



£1.25m biomass project gets grain co-op fired up

BY GEMMA MACKENZIE

North-east farmers co-operative Aberdeen Grain has taken a leap into the world of renewables following a £1.25million investment in biomass boilers.

In fact, the project, which has been fully funded with capital from some of the co-operative's 186 members, could be described as an example of the farming world's very own version of crowd funding.

Managing director Bruce Ferguson said the investment will help future-proof the business, which handles around 80,000 tonnes of grain and oilseed rape every year.

"We looked at biomass various times over the years but we could never really make it stack up because some of the figures coming back to us didn't quite work out," he added.

However, following discussions with specialist biomass business Topling, the co-op opted for a bespoke 6MW system to provide heat for three of its grain driers at its base at Whiterashes in Aberdeenshire.

It plans to hook up the boilers to a fourth drier for harvest in 2015.

"We use anything, depending on the season, between 750,000 and 1million litres of fuel per annum. That's our largest variable cost," said Mr Ferguson.

He said the new boiler scheme,

which is being installed by Rapid Project Development and is set to be commissioned at the end of this month, will cut fossil fuel bills by around £600,000 a year.

And according to calculations by Topling, the scheme will also reduce Aberdeen Grain's annual carbon footprint by around 1,300 tonnes a year.

Mr Ferguson said: "We are future-proofing the business. It just takes that risk out and makes the business more resilient. Aberdeen Grain would certainly be at the forefront of grain storage and development in Scotland. We are part of a select few that is leading the way in terms of trying to move things forward."

The farmer co-op originally got approval from the banks to lend towards the scheme, however this was not necessary after members opted to fully fund the whole project on a six-year payback period.

Topling managing director John Seed, who runs a mixed farming business near Duns in the Borders, said the scheme made Aberdeen Grain more competitive.

He started the Topling business after returning to the family farm in 2008, following a career working away in the renewables industry.

This resulted in him designing Europe's largest straw-fuelled batch boiler - 950kW in size - to power the farm's grain drier, free-range egg unit, farmhouse and farm buildings.

Similar boilers have since been installed by farmers across the UK, although the scheme at Aberdeen Grain is by far Topling's biggest project to date.

Aberdeen Grain's scheme incorporates three 2MW multi-fuel boilers, which will be fuelled with woodchip sourced from a local north-east supplier.

Mr Seed said the boilers operate a gasification and combustion process, which means they can be fed with different fuels including lower-grade wood.

He said: "This is a multi-fuel boiler for wood with a walking

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floor feeding through an auger and a pushing system to a gasification pot at 1,400 degrees centigrade."

He said the wood is burned, creating 80% gas which is then carried through to the boiler for burning, with a special multi-cyclone system used to take the ash out of the smoke and then up a flue.

The boilers then heat water for an extensive radiator system, which is stored in two 55,000-litre tanks, at around 100 degrees centigrade.

The hot water is then pumped through radiators in the grain dri-

ers, which suck the air through them to dry the grain.

Mr Seed said: "Water comes out at about 100 degrees and comes back in around 70 degrees heating the air (in the drier) to 55 degrees."

He said the scheme would not have been feasible had the government not increased the support payment it offers larger biomass schemes under the Renewable Heat Incentive (RHI).

Previously the government offered support of 1p/kWh of heat generated for schemes over 1,000kW in size. This has since increased to 2p/kWh of heat generated, which Mr Seed described as the "game changer" for the Aberdeen Grain project.

He added: "All the RHI did was underpin the lending that the members were making. It made it payback."

Aberdeen Grain's biomass project follows considerable investment - around £11million - in its facilities at Whiterashes since 2009.

Mr Ferguson said the co-operative is also installing two new grain silos to add extra storage capacity to its books, and there is scope to build more grain driers in the future to sit alongside the new boilers.

The co-operative is holding an open day on Thursday, May 29, for farmers to come and see the boilers in action.



TURNING UP HEAT: Aberdeen Grain managing director Bruce Ferguson at the farmers' co-operative's Whiterashes base where a £1.25million investment in biomass boilers has taken place.

Photographs: Colin Rennie



RODDY CATTO

I wish I could start my first column for the Press and Journal with better news. Many of you will be fed up hearing about Common Agricultural Policy reform. The European commissioner had indicated that Scotland could put up to 5% extra into coupling on our rough grazing land - taking our coupling potential up to 13% - so that the money could be directed to active producers.

It could save the budget being drained on those rough grazing acres not producing food. The idea also went a long way to addressing the issue of "slipper" farmers.

It appears that nothing in politics is certain and after Commissioner Ciolos told Richard Lochhead it was a workable solution, he has, within the space of a few weeks, changed his mind.

After this bombshell, I have no doubt the union's president, Nigel Miller, will be calling us back to Inghis-ton.

I personally feel we need to get the Scottish Government, Mr Ciolos and their officials into a room with the NFUS board and not let them leave until we have a solution.

In explaining the importance of Cap to the north-east and Highlands, my predecessor as regional chairman, Charlie Adam, had an excellent piece on television this week on what the deal might mean for those with cattle and spring barley.

He even managed to get one of his coos to calve for the camera but he was splitting hairs a wee bit when he complained about only getting a heifer calf. As a dairyman I could be doing with having a few more calves with "pump and tool bag" missing.

I totally agree with Charlie's points on greening and a three-crop rule and what that means to our growers.

It is ill thought out and not very environmentally friendly. With a growing whisky industry and a demand for malting barley, many mixed farming family farms are going to fall foul of this three-crop rule if their rotation is based around grass and malting barley.

If they are not allowed to grow the tonnage wanted by our maltsters, it will be imported from across the border or farther afield. Where is the environmental-friendliness in this when a Scottish-grown product can supply a Scottish market on its doorstep with virtually no food miles?

Looking on the bright side, we have had one of the easiest winters on record. Grass has hardly stopped growing all winter, there has been a good start to lambing and calving and a lot of sowing done in ideal conditions.

That is helping to take the mind off the Cap debacle. What would our dear departed friend Joe Watson have had to say about this latest development? His larger-than-life character is sorely missed and our thoughts are with his family.

But, like the seasons, things move on and can I thank new farming correspondent Gemma and the Press and Journal for their continued commitment to covering the food and farming sector.

■ Roddy Catto is a dairy farmer at Hillhead of Muirton, Whitecairns. He is NFU Scotland north-east regional chairman

