Mackey's Dairy Farm

The Challenge

Mackey's Farm is a family run farm where owner Lyle Mackey keeps a 100 strong dairy herd and milking parlour.

The farm, situated in Crumlin, Co. Antrim, is not immune to the challenging conditions being experienced by the dairy farming sector. With the recent removal of milk quotas and the subsequent oversupply of milk to the market, prices that farmers receive for their milk are coming under increasing pressure.

As such, the need for dairy farmers to be efficient has never been greater. However, like many, Lyle Mackey had been using a system of heating water by electricity. This system was **proving costly**, as some of the heating had to be done on the electricity day rate rather than the cheaper night rate. Despite water being heated overnight, it had to be reheated during the day again to satisfy safety precautions in place to avoid the build-up of legionella bacteria.

The Flogas Solution

Flogas were delighted to be able to assist Lyle Mackey, proposing a more cost effective solution of providing hot water on demand, essential to the operations of dairy farmers.

The solution was simple. A Greenspring Water heater from Worcester Bosch was installed at the farm and then piped to a Flogas LPG tank.

The new heating system provided on demand hot water at whatever temperature was required, determined by an easy to use temperature controller that allowed the water to be heated from anywhere between **37°C to 84°C**. The water heater is designed to heat up to a maximum of **84°C**, effectively killing any bacteria. While one heater can produce **140 litres of hot water in 10 minutes,** the Greenspring Water heater can be installed in multiple cascades of up to 12 units to deliver higher volumes of hot water where required.

Installation was a simple, one day process and no day-to-day activities were interrupted while it was taking place, a bonus for the busy dairy farm.

Seamless Changeover Process

With Mackey's farm now heating water on demand, the increased efficiency in the new system directly translated into cost savings. When compared with the economy price of electricity per Kwhr, LPG offers potential savings of up to 22%*. Of course, against the daytime tariff of electricity, these savings have the potential to be much greater.

This highlights the importance of considering the capacity of existing hot water systems to cope with demand. In a lot of cases milking parlours are extended but the capacity of the water heater is not increased. As such, this can lead to a shortage in hot water risking higher Bactoscan results, as experienced at Mackey's Farm.

However, the need to keep these Bactoscan results low and maximise the milk price has never been greater and the Greenspring Water Heater means that adequate hot water is available for both parlour and tank wash. Furthermore, if additional hot water is needed for mixing calf milk or for the vet to use, it is readily available as and when required.

Want to find out more?
If your current system is not providing you with the level of service you require and contributing to high bills, call Flogas for your free on-site survey and quotation for a new system tailored to your Dairy Farm. We will analyse your existing energy costs and outline the savings and benefits you'll enjoy by converting to Flogas LPG.

*Calculations based on energy prices of LPG & Electricity at time of case study (Jan 2016)

"The system is tailor-made for the needs of a modern dairy farm and the excellent feedback we have been getting from those who have made the switch is bearing this out. The primary benefit is, of course, the instant hot water on demand but now all the farm's needs are being met more cost effectively than with electricity."

Craig Johnston, Flogas sales executive

Results

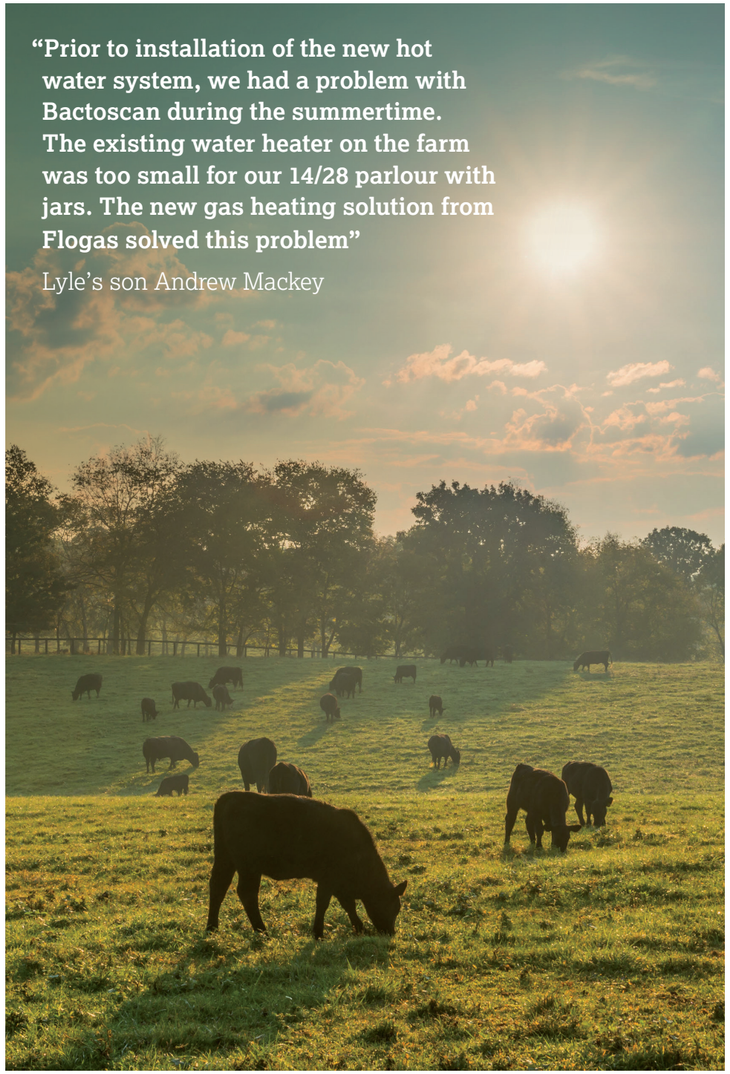
On demand hot water FAST - **140 litres of hot water** at 84°C in ten minutes

Increased control over water temperatures - from 37°C to 84°C via a controller

Increased efficiency and significantly **reduced running costs by 22%***

No hot water storage costs throughout the day and night

Reduced carbon footprint and full control of the amount of hot water that is used



"Prior to installation of the new hot water system, we had a problem with Bactoscan during the summertime. The existing water heater on the farm was too small for our 14/28 parlour with jars. The new gas heating solution from Flogas solved this problem"

Lyle's son Andrew Mackey

Contact Flogas for free site visit

To quote the savings that will be made (Energy Survey)
To carry out tank location assessment
To draw up a proposal and pricing

Flogas Drogheda
Knockbrack House
Matthews Lane
Donore Road
Drogheda
Co Louth, Ireland
t 041 9831041
e info@flogas.ie
w www.flogas.ie

Flogas Belfast
Airport Road West
Belfast Harbour Estate
Belfast BT3 9ED
Northern Ireland
t 028 90732611
e info@flogasni.com
w www.flogasni.com

FlogasIreland

LPG

Seeing a brighter future

Lyle Mackey
Dairy Farm

Wherever you are

FLO GAS