



Mains of Woodstone: a farm powered by the wind

The Greer family, headed by Noel and Eleanor Greer, have owned and operated Mains of Woodstone Farm near Montrose in Aberdeenshire, Scotland for 10 years. The farm has both arable and pastoral operations, producing wheat, oilseed and malting barley, as well as beef and free-range eggs.

Like other farmers across the UK, the Greers require a large, consistent supply of electricity to power their operations at Mains of Woodstone farm; in particular, the poultry sheds require a vast amount of electricity. And like other farmers, they found that their business was increasingly threatened by spikes and fluctuations in the price of energy. As a result, since April 2015 there has been an EWT DW54-500kW wind turbine in operation at Mains of Woodstone. With a blade tip height of 79.6m, the turbine will produce on average 1,700 MWh of electricity every year – reducing the Greers' reliance on unpredictable and potentially threatening energy prices.



EWT Mains of Woodstone Case Study

Mains of Woodstone farm diversified to include poultry in 2005. Since then, this aspect of the business has expanded massively, with the farm now housing 32,000 chickens. The sheds that house the chickens consume a large amount of electricity every day to provide ventilation, lighting, automated feeding and egg packaging. In addition to these constant energy demands, the farm operates a grain dryer during the harvest season, and this energy and fuel-intensive machine is often run day and night for several weeks.

The EWT turbine has been able to provide a reliable source of energy for the poultry sheds, thereby significantly reducing the farm's energy costs. The grain dryer has been converted to be able to use electricity supplied directly by the turbine, further reducing electricity bills and the amount of diesel used on the farm. The Greers' have also benefited from the diversification of the farm's income, with surplus electricity from the turbine being sold into the local grid network.

On top of the more immediate economic and environmental benefits, the turbine offers an additional benefit for the poultry operation. Increasingly, retailers and supermarkets are giving priority to suppliers who make direct use of renewable energy. By having on-site wind energy production, the Greers will be able to go forward and expand their business, confident in the knowledge that retailers will welcome their products.

Benefits to the Landowner and Local Community

- 1,700 MWh of electricity is produced per annum by the turbine. It is estimated that one third of this is used on the farm, and the surplus is sold into the local grid.
- Approximately 620 – 1,480 tonnes of CO₂ will be saved per annum by the turbine. There will also be a lower level of emissions from the farm, due to the decreased use of diesel.
- Mains of Woodstone Farm provides jobs for the Greer family – comprising Noel, Eleanor, Alistair and Steven – plus two full time employees and one part time employee. The turbine has both improved their job security and the long term viability of the farm.
- The total investment during the installation of the turbine was £1.4 million. Of this, it is estimated that 20 per cent – or £280,000 – was spent locally in Aberdeenshire, with local contractors used to build the access tracks and crane hardstands, as well as to install the electricity cables.
- Aberdeenshire Council receives approximately £5,000 in business rates for each year the turbine is operational (an estimated 25 years).



EWT UK Ltd.

Thistle Court
1-2 Thistle Street
Edinburgh
EH2 1DD
United Kingdom
T +44 (0)131 560 1661
salesUK@ewtdirectwind.com
www.ewtdirectwind.com