



— 1

Firing on all cylinders

The Lea Valley growing region is powering ahead as growers are diversifying into becoming small-scale energy suppliers.

Nina Pullman visits the region

A cres of glasshouses stretching as far as the eye can see have been a historic part of the Lea Valley produce industry – famed for its production of salad crops – for decades.

Heating these glasshouses has always meant energy costs have been one of the biggest challenges for growers in the region, but recently energy production has started to become an incentive rather than an obstacle for the future.

Described as one of the country's "best kept secrets", the Renewable Heating Incentive (RHI) is a government-funded tariff system that pays commercial businesses for energy produced from heat sources. With a similar budget for solar having been recently slashed, and the ever-looming threat of higher oil and gas prices in the long-term future, biomass is just one of several systems that are becoming increasingly viable for commercial produce businesses. Commercial director of grower and marketer Abbey View Produce, Luke Hibberd, explains: "Energy is one of the biggest costs for growers. So I think the future is that small-scale growers will become energy suppliers. Businesses will become energy hubs using heat exchange methods, air sources, gas, thermal, solar and anaerobic digestion."

Abbey View Produce has already started this process itself, with a 3MW combined heat and power (CHP) boiler, as well as recently investing £250,000 in 1,000 solar panels, providing enough to power the company's growing operations and export back to the grid. Demonstrating how a horticulture business can merge into a savvy energy supplier, Hibberd says the boiler runs between 5pm and 7pm as this is when the wholesale price for electricity is at its highest.

Already known as the largest cucumber grower group in the country, Abbey View Produce is not about to rest on its laurels. Last year the business completed a £3.5 million expansion of its packing and storage facilities, increasing its capacity by around 200 per cent to 7,500 sq m. "We see growth coming from bigger volumes, but also crop diversification – we are the only commercial grower of English figs, which have been in the ground for four years and will be available in Sainsbury's stores this year," says Hibberd.

The figs are currently grown by one of Abbey View's aubergine growers, and Hibberd explains how the company tries to use all of a grower's available space and take 100 per cent of their crop. "We believe looking at niche >>



— Rob Jones, of Guy & Wright, with the company's straw-powered boiler



GrowSave project

Energy information for growers

The GrowSave project, delivered by the Farm Energy Centre on behalf of the HDC, offers seminars, study tours, technical guides and data to help growers make energy decisions.

crops that aren't huge sellers give growers a different revenue stream, and the chance to sell a premium product that might have better returns. "In the past we've also trialled English okra, as well as white or apple cucumbers, and white and graffiti -striped aubergines."

Fifteen minutes up the road, pepper and cucumber grower UK Salads has recently invested £500,000 in two fully-automated, and wood chip-powered, 1MW boilers. Together they provide around 40 per cent of the business' energy usage, with an estimated payback of around three to four years, after which point the income is used for margin reduction. As well as providing the local area with energy security and business opportunities, biomass systems have further benefits - any carbon dioxide generated from the boilers is fed back into the glasshouses where it helps to increase plant yields.

Julian Morgan-Jones, from South East Wood Fuels (SEWF), which supplies wood chips to UK Salads, believes 2015 is the year for biomass. "The feed-in tariffs are better than solar at the moment," he says. "The Renewable Heat Incentive is one of the country's best-kept secrets, and it's now really taking off. This budget only lasts until 2016, when it's set for review, so it's a good time to invest.

"These two boilers require 4,000 tonnes of wood chips a year. It's one of the least expensive fuels - it's the same price as gas at the moment, but much cheaper than oil and electricity."

Managing director of tomato grower Guy & Wright, Rob Jones, explains how a straw-powered boiler earned the business £120,000 in 2014 through RHI payments. "It's completely changed our business, it really has. Without this boiler we wouldn't be here today.

"Last year, we spent about between £50,000-60,000 on straw, and around £10,000 on gas, which we use to top up the boiler and maintain the humidity."

According to Jon Swain, senior engineer at the Farm Energy Centre, using straw rather than wood chips creates 'peaks' of energy, but costs around a half to a third of the price. "The Lea Valley has highly wooded surroundings, so wood chips are plentiful, but there is also plenty of straw available from neighbouring East Anglia," he says.

Becoming an energy supplier means a business is affected by wider economic and political issues. Abbey View Produce's managing director, Brian Hibberd, explains: "To produce a cucumber you have to keep an eye on politics - for example, Labour saying they would cap energy bills has kept the prices up because energy companies don't want to reduce costs and then have to stay down, while politics in Ukraine are affecting gas prices.

"It's an everyday industry that's getting ever more challenging. Go back 20 or 30 years and it wasn't so international. More than ever you need to look at the whole picture." And the father and son team behind Abbey View don't just

see the value in engaging with national issues - they also sit on several trade bodies, including the Cucumber Growers' Association and the Tomato Growers' Association, as well as representing the industry on the Lea Valley taskforce, alongside the Lea Valley Park Authority (LVPA).

The latter is particularly relevant in the light of recent draft proposals from the LVPA that claim they would resist future glasshouse expansion. The proposals sparked outrage among growers, who say clamping down on expansion threatens the viability of their businesses, but Luke Hibberd notes there is actually more support for the industry among local authorities than there has been in the past.



— 2

"The council has previously been quite indifferent to the growers, but there is a growing realisation that the industry is a major employer and they now want to support the growers," he explains, before admitting that: "Lea Valley Park Authority would prefer growers to expand on land elsewhere, but there is a lot of house price potential in the area so no one is selling any land."

For a very valuable region that combines prime residential areas with protected parkland, the produce industry in Lea Valley may find itself increasingly squeezed, although Hibberd remains optimistic. "Maybe the future is for sites to come together, so businesses that are neighbours could perhaps share a boiler, for example," he says. — FPI

ABBEY VIEW PRODUCE FACTFILE:

- Marketer and grower of salad crops, based in Waltham Abbey, Lea Valley.
- Largest cucumber grower group in the UK, making up 28 per cent of the total supply.
- During the peak week in 2014, cucumber sales reached 2.2 individual units.
- 23 growers over around 95 acres in the Lea Valley, of which 68 acres are cucumbers.
- Supply Sainsbury's as key customer, but also Morrisons, as well as foodservice and wholesale customers.
- Export to Holland, Denmark or Ireland if there is spot demand.
- Import when required from Spain, the Canary Islands, Israel and occasionally Holland. — FPI



"A 1MW boiler would cost between £300,000 and £500,000 depending on the site constraints and complexity. Around £60-80,000 of that would be for the boiler, and the rest is installation costs," says Jon Swain, of the Farm Energy Centre. — FPI



2—Glasshouses are a familiar sight in the Lea Valley