A Biofuel Power Station for Shoreham?

What is proposed?

Edgeley Green Power, (EGP) a new Hampshire-based company, want to build a biofuel power station at Fishergate Terminal, Shoreham Port. The power station would burn 50,000 tonnes of biofuels per year. To illustrate the scale of this demand: If EGP wanted to burn UK-vegetable oil (which they don't, they want to ship in all the biofuels) they would need an area over four times the size of Adur District entirely covered in oilseed rape. EGP state that this is the first of three similar power station plans which they are developing – if they are successful, they will greatly increase the demand for biofuels in the UK, with serious consequences for forests and biodiversity, for communities and for the climate.

If the power station is approved then EGP will claim between $\pounds 17.3$ and $\pounds 23$ million in subsidies every year, paid through a national levy on electricity bills (Renewable Obligation Certificates).

Local impacts will include:

- More air pollution, including nitrogen oxides and small particulates in an already heavily polluted area : This means more risk of respiratory and heart disease for local residents;
- Odour: So far, only one, much smaller biofuel power station is operating in the UK (in Wakefield, Yorkshire) and serious problems with smell as well as pollution have been reported.



Biofuel power station in Monopoli, Italy

What type of biofuels would EGP burn?



"Access prohibited" – Jatropha plantation in Senegal, Action Aid, tinyurl.com/yd8p9cv

EGP's public statements have been confusing and contradictory. They claim on their website that most of the biofuels would be a residue of pulp and paper production, called tall oil, but they also speak of using various 'inedible' vegetable oils (tinyurl.com/2vcj5az). They list certain ones which they claim they won't burn, but don't actually say which ones they want to burn.

In a recent government consultation (tinyurl.com/38u9a4y), EGP do not even mention tall oil but say that they want to burn jatropha oil. Jatropha is inedible and thus in line with what they say on the website. It is also a major threat to the livelihoods and food sovereignty of large numbers of communities in Africa, Latin America and Asia. There are growing numbers of reports of small farmers, indigenous peoples and pastoralist communities being evicted, for example in India, Ghana and Tanzania, to make way for jatropha plantations, to grow fuels for European cars and power stations. In India and Paraguay, biodiverse forests are facing destruction for jatropha.

"They actually took the land when it was already tilled... They haven't paid us anything... What we want is to get our farms back, because that is what our livelihood is dependent on... we are dying of hunger and there is nothing that we have that is actually our own."

'Inedible' clearly does not mean 'sustainable' – even vegetable oils used for food are often inedible until they have been refined and would thus meet EGP's criteria.

EGP have not ruled out palm oil either – instead they list particular types of palm oil, yet any form of palm oil requires require more plantations and thus more deforestation and land-grabbing

Used cooking oil?

Used cooking oil from the UK accounts for only 17% of biodiesel used for transport, and a large proportion of that is imported from other European countries which in turn source most of their own biofuels from soya, palm oil and other plantations. Used cooking oil is short supply. If EGP were able to source a lot of used cooking oil, the consequence would be that even more biodiesel from palm and soybean oil would get used in cars.

Salvage oils?

Some biofuel firms now speak about 'salvage oils' – small amounts of contaminated oils left behind after shipping or by food and chemical firms. EGP need big bulk supplies – they cannot run a power station by collecting a few tonnes of 'left over' vegetable oil from lots of different places!

Tall oil?

Tall oil is a byproduct of the pulp and paper industry. Monoculture tree plantations for pulp and paper are anything but sustainable: They replace forests and other ecosystems, pollute and deplete soils and water and often have devastating impacts on local communities, too. Tall oil supplies are already fully used, mainly by the chemical industry – there is no waste, and none to spare. It is in very short supply. According to figures collected by the chemical industry (Harrpa), all tall oil produced in Europe "would only be sufficient to supply one medium sized power station". Yet two UK biofuel companies alone (EGP and Rocpower) now say that they want to run nine power stations between them 'mainly' on tall oil, without any known secure supplies! There are also technical problems with running a power station like the ones planned by EGP on tall oil: It is very corrosive and Rocpower have had major problems with using it in diesel engines (see below under 'pollution').

Finally...

If EGP get planning permission, they will be able to burn any type of vegetable oil they like or, more to the point, they can best afford. In Germany and Italy, there are large numbers of biofuel power stations and virtually all of them run exclusively on palm oil, which is by far the cheapest vegetable oil (and, unlike tall oil or other obscure residues, easily available in bulk). EGP's 'sourcing policy' can be changed at any time. The local authority cannot control this through planning conditions. What this means is illustrated by MGT Power, who recently got permission to build a large wood power station in Teesside. Their sourcing policy stated that all or most of the wood was to come from North America. A few months after they got planning consent, they signed a supply agreement for most of the wood to come from eucalyptus plantations in Brazil!

EGP directors have a lot of experience in sourcing palm oil for biofuels: EGP Chairman Field Walton founded the Biofuels Corporation which used palm oil from Southeast Asia as one of their main feedstocks until they went bankrupt.

Good for the climate?

No! The demand for vegetable oil already exceeds supplies, so any new demand will, directly or indirectly, lead to new plantations somewhere in the world, which means more deforestation and other land use change and more fossil-fuel based fertilisers and pesticides, all of which make global warming worse. Scientific studies show that virtually all current biofuels are worse for the climate than the fossil fuels they replace.

How much pollution?

Last year, Ealing London Borough Council refused an application for a biofuel power station by Blue NG in Southall due to serious concerns over air pollution. The company lost on appeal. The Secretary of State ruled that the pollution, nitrogen dioxide (NO2) in particular, would be too great to be allowed in an urban area with already high levels of pollution. The local area had been declared an Air Quality Management area because of high NO2 levels. The same is true for parts of Shoreham-on-Sea and for Southwick, where NO2 levels already breach legal limits. The Shoreham power station would cause 2 $\frac{1}{2}$ times as much pollution as would have been the case in Southall. That's because EGP would burn 2 $\frac{1}{2}$ times as much biofuels and they are proposing the same technology for reducing NO2 (which still lets enough pollution through to have a major impact on local people). The height of the chimney – up to 65 metres – suggests that EGP are very aware how polluting their plans are. Nearby residents will still be exposed to the worst of the pollution, but the prevailing winds will also carry it across much of Hove and Brighton.

Here is a account from somebody who visited Rocpower's biofuel power station in Wakefield: "When visiting the Rocpower Common Side Lane site near Featherstone on the 14/6/10 I was

shocked to see rusty coloured smoke gushing out of one of its 4 chimneys. Also the air smelt of sulphur." (tinyurl.com/39opypq) Rocpower claim to have been burning tall oil and there appear to be 'special' pollution problems with burning this in diesel engines (EGP want to use old diesel engines, too).

Heat distribution?

EGP say that they will 'explore' heat export. There are no proposals to capture and distribute any heat at all. A port, separated by water, industrial buildings and a main road from the nearest houses is a very unsuitable location for heat distribution. District heating does not appear to be an option.

Jobs?

EGP claim that they will create 20 permanent jobs. This seems highly unlikely. A comparison with other company plans, together with the size of the fuel tanks, suggests that five permanent jobs would be a more likely figure. EGP also claim that they will boost the local economy, bring in more money and create more 'indirect jobs'. Such claims are widely used by different industries. The Aviation Environment Federation has published an analysis and critique of similar claims made by airport operators:

www.aef.org.uk/downloads//Airport_jobs_false_hopes_cruel_hoax_March2009_AEF.pdf .

What can be done?

EGP want to submit a full planning application this autumn. There will then be several weeks for local people to object, raise concerns with their Councillor, etc. The decision will be made by Adur District Council, but Brighton & Hove Council will be consulted and there are many ways in which people from the wider area can get involved.

To share ideas of what to do about EGP's plans and how to campaign on this, please contact biofuelwatch@ymail.com.

www.biofuelwatch.org.uk