



**BASSETT AVOCADO HEIGHTS**  
**advanced energy**  
**community**

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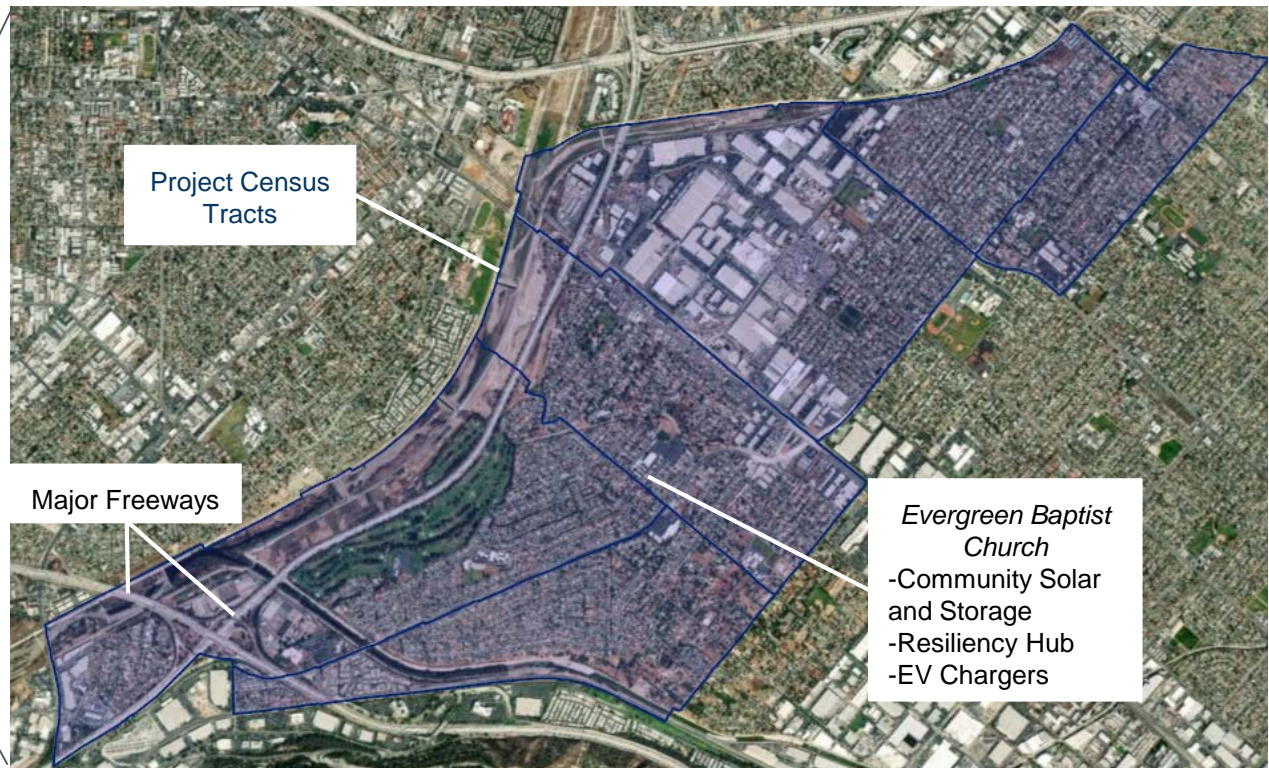
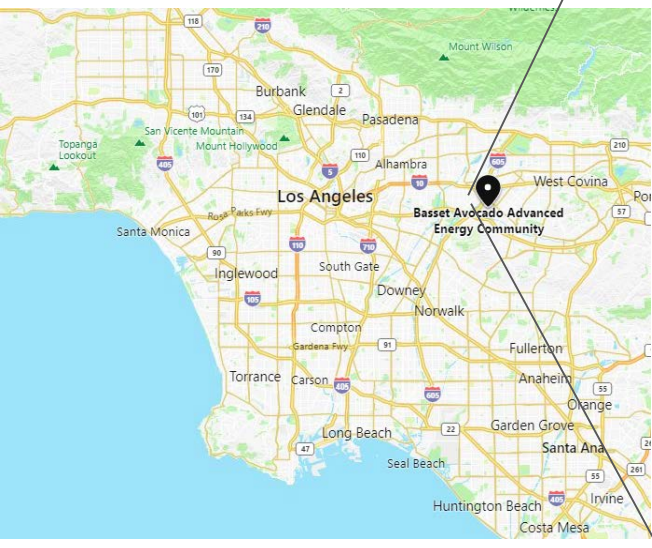
# Major Policy Challenges Facing California

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- **Improve Energy System Resilience to Respond to Historic Wildfires, Extreme Heat Events, and Expanded Use of Solar and Wind Energy**
- **Decarbonize California through Energy Efficiency, Electrification of Transportation and Buildings, and Community Microgrids**
- **Develop and Implement a Post-COVID Recovery Plan that Strengthens the Green Economy and Stays on Track for California's Climate Goals**
- **Ensure that the Needs of Low Income and Disadvantaged Communities (DACs) are a Priority in New Programs and Policies**

# The Advanced Energy Community Pilot Project

Over 250 families  
benefiting from affordable  
and accessible clean energy



# The Bassett -Avocado Heights Community Profile

- 4.7 square miles and population of 28,000
- Ranks within the top 10% of disadvantaged communities in California
- Impacted by toxic emissions from nearby industrial activities and freeways
- Expected to experience 40+ additional extreme heat days per year by 2050



Figure 4. Two children with Advanced Energy Community buttons at the San Angelo Parks After Dark event



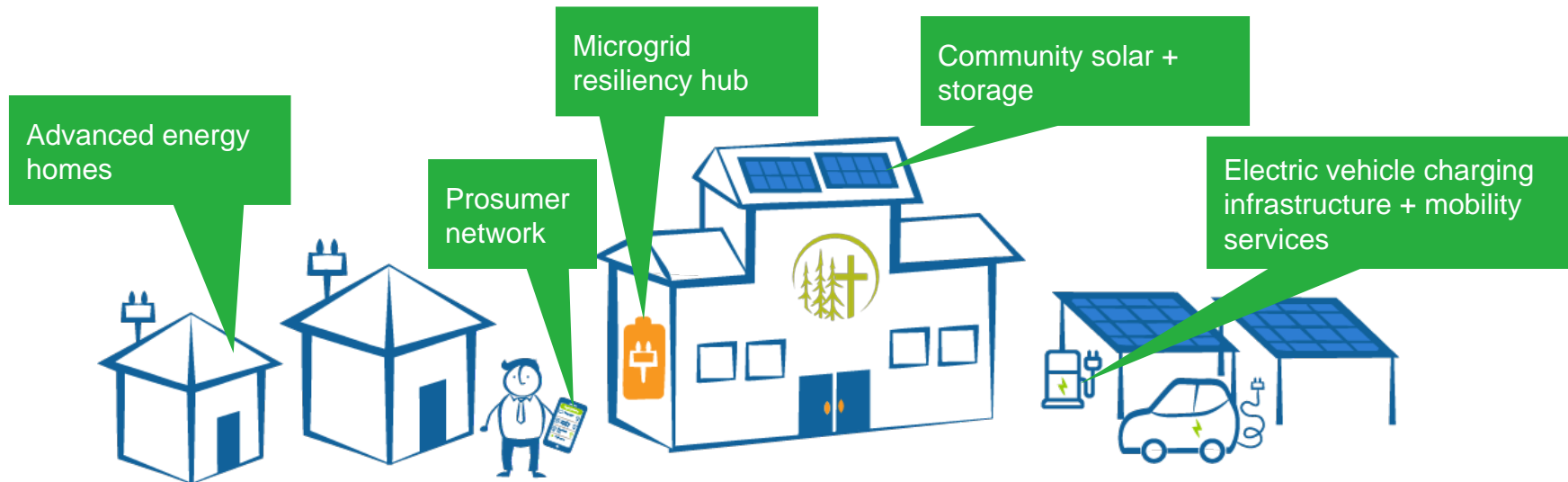
# Innovative, Community -Scale Energy Project Design

- Provides local renewable energy and lower electricity costs to DAC residents
- Overcomes the barriers to DAC energy projects and creates a model that can be replicated throughout California



# What is BAAEC?

The project has five key features that empower residents to be part of a local energy-producing network where clean energy is affordable and accessible



# Community Solar + Storage



- 1.2 MW of solar and 3,000 kWh of battery storage
- Provides a 20% rate discount for 100% local renewable electricity for 235 families
- In partnership with publicly-owned electricity provider



# Advanced Energy Homes



- Fifty (50) families on the path to zero-net electricity
- All homes receive a free roof-top solar system
- All homes receive a free battery storage system
- 20 homes receive a free electric heat pump water heater with demand management controls





# Prosumer Network Pilot



Demonstrates how blockchain technology can enable a ***transactive energy platform*** that ***measures, validates, certifies and transfers carbon emission credits*** and simulates how the ***Advanced Energy Homes*** could produce and sell electricity in a future digital energy market



# Microgrid Resiliency Hub



A 250 kW rooftop solar system and 500 kWh battery storage system will be installed at a community church center

- Both grid-connected and microgrid operation modes
- Prioritizes resiliency and is available to the community in the event of power outages and extreme heat days



# EV Vehicle and Charging Services



- Builds local EV infrastructure with 5 DC Fast-Charging stations
- Deploys EV vans for first and last mile transit and vanpooling options
- Performs real-time enhanced air quality testing to measure positive air quality impacts



# BAAEC Benefits the Community and is a Model for Future Decarbonization Efforts

- Reduces GHG emissions by 64% and net electricity consumption by 96% over a 25 year period
- EV vanpooling and microtransit services are expected to produce an annual emissions reduction of 30.5 MTCO<sub>2</sub>e
- Supports the decarbonization of other DACs across California by offering a replicable model for local and affordable clean energy

# Thank You!

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