled instead of landfilled.

eCAP – The Virtual Site Survey

South Plains Community Action Associates, Inc. - 411 Austin St Levelland, TX 79336

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SOLAR

energy for the future

A customized proposal for

South Plains Community Action Associates, Inc.
411 Austin St
Levelland, TX 79336

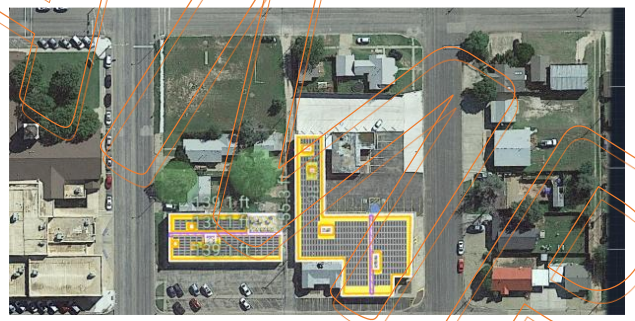
Contact

Steven Leitner
steven.leitner@capsolar.org
n/a

Meet your business on solar

411 Austin St
Levelland, TX 79336

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W hat does a solar property do for you?

It saves

$1,254

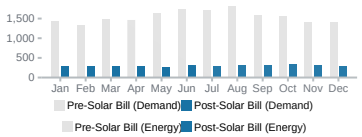
from your electric bill each month

It saves

$n/a

over the lifetime of the system - including purchase cost

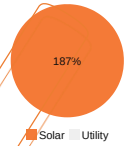
Average monthly electric bill



Cashflow over time

Your customized solution





You would generate

187 %

of your energy from solar

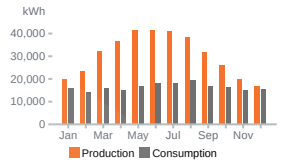
Bill savings that start right away

	Year 1 Monthly Utility Bill	Year 1 Total Utility Costs
Without solar	$ 1,554	$18,643
With solar	$299	$3,592

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System summary

System size	240.07 kW
Year 1 Production	369,319 kWh



A responsible choice

Your system would offset emissions equivalent to

Planting n/a trees

Driving n/a fewer miles per year

Taking n/a cars off the road

Cap Solar conducts an on-premise site survey.

Shading Analysis



Roof Inspection



Electrical Inspection

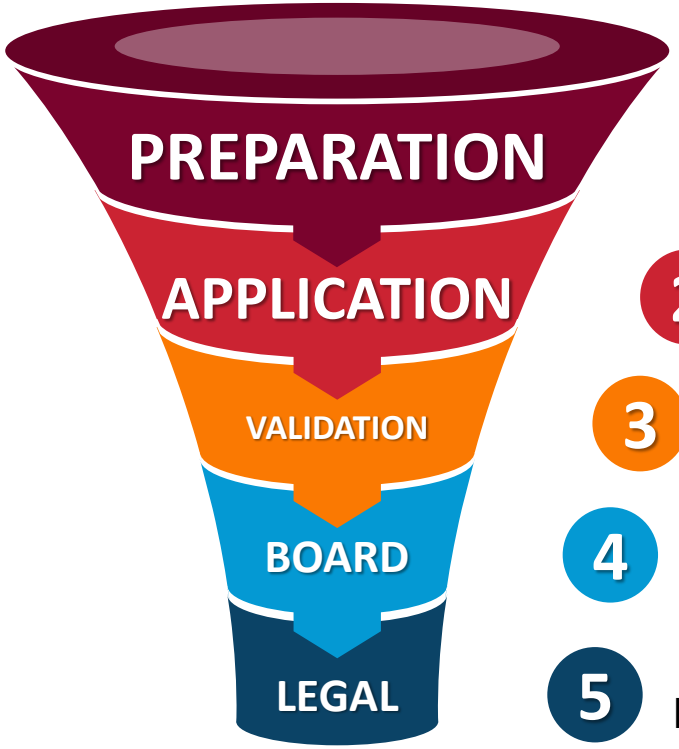




Cap Solar is in discussions with a partner regarding roof + solar

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How can your CAP be part of The Electric CAP Pipeline?



1. Prepare a list of your buildings
2. Go through the application process
3. Building Validation
4. Board Consideration
5. Execute legal documents

Your projects are in the pipeline

1 The CAA registers with the Electric CAP Program

https://www.capsolar.org/reg



All you will need:

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A CHECKLIST for action

