

Communities Local Energy Action Program (LEAP)



- LEAP Pilot Program Partners with Low-Income, Energy-Stressed Communities
- Communities experiencing environmental justice challenges and/or direct economic impacts from reducing their historical dependence on fossil fuels
- Focus on creating community-driven action plans for economic development related to clean energy.



Communities Local Energy Action Program (LEAP)



LEAP Technical Support in Bakersfield: MICROGRIDS

- Developing an equity and site evaluation framework that enables the coalition to equitably select sites for analysis.
- Determining hazards and threats for each high priority area to support final site selection.
- Selecting final sites for analysis based on coalition priorities and preliminary technical and regulatory analysis.
- Engaging with utilities to understand technical feasibility and build coordination for future implementation of projects such as microgrid islanding and interconnection agreements.
- Performing technical and economic analysis on energy resilience intervention scenarios, including financial options to determine optimal deployment scenarios.
- Performing social burden analysis to understand social and resilience impacts of deployment scenarios.
- Generating case study reports for each site to inform implementation.

Coalition Partners & Core Members





Lori Pesante, Community Partner
Kern Community College District
Reyna Olaguez, Building Healthy Communities Kern
Dolores Huerta Foundation
Lideres Campesinas
Community Interventions
Greenfield Walking Group
Kevin Wu, National Renewable Energy Lab
David Greene, National Renewable Energy Lab
Kevin Daehnke, Center for Strategic Policy Innovation
City of Bakersfield
City of Wasco
Bear Mountain Parks & Recreation District (Lamont)









Energy.gov/CommunitiesLEAP

KEARNS WEST

Community-Centered Site Selection



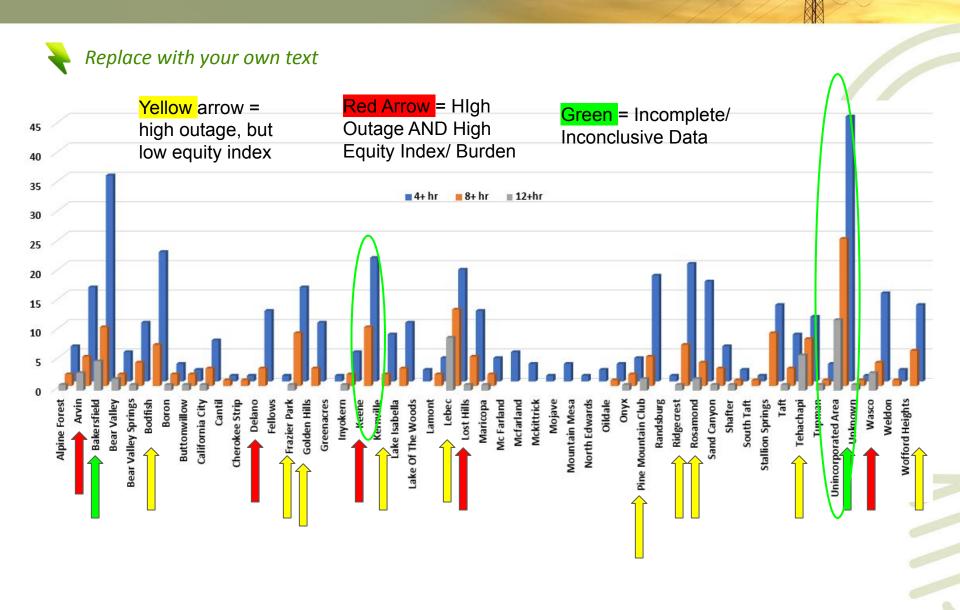


NREL formulated a <u>Selection Methodology</u> that the Core Group used to refine area selections.

The Core Group combined multiple equity indices and power outage data to analyze and select highest need areas in Kern County:

- Justice40 tool: disadvantaged or not
- CalEnviroScreen Total Score
- Human Right to Water: Quality
- Human Right to Water: Access
- 5. Human Right to Water: Affordability
- 6. Healthy City Tool: % of population without a Bachelors' degree
- 7. Healthy City Tool: % of population with no healthcare insurance
- 8. Healthy City Tool: % of population with no vehicle available
- 9. Sandia Social Burden Index

Community Outage Data



Initial Public Input Workshops (June 2023)

Hazard & Threat Assessment Capacity Building & "Community Champion" Identification



Wasco

East Bakersfield





Lamont

Initial Public Input Summary

	Hazards	Vulnerabilities
	What natural and human-caused threats does our community face?	How is our community specifically sensitive to these hazards?
East Bakersfield	 Poor Power Infrastructure Inadequate Cooling Systems Heat Waves 	 Affected livelihoods: food spoilage, lack of medicine access, poor sleep, childcare, Negative business impacts and economic costs Communication burden- no phone charging
Wasco	 Heat Waves Air/Water Pollution Poor EV Charging Infrastructure High Electricity Prices 	 Poor communication methods mean residents don't know steps to take during adverse events High concentration of individuals sensitive to air pollution impacts Lack of EV charging creates negative economic impacts, especially for farmworker communities
Lamont	 Heat Waves Poor Lighting Poor Power/Cooling Infrastructure Air/Water Pollution 	 Affected livelihoods: food spoilage, lack of medicine access, childcare, feeling unsafe due to poor lighting, lack of internet High concentration of individuals sensitive to air pollution impacts High susceptibility of local economy to negative impacts of power outages



Dream Big, Start Small

- 1. Cooling Center
- 2. Cold Storage
- 3. Commercial Kitchen
- 4. Electric Vehicle Charging Stations
- 5. Computer Lab
- 6. Health Services
- 7. Drinkable Water Storage
- 8. Community Gardens including Irrigation
- 9. Educational Programming
- 10. Showers
- 11. Child Care Facilities
- 12. Recycling, composting
- 13. Community Solar
- 14. Resilience Technology Pilot Demonstrations
- 15. Tool Library/
 Community Supply
 Check-Out
- 16. E-Bikes, Bicycles & repairs
- 17. Floodproofing
- 18. Veterans Services
- 19. Green Infrastructure
- 20. Air Filtration



Second Community Input Session: Priorities



Lamont		Wasco		East Bakersfield-MLK	
Function	Rank	Function	Rank	Function	Rank
Air Filtration	1	Cooling Center	1	Commercial Kitchen	1
Commercial Kitchen	2	EV Charging Station	2	Cooling Center	2
EV Charging Station	2	Drinkable Water Storage	2	Educational Programming	3
Drinkable Water Storage	2	Educational Programming	2	Computer Lab	4
Cooling Center	3	Cold Storage	3	Showers	4
Health Services	3	Commercial Kitchen	3	Child & Pet Care Facilities	4
Community Gardens with Irrigation	3	Resilience Technology Pilot Demonstration	3	Cold Storage	5
Educational Programming	3	Air Filtration	3	Drinkable Water Storage	5
Showers	3	Community Gardens with Irrigation	3	Air Filtration	5
Cold Storage	4	On-site Water Filtration	3	Community Gardens with Irrigation	5
Resilience Technology Pilot Demonstration	4	Computer Lab	4	E-bikes, bike repair	5
On-site Water Filtration	4	Health Services	4	On-site Water Filtration	6
Recycling, composting	4	Recycling, composting	4	Tool Library/Community supply check-out	6
Tool Library/Community supply check-out	4	E-bikes, bike repair	4	EV Charging Station	7
Computer Lab	5	Tool Library/Community supply check-out	4	Recycling, composting	7
Child & Pet Care Facilities	5	Showers	5	Veteran's Services	7
E-bikes, bike repair	5	Child & Pet Care Facilities	5	Health Services	8
Veteran's Services	5	Veteran's Services	5	Resilience Technology Pilot Demonstration	8

Next Steps





Use NREL/DOE/<u>REOpt Analysis</u> to apply for/ combine with other funding:

IRA/ Infrastructure Act (EnviroVoters) EPA Community Change Grant C-LEAP 2.0

CA Strategic Growth Council
CA Dept of Food and Agriculture

Transformational Climate Communities (Bakersfield)

Bond Measures

Private/ Public Partnerships

Use C-LEAP Bakersfield Report to Support Similar Communities in Kern County & Beyond

Continue to <u>center community members and input</u> in building, operating and maintaining Resilience Centers.

