

WNC Recovery Post- Hurricane Helene

Microgrids for Disaster Recovery and Long-term Resiliency

footprintproject.org™

LAND OF SKY
REGIONAL COUNCIL



NC SUSTAINABLE
ENERGY ASSOCIATION

Hurricane Helene

- \$59.6 Billion Total in Storm Damage (North Carolina)
- 185,000+ damaged homes
- \$6.962 estimated 'Utilities and Natural Resources' Damages
- 104 Lives Lost











OUR MISSION

To help build back greener after disasters by mobilizing cleaner energy infrastructure to communities in crisis.

OUR PROGRAMS

We accomplish our mission through three core initiatives:

- **Disaster Response:** We rapidly deploy renewable infrastructure technologies to displace fossil fuels through recovery and help communities reimagine their future.
- **Build Power:** We develop locally-grown resilience by training community responders to assemble, maintain, and activate sustainable disaster tech.
- **Upcycle Energy:** We re-use solar, battery, and power electronics components to keep them out of landfills and lower microgrid implementation costs for community resilience partners.

Footprint Project



MOBILE MICROGRIDS: Anything better than single-source fossil fuels.

Portable



Inverter: 1-2 kW
Battery: 2-5 kWh
Solar: Up to 2 kW

Towable



Inverter: 2-20 kW
Battery: 10-100 kWh
Solar: 2-10 kW

Palletized



Inverter: 10-50 kW
Battery: 10-100 kWh
Solar: 10+ kW

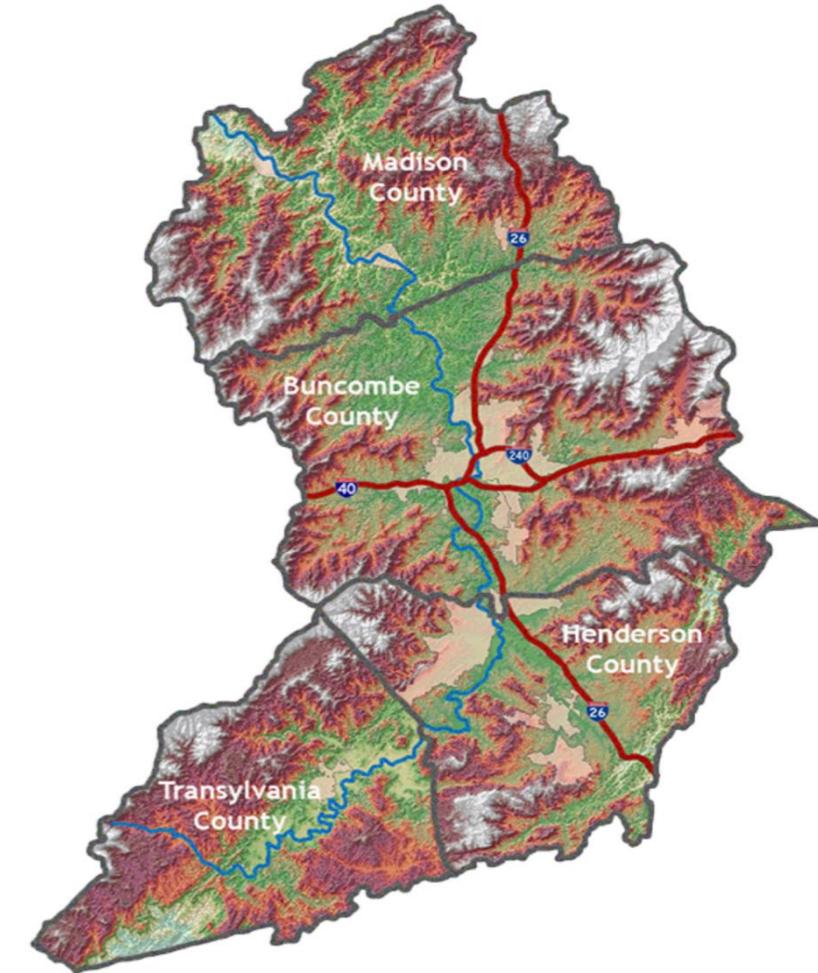
Containerized



Inverter: 50+ kW
Battery: 100+ kWh
Solar: 10+ kW

Synonyms: charging stations, solar generators, solar trailers, temporary power systems, electric generators... if it's more renewable than gas, we'll use it!

Land of Sky Regional Council is a multi-county, local government, planning and development organization. We reach county and municipal borders providing technical assistance to local governments and administer projects and programs which benefit our region's citizens.



Fundraising Efforts

- \$850,000+ Cash Raised
- Collectively More than \$1.2M of Donated Equipment
- Free Shipping/Transportation into the Region by Greentech Renewables





WORKERS

WORKERS

WORKERS

WORKERS

The hearts of Jesus in the heart of the Blue Ridge
Bill and Sharon Welch
www.lovekitchenforthehungry.org

WORKERS

SURVIVOR





RockSolid
CARGO

Compliments of Conc
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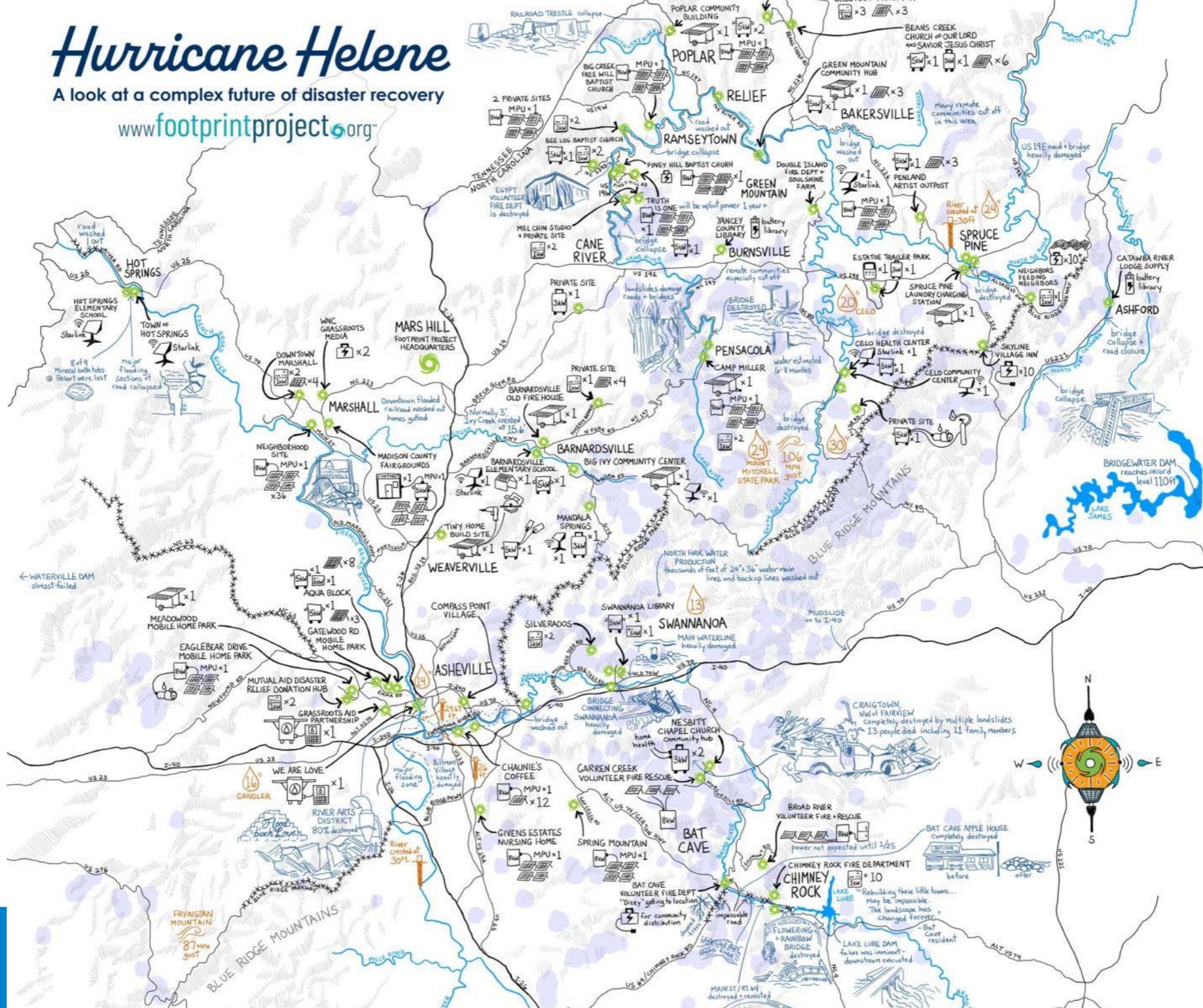




Hurricane Helene

A look at a complex future of disaster recovery

www.footprintproject.org





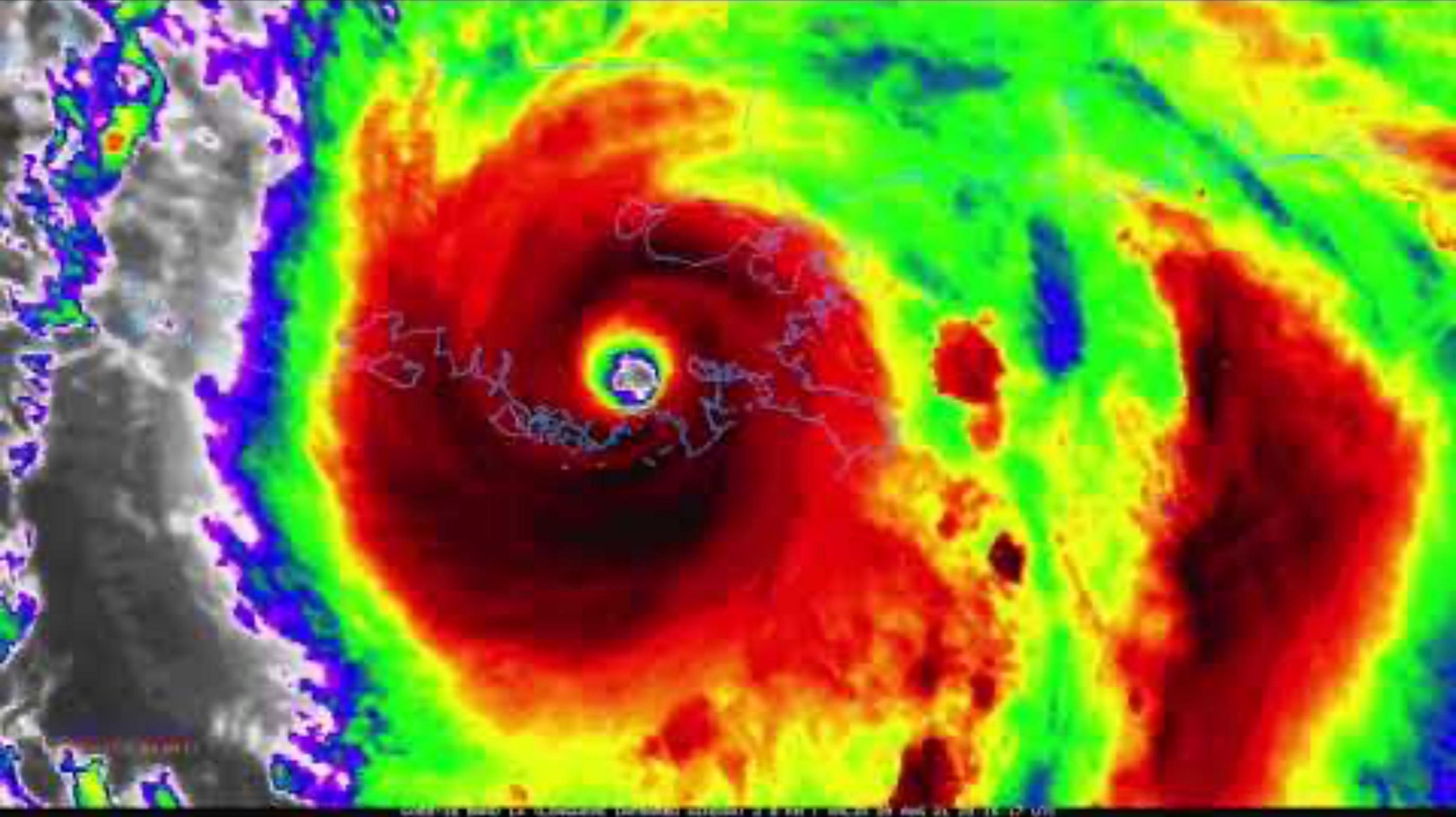
- \$5 Million in Additional Funding

High level budget and narrative

Line Item	Est Cost	Quantity	Total
Permanent Microgrid Installation (assumes a 50kW average site size).	\$100,000	25	\$2,500,000
Beehive Microgrid Installation	\$1,250,000	2	\$2,500,000
Total			\$5,000,000

State Energy Office





BEEHIVE buzz buzz

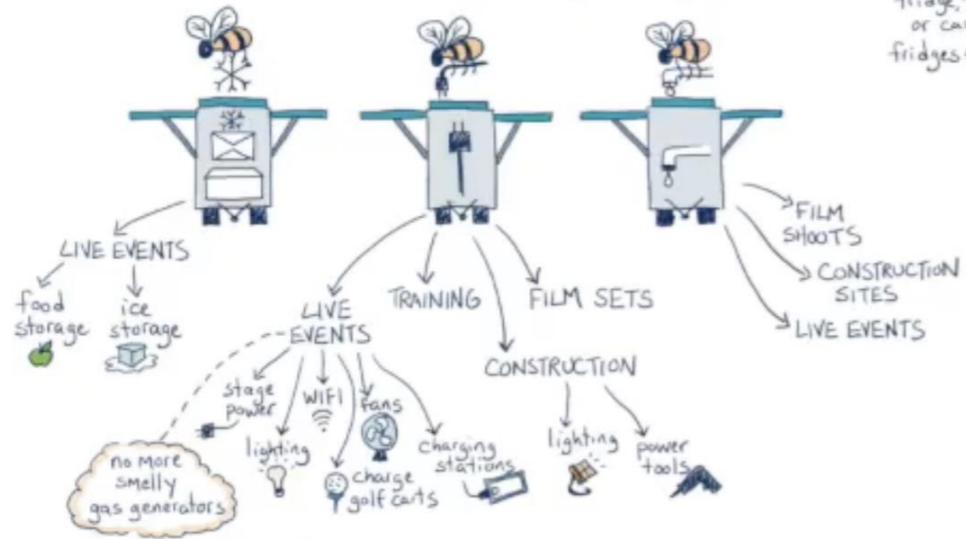


"BEE POLLINATION" BEGINS



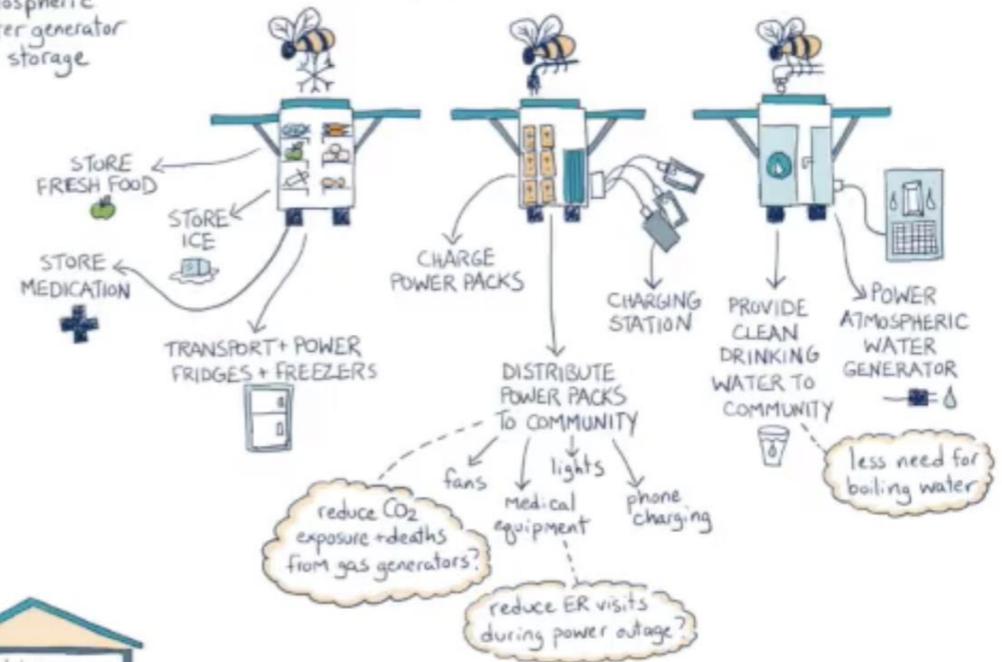
BLUE SKY POLLINATION

Multiple uses for solar trailers in good weather

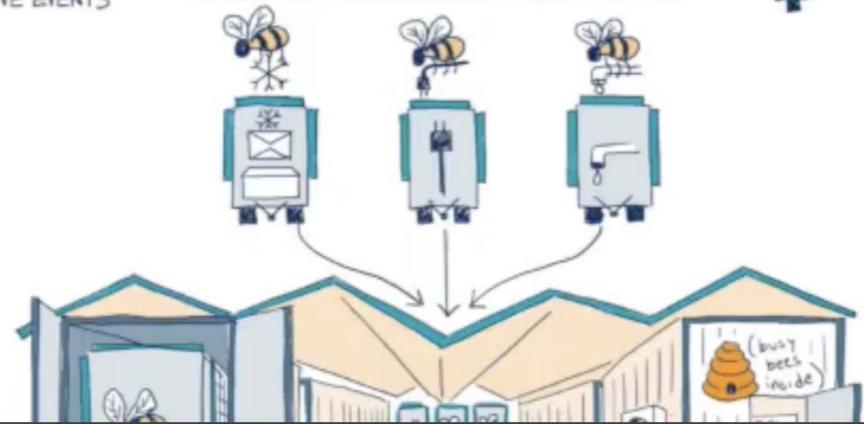


GREY SKY POLLINATION

trailers are deployed to "resilience spokes"



DISASTER EVENT OCCURS





Policy Opportunities

Competitive Funding Requested

Grid Hardening – \$1 billion

The state requests \$1 billion in loan credits for North Carolina’s State Energy Office from the U.S. Department of Energy to establish a State Energy Financing Institution (SEFI) and fund microgrids for communications infrastructure.⁵ Once established, the SEFI will enable North Carolina to leverage significant investments from DOE’s Loan Program Office, providing financing support or credit enhancements for eligible energy projects. This investment will fund a loan program to help communications providers install energy storage microgrids allowing communications infrastructure, such as cell phone towers, to remain operational when the electric grid goes down.

D5 Resilience Backup Power Measures

Provides funding to the State Energy Office in the Department of Environmental Quality (DEQ) to provide grants to councils of government, counties, and other entities to provide solar power and battery backup power for emergency operations and other critical infrastructure. Funds may be used to install solar and storage microgrids that would allow critical infrastructure to remain operational when the electric grid goes down. These solar and battery arrays are mobile and can also be permanently attached to the local grid to act as long-term microgrids for future emergencies.

Req. \$	10,000,000
Rec. \$	10,000,000
NetApp. \$	-

