WHEN GOING SLOW IS GOING FAST: Building Community Trust and Accelerating Clean Energy and Community Resilience

the Energy Coalition

Multiple Interrelated Challenges

Underserved communities face multiple interrelated challenges that stack on top of each other:

Barriers

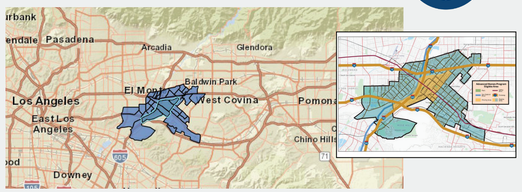
- Limited capacity to engage
- Economic limitations
- Language and cultural barriers
- Landlord-tenant split incentive
- Community distrust/experience of predatory business practices
- Deferred building maintenance

A Community in Action

Since 2020, The Energy Coalition has been implementing the Bassett-Avocado Heights Advanced Energy Community Project ($9M funding from California Energy Commission) with a community-based approach. The project serves underserved communities in the San Gabriel Valley area of California.

BASSETT AVOCADO HEIGHTS advanced energy community

STATE OF CALIFORNIA ENERGY COMMISSION



Our Impact

Advanced Homes
- **35% bill savings (avg.)**
- 46 with solar & 45 with battery storage
- 44 with electrification upgrades
- 26 with roof upgrades
- 37 with panel upgrades
- 4 with full electrification
- $359,040 of bridge financing

Community Solar
- **20% bill savings**
- 670 KW across two sites
- 1st CAISO aggregation
- Serving 350 households

CarShare & EV Charging
- 11 members, 2 EVs, 4 home chargers
- 30 chargers across three school sites

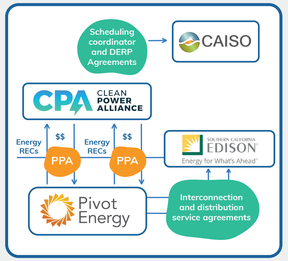
Prosumer Network
- **9% avg. bill savings (modeled)**
- Simulation of Advanced Homes transacting energy in a marketplace
- Identified the technology improvements needed to make this a reality

What We Learned

Design with Renters in Mind
670 kW Community Solar Project

First CAISO Two-Site Aggregation

A total of 670 KW was installed across the two sites, which are scheduled with CAISO as a single resource, and serve approximately 350 households.



Affordability IS Residential Decarbonization

Savings from local renewables enable home electrification

Pairing local renewables with home electrification is essential.

A shift from strict sequencing of home upgrades ("loading order") to pairing renewables with electrification ("loading lanes") can protect utility bills. To accelerate DER deployment, they must be better integrated into state planning.

Learn more about "loading lanes"
Read the white paper:

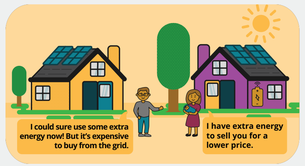
Free is not enough

Program participants need wraparound, concierge-like assistance.

Collective savings for everyone

DERs are a reliable energy source for community resilience.

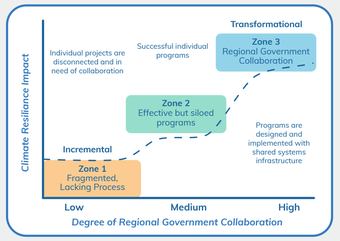
Demand flexibility tools, including virtual power plants, **must** provide value to **people** and the grid. Additional savings can be captured with transactive energy markets that optimize local supply and demand (Prosumer Network).



Community Resilience Leadership via Local Government Collaboration

Resilience Hubs: A model for CCA leadership

Community Choice Aggregators (CCAs) and Regional Energy Networks can institutionalize an integrated approach to resilience hub planning and procurement. By creating a shared systems infrastructure, local governments can accelerate climate action and provide community-wide economic benefits.



Read the white paper

Replication toolkit to be available at advancedenergycommunity.org

Looking Ahead

A Framework for Community Transformation

1

Strengthen community capacity to lead

- Prioritize trust-building with mission-aligned organizations
- Foster innovation in community-led solutions
- Move from individual to collective decision-making to accelerate community awareness and customer adoption

2

Go beyond energy

- Include community resilience, health, wellbeing, and economic development

3

Create an enabling environment for community-centered local investment

- Build a pipeline of investable projects and strategies.
- Develop shared "Systems Infrastructure" with replicability in mind
- Address systemic barriers through a long-term, inclusive, and solution-driven framework

Requires Policy Leadership

1. Unlock value of DERs to accelerate deployment
2. Improve locational awareness
3. Quantify non-energy impacts
4. Address the barrier of unpermitted structures

Develop regulatory & forecasting and planning procedures to account for low-income households.

1. Successful capacity (RA) credit system for utilities & open DER CAISO market participation
2. Effective non-wires alternatives in strategic locations + zonal electrification-ready communities
3. Opportunity in the nexus to health/ health-related funding streams for affordability and equity
4. Decarbonization with Authority Having Jurisdiction (AHJ) without creating a burden on homeowners

Underserved communities need more than just incentive programs!

Market transformation does not equal community transformation