

No Subsidies for Biomass: Joint Parliamentary Briefing

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In the next few weeks, discussions in the Economy, Energy & Tourism Committee, could have very significant consequences. The Renewables Obligation (Scotland) Order that sets the levels of subsidy for renewable energy technologies, including biomass, is currently under review. The Scottish Government issued a Draft Amending Order in February.ⁱ Subject to affirmative procedure, an Amending Order will be laid before Parliament by summer 2012.

Please take a moment to read this briefing.

If you agree, here are some key actions you could take.

1. Contact the Economy, Energy & Tourism Committee and make your views known;
2. Sign the motion S4M-02411, launched by Malcolm Chisholm last month, calling for an end to subsidies for biomass;ⁱⁱ
3. Request a Parliamentary debate on the issue of subsidies, so that the amending legislation to the Renewables Obligation (Scotland) Order can be fully and openly discussed.

Biomass: An Unsustainable Energy Source

Biomass is a finite and depletable resource, unlike wind, solar or marine energy. Subsidies for biomass, through the Renewables Obligation, create a financial incentive, which in turn creates an artificially inflated demand for wood. This in turn leads to a 'biomass boom,' which is already occurring in Scotland and across the Western world. It brings with it the following catastrophic environmental and human rights consequences:

(1) Energy insecurity: In Scotland, current proposals for biomass power stations will, if granted planning permission, use 5 times more wood than is available in Scotland, causing wood shortages and rising wood prices.ⁱⁱⁱ This trend is mirrored across the UK, Europe and the rest of the Western world, where developing countries are expected to play a key role in supplying wood to meet Western and EU demand.^{iv}

(2) Deforestation & rights abuses: As well as price increases and wood shortages, artificially inflated demand for wood is causing deforestation as rich and biodiverse lands are cleared and converted to monoculture plantations. Examples have been documented from West Papua, the Congo, and Brazil.^v Along with deforestation, some exporting countries are characterised by food insecurity, vulnerable land rights and poor governance structures, resulting in rights abuses as an associated consequence of increased demand.^{vi} Whilst Scottish biomass power Stations may not necessarily be *directly* importing wood from deforested areas, it is clear is that the subsidisation of large-scale biomass creates an import-reliant system, which exacerbates competition for wood and indirectly contributes to deforestation and rights abuses. The European Parliament has coined such indirect impacts as 'leakage' effects, and notes that these impacts are greater than direct impacts. To avoid complicity in deforestation of rich and biodiverse lands, Scotland must scale back its demand for bioenergy by removing the artificial incentive for its use.

(3) Climate Change: Scientists warn that currently, not all of the carbon emissions associated with biomass are counted under regulatory frameworks, and that legislation encouraging biomass demand may result in increased carbon emissions, thereby accelerating global warming.^{vii}

(4) Inefficiency: Most biomass power stations are as inefficient as coal. In current biomass installations across the UK, for every four trees burned, three are wasted as heat.^{viii} Even in combined heat and power Biomass installations, the current requirement is only that these power stations should reach 35% overall efficiencies. This loophole allows installations to fall far short of EU recommended standards for 70% efficiency levels.

(5) Environmental and Social Justice: Communities in Scotland do not want these massive and inefficient power-stations. There are ever-growing concerns about the negative impact on air quality locally, and increasing awareness of the negative impact of big biomass, globally.

The Loopholes in the Scottish Government's proposals on the future of biomass

The Energy Minister has already expressed concerns^{ix} over the UK's ambition for increased biomass, stating that electricity generation from biomass is inefficient, that supply chains are uncertain, and that price hikes would put local jobs at risk. The Scottish Government would prefer to see biomass deployed in heat-only or CHP schemes, off gas-grid, at a scale appropriate to make best use of both the available heat, and of local supply.

As such, as part of reviews to the Renewables Obligation Order, which will go before the Economy, Energy, and Tourism Committee later this Spring, the Scottish Government has promised to remove the subsidies from electricity-only biomass.

However Scotland could continue to offer subsidies for biomass through two loopholes. Although Scottish Government has an intention to remove subsidies for (1) electricity-only biomass, it has not yet committed to plans in respect of (2) Combined Heat & Power (CHP) biomass applications, and (3) fossil fuel power stations which co-fire biomass alongside coal.

If subsidies remain in place for power stations of type (2) and (3) this loophole will encourage the expansion of large-scale, inefficient biomass energy in Scotland as follows:

- **Combined Heat & Power (CHP) biomass applications with low levels of heat capture.** Under the definitions of 'Combined Heat & Power', developers need only achieve 35% efficiency levels to claim subsidy. This is highly wasteful, and The EU recommends CHP applications achieve 70% efficiency levels.^x In Scotland currently, there are 7 power stations in planning which would classify themselves as CHP (whether or not they actually have guaranteed customers for their waste heat).
- **Fossil fuel power stations which co-fire biomass alongside coal.** Fossil fuel power stations could receive new subsidies for burning biomass alongside fossil fuels (known as 'co-firing' biomass). Hunterston alone, if it gets planning permission, could burn over 1.5 million tonnes of wood each year - over 3 times Scotland's current annual additional availability of wood.

If subsidies remain in place for these power stations, the expansion of large-scale inefficient biomass energy in Scotland will be unavoidable. We hope you will urge Government to close these loopholes.

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i The Draft Order can be found at <http://www.scotland.gov.uk/Publications/2012/02/2771>

ii The Motion can be accessed at <http://www.scottish.parliament.uk/mmps/currentmmps/Malcolm-Chisholm-MSP.aspx>

iii See Biofuelwatch 'Response to Scottish Parliamentary Inquiry into Renewables', March 26 2012, available at <http://www.biofuelwatch.org.uk/category/responses/>

iv European Parliament Development Committee Briefing Paper, 'Impact of EU Bioenergy Policy on Developing Countries' March 2012, available at <http://www.europarl.europa.eu/committees/fr/studiesdownload.html?languageDocument=EN&file=72731>

v See Biofuelwatch, 'Response to Scottish Government Consultation on ROC banding, 2012,' pp 10-11, available at <http://www.biofuelwatch.org.uk/category/responses/>

vi European Parliament Development Committee Briefing Paper, 'Impact of EU Bioenergy Policy on Developing Countries' March 2012, available at <http://www.europarl.europa.eu/committees/fr/studiesdownload.html?languageDocument=EN&file=72731>

vii European Environment Agency, 'Opinion of the EEA Scientific Committee on Greenhouse Gas Accounting in Relation to Bioenergy' (15 September 2011)

viii DECC notes that biomass power stations are around 25% efficient: see DECC Consultation, 'Heat and Energy Saving Strategy' Chapter 7: Combined Heat and Power and Surplus Heat paragraph 7.2, available at <http://hes.decc.gov.uk/consultation/download/index-32178.pdf>

ix Scottish Government News Release, 'Call for biomass rethink', 30 October 2011, available at <http://www.scotland.gov.uk/News/Releases/2011/10/28105521>

x The EU Renewable Energy Directive (2009) states in Art 13(6) "In the case of biomass, Member States shall promote conversion technologies that achieve a conversion efficiency of at least 85 % for residential and commercial applications and at least 70 % for industrial applications". Similarly, DEFRA's 'Quality Assurance for Combined Heat and Power the CHPQA Standard: Issue 3' recommends efficiency levels of 70%.

However, the DECC Guidance Note 44 which the Scottish Government decided in 2009 to apply in Scotland, too, explicitly provides that for the purpose of ROCs this efficiency standard will not apply to all size power stations. It stated that to qualify for ROCs, biomass CHP Schemes over 25MW must demonstrate only 35% overall efficiency (gross calorific value). The CHPQA Standard can be found at

https://www.chpqa.com/guidance_notes/documents/CHPQA_Standard_Issue3.pdf and Guidance Note 44 can be found at https://www.chpqa.com/guidance_notes/GUIDANCE_NOTE_44.pdf