

ENERGY CASE STUDY

Energy Procurement

Overview

Brenntag UK & Ireland is the market leader in the distribution of specialty, bulk and packaged chemicals and ingredients.

Our teams are a cornerstone of our success: 26 strategic locations, three sea-fed facilities, a dedicated fleet of over 100 vehicles, our dedicated expert teams serve over 20,000 customer accounts nationwide.

Headquartered in Leeds, Yorkshire, Brenntag UK & Ireland offers its business partners a wide range of products and value-added services such as filling services, mixing and blending, as well as extensive technical support and services for various industries within the life science, environmental and material science sectors.

Brenntag UK & Ireland is part of the Brenntag Group who is the global market leader in full-line range of chemical & ingredient products and value-added services.

Case Study ENERGY & RENEWABLES

River have managed Brenntag's energy procurement for the last 2 years. Our initial project scope was to secure the best possible rates for the gas and electric procurement from the market.

Having secured rates during mid 2020 when the market was at its lowest for many years, River were able to demonstrate significant savings for Brenntag on 3-year fixed contracts.

The long-term position was discussed and agreed that from 2022 we would continue to benchmark the supply market for early renewal or buying window opportunities but to also develop a parallel strategy to reduce usage and reliance on the grid by developing a renewable strategy. It was important this strategy met multiple objectives:

- Usage reduction
- Cost reduction
- Reduce reliance on grid generated energy
- Neutralise exposure to extreme market movements
- Any CAPEX must achieve viable ROI

After exploring several technologies whilst we recognised there may be specific sites that could benefit from specific technology it was established that Solar PV represented the best broad solution that would be viable at the majority of the sites based on current infrastructure.

Challenge

Whenever deploying a renewables solution there are a myriad of restraints and criteria to consider. When installing solar on complex manufacturing sites, like Brenntag the main considerations are as follows:

- Does the client own the building?
- Is the roof structurally sound?
- Accessibility
- Health & Safety restrictions or requirements on site.
- Location of Meter

Having completed comprehensive surveys at the initial batch of sites covering Bradford, Lutterworth, Manchester & Perth we were able to design and cost a bespoke solution for each site.

The main objective was to create a solution that allowed the solar PV to generate as big a percentage of the current usage as possible in order to drive green credentials but also to help offset the impending rate increases in Jan 2023.

To do this we had to assess the above considerations for each site and identify those sites which met the most criteria of, owned buildings, good roof structures & high users of electricity.

Next Phase

Following the survey of the sites to establish the individual requirements we are able to design a bespoke solar array and provide full calculations on generation, cost savings, carbon reduction and ROI.

Solution Process

Once the proposals were accepted we then entered the next phase of the process which is as follows:

- 1 Arrange structural surveys for the roof to meet all health and safety guidelines.
- 2 Submit the DNO application to the grid.
- 3 Arrange the installation date.
- 4 Hold site meeting with HSE and compliance manager.
- 5 Install and connect.

Future Plan

Initially we will monitor and provide access to our MI dashboard so the solutions at each site can be managed and measured to ensure they are operating at the agreed capacity.

Together with the team at Brenntag we have established a clear path forward to assess the rest of the business. The future plan is to extend the solar PV product across as many sites as possible in the UK and Europe.

Phase 1 which is near completion was the high user manufacturing sites whereby the client owned the building.

Phase 2 will be to address the high user sites which are leased by collaborating with the landlord as well as any smaller owned sites.

Phase 3 will be to explore the possibility of extended European sites

Phase 4 will be to bolt on complimentary technology such as EVC and battery storage across the estate.