

Ovanova's Portable Energy Technology (PET) is a towable microgrid delivering clean, resilient energy for disaster zones, remote communities, and grid-challenged areas. It integrates solar, battery storage, EV V2X, and bi-fuel generator backup. PET meets critical needs for mobile, off-grid power—and offers strong revenue potential through rentals, energy deployment, and platform integration.

Patent-Pending Technologies Powering the Ovanova PET



Vehicle-to-Trailer Power Station

Allows PETs to draw power from electric vehicles to run external loads—turning EVs into mobile backup sources during outages or in remote areas



Building Power Integration

Connects the trailer to buildings as a plugand-play energy source for backup power, peak-shaving, or load-shifting.



Multi-Source Charging

Supports recharging from solar, generator, or grid—individually or in combination—for reliable power anywhere. EVs can assist by powering loads.



Secure Grid Interface

Equipped with Starlink and secure RF comms, PETs enable real-time grid coordination—built to meet FEMA and defense-grade standards



PET Versions – Detailed Specifications

The PET Spark

- Trailer Size: 5 ft × 8 ft, single axle, SUV towable
- Solar Array: 1.29 kW DC PVBattery Storage: 32 kWh LFP
- Inverter Power: 11.4 kW AC continuous (120/240V split phase)
- Generator: Compatible with external 120V or 240V generators
- EV Interface: Supports charging via NEMA 14-50 outlet (compatible with most portable EVSEs)
- Charging Sources: Grid charging, solar charging, external generator charging
- Receptacles: Onboard 120V & 240V outlets
- **Communications:** Starlink Internet, sub-1 GHz RF secure comms, cellular, Wi-Fi

The PET Flame

- Trailer Size: 7 ft × 18 ft tandem axle
- Solar Array: 4.59 kW DC PV (6 roof + 6 awning modules)
- Battery Storage: 64 kWh LFP (8 × 8 kWh)
- Inverter Power: 22.8 kW continuous AC (120/240V split phase)
- Generator: 26 kW DC-coupled bifuel, integrated (supports propane)
- **EV Interface:** 2 × bidirectional EV charge/discharge ports (V2X capable)
- Charging Sources: Grid charging, solar charging, generator charging
- Receptacles: Onboard 120V & 240V outlets
- **Communications:** Starlink Internet, sub-1 GHz RF secure comms, cellular, Wi-Fi

The PET Ember

- Trailer Size: 6 ft × 12 ft tandem axle
- Solar Array: 3.06 kW DC PV
- Battery Storage: 64 kWh LFP
- Inverter Power: 22.8 kW continuous AC (120/240V split phase)
- Generator: 9 kW DC-coupled, integrated into trailer
- **EV Interface:** 2 × bidirectional EV charge/discharge ports (V2X capable)
- Charging Sources: Grid charging, solar charging, generator charging, EV Charging
- Receptacles: Onboard 120V & 240V outlets
- **Communications:** Starlink Internet, sub-1 GHz RF secure comms, cellular, Wi-Fi

The PET Blaze

- Trailer Size: 7 ft × 18 ft tandem axle (same as Flame v2)
- Solar Array: 4.59 kW DC PV
- Battery Storage: 114.4 kWh
- Inverter Power:
 - 62.4 kW @ 120/208V three-phase
 - 24 kW @ 120/240V split phase
- Generator: 26 kW DC-coupled bifuel, integrated
- Charging Sources: Grid charging, solar charging, generator charging,
- Receptacles: Onboard 3 phase wiring connection
- Special Feature: Accepts split-phase input and outputs both split phase and threephase power simultaneously
- **Communications:** Starlink Internet, sub-1 GHz RF secure comms, cellular, Wi-Fi

PERFORMANCE & FEATURES

- Portable, road-ready microgrid platform
- Operates fully off-grid or with grid tie-in capability
- Fast deployment with single-cable connection to building infrastructure
- Solar-first operation with quiet, clean generator backup
- Resilient design supporting bidirectional EV charging and discharging
- Backed by a 10-year comprehensive warranty

EVERYONE NEEDS A PET9 Identified Use Cases plus a Robust Rental Market

- Film & TV productions silent set power, fuel savings, greener shoot credentials.
- Concerts, festivals, weddings, sporting events audience-friendly silence, no fume complaints, visible solar = great PR.
- Construction & infrastructure sites longer work hours in noise-sensitive zones, lower diesel spend, compliance with new low-emission rules.
- Municipalities & public works mobile backup for shelters, traffic lights, or fairs.
- Emergency services & disaster relief resilient "lifeline" power that doesn't depend on fuel convoys; can recharge e-ambulances and turn EVs into fuel delivery convoys to PETs deployed in disaster zones.
- Mobile healthcare & clinics clean, quiet electricity for medical devices, refrigeration, HVAC anywhere.
- Utilities & telecom rapid-deploy grid support precisely where it's needed most, avoiding expensive infrastructure upgrades.
- Mining, oil & remote industry cuts delivered-fuel bills, improves ESG scores, powers electric site equipment.
- Agriculture & ranching drives pumps, agro-robotics, or cold-storage off-grid.

Power What's Possible with PET

Whether you're preparing for the next outage, building a cleaner future, or seeking a resilient income stream

PET puts energy in your hands, wherever it's needed most. Own. Deploy. Earn. Empower.