CASE STUDY

Rebuilding Puerto Rico

Blue Planet Energy has been actively involved in Puerto Rico's hands-on rebuilding effort after Hurricane Maria devastated the island in 2017.

To facilitate the deployment of its Blue Ion battery technology to projects throughout Puerto Rico, Blue Planet Energy built strategic partnerships with global NGOs, including the American Red Cross.

Developed to serve as community shelters during extreme weather events, Blue Planet Energy and the American Red Cross have equipped more than 100 schools spread across all the municipalities in Puerto Rico with battery systems charged by solar energy.

125 Solar Schools

11MWh Blue Ion energy storage

5.7MW solar PV

CASE STUDY

Grid Independent Microgrid

Blue Planet Energy reinforces a solar + storage microgrid at an off-grid 11,500-sq-ft warehouse by adding 64 kWh of storage capacity.

Rather than connecting to utility power when building their new facility, Sandbar Solar installed a standalone microgrid. To increase load capacity and the use of all its existing solar resources, Sandbar Solar added a Blue Ion LXHV system.

With a highly-efficient charge and discharge rate, the Blue Ion LXHV stores 100 percent of the incoming solar energy for use at the facility and requires only a small footprint on the warehouse floor - greatly reducing generator usage as well as associated emissions and noise.

64 kWh
Blue Ion LXHV

59 kW
solar PV

60 kW natural
gas generator

CASE STUDY

VERGE

Commercial Microgrid

VERGE 2019 demonstrated a real-world solution to utility blackouts by powering its 3-day event entirely off-grid with a 100% renewably powered microgrid.

At the center of the microgrid constructed on 10th street in downtown Oakland, California, Blue Planet Energy's Blue Ion LXHV commercial energy storage system provided enough battery capacity and power conditioning to power the event's main stage and several EV charging stations.

Diverse charging sources including a 72 kWac solar PV array and a biogas generator. Despite local PG&E power cuts, the VERGE 2019 event was self-powered by the microgrid for duration of the conference.

64 kWh
Blue Ion LXHV

72 kW
solar PV

Biogas
generator

 |

CASE STUDY

Community Water Pumping

In Puerto Rico's rural town of Barrio Rabanal, Blue Planet Energy's Blue Ion battery system provides water security.

The microgrid system integrates battery storage, solar, and a backup generator to provide independent power for the community water system when the utility grid fails.

With funding from the international humanitarian aid group Direct Relief, the Puerto Rico-based non-profit Por los Nuestros engaged and empowered local community members during the planning and boots-on-the-ground installation phases of the sustainable water project.

20 kWh Blue Ion energy storage

20 kW diesel-fueled generator

15.8 kW solar PV

CASE STUDY

Martín García Middle School Microgrids

Martín García Middle School experiences 30 power outages a year and turned to Blue Planet Energy for reliable backup power.

Knowing hundreds of people depend on the school for shelter in times of emergency, two microgrids were installed onsite. Blue Ion 2.0 was selected for its safety, reliability, robust warranty, and ability to be easily installed.

These solar-plus-storage systems provide power for the building's kitchens, water pumping, lights, and plug loads. Part of the American Red Cross Solar Schools Project, this school can also serve a mission control center for disaster relief. Monthly electric bill savings even provide additional funds for school supplies and activities.

50 kW
solar PV

112 kWh
Blue Ion 2.0

$1,800+
monthly savings

CASE STUDY

Critical Power for Critical Hospital Services

Blue Planet Energy provides on demand clean energy for Culebra's only hospital to replace its reliance on an unstable utility grid and polluting gas generator.

When the Culebra Center for Diagnosis and Treatment needed a reliable, commercial-grade, and no maintenance energy storage solution to power its medical services, a Blue Ion 2.0 microgrid was the obvious choice.

Blue Ion 2.0 uses the safest lithium battery chemistry available, essential for any medical facility, and its small footprint enabled the energy storage system to be installed in a shipping container before being shipped to the island. A monitoring portal allows the hospital to gauge system status.

128 kWh
Blue Ion 2.0

50.25 kW
solar PV

Containerized
system

CASE STUDY

Restoring Clean Water with Clean Energy

Water Mission partners with Blue Planet Energy to restore reliable electricity and clean water to a rural community in Puerto Rico.

Post-Hurricane Maria, Corozol, Puerto Rico lacked electricity and a way to access clean drinking water. Blue Planet Energy integrated a 16 kWh Blue Ion 2.0 energy storage system into Water Mission's pumping systems to create a reliable, long-term solution.

Water availability went from only a few hours a week to 12 hours per day. With a 20-year life cycle and minimal required maintenance, the Blue Ion 2.0 battery system eliminated the town's reliance on expensive gas generators.

16 kWh
Blue Ion 2.0

7 kW
solar PV

12 hours/day
water access

CASE STUDY

Residential “Net Positive” System

Blue Planet Energy provides energy independence to Colorado homeowners by taking a 60-year old home off-grid.

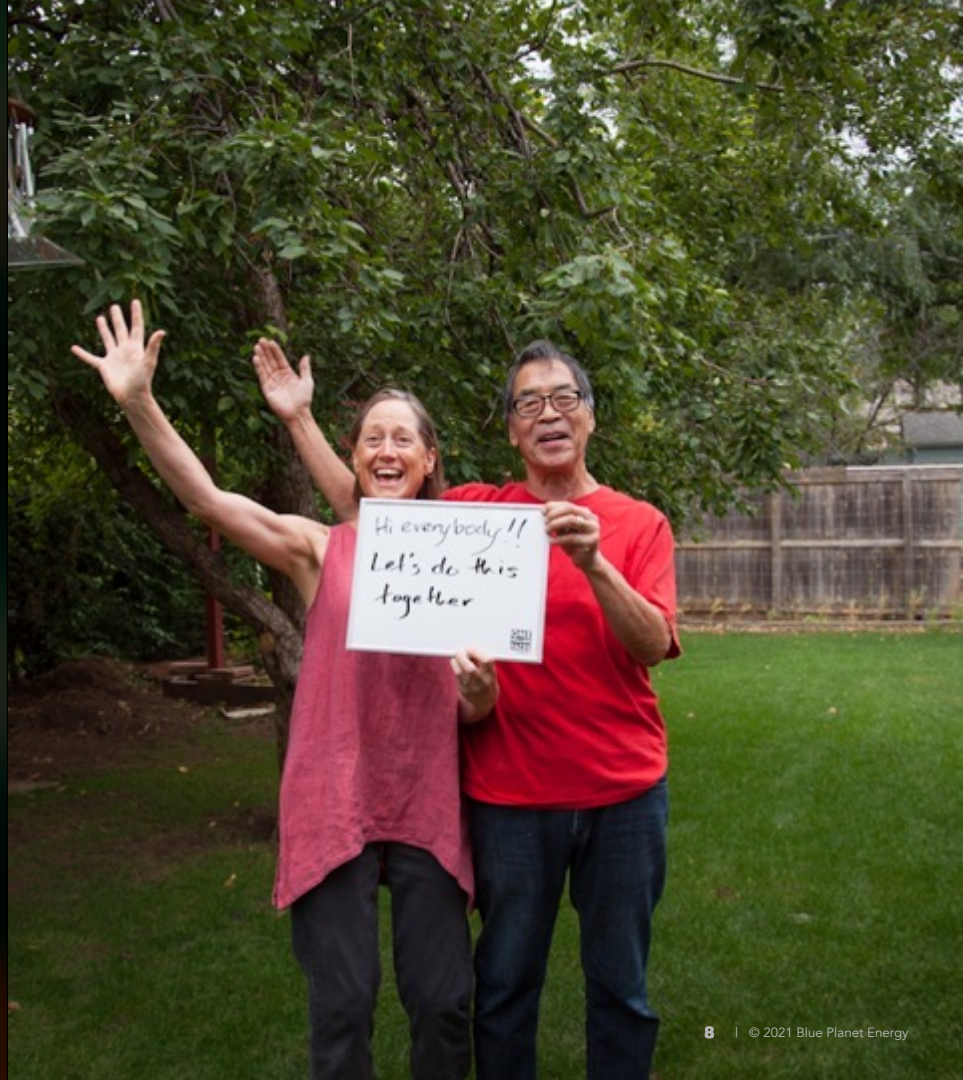
To lower their carbon footprint and prepare for inevitable power outages, David and Emily Takahashi installed a solar-plus-storage system. The Blue Ion 2.0 batteries were energy dense and safe enough to fit in the 1000 sq. ft. home’s crawl space and still capture 100% of the energy generated by solar.

The system can keep the Takahashi's home powered for four straight days, even in winter. Through energy efficiency upgrades, the Takahashis have achieved an 87% reduction in greenhouse gas emissions.

32 kWh
Blue Ion 2.0

10.7 kW
solar PV

HERs score
of -50



CASE STUDY

Next-Gen Grid Integration

Blue Planet Energy, Habitat for Humanity, NREL, DOE and Holy Cross Energy deliver reliable power and homeowner savings in Colorado.

An affordable housing project consisting of all-electric, net zero units aims to fast-track the integration of renewable energy into the electric grid. Blue Planet Energy batteries were selected for its reliability, long life and safety.

The solar + storage systems represent an autonomous energy grid where homeowners can exchange energy and services with neighbors, matching generation and demand intelligently and in real-time. Homeowners are expected to save $2,000 annually on utility costs.

27 housing units

12 kWh Blue Ion 2.0

11 kW solar PV

CASE STUDY

Backup Power in CA Wildfire Zone

SimplySolar

California homeowner relies on Blue Plant Energy to provide critical backup power during wildfire prevention power shutoffs.

California resident Jim Maselli needed an alternative energy source to power his home during ongoing PG&E utility-planned public safety power shutoffs. To avoid noisy, fuel-dependent generators and high maintenance lead acid batteries, he chose Blue Planet Energy solutions.

The Blue Ion 2.0's lithium ion chemistry is safe enough to be installed inside without fire risk and strong enough to power the home's entire electricity needs, including a water well, lighting and three refrigerators.

16 kWh
Blue Ion 2.0

7.68 kW
solar PV

(1) inverter
(2) Charge controllers

BLUE planet ENERGY

CASE STUDY

INNOVACION SOLAR

Power Outage Relief for Luxury Living

Cabo San Lucas homeowner wanted a better solution to ongoing power outages than noisy, polluting and difficult to maintain generators.

For a more reliable, fossil-fuel free alternative, Douglas turned to solar-plus-storage.

Blue Ion 2.0 from Blue Planet Energy features a rapid recharge time for significant cost savings, and a battery chemistry safe enough for 100-degree summers. The robust microgrid system powers over 80% of the house's energy needs, including lighting, water supply system, wine cellars, refrigerators and more.

5 inverters,
5 chargers

32 kWh Blue Ion
energy storage

57 kW
solar PV

BLUE planet ENERGY

CASE STUDY

Energy & Cost Savings for Hawaii Homeowners

Hawaii homeowners invest in Blue Plant Energy to decrease exorbitant monthly electricity bills and gain a reliable energy source during power outages.

Hawaii has the highest electricity prices of any state, and the Porter family was paying nearly $900 a month. Wanting to ensure the upfront costs of solar-plus-storage would yield a long-term net gain, the Porters chose Blue Planet Energy's Blue Ion HI.

Installed in half the time compared to other lithium ion batteries, Blue Ion HI can power the family's daily 70 kWh energy usage with room to expand if their needs increase over time.

32 kWh
Blue Ion HI

14.7 kW
solar PV

3,600 sq. ft.
home

CASE STUDY

Energy Resilience for High-End Community

Tired of expensive, unreliable electricity, Puerto Rico residents install a grid-tied solar-plus-storage system to reduce both expenses and reliance on a generator.

In the luxury Enclave community of Dorado, Puerto Rico, homeowners needed a more permanent solution to their backup generator. With Blue Planet Energy, they gained peace of mind by becoming energy resilient.

Blue Planet Energy's unmatched performance warranty, safety, and ability to withstand harsh island environments made battery selection an easy decision for the homeowners, who will now save over $18,000 on yearly electricity costs.

64 kWh
Blue Ion HI

44 kW
solar PV

4 Sol Ark
12kW Inverters

CASE STUDY

Energy Security for U.S. Army in Oregon

Oregon Military Department turns 255kW solar array into a microgrid with Blue Planet Energy, eliminating wasted time and resources on diesel generator.

Blue Planet Energy's Blue Ion LX provided OMD with reliable backup during power outages, plus reduced their carbon footprint to align with the U.S. Army's Net Zero Initiative.

Blue Planet Energy's additional services ensured the Blue Ion LX was properly integrated with the facility's generator and solar system. This microgrid is projected to save OMD between $2,100 and $3,700 per month on diesel fuel, plus associated fuel delivery costs.

128 kWh
Blue Ion LX

255 kW
solar PV

5 months of
backup energy

CASE STUDY

Supporting Renewable Energy Education

Blue Planet Energy donates Blue Ion HI battery to the Midwest Renewable Energy Association's new Energy Storage System Tech Center.

Dedicated to educating communities on renewable energy and sustainable living, the Midwest Renewable Energy Association's (MREA) energy storage lab showcases the market's premier storage technology. Homeowners explore what each different system entails and installers receive accredited product training.

MREA sought to include Blue Planet Energy because of the safety and reliability of its batteries, as well as its mission.

8 kWh
Blue Ion LX

Philadelphia
Solar Bifacials
370w

Solark 8 kw,
240v

CASE STUDY

Training the Global Solar Energy Workforce

Blue Planet Energy donates Blue Ion battery and upgraded Namaka monitoring system to be used in Solar Energy International's (SEI) training curriculum.

Blue Planet Energy's Blue Ion battery is SEI's only lithium-ion battery on campus, and its lithium iron phosphate (LFP) chemistry gives students an introduction to the safest, most environmentally benign battery chemistry on the market.

Looking to employ only the most environmentally-favorable technologies in its trainings, SEI agreed Blue Planet Energy 'fit the bill' in regards to safety, quality, and responsibly-sourced materials. A win-win for the school and the planet.

16 kWh
Blue Ion 2.0

Namaka
Monitoring

500 students
trained each
summer

CASE STUDY

Turning Renewable Energy into a Tradition

Blue Planet Energy donates Blue Ion battery to replace the noisy, air-polluting gas generators used by the indigenous communities of North and South Dakota.

While the remote location of Standing Rock and other surrounding gathering sites meant grid power was not an option, battery storage from Blue Planet Energy enabled the communities to swap reliance on generators for a cleaner, more sustainable alternative.

Built on a custom trailer, the mobile solar-plus-storage system operates entirely off-grid and was designed to be easily transported to events across the states.

16 kWh
Blue Ion 2.0

3kW
solar array

Off-grid
energy trailer

CASE STUDY

Replacing Diesel in Remote Alaskan Village

A new solar-plus-storage microgrid Shungnak, Alaska, eases the burden of the village's polluting diesel power plant that is both expensive and difficult to maintain.

The complex nature of Shungnak's often unstaffed power plant meant choosing a reliable battery system was paramount. Chosen for its inherently safe LFP chemistry, Blue Planet Energy's batteries also provide a longer warranty and less maintenance than competing batteries.

The community will be saving 25,000 gallons of fuel per year, estimated at $200,000.

384 kWh
Blue Ion LX

225kW
solar array

Offsetting
25,000 gallons
of fuel per year