

Case study

Enabling risk-free supply and cost stability

centrica
Business Solutions



Global leader in life sciences uses fully funded CHP solution to cut CO₂, save costs and gain financial predictability

US-based global leader in life sciences and pharmaceuticals operates over 600 sites across the world, including over 20 in the UK that employ around 5,000 people.

The business was looking for energy solutions that would allow them to reduce their expenditure and carbon footprint and offer security against rising energy prices in an unpredictable and inflationary market.

Having completed work at the client's site in Scotland, in late 2020 Centrica Business Solutions was invited to suggest solutions for other large sites where costs are higher, and the business benefits would be greater. The client's extensive facility in South Wales was an obvious candidate.



£700k
year

projected savings

1MW
unit

fully funded

100%

electrical utilisation

Hot and cold

With the site's roof space unsuitable for solar solutions, Centrica Business Solutions and the client explored other options. They decided on a combined heat and power (CHP) trigeneration installation, including a cooling solution, that would see the client move away from grid supply.

After the initial sizing and scoping process, Centrica Business Solutions agreed to carry out the initial planning, consent, and grid connection processes upfront, meaning work would be ready to begin when the final contract was signed.

The subsequent product development agreement (PDA) involved the installation of a 1MW multi-tech generator funded fully by Centrica Business Solutions, with the client leasing the asset on a pence-per-kilowatt basis.

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Aaron Parker, Head of CHP Sales, Centrica Business Solutions

Technical overview

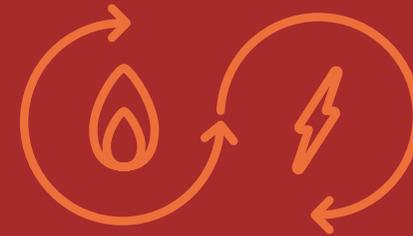
As a complete engineering, procurement, and construction (EPC) solution, the installation is fully project managed by Centrica Business Solutions. Approved contractors are building, delivering, and installing an MTU 8V4000 series engine rated to 999kWe, with surplus heat used to feed an absorption chiller to meet the client's cold water requirements. The MTU engine is already hydrogen-ready, making it futureproof.



Savings without an investment

With the project expected to complete within one year of signature, Centrica Business Solutions' client can look forward to substantial financial savings without any upfront investment. A detailed breakdown of the site's usage is indicating expected savings of around £700,000 per year. This is bolstered by significant improvements in terms of carbon output and future cost planning, with the client no longer reliant on supply from the grid and its associated cost fluctuations.

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For more information, please contact:
centricabusinesssolutions.UK@centrica.com