

PowerEdge Success Story



GLOBAL INDUSTRIAL BATTERY MANUFACTURER
PRODUCT DEVELOPMENT AND COMPREHENSIVE GO-TO-MARKET
SUPPORT

THE CLIENT

Our client is a globally recognized, over billion-dollar industrial battery manufacturer with expertise in both **lead and lithium-ion technologies**. A leader in material handling and battery-charging solutions, they sought to develop a disruptive battery system tailored to the cold chain logistics market, aiming to capture early mover advantages and capitalizing on environmental funding opportunities.



THE PROJECT

PowerEdge partnered with a leading industrial battery manufacturer to develop a groundbreaking new **battery system designed for cold chain logistics**. This innovative product incorporates Li-ion battery, bi-directional inverter, integrated cooling, an advanced enclosure, and an IoT monitoring platform, all in a single solution to replace traditional diesel generators in refrigerated containers. The system targets **CO₂ emission reductions**, enhances **worker safety**, and **improves cargo movement efficiency** at ports. From the feasibility study through to the product's market entry, PowerEdge has played an instrumental role, providing critical support across market analysis, R&D guidance, partnership management, licensing and distribution negotiations, patent / funding application processes, and IoT platform development.

THE CHALLENGE

Our client faced multiple challenges, including the need to swiftly **validate market fit**, adapt product requirements, and develop a high-performing generation-one system with limited resources and specialized knowledge. Additionally, a swift time-to-market was essential to secure key funding opportunities and establish a first-mover advantage in a rapidly evolving industry. Through PowerEdge's strategic guidance, the product was not only shaped to meet market needs but also optimized to leverage time-sensitive funding and regulatory incentives.

THE RESULTS AND ROI

The addressable market for this battery system spans hundreds of millions of dollars, with approximately 3.2 million refrigerated containers in operation globally - a figure expected to grow to 7 million by 2030. Many regions, including the U.S., offer significant funding and support for CO₂ reduction initiatives, accelerating the product's relevance. As of October 2024, the product received full approval and a favorable **funding voucher, worth of 110.000USD** from a major California state program, marking it as the first solution of its kind with this scale and functionality.

TIMELINE 01/2023 - ON-GOING