GeoPura®

THE SALVATION ARMY TRADING COMPANY

PROJECT PLAN B
DESIGNED TO BE RECYCLED

SECTORS: Off-Grid Power

Project Re:claim
Case Study

Kettering, Northamptonshire



Project Re:claim, a groundbreaking new polyester recycling plant in Kettering, Northamptonshire, is pioneering the use of zero-emission hydrogen power technology to address the pressing issue of polyester textile waste. This innovative project, a joint venture between the Salvation Army Trading Company Ltd (SATCoL) and Project Plan B, is set to drive the industry towards a circular economy. GeoPura, a leader in sustainable energy solutions, is providing the critical power needed to support this transformative initiative from green hydrogen.

Challenges

- Insufficient on-site grid supply
- Sustainable alternative to diesel generators needed for renewable project.
- Off-grid power supplied to textile recycling plant.

Location	**Kettering, Northamptonshire**
Dates	25th March 2024 - 12th January 2025
Equipment	2 x HPU 1

KEY METRICS

CO_2 saved	128,609 kg
NOx saved	964.5 kg
PM saved	37.1 kg

Solutions

- GeoPura HPU utilised to provide zero emission power for recycling system.
- Experienced teams on site to ensure reliable power supply.
- Ensuring renewable energy supplied to reduce carbon footprint of recycling project end to end.

APPLICATIONS

Grid Augmentation

Off-Grid Power

ZERO EMISSION FUEL

GREEN POWER GENERATION

About the project



GeoPura's Hydrogen Power Units (HPUs) are providing zero-emission electricity generated via green hydrogen to support the initial phase of Project Re:claim. Until a suitable grid connection is established, which may take 12-18 months, the GeoPura hydrogen-powered generators are ensuring the site has a reliable, sustainable power supply that can withstand the demands of the plant. The only output is water.

Project Re:claim, is the first commercial-scale, post-consumer polyester recycling plant of its kind in the UK. The plant is designed to recycle post-consumer garments and other textiles, transforming them into raw materials that can be reintroduced into the fashion and textiles industries. Powered by GeoPura's clean energy, the plant is set to recycle 2,500 tonnes of polyester waste this year, with a target of 5,000 tonnes in the second year.

The collaboration between GeoPura and Project Re:claim, exemplifies the power of strategic partnerships in driving sustainable development. By integrating GeoPura's innovative hydrogen technology, the project not only addresses the urgent issue of textile waste but also sets a benchmark for future recycling initiatives that can be powered sustainably.

What our client says

"In the UK alone, 300,000 tonnes of textile items are discarded into household waste, including polyester. Up until now, polyester that had no useful life left would have been disposed of.

A significant challenge in launching Project Re:claim was ensuring we had enough power to operate sustainably from the outset. GeoPura's hydrogen power solutions have been instrumental in overcoming this hurdle, enabling the plant to operate efficiently without relying on fossil fuels. This not only aligns perfectly with our mission to create a circular economy for textiles but also sets a precedent for future recycling initiatives to follow."

Tim Cross, CEO

Project Plan B

Find out more

Learn more about our HPU **here**.