



PACIFIC PALISADES SMART GRID PILOT PROGRAM

Rebuilding Smarter: Vehicle-to-Grid Technology & Microgrid Integration

Transform the Palisades Rebuild Into a Smart Energy Hub

Turn EVs into power generation assets and strengthen grid resilience. With 2,600-3,200 EVs among remaining households (45-70% penetration), Pacific Palisades can lead the nation in smart grid technology. Deploy bidirectional charging infrastructure, integrate distributed solar + battery storage, and create a revenue-generating microgrid that supports community energy independence during reconstruction.

\$21.7M

Net 5-Year Benefit

180 MWh

Distributed Storage

45 MW

Peak Reduction

PROGRAM COMPONENTS

- V2G Bidirectional Chargers: 300 units enabling vehicles to feed power back to the grid
- Smart Off-Peak Chargers: 1,200 units with automated load shifting
- Solar + Battery Systems: 1,600 homes with microgrid capability
- Smart Appliances: Heat pumps, water heaters, and thermostats with demand response

KEY BENEFITS



Grid Stability



Cost Savings



Resilience



Clean Energy

- Avoid building new power plants
- Earn payments for grid services (\$0.25/kWh)
- Emergency backup during outages
- 85,000 tons CO₂ reduction over 5 years
- Lower electricity bills through smart charging

HOMEOWNER INCENTIVES

V2G Charger

\$5,000 equipment + \$2,000 installation

Solar + Battery:

\$3,000 solar + \$4,000 battery + \$1,500 microgrid

Heat Pump HVAC

\$3,000 rebate

Smart Water Heater

\$2,000 rebate

HOW IT WORKS

1 Smart Charging

EVs charge during off-peak hours when electricity is cheapest and cleanest

2 Grid Support

During peak demand (5-9 PM), EV batteries send power back to the grid, generating revenue (\$0.25/kWh)

3 Emergency Backup

During outages, solar, home batteries, and EVs keep critical appliances running

4 Automated Optimization

AI-powered system manages everything automatically — no manual intervention required

