## WYKE FARMS POWERED BY 100% GREEN ENERGY IN UNITED KINGDOM

## by Kim Assaël

<u>Wike Farms</u> won four prestigious awards for their sustainable approach, one of which crowns it European Champions for Environment & Corporate Sustainability. They are also the 2016 winner in the carbon and energy management category of the <u>Guardian Sustainable Business</u> <u>Award 2016.</u>

Covering 1,500 acres in the heart of the Cheddar region, in southwest England, Wyke Farms which employs 225 people, has 150 years of experience. Located across three different farms, 1,000 head of cattle produce milk for their own family cheese making.



Cheesemaking in Somerset has always been a familiar tradition, especially in the famous Cheddar region. However, today there are very few producers in the area. Wyke Farms, which exports 14,000 tonnes of cheddar a year to more than 160 countries, has been building an energy generation and water recycling operation over the past five years to reduce its environmental impact and save money on the power bill. The 100% Green old farm, by generating electricity, gas and heat from renewable sources, saves £100,000 a year on energy bills thanks to a complex system of green initiatives.

The company generates electricity and heat producing biogas from cow dung. The process of producing biogas also helps the farm cut the amount of methane, a potent greenhouse gas released in the atmosphere by dung decomposition. Biomethane is used for electricity generation, water heating, space heating, cooking as well as to fuel vehicles.

Wyke Farms has also installed a number of solar arrays to help to manage peak daytime electrical loads that are not covered by the biogas plant. The result is that the firm will be able to get its entire electricity and gas supply from both solar and biogas. Altogether, there will be a saving more than 5 million kilos of CO2 a year.

They also invest in changes in work practices: the company is putting in place software to monitor energy generation and wastewater recycling, which can figure out the business's needs and adjust the energy generation accordingly. It would get greater benefits by storing and using the renewable energy it generates on-farm because buying electricity from a local utility would cost 7.5 pence more per kilowatt-hour and part of the energy saves is sold to businesses



The Company minimize waste not only by reducing packaging, but also by reusing 85% of the farm's water. They has also encouraged wildlife within the Brue Valley in Somerset, by leaving conservation areas on riverbanks for nesting birds, deer and other animals. The Farms maximise the use of organic nitrogen to replace artificial fertiliser.

The company has three electric vehicles, which it charges from its own solar energy and uses for local cheese deliveries. A new prototype tractor which can run entirely on bio-methane derived from waste and produced by on-farm biogas plants has recently been tested by the Farm. The tractor, developed by the *New Holland Agriculture* company has the potential to reduce polluting emissions by 80% and offers fuel cost savings of between 25 and 40%.

The Farm is investing in private, taking a risk by counting on signing up customers willing to pay more for low-carbon energy but can also rely on government's renewable energy incentives for producing biomethane, recovering and using heat from its biogas-fed power plants. Their estimates consider a payback period of no more than five or six years.

Wyke Farms' biogas big generators run partly on manure shipped in from neighbouring farms: this facilitates gas sharing, has an economic sense, stimulates inclusiveness and sense of belonging of the community by sharing benefits between local farms over the territory. The company's plans for the future are to enhance this practices, sharing of gas power between local farms, providing a local filling point for neighbouring farms, helping them reducing their costs and also encouraging suppliers to work in a more sustainable way.

Wyke Farms also support knowledge sharing and education at school to make children understand where their food comes from and to encourage children to think about the locally sourced ingredients that are available in their retailer's stores of the territory.

While some farmers may dream of being energy independent, Wyke Farms has achieved it. The dairy business hopes to inspire other farmers to adopt alternative energy and to be committed to protect the environment and the land that provides home and livelihood.

## To know more

Wykefarms.com webpage

Wykefarms Green promises

European Business Award 2015

Article in the guardian

Winners of Sustainable-business Prize 2016

Webpage biomethane.ork.uk



Video in Yoytube

Wyke Farms in Twitter.com

Wyke Farms in Facebook

Article in farmweekly.com

