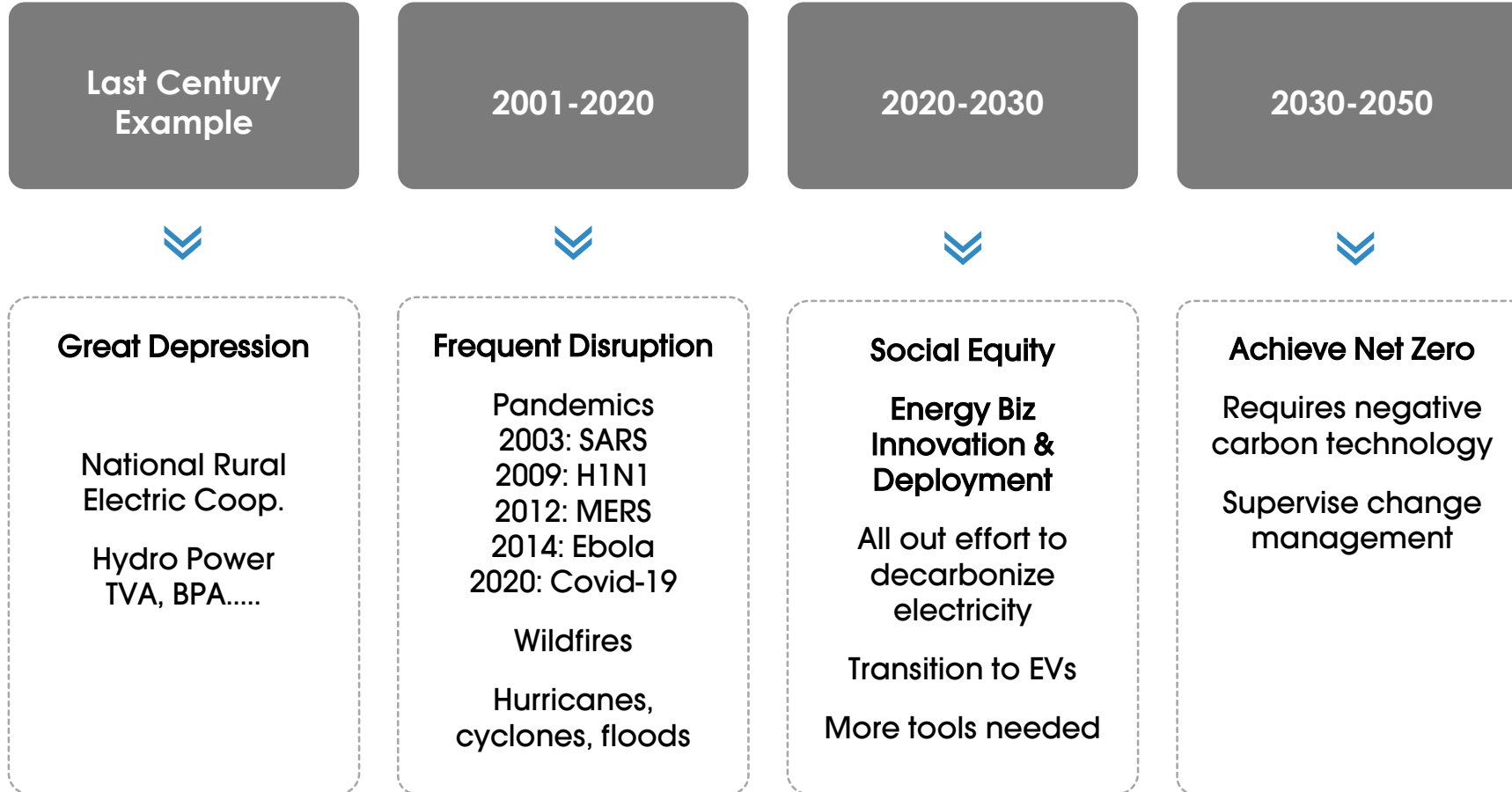


Solar Energy in the Post-Covid19 World: Moving to a New Normal

Charlie Gay
10 June 2020



Time Perspective



Covid-19 highlights the role of self-reliance

Institutions accelerating change

- Cities
- States
- Corporations
- Utilities
- Oil and Gas

When the game hits reset, one doesn't go back to playing the exact same way after reboot

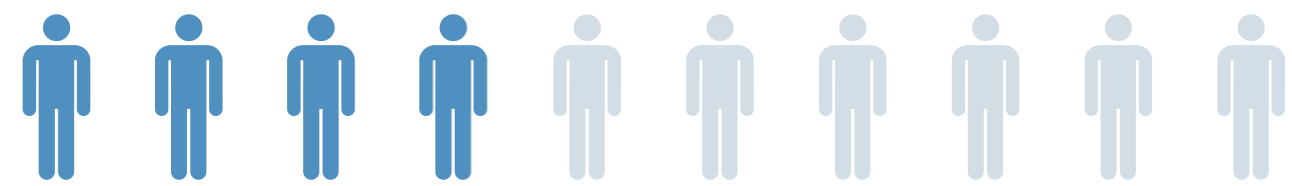
-Elon Musk

U.S. Energy Landscape

Energy Employment Q4 2019

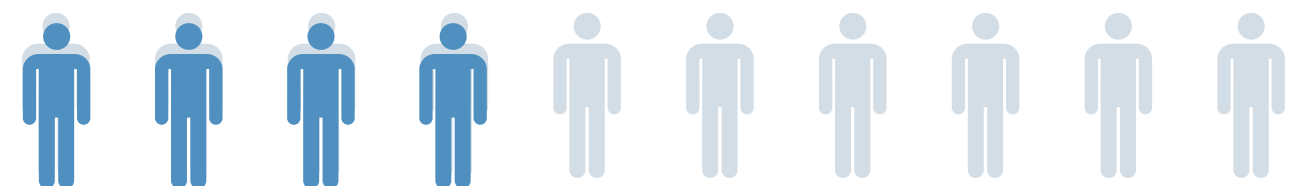
118,000 New Jobs in 2019

Transmission, Distribution, Storage



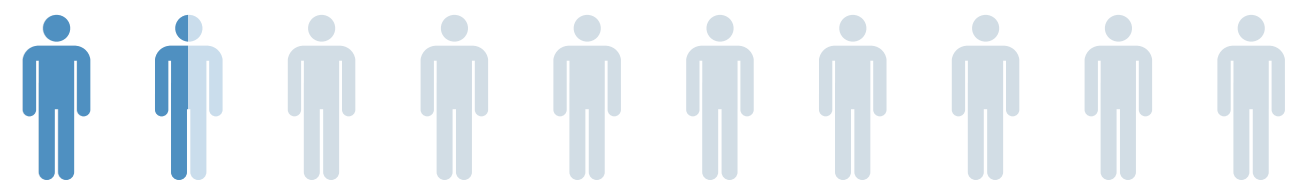
2,401,000

Energy Efficiency



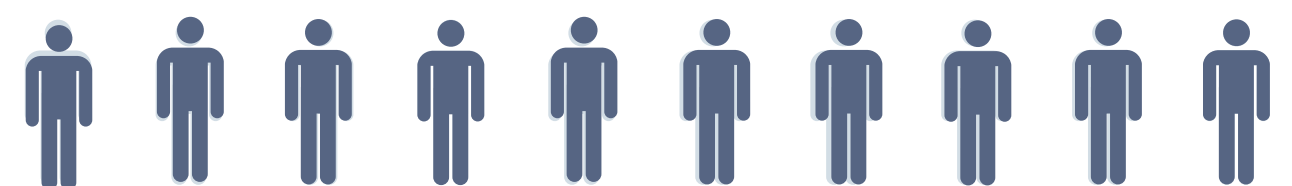
2,380,000

Electric Power Generation



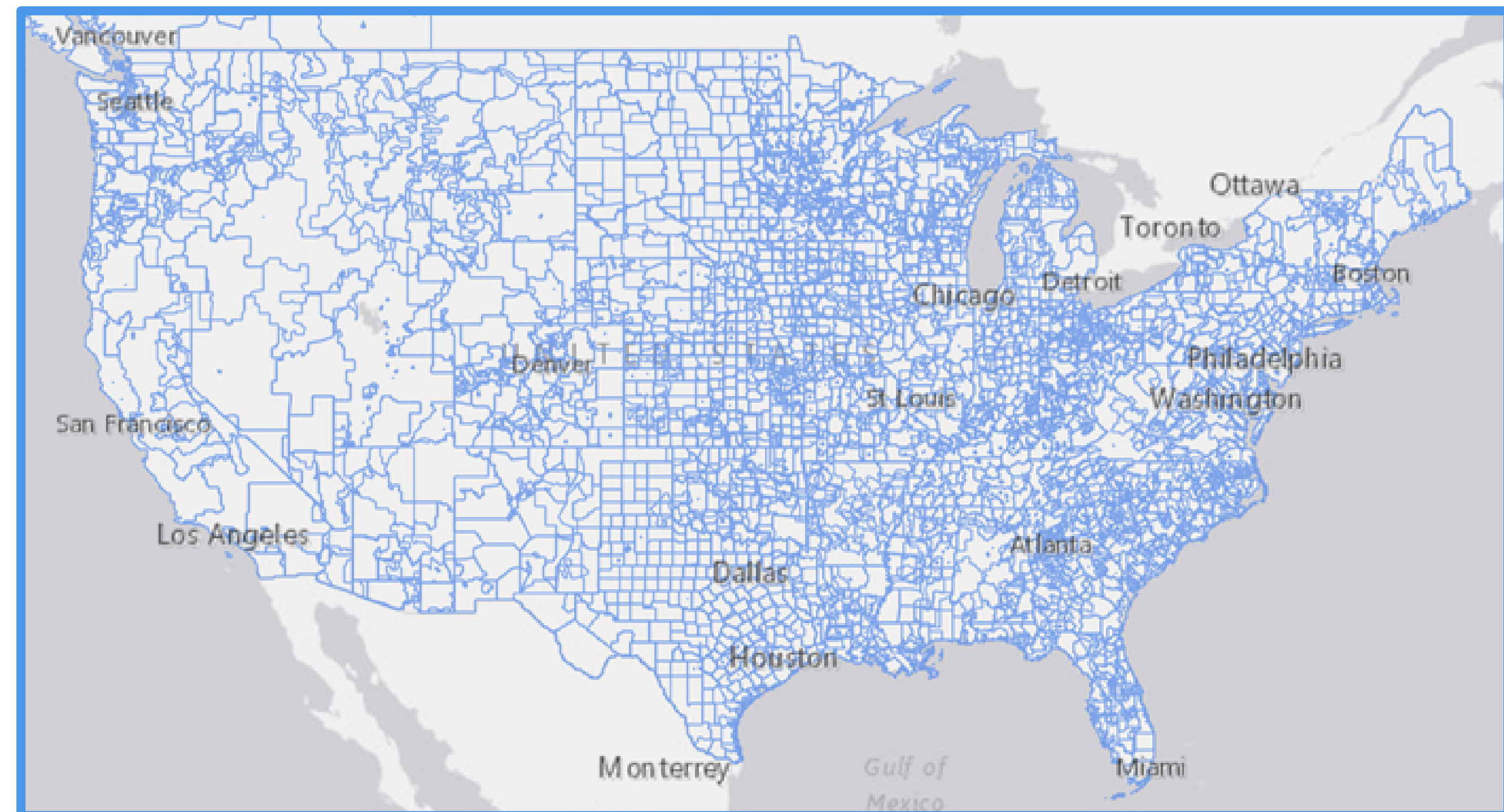
896,800

Motor Vehicles



2,550,000

Electric Retail Service Territories

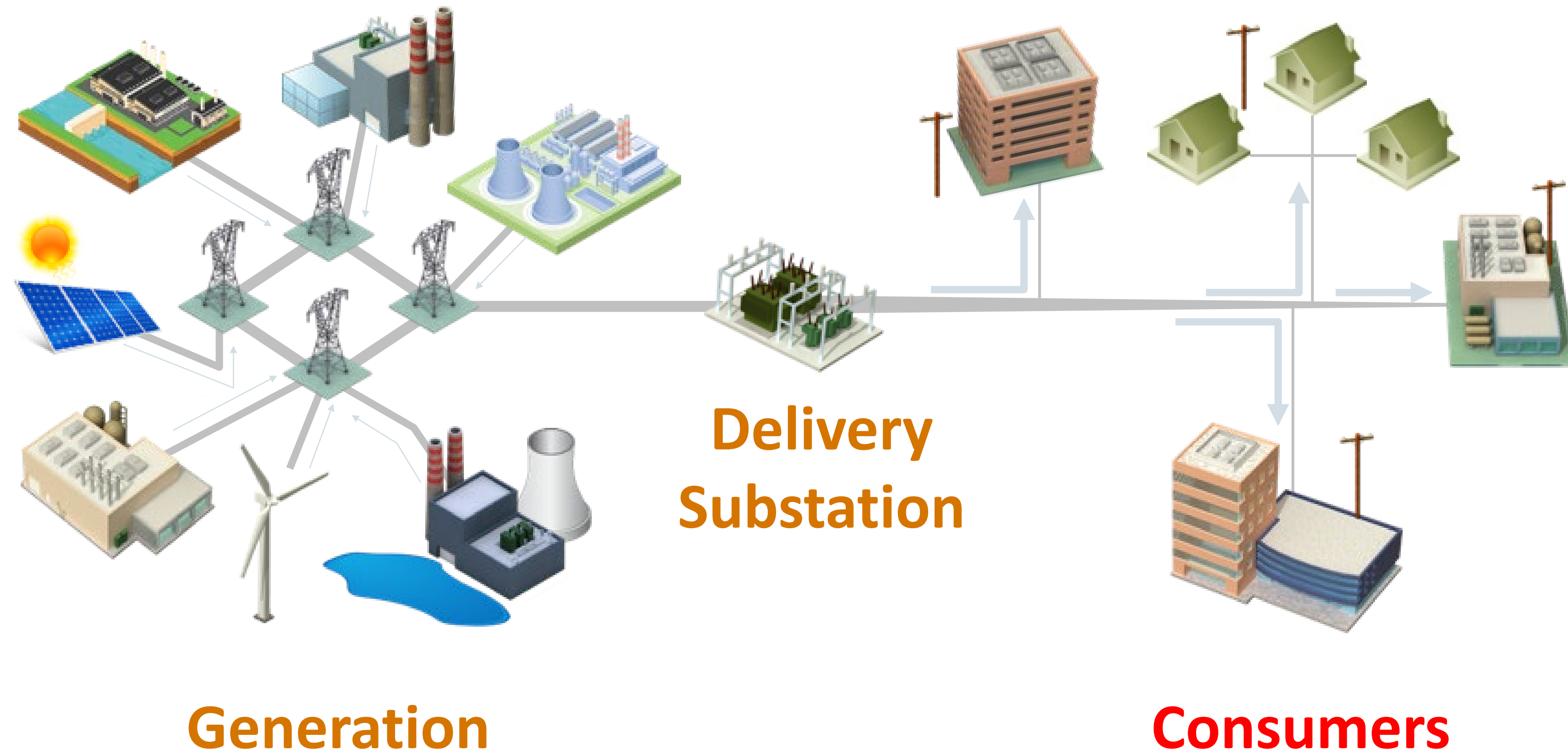


Six Drivers for Energy Jobs

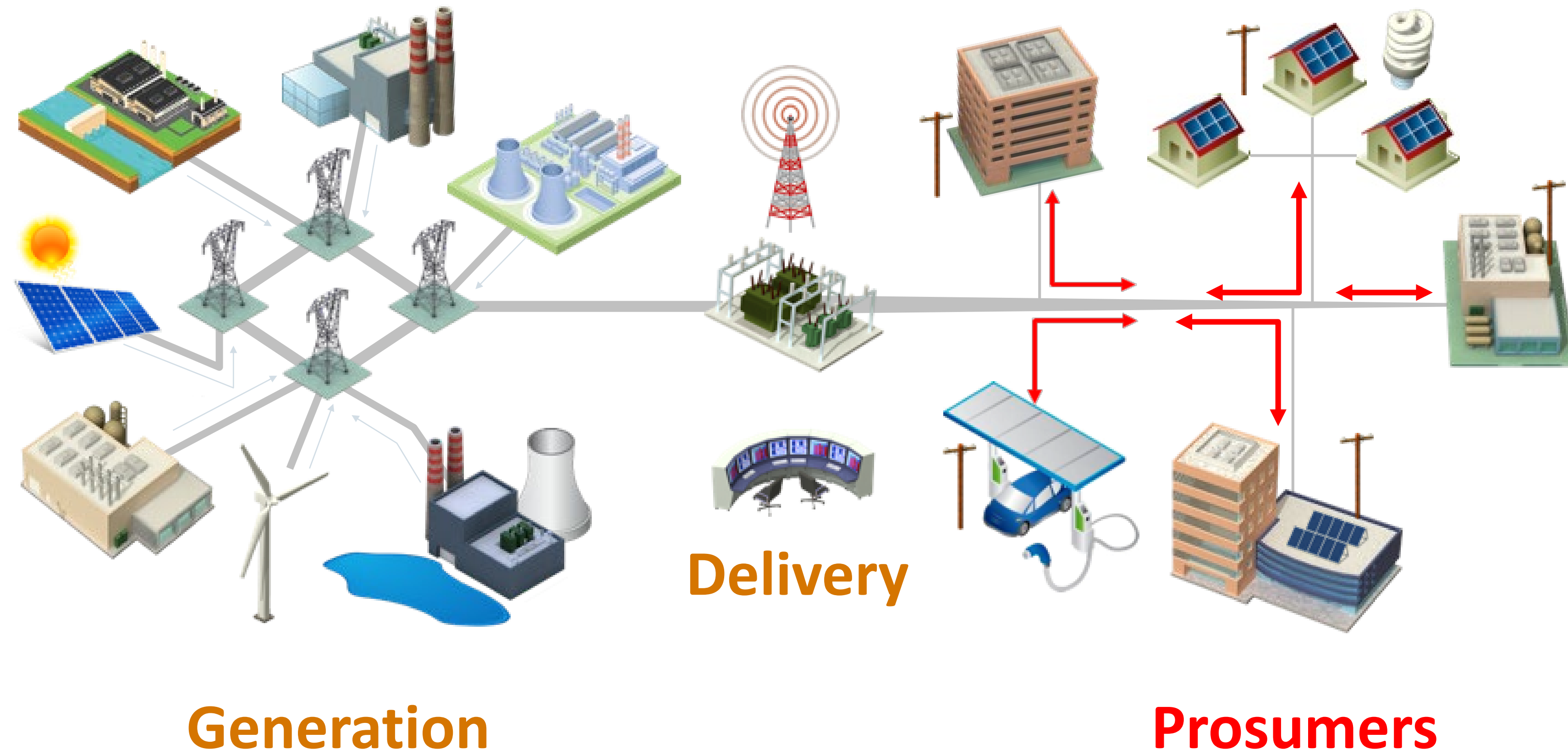
These six themes need broad coalitions to maximize impact

	Focus	Example Opportunities
Resilience	<ul style="list-style-type: none">• Digitalization of energy	<ul style="list-style-type: none">• Modernize public buildings• Start now to qualify for tax incentives
Infrastructure	<ul style="list-style-type: none">• Microgrids	<ul style="list-style-type: none">• EV charging (esp. fast charge)• Community solar (e.g. Detroit)• Tribal lands
Innovation	<ul style="list-style-type: none">• Rapid prototyping	<ul style="list-style-type: none">• Leverage National Labs• Highlight Incubators
New Industries	<ul style="list-style-type: none">• Pilot new markets across existing sectors	<ul style="list-style-type: none">• DC microgrids in front of meter• Adapt European prosumer models• Hydrogen, CCS, modular nuclear.....
Incentives	<ul style="list-style-type: none">• Government policy	<ul style="list-style-type: none">• Opportunity Zones• e.g. DOE Loan Program
Workforce Development	<ul style="list-style-type: none">• Community colleges• Mentorship initiatives	<ul style="list-style-type: none">• Union engagement

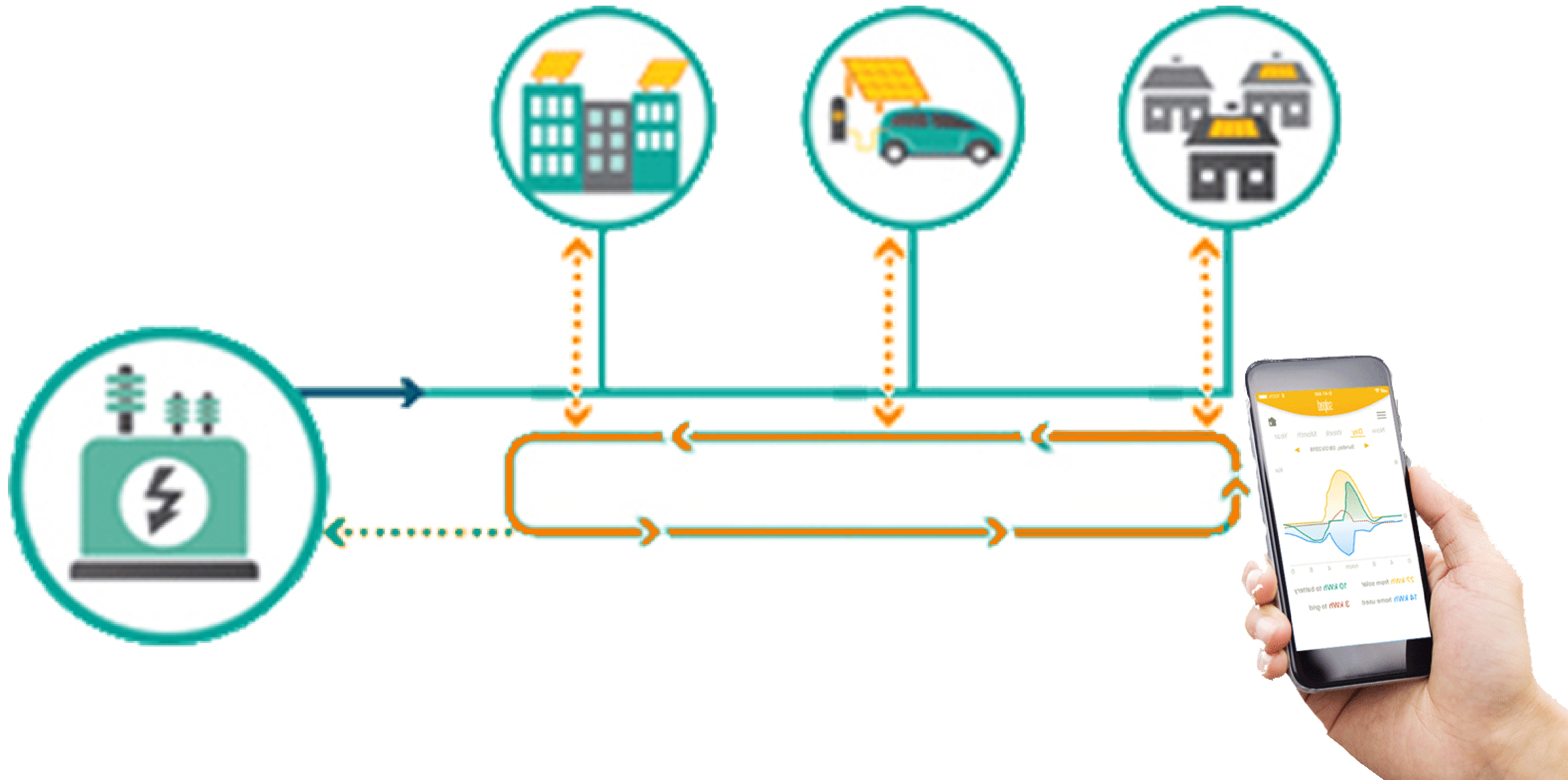
The U.S. Grid Situation



The Prosumer Vision



DC Microgrid



Community Solar



Gannawarra Energy Storage System

<https://reneweconomy.com.au/the-remarkable-growth-of-wind-and-solar-projects-paired-with-big-batteries-95562/>