

**RESEARCH AND DEVELOPMENT FUND
PROJECT SPOTLIGHT**

PROMETHEAN POWER SYSTEMS

INCREASING ACCESS TO RELIABLE REFRIGERATION FOR A SUSTAINABLE DAIRY SUPPLY CHAIN

This project will test a new model for increasing access to reliable refrigeration for dairy farmers in rural villages across India. It will achieve this through the use of thermal energy storage systems and remote monitoring technology.

Promethean Power Systems has developed a thermal battery technology as an alternative power solution for cooling and transporting milk. The dairy supply chain in India currently relies on diesel generators to chill milk in rural villages due to unreliable electricity. However, diesel generators are expensive, polluting and inefficient to operate. As a result, many farmers face spoilage issues and have poor access to markets. For consumers, milk quality is affected by the lack of refrigeration at the source.

Promethean Power Systems has resolved this problem with a battery that stores thermal energy and has a remote monitoring capability to ensure uptime. The thermal energy storage system eliminates the use of diesel generators to refrigerate milk in rural areas. The project aims to create a new model, which brings reliable refrigeration to milk-producing villages in an economical and sustainable manner. This new technology, remote monitoring and business model will remove the cost of diesel generators. It will enhance equipment maintenance and uptime and reduce operational expenses. This solution links villages and smallholder farmers to milk chilling technology in an economically viable way.



AT A GLANCE

R&D Partner
Promethean Power Systems

Efficiency for Access Funding
£160,000

R&D Funding Unlocked from Promethan Power Systems
£220,713

Project Location
India

