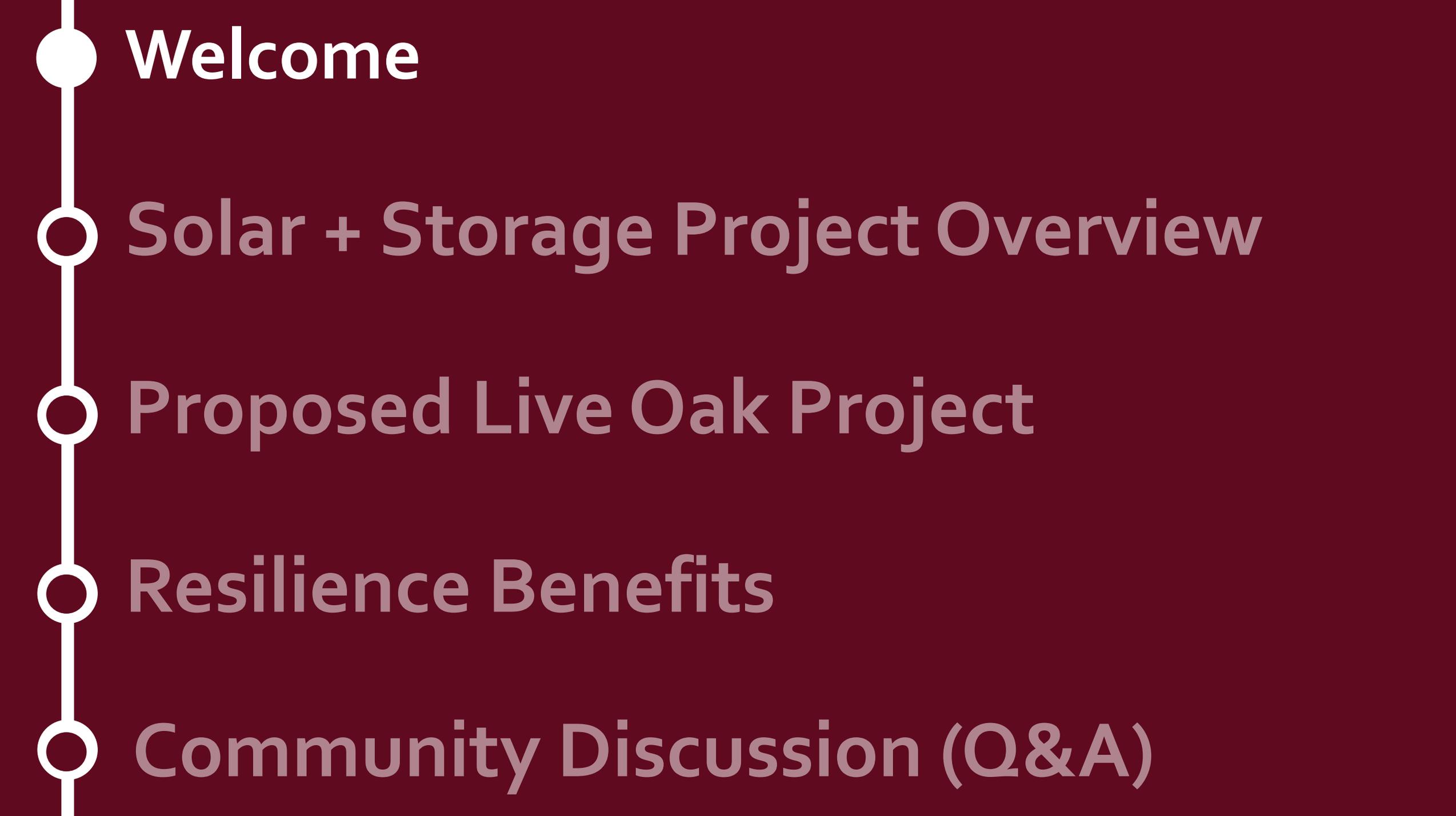


Live Oak Proposed Solar + Storage Project Virtual Community Meeting

October 28, 2024





● Welcome

○ Solar + Storage Project Overview

○ Proposed Live Oak Project

○ Resilience Benefits

○ Community Discussion (Q&A)

Welcome – Team Introductions



City of Berkeley

Planning Department, Office of Energy & Sustainable Development:

- Sarah Moore, Marna Schwartz, Katie Van Dyke

Department of Parks, Recreation & Waterfront:

- Scott Ferris

Fire Department, Office of Emergency Services:

- Jamie Albrecht

Ava Community Energy

- Andy McElroy, Anish Patel



Gridscape Solutions

- Vipul Gore



Solar + Storage Project Overview

Powering Berkeley's Resilient Future



Solar + Storage combines rooftop solar panels with battery backup systems. It's a key part of the City's Resilience Strategy and Strategic Plan.

What is Solar + Storage?



1. Daily Energy Savings

Offsets time-of-use charges during peak pricing periods. Reduces overall electricity costs.

2. Emergency Preparedness

Provides backup power during outages. Crucial for maintaining essential services during natural disasters.

3. Climate Action

Supports building electrification goals. Reduces reliance on fossil fuels (diesel generators) and lowers carbon emissions.

Project History



Berkeley Energy Assurance Transformation Microgrid Project (2015-2016)

Berkeley City Council Authorizes Participation in Ava project (March 2021)

City Council to consider approving contract with Ava (Nov 12, 2024)

Ava Solar + Storage Facility Assessments (2019-2023)

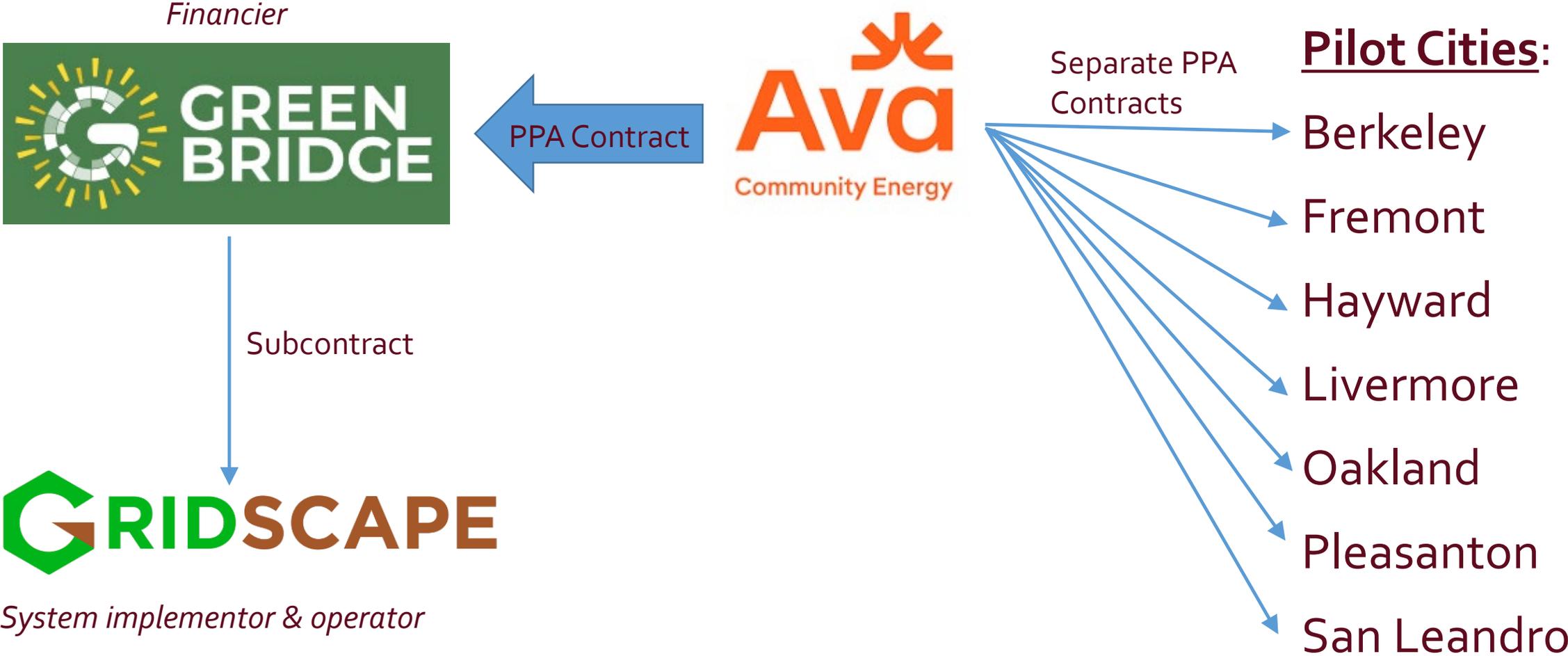
Ava Request for Offers (RFO) Released (July 2023)

Ava to finalize pricing & portfolio

Implementation by April 2026

October 28, 2024 Community Meeting

Partnership structure



Ava Community Energy

&

Live Oak Community Center

Critical Municipal Facilities Program

City of Berkeley



What is Ava Community Energy?



Ava Community Energy (Ava) is a local community choice power supplier committed to providing Alameda County and the City of Tracy with clean, green electricity at low rates.

Ava is the default provider of electricity generation service for all customers in the jurisdictions we serve. Customers are automatically enrolled in Ava's service and are billed by PG&E.

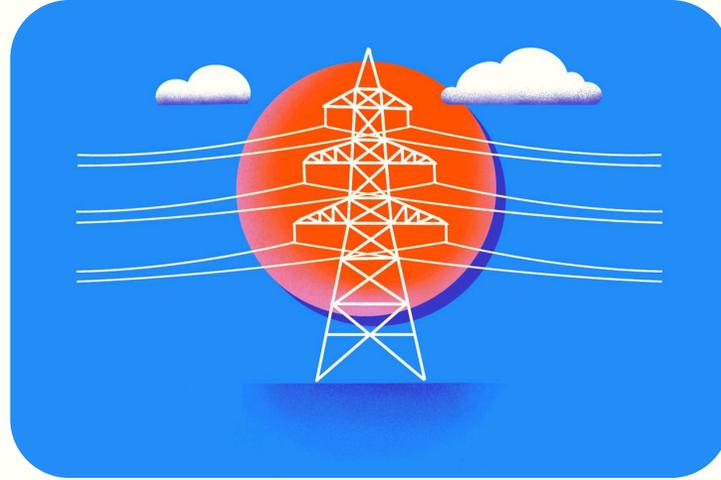
Ava is a not-for-profit public agency that reinvests earnings back into the community to create local green energy jobs, local energy programs, and clean power projects.

How It Works



1. Ava buys and generates clean power

Ava buys from, and is building, clean power plants. Ava sells the power to customers at low rates.



2. PG&E delivers the power to homes and businesses

Ava's power is delivered to customers by PG&E. Customers pay PG&E for delivery as they always have.



3. Customers get the power and local benefits

Customers benefit from clean energy, low rates, local governance, and innovative programs.

Local Development



Transportation Electrification

- Public fast charging network
- Medium/heavy duty vehicle electrification
- E-Bike incentives



Building Electrification

- Induction stove retrofits
- Induction cooking demonstrations



Resilience

- Resilient Critical Municipal Facilities
- Resilience Hubs
- Solar + Storage Incentives



Energy Efficiency

- Commercial Energy Efficiency

Ava Community Energy in Berkeley

54,365

Berkeley homes and businesses served by Ava

98%

Ava customer retention rate in Berkeley

\$2.9M+

Bright Choice savings by Ava customers in Berkeley since 2018

78%

Ava customers in Berkeley served by Renewable 100

Local Control

Councilmember Igor Tregub serves on Ava's Board of Directors, representing Berkeley

Community Investment

Ava offers ongoing direct community investments through Local Sponsorships, which has awarded over 140 grants. **20 organizations in Berkeley** have received these local grants, amounting to **\$40k of direct investment**, including:

- Berkeley Food Network
- Scientific Adventures for Girls
- Chavez Park Conservancy
- Berkeley Food Pantry
- Spurs FC
- Waterside Workshops
- Collective Resilience



Potential Critical Municipal Facility sites can include:

- Firehouses and Police Stations
- Community Centers
- Libraries
- Equipment & Corporation Yards
- Water Treatment Facilities
- and more

Our goal is to ensure critical facilities are provided with reliable power during outages through solar power and batteries.



The Ava Critical Municipal Facilities Program



Focus: Live Oak Community Center

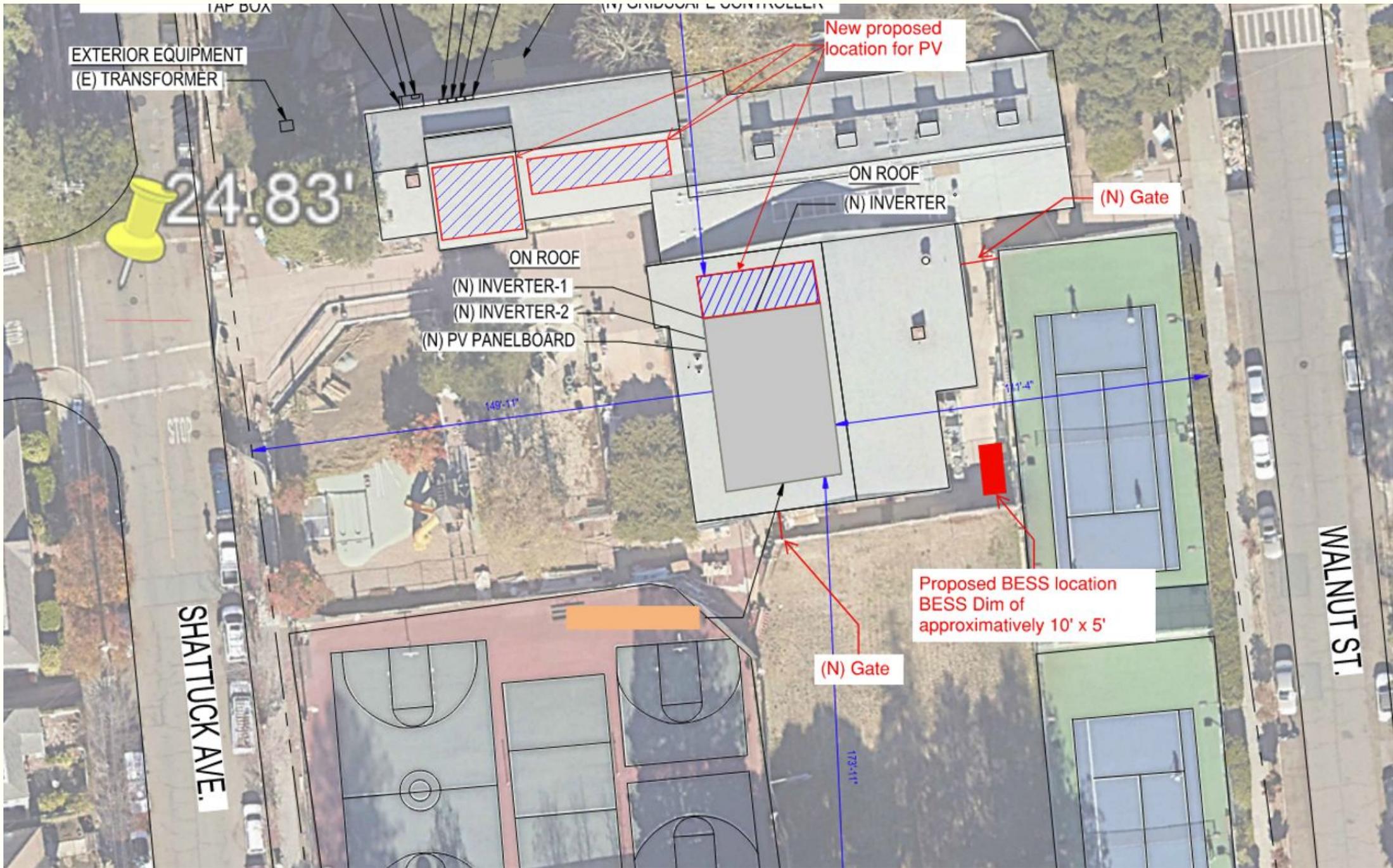
Solar system details:

- 36.8 kilowatts-DC
- Located over the theater on south-facing roof with possibility of solar panels on a portion of the west-facing community room roof

Battery details:

- 77.4 kilowatts-DC
- Can power Live Oak at maximum load for 2.5 hours (likely longer in real-world load cases with PV system re-energizing battery)





Battery Location



Next to HVAC equipment along an existing east-west path that will be cordoned off. Proposed battery location chosen for minimal impacts on park.

Other supporting reasons for selection:

- Not visible from the street
- Preserves open and recreational space
- Can be fully secured behind gates along with other HVAC equipment
- Level, paved surface



Security & Safety

Security:

- Battery box is an integrated outdoor-rated and weatherproof unit that includes all essential components and 24/7 advanced monitoring
- Secure heavy gauge metal enclosure with lock
- Wrought iron gates will block pathway at both ends
- No public access

Safety:

- Built-in fire suppression
- Underwriter Labs listed, which means that the product has been tested by UL to nationally recognized safety and sustainability standards. Additionally, it has been found to be free from a reasonably foreseeable risk of fire, and electric shock in hazardous environments (which Live Oak is not)

Maintenance & Repairs

- Solar and Battery operation and maintenance are both covered by a comprehensive 25-year service contract
- Remote monitoring for immediate issue detection
- Ava Energy is Berkeley's direct partner throughout

Timeline

Order Long-Lead Items:	January 15, 2025
Permitting:	January 21, 2025 - May 1, 2025
Interconnection Process:	April 11, 2023 - October 6, 2025
Procurement:	May 1, 2025 - September 3, 2025
 Construction:	September 3, 2025 - January 6, 2026
Commission:	January 7, 2026 - January 27, 2026
Commercial Operation Date:	January 28, 2026 - February 17, 2026

Thank you!



Online

AvaEnergy.org

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+1 833.699.3223

Email

customer-support@AvaEnergy.org

Social

[PoweredWithAva](#)



Community Resilience

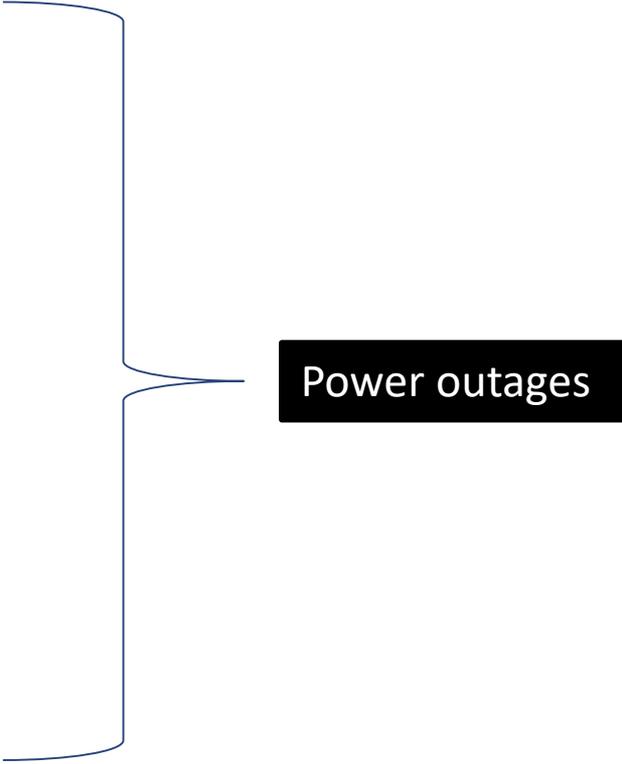
City of Berkeley

Office of Emergency Services

Jamie Albrecht, Emergency Services Coordinator

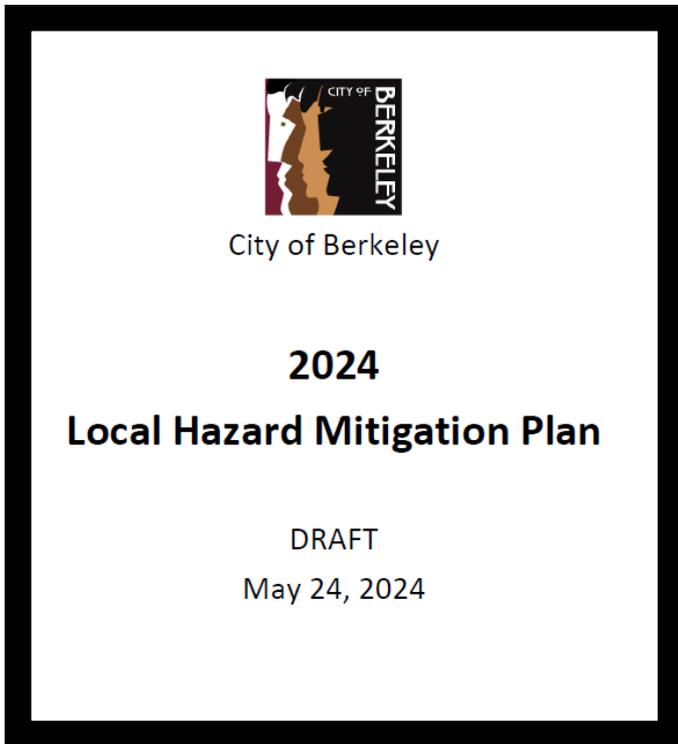
Natural Hazards of concern in Berkeley

- Earthquake
- Wildfire
- Landslide
- Flood
- Extreme Heat
- Landslide
- Tsunami
- Sea Level Rise
- High Winds



Power outages

2024 Local Hazard Mitigation Plan

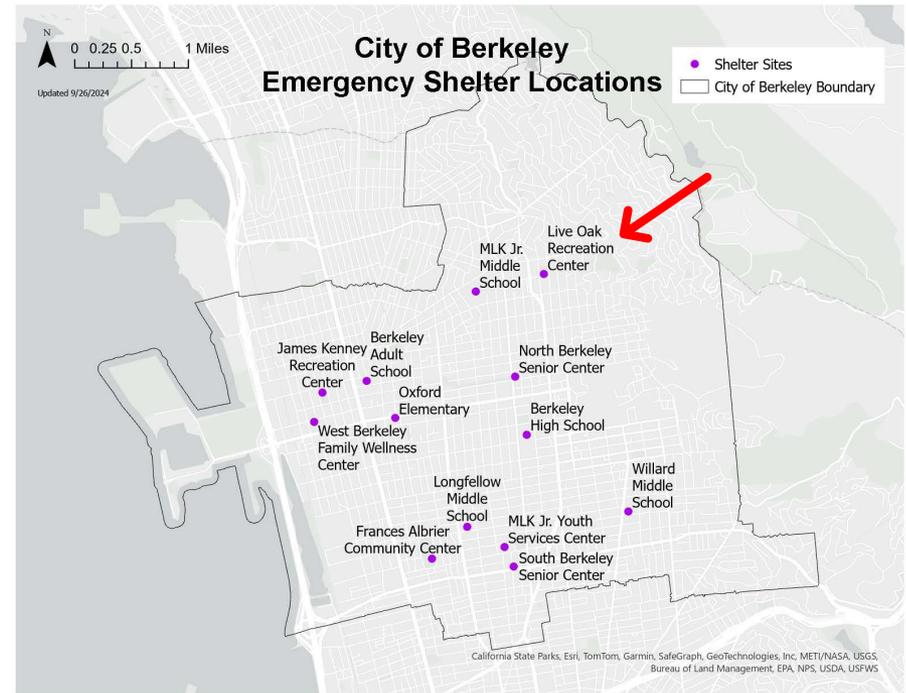


- Outlines goals and actions that the City is taking to reduce risks associated with natural hazards of concern
- Medium Priority Action:
 - Implement energy assurance strategies at critical facilities
 - Identify potential actions to mitigate energy assurance vulnerabilities at critical City facilities during planning/conceptual design of both retrofits and new construction.
 - Provide guidance to help the City consider opportunities to design, finance and implement clean energy assurance strategies (e.g., photovoltaic-supplemented generation, energy efficiency activities, and/or mobile charging stations).
 - Work with partners to identify additional non-City critical facilities and develop strategies to provide clean backup power at these sites.



Mass Care and Shelter Program

- In a disaster, many individuals and families in Berkeley will rely on emergency shelters
- Backup power will be essential for:
 - Food services
 - A/C or heat
 - Charging electronics
 - Medical devices
 - Hygiene services



Community Discussion / Q&A

Thank You!



If you have questions please email:
sustainability@berkeleyca.gov

