Angelo Calabrese
Planning Department
Bristol City Council
The Council House
College Green
BRISTOL BS1 5TR

6 October 2009

Dear Mr. Calabrese,

Re: plans by W4B Limited to build a Green Energy Plant at the ex-Sevalco site in Avonmouth. Application No. 09/03235/F

I am writing on behalf of Biofuelwatch to object to the plans submitted by W4B Ltd to build a "Green Energy Plant" at the ex-Sevalco site in Avonmouth, which is to burn virgin vegetable oil, primarily palm oil from South-east Asia.

The applicant states that the development will consume up to 90,000 tonnes of fuel per year. This volume is approaching 9% of the biodiesel supplied to the UK transport market at the moment to be blended with petrol-diesel.

Biofuelwatch is primarily concerned about the impacts of this large additional demand for biofuels on the global climate; on communities in the global South, for example in Indonesia, Papua New Guinea, Malaysia and Colombia; and on the life-support systems which underpin global biodiversity.

We therefore focus on those impacts in our objection. We also have concerns that the additional air pollution resulting from the operation of the proposed Energy Plant may adversely affect air quality in the area to an unacceptable extent, and we would point out that the Energy Plant may not be financially viable in the medium to long term because it depends on government subsidies which may be withdrawn in future

THE BASIS OF OUR OBJECTION

1. There is now universal acceptance by scientists and politicians that global warming is changing the climate, and recognition that all developments with more than minor climate and sustainability impacts ought to be considered from a global perspective.

In Biofuelwatch's view, the proposed development will have significant adverse environmental, social and economic impacts at a global level. We believe these should be treated as material considerations in determining this application.

1.1. Regarding renewable energy specifically, Planning Policy Statement 22: Renewable Energy (PPS22) states as one its key principles that:

'(iv) The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.'

Biofuelwatch believe that if wider environmental ***benefits*** are to be treated as material considerations in considering a planning application, then so should wider environmental ***impacts***.

PPS22 also states that:

'Renewable energy developments should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures.'

In our view, the use of large volumes of imported vegetable oil, including palm oil, for this application is totally incompatible with the requirement to ensure that "*environmental and social impacts have been minimised".*

1.2. Planning Policy Statement 23: Planning and Pollution Control, confirms that '*any considerations of the quality of land, air, water and potential impacts arising from development, possibly leading to impacts on health are capable of being material considerations in the determination of planning applications.'*

The wording of PPS23 does not limit the geographical scope of 'potential impacts'. In our view therefore, the wider environmental and social impacts of palm oil and jatropha oil production, which include adverse impacts on the quality of land, air and water in producing countries as well as on the health of indigenous people, should be treated as material considerations for determining this application.

1.3. Furthermore, this application should be considered in the light of the Council's website statement on sustainability which acknowledges the need to consider the impact that local activities have on the wider environment:

'Working towards a sustainable Bristol where everyone's needs and aspirations are met now and into the future without depriving others here ***and elsewhere*** *of the chance to meet their needs and aspirations.'*

2. The proposed Energy Plant will generate a number of air pollutants, notably Nitrogen Dioxide and particulates (PM10 and PM2.5), which are known to be harmful to human health. The applicant's assessment of the impacts of additional local air pollution concludes that there are no predicted exceedences of the NO_2 or PM10 AQ objectives. However, we note that there has been no modelling of the cumulative effects of this development to take account of the emissions from other proposed nearby developments, i.e. the larger Helius and E.On biomass power stations in Avonmouth and Portbury respectively, and the Viridor Energy from Waste plant on the same site as the W4B Energy Plant. In our view this is a serious omission, as the Council currently has no assurance that AQ objectives will be met locally if all four developments go ahead.

3. Our assessment is that electricity generation from bio-liquids is only financially viable because high levels of subsidies have recently been made available for this type of operation under the UK Renewable Obligation. The EU Renewable Energy Directive (DIRECTIVE 2009/28/EC), makes these subsidies contingent on the sustainability of fuel. However, both the UK Government and the EU recognise that the current sustainability criteria are inadequate, highlighting for example the need to take account of 'Indirect Land-Use Changes':

DIRECTIVE 2009/28/EC *'(85) The Commission should develop a concrete methodology to minimise greenhouse gas emissions caused by indirect land-use changes. To this end, the Commission should analyse, on the basis of best available scientific evidence, in particular, the inclusion of a factor for indirect land-use changes in the calculation of greenhouse gas emissions and the need to incentivise sustainable biofuels which minimise the impacts of land-use change and improve biofuel sustainability with respect to indirect land-use change.'*

The EU does not **require** the UK to subsidise the use of biofuels for power generation, it only **allows** national governments to do so. Given the highly negative climate, environmental and social impacts of large-scale biofuels, and the recognition that the sustainability criteria now used to award subsidies need to be tightened, it is very doubtful that subsidies for the least sustainable biofuels like palm oil will continue at the present level.

Without subsidy at the current level, it will be uneconomic for W4B to operate the proposed green energy plant.

PALM OIL AND OTHER BIOFUELS

The use of biofuels for generating electricity is currently designated by UK Government as renewable energy. However, there is a growing body of evidence and scientific opinion that challenges the basis of this designation. Scientific research as well as first hand experience from affected communities worldwide has shown that the large scale use of biofuels is fundamentally unsustainable and leads to catastrophic social and environmental impacts.

Several recent peer-reviewed scientific papers report that the overall impact of burning biofuels is actually worse for the climate than burning equivalent amounts of fossil fuels. This is due to the strong global warming impact of nitrogen fertilisers used in growing industrial-scale biofuels, and to the large amounts of carbon dioxide emitted when natural ecosystems and healthy soils are turned into biofuel plantations:

- According to a study by Nobel Laureate Paul Crutzen, biofuels from rapeseed oil are up to 70% worse for the climate than the equivalent amount of mineral oil, due to nitrous oxide emissions caused by fertiliser use. This figure does not take land use change into account

- Converting rainforests, peatlands, savannas, or grasslands to produce food-based biofuels, such as palm oil and soya in Brazil, Southeast Asia, and the United States creates a 'biofuel carbon debt' by releasing many times more CO_2 than the annual greenhouse gas reductions these biofuels achieve by displacing fossil fuels. Holly Gibbs of the University of Wisconsin calculated that biofuel from palm oil grown on forest land leaves a carbon debt of up to 120 years and for palm oil grown on peat land this figure increases to 900 years.

- According to the Stern Review, nitrous oxide and methane emissions from industrial agriculture account for 14% of all global greenhouse gas emissions.

Official statistics currently omit all 'indirect land use change' emissions despite a major Government report (the Gallagher Review in 2008), identifying them as one of the main drawbacks of crop-based fuels:

www.dft.gov.uk/rfa/reportsandpublications/reviewoftheindirecteffectsofbiofuels.cfm .

It is impossible to ensure that biofuel feedstock is not grown directly or indirectly at the expense of forests, grasslands or peatlands, nor is it possible to fully account for the very significant greenhouse gas emissions that arise from land conversion.

Without taking account of these large direct and indirect land use change emissions, it is not possible to accurately assess the full environmental impact of producing biofuels, and it is therefore presumptuous to describe them as sustainable.

W4B state in their application that they will use palm oil, and indicate they may also use other types of imported vegetable oil. Like palm oil, the production of soybean oil and jatropha (a crop that is being expanded even though it does not generally produce commercial yields), also has severe adverse impacts on the environment, and on social and economic conditions in producing countries.

A World Bank report in 2008 indicated that biofuels caused 75% of global food price inflation:

www.guardian.co.uk/environment/2008/jul/03/biofuels.renewableenergy .

PARTICULAR IMPACTS OF PALM OIL

CLIMATE: According to the United Nations Environment Programme, palm oil is the biggest driver of deforestation in Malaysia and Indonesia, see:

http://www.unep-wcmc.org/resources/publications/LastStand.htm

Largely due to Europe's growing demand for biofuels, the Indonesian government is planning to expand oil palm plantations by 20 million hectares. According to Wetlands International, over half of all new oil palm concessions in Indonesia and Malaysia are on peatlands, which hold up to 42 billion tonnes of carbon in total. In order to grow oil palms, the peat is drained and this commits all of the carbon sequestered in the peat to the atmosphere. Plantation companies commonly set fires to speed up the process. Peat expert Professor Florian Siegert of Munich University estimated that the emissions from such fires accounted for 15% of all global greenhouse gas emissions in 2006. Professor Siegert said the following about the use of palm oil for generating heat and power in Germany:

"*We were able to prove that the making of these plantations and the burning of the rain forests and peat areas emits many thousands of times as much CO2 as we then are able to prevent by using palm oil. And that is a disastrous balance for the climate.*"

See: http://de.indymedia.org/2007/03/170912.shtml

HUMAN RIGHTS AND HUNGER: EU legislation prescribes how biofuels used in the UK are to be assessed for sustainability, which in turn allows the UK government to give them financial subsidies. This legislation forces the UK government to ignore key factors that are frequently associated with overseas biofuel production: all human rights abuses, increases in food prices and in the number of people going hungry, abusive working conditions and slavery-like conditions - common for example amongst Indonesian migrant workers on oil palm plantations in Malaysia.

According to Watch Indonesia!, 45 million people in Indonesians depend on rainforests for their livelihoods. Oil palm plantations could eventually create up to 10 million jobs but this would leave 35 million people destitute. Evictions are common; many of them violent, and according to the Indonesian NGO Sawit Watch, there were 576 land conflicts in Indonesia in 2008 linked to oil palm plantations:

www.sawitwatch.or.id/index.php?option=com_content&task=view&id=79&Itemid=64&lang=english .

Pesticide poisoning leading to acute and chronic illness and even death is common on oil palm plantations and often involves pesticides which have been banned in the EU because of the health risks, such as the highly toxic Paraquat but which nonetheless have been used even on palm oil certified by the Roundtable on Sustainable Palm Oil.

BIODIVERSITY DESTRUCTION: Not just Orangutans but many thousands of species are threatened with extinction as a result of deforestation. NGOs including Greenpeace and the Centre for Orangutan Protection have shown that even palm oil companies who are members of the Roundtable on Sustainable Palm Oil are also responsible for the destruction of Orangutan habitat.

PARTICULAR IMPACTS OF JATROPHA OIL

W4B refer to both palm and jatropha oil in their application. Jatropha oil is not commercially available at present. D1 Oils, who claim to be the world's largest jatropha company (and for whom The CEO of W4B used to work) traded a world total of just 1,000 tonnes of jatropha oil last year. Large-scale failures and low yields of jatropha have been reported.

Jatropha is being falsely promoted as a crop which can thrive on poor soils with little water. In fact, it requires fertile soils and regular water to yield sufficient oil. In countries including Tanzania, Ghana, Swaziland, Kenya, Cameroon and India, land on which communities rely for food is being taken over on a large scale by jatropha companies. In India, forests are being classed as 'marginal' and handed over to jatropha companies. In Paraguay, jatropha directly threatens tropical forests. Jatropha is a highly invasive plant, had been banned as such in Western Australia and, for the same reason, has been ruled out for support in South Africa's biofuel programme.

See: www.regenwald.org/international/englisch/news.php?id=1111,
www.biofuelwatch.org.uk/files/biofuels_ghana.pdf ,
www.biofuelwatch.org.uk/docs/mausam_colonizingthecommons_itsjatrophanow.pdf .

CONCLUSION

1. All industrial-scale biofuels, whether imported or domestically grown, cause more greenhouse gas emissions than equivalent fossil fuels and therefore will only exacerbate dangerous climate change. (see www.biofuelwatch.org.uk/docs/lca_assessments.pdf).

2. Increasing the use of biofuels makes it harder to save the tropical rainforests and other ecosystems.

3. Biofuels lead to rising food prices, world hunger and human rights abuses.

4. Biofuelwatch dispute that palm oil, jatropha and other imported vegetable oils can be deemed sustainable. Palm oil is responsible for large-scale deforestation, major carbon dioxide emissions, evictions and human rights abuses, more global hunger, serious biodiversity losses and pesticide poisoning.

5. The applicant has not submitted an Air Quality impact assessment that takes full account of likely future conditions, namely the construction nearby of other polluting developments, which will make it more likely that air quality objectives will be exceeded in the local area.

6. If subsidies for biofuel burning are withdrawn, which is very possible in future in response to the growing evidence about climate, environmental and social impacts, the Energy Plant would become financially unviable and would most likely be shut down.

If approved, this development will have very significant adverse consequences for the environment and for people in the South for decades to come.

We urge you to take these wider implications into account when considering W4B's proposals, and to reject their application.

Yours sincerely,

Robert Palgrave

Biofuelwatch