

POWERING RESILIENCE:

HOW ELECTRIC VEHICLES CAN BRING POWER BACK TO COMMUNITIES

#TransportationTuesday

MORE THAN JUST A CLEAN WAY TO GET AROUND HAWAI'I

When we talk about electric vehicles (EVs), we usually talk about how they are cleaner than their fossil fueled counterparts.



As EVs have become more reliable, accessible, and affordable for more people, we can now start to talk about how EVs can provide power to those in need and so, play a central role in disaster recovery.

-- JAPAN --PROVIDING RESILIENCE IN THE WAKE OF DISASTER

In March of 2011, the northeastern coast of Japan was struck by an earthquake and tsunami that left 4.8 million households without power.



In response to the disaster, **Nissan provided 66 LEAFs** to affected areas, using the cars' batteries to provide power to homes, buildings, and communities.

Electric lines are usually easier to restore than disrupted gasoline infrastructure, and during a natural disaster, using the batteries from EVs provide a convenient and efficient option for community "lifelines".

FOR CONTEXT ...

With a portable power station, the latest generation Nissan LEAF e+ with a fully charged battery can provide enough electricity to power:



An average Japanese home for 4 days OR an average US household for 2 days



6,200 smartphones



More than 100 elevator round trips in a 43-story building

ELECTRIFICATION OF FLEETS IS ABOUT MORE THAN REDUCING EMISSIONS

As we continue to electrify our fleets (see our previous post!), we not only reduce emissions from ground transportation, but can also provide aid in the wake of natural disasters.



-- USA --PROVIDING RESILIENCE IN THE WAKE OF DISASTER

The Los Angeles Air Force Base became the first federal facility to replace its entire ground vehicle fleet with plug-in EVs!

Wildfires in California are **expected to intensify** in the near future due to the effects of climate change.

The mobility of EVs are advantageous in emergencies, and fleets can be deployed to locations and quickly restore power to critical infrastructure in communities that are affected from fire or storm damages.

RESOURCES

Powering Resilience: How EVs can help communities bounce back after a disaster | *Nissan Official Global Newsroom* [bit.ly/TT-powerresilience]

Electric vehicle models expected to triple in 4 years as declining battery costs boost adoption | *Utility Dive*[bit.ly/EVbatterycost]

Fleet Tools: Electric Vehicles | State Climate Commission [climate.hawaii.gov/electric-vehicles/]

How California can use EVs to keep lights on | World Resources Institute [bit.ly/TT-EVresilienceCA]