



As Chairman of Biomass Energy Northern Ireland (BENI), I welcome publication of the draft report for The Renewable Heat Study for Northern Ireland, and the opportunity to comment on the findings.

This is a useful piece of work which should provide a sound basis to develop a comprehensive policy, to support the adoption of Renewable Heat (RH) technologies.

The report has identified the main demands for heat as well as existing sources, with virtually all heat provided from imported fossil fuels, which constitutes a significant export of monies from the local economy.

While the report has considered the implication of adopting a mix of technologies, the scope did not include examining the impact of each technology on the "Balance of Payments" for Northern Ireland.

For example, the use of locally grown biomass compared to imported natural gas, with huge distribution infrastructure costs.

Going through the report I have identified a number of areas on which I wish to comment. These are identified by the numbering system adopted in the report, and correspond to those points similarly numbered in the report.

2.4.3 : Suggests the need to invest to extend the gas network to connect Anaerobic Digestion (AD) plants to input biogas. As previously indicated I question the merit of extending the gas network further. Much better to use limited public resources to encourage other RH technologies, at a fraction of the cost.

Biogas can be used in CHP units located beside the AD plants or possibly for transport fuel, in either case without the need for extending the gas network.

2.5: Indigenous biomass can have a short supply chain compared to imported oil and the need to extend the infrastructure for natural gas.

The introduction of a Renewable Heat Incentive (RHI) similar to that in GB since April 2010 would benefit the entire RH sector. There is currently confusion in the Northern Ireland RH market as to whether a similar policy will be introduced. Failure to give an indication to the sector is resulting in delay of some investment, while others are being exported to mainland GB. It appears unlikely to me that an RHI will be introduced in Northern Ireland as there was a failure to adopt the primary legislation to allow such a policy to be adopted. It is essential that the situation is clarified in order to remove the negative effect on the local RH sector. Additionally, development of other policy instruments to stimulate the RH sector, as a matter of urgency.

5.: I support the development of the biomass sector based on locally produced material, such as woodchips from SRC Willow. It has been identified in the report as having many advantages in terms of cost, employment creation and efficiency. Northern Ireland has ideal growing conditions for SRC willow, for example, and has been at the forefront of research into such crops through research studies carried out by the Agri-Food and Biosciences Institute (AFBI). I accept there are limitations to



the use of woodchips in all situations where space is limited, and notice needs to be taken of emissions in urban areas.

The report has also failed to consider other benefits offered by energy crops, such as a sustainable and low cost way to bioremediate waste products, from Waste Water Treatment Works.

5.2: I take issue with the points made in relation to the conflict between food and energy production. Around 80% of agricultural output from NI agriculture is exported, while around 98% of all energy requirements are imported. Based on these figures there seems to be very little conflict between food and fuel production. Priority needs to be given to production which provides the greatest benefit to the local economy. This will be based on financial return, but also on security of supply. Government has identified security of energy supplies as being fundamental to national security in the medium to long term.

At a time when farmers are struggling to cover the costs of production with traditional enterprises, there is a double benefit to the economy by switching some agricultural production to energy crops, which will reduce a dependence on imported fuels.

The Carbon Trust has identified biomass as having the greatest potential to create employment when compared to other RH sectors.

5.2.3: I again state opposition to extending the gas distribution network to allow biogas to be used by gas consumers. As previously indicated, a fraction of this money could be used to develop a sizeable RH sector, giving much better value for money for the public funds invested.

I would question the likelihood of expecting 10% of the grass crop being used in AD to produce biogas. A significant incentive will be required to provide growers with the revenue to use grass as a feed stock, given the level of investment needed for an AD plant.

6.3.4: In relation to the supply chain for biomass, it is likely to be much shorter than for other imported fuels. There should be support to encourage the optimum amount of locally grown biomass to ensure maximum uptake of the technology. There may be the need to import biomass if demand cannot be satisfied from local material.

There need to be quality standards for imported biomass to ensure it is suitable and complies to quality standards. There also need to be environmental standards to ensure the sustainability of imported biomass. There have been suggestions that wood fuel could be exported from the African continent, by clearing natural woodland, for use in Europe.

I believe there needs to be encouragement for the biomass sector in line with the suggestions contained in the report. There is also a need for the Public Sector to use biomass where appropriate, to demonstrate the opportunity to wider society.

The production cycle has a significant lead in time from planting until it can first produce fuel. For SRC willow this is likely to be 3-4 years. This needs to be considered in order to match supply and demand.



The biggest barrier to the establishment of SRC willow is the significant up front planting cost of around £2000 / hectare. Even with a planting grant from DARD of £1000 / hectare this still leaves the landowner with a substantial cost with no return for 4 years. However once established it will remain productive for up to 25 years. Biomass production needs to be attractive to the grower or it will be pointless encouraging the installation of biomass boiler systems.

BENI was established by growers to help manage the supply chain for locally grown biomass. Development of Energy Service Companies (ESCO's) will ease the supply of RH to end users through the supply of heat on a contracted basis rather than raw fuel.

Assistance needs to be given to further develop the market in this direction, which will ease the concerns of consumers in adopting biomass heating. The development of local ESCO's and associated biomass production co-operatives will help provide short supply chains.

7.3.1: There needs to be consideration given to the lifetime cost of various RH technologies.

Some systems may have higher capital expenditure requirements at the outset, but with significantly lower running costs, giving substantial savings over the lifetime of the system. Consideration also needs to be given to wider benefits to the NI economy by replacing imported fossil fuel and employment generation.

As indicated in the report biomass compares favourably with other forms of RH for the reasons stated.

7.4: The assumptions are stated with regard to biomass, and the report identifies the benefits biomass has over RH technologies.

However a mix of technologies will be required in order to reach the target for RH.

7.6.3: The Summary identifies there is a need to incentivise production of biomass eg. SRC willows, otherwise imported fossil fuel will simple be replaced by imported biomass.

However as previously mentioned there will need to be a mix of incentives to encourage both producers and consumers.

8.6: Direct support for growers is identified in the report as being necessary to encourage the production of biomass, and I would support this conclusion.

The concept of a Biomass Agency is interesting but would need a clearly defined role to oversee the sector without interfering in the smooth operation of the market. It could perhaps deliver cross Departmental support to the sector, and monitor quality standards.

Energy crops can provide other benefits, such as bioremediation of waste materials. This has the potential to further reduce demands on water and electricity, for the operation of Waste Water Treatment Works, by providing a sustainable solution.



SRC willow also has the potential to increase biodiversity compared to the grassland it is likely to replace, therefore providing additional environmental enhancement.

9.2.1: Biogas production needs to consider the cost of agricultural crops grown as a feedstock and provide an adequate return. The suggestion in the report is that 10% of grassland could be used for AD feedstock. If the same area was used to produce SRC willow the benefits would be much greater, with no dependence on artificial fertilisers, for example.

10.4.1: Drawing on the on experiences in Austria for example, it would appear from the report to provide support for small scale District Heating (DH) schemes as well as individual biomass boilers, rather than extending the gas distribution network.

13.: The report identifies the 10% target of heat from renewable sources as challenging but attainable.

To reach this level of adoption will, require a range of public incentives for both the production and consumer elements of the RH supply chain.

Priority needs to be clear and provide a long term rather than a short term approach, if producers and consumers are going to have the confidence to get involved in the sector. As we are seeing at the moment, there is confusion in the Northern Ireland market, as a result of the "possible" introduction of Feed In Tariffs in the province.

DETI needs to give clear and decisive leadership with regard to Renewable Energy, in order not to mislead potential investors and result in the export of Green Jobs, as we are seeing at the moment in the wind energy sector.

As a matter of urgency, there needs to be the introduction of policy for the Northern Ireland RH sector, which will provide clarity and stability. In order to remove uncertainty DETI need to be clear as to whether RHI's will be introduced, as in GB, and whether they will be back dated.

In conclusion, I welcome to opportunity to comment on the report. While I understand the need for evidence based policy development, there seems to be a continuous process of consultation around the renewable energy sector, which is delaying action and using limited resources across a range of organisations

At some point there needs to be decisions taken which will support the sector, and actually start to move to reach the targets.

I would question whether it is practical to have a separate policy for Northern Ireland, given the complexity of the sector, and limited resources available to DETI. Perhaps it would be a better use of resources and avoid delays if policies developed by DECC were also applied in Northern Ireland.