## Energy Storage for Resilience and Social Equity

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35 min, CESA 05-18-23

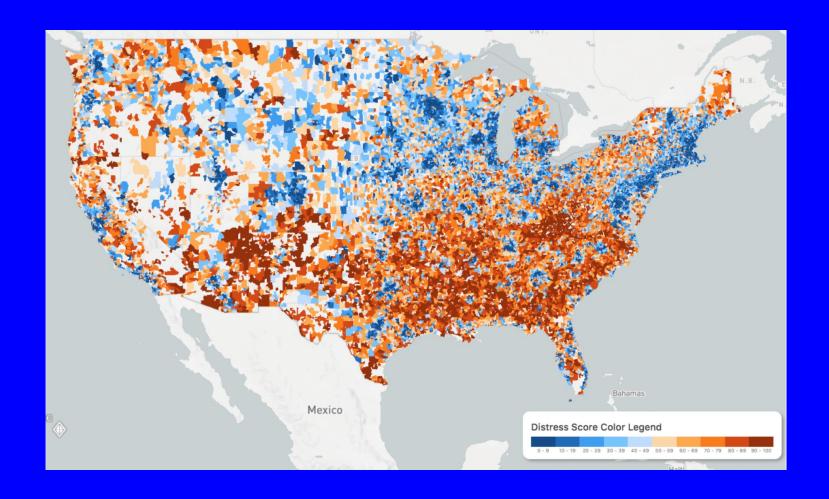
## Tutorials on Energy Storage for State and Regulatory Agencies

2020 January - North Carolina 2020 July – Utah 2020 October – New Mexico 2021 January - New Jersey 2021 April – NECPUC 2021 April – Wisconsin 2022 November – Washington, DC 2022 December - Illinois 2023 April - FEMA

Please let Us Know
If you are Interested in
Partnering with Us
on a Webinar Series

## Decarbonization will entail a vast Reorganization of the entire Electricity Industry.

It is important that we <u>not</u> create or proliferate an "Energy Divide" which finds less affluent communities left behind!



Distressed Communities can be found throughout the U.S. (VT 1% - MS 40%)

### Navajo Nation, AZ

#### Partnering with DOE-OE, Sandia, NTUA, UEP



Commissioned May 2022

Average Load 150W > 87hrs
PV = 1kW

3 kW / 13 day Rechargeable Zn Mn O<sub>2</sub> Battery Developed by UEP.

There are 18,000 Residents off-Grid on the Reservation



## Atrisco Heritage Academy, Albuquerque, NM Energy Storage for Social Equity

85% Hispanic,

Reduce peak demand during occupied hours

Battery: 721 kW/4hr = 2884 kWH plus roof-mounted PV = 850 kW

Total cost with PV: \$3.1 M







Contract awarded – May 2021 Commissioned – Oct. 13, 2022

### DOE Initiative ES4SE: Energy Storage for Social Equity

14 communities selected to receive 1 year of detailed Technical Assistance from Pacific Northwest Laboratory

https://www.pnnl.gov/projects/energy-storage-social-equity

## First set of 5 Communities has been chosen to partner with <u>Sandia</u> in constructing their Energy Storage Project.

Harambee House, Savanah. GA Small community Hub





Ho'ahu Energy Coop, Molokai, HI Off Grid Solar + Storage



Coast Electric Power

Kiln, MS
Wastewater Treatment

Native Renewables Navajo and Hopi Res, NM, AZ Off Grid Solar + Storage

#### Fourteen Communities Tribal, Rural, and Urban

Native Renewable, Flagstaff, AZ Cher-Ae Heights Indian Community Trinidad, CA Ayika Solutions Incorporated, Atlanta, GA Hoʻāhu Energy Cooperative Molokai, Kaunakakai, Hl Together New Orleans, New Orleans, LA Honor the Earth, Callaway, MN Coast Electric Power Association, Kiln, MS Joule Comm. Power & Open Door Mission, Rochester, NY Warm Springs Community Action Team, Warm Springs, OR Rogue Climate, Coos Bay, OR Coyote Steals Fire Energy Group, Pendleton, OR Makah Tribe, Neah Bay, WA Klickitat Valley Health, Goldendale, WA Oneida Nation, Oneida, WI

# The Energy Concerns of Underserved Communities Should be of Concern To everyone!