KEELHAM FARM SHOP

KEELHAM is GREEN

AND 7 Years on is delivering

even greater savings

When construction of the new state of the art farm shop was first proposed in 2015, being green was high on the agenda. With the involvement of DK Heat Recovery Limited, Keelham are able to boast about their green credentials. All the hot water for the whole site including the butchery, bakery, busy restaurant and even the restroom facilities is provided by reclaiming the waste heat from the refrigeration plant. Even the offices will be heated during the winter for free.

The system DK Heat Recovery Limited supplied for the hot water was a 750 litre storage tank three internal heat exchangers totalling 24kW of heat recovery. The system is capable of generating over 500 litres of free hot water per hour. The office heating system has a 300 litre buffer tank with a 12 kW heat exchanger.

The heat exchangers for the hot water are a twin wall design which ensures that, even in a failure situation the refrigerant and water can never come into contact with one another. This is a legal requirement under EN1717 for any business handling food.

The system is simplicity itself, maintenance free, having no moving parts it is highly efficient due to the innovative design of the heat exchangers that can remove up to 100% of the energy produced by the refrigeration plant.

The system was fitted with an optional heat meter that monitors the real time hot water usage giving Keelham Farm Shop accurate details of the cost savings.

The farm shop's butchery, cookery school and restaurant consume 4,200 litres of water each day.
The annual energy saving just for the hot water is over
76,200 Kilo Watt Hours.

The annual cost saving for the water heating alone is over **£16,000** per annum at today's price caps for fuel cost.

BUT even more impressive; Keelham Farm Shop can now boast a reduction in its carbon footprint of **17.7 tonnes of carbon** a year, and over the last 7 years that adds up to a massive **124 tonnes of carbon saved.**