

Dear Sir/Madam,

Re: Plutus Energy's proposal for a biofuel STOR plant at Avonbank, Bristol, Appeal reference APP/Z0116/W/17/3167991

I am writing on behalf of Biofuelwatch, an organisation which carries out research, advocacy and campaigning in relation to large-scale industrial bioenergy (biofuelwatch.org.uk).

We would like to set out our concerns and reasons for objections to the proposed development and Appeal.

We agree with Bristol City Council's conclusion that *"the proposed development would result in significant impacts on air quality and would consequently introduce a risk of harm to human health and well-being within the vicinity of the site. It would therefore be contrary to policy BCS23 of the Bristol Development Framework Core Strategy (June 2011) and policies DM14 and DM33 of the Site Allocations and Development Management Policies (July 2014)."*

We do not doubt the validity of Bristol City Council's second ground for rejecting the application, i.e. noise impacts, however we have no expertise in relation to noise impacts.

However, we would like to raise an additional concern regarding the proposal which we believe to be a material planning issue: The lack of any credible safeguards regarding the sustainable sourcing of the biofuels and the developments' compatibility with Policy BCS14 of the Bristol Development Framework Strategy, which requires the use of low carbon fuel. We hope that this issue will be fully considered in relation to this Appeal.

Aid quality impacts:

As the analysis of Plutus Energy's original Air Quality assessment and, subsequently, of its updated Air Quality Assessment, provided by Air Quality Consultants on behalf of RADE shows, there are serious concern that the plant could worsen existing breaches of air quality limits and objectives as well as potentially causing new ones.

Air Quality Consultants' analysis points out that the Air Quality Report uses 170 operating hours as the 'worst case scenario' for modelling air quality impacts, even though the planning condition proposed by the Planning Officer would seek a 200 hour a year cap. Clearly, the worst case scenario should account for 200 operating hours a year. Furthermore, it should assume that those 200 hours coincide with meteorological conditions responsible for the highest background pollution levels. This would seem a reasonable assumption, given that STOR plants are meant to provide "balancing power" at times when wind power and thus overall electricity generation are lower than normal, yet demand is high. The typical scenario would be high pressure conditions during the winter, which correlate with particularly high pollution levels and little or no wind.

Air Quality Consultants' analysis also points out that Plutus Energy's Updated Air Quality Assessment has misapplied IAQM/EPUK guidance by classing a predicted addition of 0.53 µg/m³ to annual mean NO₂ concentrations at a residential property in Bath Street as 'slight' rather than 'moderate'. It states that similar increases in NO₂ levels can be expected at other residential properties in Bath Street.

Furthermore, the analysis shows that, using IAQM methodology and the figures supplied by Plutus Energy, there will be substantial adverse impacts on the short-term NO₂ objective at Spark Evans Park, and moderate adverse impacts at 14 different receptors, including at St Philip's Marsh Nursery School, even during "typical" conditions, rather than worst-case weather and pollution conditions (which in our view are likely to coincide with the operation of the plant). Most of those receptors lie within the Air Quality Monitoring Area, declared because of excessive NO₂ levels.

Furthermore, we are concerned that proposed diesel engines are not Best Available Technology. We understand that Best Available Technology under EU emissions standards for such off-road diesel engines are Stage IV engines¹, rather than the Stage III engines which it appears Plutus Energy plans to use and which are more polluting.

We therefore believe that Bristol City Council's decision to reject the application on grounds of air quality and health impacts was valid and justified.

Concerns that the sustainability and low-carbon nature of the fuel cannot be guaranteed:

The proposed power plant would burn Hydrotreated Vegetable Oil (HVO), which is a type of bioliquid that can be made from the same range of feedstock as biodiesel. Plutus Energy's planning application states that the plant would burn HVO "Renewable Diesel" manufactured by the Finnish company Neste Oil.

Virtually all liquid biofuels used in the UK are either used in road transport, in which case they come under the Renewable Transport Fuel Obligation (RTFO), or they are used for electricity and come under the scope of the Renewables Obligation (RO) because they attract Renewable Obligation Certificates. All biofuels which fall under either the RTFO or the RO must meet legally sustainability and greenhouse gas standards². Defra and Ofgem respectively are responsible for administering and overseeing those schemes and monitoring compliance with the criteria.

However, Plutus Energy states in the planning application that the plant would operate as a Short-Term Operating Reserve plant and that it would not rely on Renewable Obligations Certificates (in fact, that scheme is now closed to new developments anyway and the successor scheme, Contracts for Difference, does not cover bioliquids). We presume that the company intends to bid for a different type of subsidies, called Capacity Market Payments. Crucially, bioliquid sustainability and greenhouse gas standards do not apply to Capacity Market Payments. With or without Capacity Market Payments, the plant will not fall

within Ofgem's remit of monitoring compliance with bioliquid greenhouse gas and sustainability standards.

The Planning Officer, in his report to the Council's Development Control Committee hearing on 28th September 2016, proposed the following planning conditions:

The development hereby permitted shall only operate when the bio fuel satisfies the sustainability criteria. For the purposes of this condition:

(a) 'biomass' has the meaning given by Article 2(e) of the Renewables Directive;

(b) 'sustainability criteria' means such criteria relating to the sustainability of biomass as are set out in the Renewables Directive from time to time;

(c) 'Renewables Directive' means Directive 2009/28 of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, as amended or replaced from time to time.

...

Throughout the operational life of the development, there shall be submitted to the Council annual reports on the sustainability of the biofuel to be used in the electricity generating engines. This information shall provide the same levels of assurance and verification which the

operator of the development is required to do (or would be required to do, if they were claiming financial assistance through Renewable Obligations (RO)).

We believe that such planning conditions would not be credible in this particular case.

Firstly, we believe that no Bristol City Council staff members have the special expertise and familiarity with the complex guidance about bioliquid sustainability and greenhouse gas standards which Ofgem has built up.

And secondly, there are particular concerns about biofuel classifications used by Plutus Energy's prospective supplier, Neste Oil. Neste Oil claims to primarily rely on "wastes and residues" for its feedstock, with a small and diminishing proportion of virgin vegetable oils, including crude palm oil. Under the UK's (and EU's) biofuel standards, crude palm oil must meet land criteria and greenhouse gas criteria. Processing residues, however, do not have to meet land criteria, nor full-cycle greenhouse gas criteria (with greenhouse gas emissions being considered from the point of collection only). The problem in this case is that Neste Oil's HVO biofuels contain an undisclosed proportion of a palm oil production called palm-fatty acid distillate (PFAD). PFAD is directly derived from Crude Palm Oil. In its Annual Report³, Neste Oil's latest Annual Report, published in March 2017, states:

We are working on improving the transparency of the supply chain of the palm fatty acid distillate (PFAD) that we use. PFAD consists of

degraded fats, free fatty acids, that are removed as processing residue to produce edible palm oil for the food industry.

This clearly shows that Neste Oil treats PFAD as a processing residue and that their PFAD supply chain is at present not fully transparent. However, Ofgem's guidance makes it clear that PFAD must not be treated as a processing residue: "The treatment of PFAD in the RED GHG calculations indicates that it is to be treated as a product"⁴. In other words, PFAD should meet the full land and greenhouse gas criteria. By falsely classifying PFAD as a processing residue, Neste Oil seems to seek to evade the proper application of EU and UK biofuel standards.

This means that an undisclosed proportion of the fuel that would be used by Plutus Energy can be expected to consist of what under UK rules should be regarded virgin palm oil, yet which is supplied by a company which appears to use a misleading classification allowing it to evade having to meet the land and greenhouse gas standards, and which does not currently have a transparent supply chain for that palm oil.

Under those circumstances, we cannot see how Bristol City Council, without any prior experience with monitoring and enforcing biofuel sustainability standards, could possibly ensure full compliance with such sustainability standards, i.e. ensure that the feedstock is sustainable and low-carbon, both of which are material planning issues.

Yours faithfully,

Almuth Ernsting
Co-Director
Biofuelwatch

¹ <https://www.dieselnet.com/standards/eu/nonroad.php>

² www.gov.uk/guidance/renewable-transport-fuels-obligation and www.ofgem.gov.uk/environmental-programmes/ro/applicants/biomass-sustainability

³ ir-service.appspot.com/view/ahBzfmlyLXNlcnZpY2UtaHJkchsLEg5GaWxlQXR0YWNobWVudBiAgJDA846OCgw

⁴ www.ofgem.gov.uk/system/files/docs/2016/03/ofgem_ro_sustainability_criteria_guidance_march_16.pdf