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Belgian biofuels in the doldrums

Belgian biofuel manufacturers have invested half a billion euros in installations for the production of biodiesel and bioethanol in the last few years. But the brand new machines mostly stand idle. The market is not getting off the ground, as there is no legal obligation for oil companies to mix in biofuels with standard fuels.



by Remco de Jong

Last winter family concern Proviron in Ostend sent its employees home for weeks on end and closed its biodiesel plant due to a lack of demand. 'It was pointless to keep producing biodiesel,' says owner Wim Michiels. 'We manage to stay afloat because of two other plants where we manufacture chemicals, but for how much longer?' The family shareholders have invested 20 million euros, but the situation is becoming difficult, says Michiels. 'All investments have been scaled down. Our old factories blew hot air into the atmosphere for 40 years. Now, we use that energy to manufacture biofuel. We believe we have an economical production process, but there has to be a market for our product out there.'

He hopes to start producing again this spring, 'but that depends on how raw materials develop on the world market, of course. We encounter fierce competition from the United States where the production of biofuel is highly subsidised. We must try and survive this difficult period.' The three Belgian banks that finance the Proviron project are uneasy about their client's creditworthiness.

Filip Tilleman is the chief executive officer of diesel manufacturer Bioro. A majority share of this company is owned by Cargill, the American commodities giant. Tilleman shows the brand new plant in the port of Ghent, which has not yet run at full capacity. Costs have been cut, so that Tilleman is not just responsible for running the company, but also for answering the telephone and replying to e-mail messages. 'We try to function as efficiently as possible,' he says with a smile. He will speak to the Cargill employees about the state of affairs later in the day. 'There is a certain amount of anxiety, of course. Our people want to know when the plant will finally run at full capacity.'

The Bioro plant is surrounded by companies which play an important role in the manufacturing chain. Raw materials are imported here by ship or train from France and Eastern Europe. Belgium does not grow enough rapeseed to meet the demand of biofuel producers. Storage silos for rapeseed, transport belts, loading and unloading installations are all present on the "integrated site". 'This enables us to work quite efficiently,' says Tilleman. 'All running costs are kept under control, which enables us to export our oil despite fierce competition.'

But not much is going on at the Bioro plant at this moment. All that can be said is that it is still running, judging by the rapeseed presses, which are excreting an oil-like substance. How much is being produced, Tilleman does not want to say.

Political support

Proviron and Bioro are just two examples of Belgian biofuels producers that are having a rough time. They put the blame squarely on the government for their precarious situation, citing a total 'lack of political support'. Last year, for instance, a Flemish minister suddenly withdrew plans to have all public transport buses run on biofuel. 'The minister put things on hold,' says Professor Wim Soetaert of Ghent, initiator of the biofuel knowledge centre, Bio Base Europe, in Ghent. 'She wants to be certain that biofuels are a sustainable solution.' Not a very encouraging signal for the new producers, he adds.

The fundamental problem, however, is that Belgium still does not have any statutory regulations for mixing in biofuels. Some say that the oil companies don't want to cooperate. 'Somehow they have managed and Malta are the only three countries of the 27 EU member states that still have not made arrangements for the biofuel industry. 'Illustrious company, eh?

'Petrol station owners are not willing to mix biofuels in voluntarily', says Tilleman. In hindsight, had Cargill and the other shareholders known that the legislator would fail to put legislation in place, 'we would have built in Amsterdam or Rotterdam'.

The Belgian Petroleum Federation rejects the criticisms. 'Oil companies profit from a lower tax if they sell biofuels', says Secretary-General Gaëtan van de Werve. 'But apparently this advantage is too small to make it profitable to sell biofuels.' He adds that in Belgium 'we also have a problem with the availability of bio-ethanol. And there are complaints about the quality of the biodiesel.' Van de Werve is against mandatory mixing of biofuels. 'If the government forced us to mix in biofuels and at the same time to buy biofuels from preselected companies, we would not accept that.'

Van de Werve is referring to a quota system that the Belgian government introduced for the selling of biofuels. This was done to prevent "excessive" production. The government fears that if the production of the low-tax biofuels becomes "too large", the treasury will suffer too much. 'The Belgian government wants a budgetary

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to obtain the minister's support,' says a source in the business. Fons Maes, spokesman for the Belgian Biodiesel Board, finds the current situation unacceptable. 'The Belgian government encouraged us to invest substantially in biofuels, but has neglected to create a Belgian market,' he says.

Soetaert sees another reason for the delay. 'This country has so many political problems that it is hardly governed at all.' He emphasises that Belgium, Cyprus neutral operation,' says Maes. BioWanze, Alco Bio Fuel in Ghent and Tate & Lyle in Aalst have been granted a license to produce and supply bioethanol from 2007 to 2013. Néochim in Feluy, Oléon in Ertevelde, Proviron in Oostende and Flanders Bio Fuel in Gistel were selected to produce and supply biodiesel.

Bio Energy Valley

Despite these setbacks, Soetaert for one still believes there is a future for the





Belgian biofuel industry. He is one of the driving forces behind an initiative to turn the Ghent and Terneuzen region into an actual Bio Energy Valley. The offices of Bio Base Europe are located in an old fire station diagonally across from the Bioro plant in Ghent. The idea is to create a leading European knowledge centre in the field of biofuels. Installations for testing second generation biofuels are to be built there this year. Flanders, the Netherlands and the European Union have each put seven million euros into the project, which must eventually pay for itself. Some of the funds are being used to turn the fire station into a 'pilot plant' for bioprocesses. Another part is being invested in a training centre close to Terneuzen, where process operators will be trained. Terneuzen (in the Netherlands) and Ghent are connected by a sea canal and are combining forces to turn the area into a Bio Energy Valley. 'Compare it to Silicon Valley in California,' says Soetaert. 'All talents from one sector are gathered there. We would like to achieve the same for biofuel in the ports of Ghent and Terneuzen.' The professor combines the management of Bio Base Europe with his tasks at the university. 'We want to be a one stop shop where we

perform test projects for customers, from green raw material to end product.'

Soetaert was very annoyed about last year's debate on whether crops should be used for food or for fuel. 'It was a hype. No one talks about that now.' However, to prevent the same kind of discussion in the future, Soetaert is currently researching sustainable, undisputed production methods. 'We can do a lot in laboratories today, but the step towards large-scale production still has to be taken. This new centre will play an important role in that process.'

Local politicians and the Ghent port administrators hope that their town will eventually develop into the primary hub for biofuel in Europe, or indeed, in the world. 'Antwerp is very important for the petrochemical industry worldwide. There is no reason why Ghent shouldn't be just as important for biofuel,' says Soetaert. Soetaert emphasises that the plants in the Ghent Bio Energy Valley are up and running, despite the lack of political support. 'We are running, but not at full capacity. Once the oil price increases to over a hundred dollars a barrel, it will be easier for us, but until that time we will be struggling.'

Jewel

The largest player in the Belgian market is BioWanze. This company last year invested three hundred million euros in an ultramodern bioethanol plant in the Walloon village of Wanze, on the river Meuse. It was done at the request of local sugar manufacturer Tiense Suiker, part of German company Südzucker. 'Tiense Suiker was looking for a market for sugar beets grown by Walloon farmers,' says Cristelle Noirhomme, marketing and sales manager of BioWanze. 'The farmers were running into difficulties because of changes in the European subsidy schemes. This plant is an alternative.'

Walking in her wellingtons through the mud on the factory site, she proudly shows the jewel in the installation's crown: the biomass power plant which meets almost 100 percent of the plant's power demand. 'It is one of the largest in Europe,' says Noirhomme. Bran, which is separated from grain, fires the power plant. BioWanze can produce 300,000 cubic metres of bioethanol on a yearly basis. Fifteen percent of the plant's operating capacity runs on locally harvested sugar beets. Grains account for the remaining 85 percent. The gluten extracted in the production process is used in the food industry. Residual proteins are processed in 'ProtiWanze', the brand name chosen to market this animal food. The plant will emit 70 percent less CO₂ during production. Local politicians supported the project, which offers employment to 120 people.

Thomas Hubbuch, Chairman of BioWanze's executive board, takes a rather mild view of the problems in the market. 'I am confident that the market will start to function later in the year. Brussels will have to realise what interests are at stake here.' BioWanze will export half its production, but the Belgian market is crucial. 'We have a lot of fixed costs, so you need size to manage the costs and operate profitably.'

Noirhomme likes to emphasise the ecological character of the factory. Sugar used to be manufactured at the site. 'We wanted to secure the future of our company, but also that of the farmers in the area, preferably in an ecologically responsible manner.'