

Biofuel power station plans in the UK

In Germany and Italy, large amounts of biofuels are being burned for electricity and palm oil, the cheapest type of vegetable oil, accounts for nearly all of those.

Germany has up to 2,000 palm oil-burning CHP plants while Italy is home to the world's largest biofuel (palm oil) power station with 100 MW and to several other large ones. In both countries, developers have found that burning any other type of biofuels is not economically viable, despite generous subsidies. In Italy, at least one company, Fri-el, has been directly involved in land-grabbing, acquiring concessions for oil palm plantations (in Ethiopia, Nigeria and the Republic of Congo) to supply Italian power stations.

In the UK, plans for biofuel power stations have been under way since it became known that the subsidy level (i.e. the level of Renewable Obligation Certificates or ROCs) would get doubled in the case of biofuels from 'energy crops', a definition which can include palm oil. Thanks largely to active campaigns against such power stations, very little palm oil has been burned for electricity as yet and only one small biofuel power station is in operation (at a significantly reduced capacity). However, several such power stations have been granted planning permission, and several are likely to be built if the current subsidies remain in place. A consultation on those Renewable Obligation Certificates will be published during the autumn.

Below is a list of the companies behind the UK's biofuel power station plans and their plans. **IF YOU KNOW OF ANY PROPOSALS, PLANS OR EXISTING BIOFUEL POWER STATIONS WHICH WE MAY HAVE MISSED, PLEASE LET US KNOW.**

Blue-NG

Blue-NG was a partnership between the National Grid and start-up technology company 20C. In early 2011, the National Grid pulled out of Blue NG, due to new EU rules under which they can no longer be a provider of electricity. [20C](#) took over the company name, however the National Grid had been the main provider of finance, as well as owners of the sites. 20C are looking for other investors but there is no evidence that they have found any for UK biofuel power stations as yet. Without external investment, they will not be able to build and operate power stations.

Blue NG has **planning permission** for a 19.5 MWe biofuel power station in **Beckton, Newham, East London**. If built, this would burn 56,000 litres of virgin vegetable oil a day. Blue NG's planning application – including a more recent approved application for changes to the plans (relating to the design, not the type and amount of fuel burned) referred to palm oil as a possible feedstock. Blue NG publicly states that they intend to burn rapeseed oil and used cooking oil but the economic feasibility of this is questionable, planning consent allows them to burn any type of biofuels and, finally, the direct and indirect greenhouse gas impacts of burning rapeseed oil as biofuels have been shown to be even worse for the climate than burning equivalent amounts of mineral oil.

In **Southall, Ealing, West London**, Blue NG applied for permission to build an 18.5 MWe power station of the same type. The plans were strongly opposed by local residents and various groups, including Food not Fuel, Biofuelwatch and Friends of the Earth Ealing, and **rejected** by Ealing Council's planning committee. Blue NG appealed against the decision but their Appeal was rejected by the Secretary of State because of its air quality (nitrogen dioxide) impacts in an already heavily polluted urban area.

Blue NG published **proposals** for a 33 MWe biofuel power station in **North Killingholme, North Lincolnshire** and for another one in **Blackrod, Bolton Council**. Their Blackrod power station was to be 33 MWe initially but this proposal was later reduced to 19.5 MWe. The Blackrod proposal has faced strong local opposition, co-ordinated through the [Blackrod](#)

[and Horwich Environmental Action Group](#). Blue NG has not so far submitted any formal planning application for North Killingholme or Blackrod.

Chelveston Renewable Energy

[Chelveston Renewable Energy](#), a local energy company based in [Chelveston, Northamptonshire](#), obtained **planning permission** for a 6 MWe palm oil power station in 2010. The application had been rejected by East Northamptonshire Council but was **granted on appeal**. It was opposed by local residents. Biofuelwatch had not been aware of the application and appeal until it was granted and we do not know whether construction has started.

EcoPellets/IIES

[EcoPellets](#) are based in Ireland and focus primarily on producing and selling wood pellets for bioenergy. Together with UK company [Integrated International Energy Systems Ltd \(IIES\)](#), they have **applied for planning permission** to build a 14 MWe biofuel power station at [Llangefni, Anglesey](#), which is still **pending**. This is part of a larger application which also includes an 18 MW biomass power station and a 100,000 tonne per year pellet factory. The two power stations are to sell electricity to the grid and provide heat for the pellet factory. Statements about biofuel sourcing in the planning application are contradictory and include tallow, used cooking oil, rapeseed oil and other virgin oils – nothing in the application would stop the companies from using palm oil.

Edgeley Green Power

[Edgeley Green Power](#) is a start-up company proposing to build several biofuel power stations at ports in the UK. Their first **proposal** is for a 32 MWe power station in [Shoreham-on-Sea, near Brighton](#). No full application has been submitted as yet, although the company had announced that they were planning to do so in autumn 2010. A local group, [NO2 Biofuels Shoreham](#), formed to oppose the plans.

Rocpower

[Rocpower](#) is a subsidiary of Hargreaves plc an energy company involved in mining fossil fuels and providing support services to the fossil fuel industry.

In [Featherstone, Wakefield](#), [Rocpower](#) obtained permission to build a 7MW power station which became **operational** in December 2009. Since then it has been running at a small fraction of its capacity, due to serious and unresolved problems with air emissions and odour. The planning application listed palm oil as the likely feedstock, however, under pressure over their other planning applications, Rocpower announced that they would find biofuels which were not virgin vegetable oil. Tall oil (a by-product of pulp and paper production in high demand by the chemical industry) accounts for most of the biofuels burned so far.

In [Barnsley](#), Rocpower submitted an **application** for a 7MW biofuel power station in 2009. The original application was withdrawn and a new, nearly identical one, was submitted and is still **pending**. The application has been held up by concerns over air quality impacts.

In [Sheffield](#), Rocpower submitted an application for an 8MW biofuel power station. The application was eventually **withdrawn** after opposition. Instead, Hargreaves submitted **a different application for a diesel back-up power plant** ("Short-term Operating Reserve" or STOR) which was **approved** by Sheffield City Council, with a condition that only mineral diesel would be burned (as Hargreaves said they would) unless otherwise agreed in writing with the Council.

In [Bramham, Leeds](#), Rocpower submitted an application for a 7MW biofuel power station, withdraw it and then re-submitted it without significant changes. The application referred to palm oil as a potential feedstock and faced strong opposition, including over

the local impacts on a greenbelt site. The application has been **rejected** by Leeds City Council because of local impacts.

Vogen Renewable Energy

Vogen is a start-up company which submitted plans for a 25 MWe biofuel power station in **Newport, South Wales** in 2009. The plans were rejected by Newport City Council's planning committee. Vogen appealed but the appeal was later **withdrawn**, following an active campaign by local residents who set up Newport Against Biofuels, as well as other including Biofuelwatch and Friends of the Earth. Vogen has had a **different application, for a gas CHP power station and import and storage of biomass and livestock feedstock approved** at the site.

W4B Renewable Energy Ltd

W4B is a UK start-up company planning to build biofuel power stations which they admit will (at least 'initially') run on palm oil.

In **Portland, Dorset**, W4B **obtained planning permission** for an 18.5 MW biofuel (palm oil) power station, despite significant local and national opposition. Weymouth & Dorset Council's planning committee had rejected a first application but then approved an almost identical second one. A local group, [No Oil Palm Energy \(NOPE\)](#), continues to actively campaign against these power station plans. Construction is pending the outcome of the forthcoming consultation on subsidies (ROCs).

In **Bristol**, W4B **obtained planning permission** for a 50 MW biofuel power station, despite significant opposition, including by local groups and individuals who formed the campaign [group Action for Sustainable Energy in Bristol \(ACSEB\)](#), Biofuelwatch and Friends of the Earth. Bristol City Council's planning committee had rejected the application because of concerns over sustainability and climate impacts of the biofuels W4B would be burning and Bristol City Council actively opposed W4B's appeal which was nonetheless granted by the Secretary of State, with only minor conditions. W4B are understood to be awaiting the outcome of the forthcoming consultation on subsidies (ROCs) before considering whether to start construction.