



Sustainability on the Go: How The Ice Box Transformed Its Food Truck

The Challenge

The Ice Box, a small-batch ice cream and gelato maker based in St. Thomas, Ontario, operates a food truck every weekend from May to October. While the food truck allowed them to serve their delicious creations directly to the community, it relied on a gaspowered generator to keep their products frozen during events. This came with significant challenges:

- **Operational challenge:** Transporting, setting up and maintaining the generator with sufficient fuel
- Financial challenge: Rising cost of fuel
- **Environmental challenge:** Emissions produced by the generator

Motivated to reduce their environmental impact and cut operational expenses, The Ice Box set an ambitious goal: transform their food truck into a near-net-zero operation.

The Solution

To address these challenges, The Ice Box received Green Project Support in 2022 and 2024 to upgrade its food truck with a battery system and solar panels.

Phase 1: Battery Power

In 2022, The Ice Box purchased an EcoFlow Delta 2 battery unit for \$1,457.87. This allowed them to significantly reduce reliance on the gas-powered generator during events.

However, the single battery didn't fully meet the energy demands of their food truck, prompting them to explore additional solutions.



Cost of Project

\$4,327.21 for project implementation



Cost Savings

\$1,500 in estimated yearly savings



Environmental Impact

Near net-zero operations





Phase 2: Solar Panels and Battery Expansion

In 2024, The Ice Box upgraded its system by:

- Expanding battery capacity with an additional EcoFlow Delta battery
- Installing a 240-watt solar panel to charge the batteries efficiently

These upgrades cost \$2,869.34 and has eliminated the need for generator use, reducing both cost and emissions.

The Impact

The Ice Box's sustainable upgrades have both financial and environmental benefits:

- Cost savings: The Ice Box anticipates that by eliminating generator fuel and hydro costs, they will be able to save approximately \$1,500 annually.
- **Energy reliability:** The solar panel consistently powers the battery, and they have not experienced energy shortages since the upgrade
- **Reduced emissions:** The food truck now emits greenhouse gases only from the diesel engine when driving, minimizing their environmental impact.

The Ice Box has proven that small businesses can make a big impact. Their innovative food truck upgrades demonstrate how eco-friendly practices can improve operations while reducing costs—a sweet success story for both the environment and their business.

To learn how Green Economy London can support your business sustainability projects visit **greeneconomylondon.ca**

The project was a huge success; we now have a truck that can fully serve and operate on battery solar power.

The truck is a fan favourite of any events as we are quiet, clean, and sleek looking"

Markus Hawco, Owner





