

Veolia lowers energy use for frozen fruit and vegetable production at Greenyard Frozen UK

8 months ago



<u>Veolia</u> is helping Greenyard Frozen UK, part of the Greenyard Group and one of the largest suppliers of fresh, frozen and prepared fruit and vegetables in the world, to reduce their energy consumption and their carbon footprint of frozen fruit and vegetable production.

As all food production accounts for around 30 per cent of total global greenhouse gas emissions, reducing the carbon intensity of the food sector has never been more important. By installing and managing the latest high efficiency steam plant, the site in Boston, Lincolnshire is now reducing gas usage per tonne of processed product by 21 per cent. Across 2024 this contributed to an annual gas consumption reduction of 834MWh of energy, which is equivalent to a reduction of 153 tonnes of CO₂e.

Greenyard's Boston plant first opened in 1988, and as the operational demand had far outpaced the capacity of the site's two natural gas steam boilers, Veolia's energy specialists worked with the site team to seamlessly integrate a modern plant to supply the essential steam to the food processing lines. Key to the success was the elimination of plant downtime and its impact on the production.

The upgrades maximised the overall efficiency of the steam plant by replacing the existing boilers with a new 6 tonne per hour steam boiler, and a low nitrogen oxide (NOx) high efficiency burner. This ensured their compliance with the Medium Combustion Plant Directive (MCPD) almost 18 months ahead of the deadline, which came into effect on the 1st January 2025.

The new boiler is also fitted with an exhaust gas economiser and blowdown heat recovery capacity, which boosts the plant's overall efficiency by extracting heat that was previously wasted in the process.



John Abraham, Chief Operating Officer – Industrial, Water & Energy for Veolia UK, Ireland and Nordics said: "As the path to net zero accelerates, we need to think differently about how we generate, use, and reuse energy. This new steam plant in Greenyard Frozen's production facility does just this, using the latest innovations to ensure minimal heat is wasted and emissions are driven down. This highlights our technical support for the food industry, and our innovative strength as part of our GreenUp plan to accelerate decarbonisation."

"Our 20-year partnership continues to support their aim to reduce the consumption of resources across the process lines and to help secure a sustainable food future. We look forward to working with Greenyard Frozen to develop and deliver further efficiencies that reduce energy use and cost, and cut carbon emissions."

Hayley Pick, Sustainability Manager at Greenyard Frozen said: "By improving our energy efficiency, we're not only safeguarding the environment but also enhancing our operational performance, eliminating downtime and boosting production performance. We're proud that this new boiler is another step towards a more sustainable food production industry."