Calor LNG helps Dairy Partners cut energy costs by 29%

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Robert Peel
Director at Dairy Partners

Dairy Partners, a cheese manufacturer, is set to cut its energy costs by 29% a year by switching from light fuel oil to liquefied natural gas (LNG) to power its operations, and by investing in new boiler equipment.

The company is the very first cheese manufacturer in the UK to be fuelled by LNG. Many other dairy production sites are expected to follow suit, due to the improved cost savings and greater operational efficiencies when compared with alternative fuels.

LNG can also help sites dramatically reduce their carbon emissions, with Dairy Partners' facility in Newcastle Emlyn now set to cut its CO_2 output by 30 per cent.

Customer:	Dairy Partners
Application:	LNG for process steam used in the company's manufacturing operations
Location:	Newcastle Emlyn, Wales

Project highlights:

- First cheese manufacturer in the UK to be fuelled by LNG
- Lower energy costs, which are set to fall by 29% a year
- Reduced CO_2 emissions, cut by 30%
- Payback period of only two years

Energy-intensive demands

A family-owned business, Dairy Partners manufactures a range of cheese products – including mozzarella and pizza cheese – for some of the leading food brands in the UK and around the world. Its manufacturing operations require process steam to convert fresh milk into mozzarella in block and string forms. With the site processing 150 million litres of milk every year, LNG is the ideal fuel to meet these energy-intensive demands.

Calor has supplied and installed a single, horizontal $60m^3$ above-ground LNG storage tank on the site, which is vacuum-insulated and features a twin ambient vaporiser system. The tank is also fitted with automatic top-up technology, so that an LNG delivery is automatically scheduled by Calor once it begins to run low on fuel, providing assured peace of mind to the business.

A sustainable strategy

Discussing the move to LNG, Robert Peel, Director at Dairy Partners, said: "Steam is used in dairy production for process heating, which is very energy-intensive. Therefore, a fuel that can reduce our site's energy consumption while improving our carbon output was a hugely attractive proposition.

We upgraded the site from heavy fuel oil to light fuel oil in 2013 as part of our on-going sustainability strategy, with the plan to upgrade to gas in the future. While we did consider biomass at one point, generating steam from this source is quite a complicated process and wasn't a viable option on our site.

Calor put forward a sound commercial package, supported by a proven track record in LNG installations. LNG gives us the ability to cut our CO_2 emissions by 30 per cent, while reducing our costs at the same time too. Relying on the tank's built-in system to monitor fuel levels also helps us hugely from an operational perspective, as it's a job we no longer have to fulfil on site with oil deliveries.

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Oliver Knight, LNG Specialist at Calor, adds:
"There is a huge opportunity for dairy production sites to benefit from converting to LNG, with Dairy Partners expected to reap the rewards very quickly, with a payback period of only two years. By investing in LNG and new boiler equipment, it's fantastic news that Dairy Partners is set to cut its fuel costs by 29 per cent a year – a really impressive reduction."

Find out more at: **www.calor.co.uk/business/large-energy-user**
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