



Case Study: Volts Energies

OutBack Off-Grid Power System Installation



Overview

For more than a decade, Volts Energies, headquartered in Laval, Quebec, has designed energy-efficient systems for off-grid customers in and around Quebec. Those customers, who include mining companies, outfitters, logging businesses and homeowners, trust Volts Energies for diesel generators and battery backup solutions to meet all of their power needs.

One outfitter company on Anticosti Island approached Volts Energies for an efficient, practical power solution for two island sites serving sportsmen at this remote recreational outpost on the mouth of the Saint Lawrence River. Because they are too far to access the local grid, the company needed its own independent power source.

System Specifications

Location: Laval, Quebec

System Power: 20 to 40kW Systems

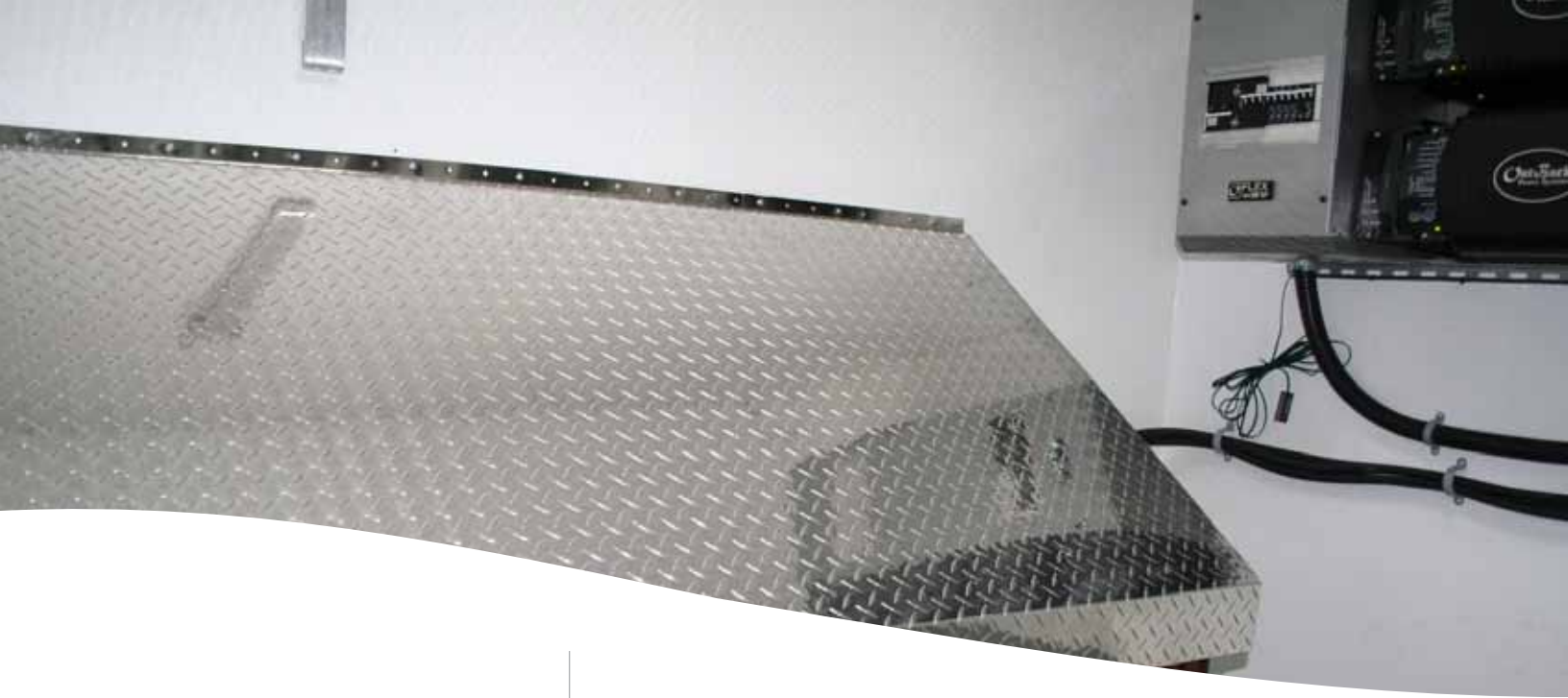
Components: FX3648, Two FLEXware 500's (Each with Two FX Inverter/Chargers and FLEXmax Charge Controllers), Four FLEXware 1000 (Each with Four FX Inverter/Chargers and FLEXmax Charge Controllers) and OutBack Battery Bank



We install about 20 off-grid systems a year, and we know our customers will be happy when they get OutBack Power products because of the company's reputation for quality products and service. OutBack is great for off-grid uses, it works all the time, and it delivers the features our customers need. We're also proud to buy products made in North America."

Sébastien Caron
President, Volts Energies





Objectives

- Design a reliable diesel source of power for two sites owned by an Anticosti Island-based outfitting company.
- Increase the installation's energy efficiency to reduce fuel costs.
- Avoid the cost of running electricity to the remote, lake-front site by providing an independent, on-site power system.

Solution

An OutBack Power solutions user since 2008, Volts Energies continues to recommend the brand based on the quality of both its product and customer service. For the Anticosti Island outfitter, Volts Energies evaluated the customer's existing system and designed a more efficient solution built around the OutBack FX sealed inverter/charger and a battery bank.

At one of the outfitting company's sites, Volts Energies installed an OutBack FX inverter/charger with a battery bank to increase system efficiency by reducing the generator load from 40 kilowatts (kW) to 20 kW. The second site uses two generators (40 kW and 20 kW) housed in a modified maritime shipping container, which is also equipped with OutBack inverter/chargers. The batteries reduce generator run-time resulting in significant fuel savings. At both sites, intelligent system programming starts generators when either loads increase or the battery banks' charge falls below 50 percent.

Benefits

- The outfitting company saved 50 percent in fuel costs at one site and 66 percent at the other.
- The outfitter will save the two sites approximately \$18,000 per year with the OutBack-based solution, putting it on track for complete system payback in six years.
- By going off-grid, the customer avoided the expense of connecting the island site to the local grid, while maintaining the same level of energy efficiency as the rest of the island.