

Developing an environmentally responsible bioenergy industry

Introduction

Bioenergy has the potential to be a valuable source of controllable renewable heat and power if delivered sustainably. This would enable the UK to lower greenhouse gas emissions and reduce our reliance on fossil fuels. However, if done badly, bioenergy could substitute the problem of fossil fuels with one of forest and habitat destruction – both are bad for climate change. Instead there is an opportunity, if tackled properly, to open up new domestic business opportunities whilst benefitting communities and wildlife.

With 31 operating biomass plants across the UK and a further 39 in the planning system; the Government and the Committee on Climate Change are undertaking separate strategic reviews of bioenergy to inform future UK bioenergy strategy; and the Government consultation on banding the Renewables Obligation, now is the time to get bioenergy right.

UK environmental NGOs (Greenpeace, Friends of the Earth, the RSPB and the Woodland Trust) have commissioned a new report by the IEEP *Securing biomass for energy – developing an environmentally responsible industry for the UK now and into the future* to set out how this can be done.

Learning from past policy mistakes

We have already seen the risks from large-scale imports of bioenergy in the way biofuels have developed. There is increasing evidence of direct and indirect environmental destruction as a result of substantial biofuels production overseas, driven in part by EU targets for renewable fuels. If all proposed biomass plants currently in the planning process are built and government plans on the expansion of the role of biomass are met, we can expect massive imports into the UK of biomass, and wood in particular. Such large-scale imports of biomass could have the same order of negative environmental and social impacts as biofuels, as they put pressure on existing forests through increasing harvesting and wood extraction. The use of land for new plantations could also be potentially damaging for wildlife and the climate. Current sustainability proposals are based on those developed for liquid biofuels and are inadequate to deal with these issues.

A positive solution

Without urgent intervention the UK will soon host a bioenergy sector based on massive wood imports and increasing pressure on forests across the world. The alternative is a UK bioenergy industry based on domestic forests, woody energy crops, agricultural residues and wastes. Not only can this deliver adequate renewable energy to enable the UK to meet its 2020 target, but it will also help meet our environmental and countryside aspirations across the board by reducing landfill, bringing woodlands back into management and providing opportunities for the rural economy.

The IEEP report *Securing biomass for energy – developing an environmentally responsible industry for the UK now and into the future* shows how UK bioenergy resources could be exploited in a way that is beneficial not only to small businesses and communities, but also to wildlife and the planet. This is an achievable goal, but only if the UK Government and devolved administrations act immediately to:

- Re-structure bioenergy subsidies, in particular through the forthcoming banding review of the Renewables Obligation;
- Provide additional support services that help businesses get off the ground and harness local resources for efficient bioenergy production;
- Ensure safeguards are in place to prevent over-exploitation of UK resources, and good stewardship of natural resources.

10 point plan for a sustainable bioenergy sector

Based on the analysis of the IEEP report we are suggesting the following 10 point plan to achieve a sustainable bioenergy sector.

1. Establish a bioenergy sustainability hierarchy

- Assess which of the many bioenergy production pathways pose unacceptable risks to the climate and environment, and which will be critical to achieving renewable energy and climate targets.
- Develop a sustainability hierarchy that is based on minimising unacceptable risks as a critical first step to good decision-making for this sector.

2. Invest in and facilitate local biomass supply chains

- Remove subsidies from imports.
- Support businesses to establish the most cost-effective, local and sustainable supply lines from domestic sources.

3. Band the Renewables Obligation (RO) and Renewables Heat Initiative (RHI) to reflect environmental impacts

- Band incentives according to the sustainability hierarchy.
- Withdraw support for environmentally high-risk sources of biomass, including imported wood and bioliquids.
- Incorporate these principles into wider electricity market reform.

4. Develop robust sustainability standards for bioenergy feedstocks

- Revise current sustainability standards which, as proposed for biomass, are completely inadequate.
- Ensure robust standards are developed that prevent damage from harvesting and extraction of existing forests.

5. Enhance support for and policies to promote biomass CHP

- Enhance support for CHP under the RHI.
- Require biomass power plants to be sited alongside heat loads and to be appropriately sized.
- Grant power to local authorities to withhold consent from developers whose proposals do not involve connection to a heat network.

6. Enhance collection and use of genuine residual waste

- Retain waste hierarchy to reduce, reuse and recycle waste before sending waste for energy generation.
- Prioritise making the use of waste for energy production economically viable. Improve waste collection services to make AD economically viable. Pool local authority resources and public procurement contracts to collect food and other forms of waste from a larger number of households.

7. Protect grasslands of conservation value

- Give full protection through cross-compliance to natural grasslands at risk from bioenergy crops, such as maize for anaerobic digestion.
- Re-examine the threshold used in Environmental Impact Assessments to protect uncultivated or semi-natural areas from agricultural intensification.
- Install a robust monitoring system and reporting obligation for anaerobic digestion operators to report on the share of agricultural crops in their feedstock resource base.

8. Support farmers in utilising straw in sustainable way

- Provide guidance on the most sustainable use of surplus straw and other crop residues.

9. Provide a package of support for undermanaged woodland for increasing appropriate and sustainable management of woodland

- Revise provision of management grants, training and marketing support for owners of undermanaged woodland.
- Use spatial land use plans to identify where new woodlands would contribute to key environmental objectives including habitat restoration and buffering fragmented woodlands.

10. Empower the planning system

- Ensure the planning system across the UK does more to act as a last line of defence so that unsustainable biomass power plants are refused.