



**Friends of  
the Earth**

Consultation Response -- Renewable Heat Incentive

To: Department of Communications, Climate Action and Environment, via email to

[rhi@dccae.gov.ie](mailto:rhi@dccae.gov.ie)

2<sup>nd</sup> March 2017

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## Introduction

Friends of the Earth welcomes the proposal to implement a Renewable Heat Incentive in Ireland. Ireland has excellent renewable resources, and currently relies too heavily on fossil fuels for the generation of heat.

Friends of the Earth's vision is an energy system that is secure, environmentally sustainable and affordable for all. A system where no one is reliant on fossil fuels for a warm home, a mobile life or affordable electricity. To get there we believe that by 2050 Ireland's energy needs to be fossil fuel free.

A transformation of the energy system at this scale is no doubt a challenge. And while we do not know the exact final design of this new system, what we do know is that a transformation of this scale will not happen without the engagement, support and participation of our communities and citizens.

The proposed RHI is solely focussed on the large industrial sector. Therefore while the principle of incentivising renewable heat is welcome, this will not go far enough to inspire the overhaul of our heating sector that is required, nor will it serve to create the 'active citizens' as identified in the White Paper. We strongly recommend that the proposed RHI includes measures to ensure small and domestic generators are incentivised to use renewable heat, as is the case in the UK.

David Connolly in '*Green Plan Ireland – A 100% Renewable Ireland with no extra costs and 100,000 additional jobs*<sup>1</sup>' suggests that to achieve 100% renewable heat, 10 TWh of the heat demand (37%) in towns and cities could be converted into district heating networks, while the remainder in more dispersed locations could be achieved from renewable sources by converting oil and gas boilers to heat pumps. Any new renewable heat incentive programme needs to ensure that every time a heating device or boiler is replaced at any scale, it should be more economically favourable, or at least as attractive to choose a renewable option.

It is also paramount that all decisions on energy are considered within the context of the climate change challenge and the main objective for increasing renewable heat as a means of reducing greenhouse gas emissions must not be overlooked. Thus any renewable heat alternative must ensure there is a guaranteed reduction in greenhouse gas emissions, and no disproportionate impact on biodiversity and the natural environment.

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<sup>1</sup> David Connolly, 2014 Green Plan Ireland, International Journal of Sustainable Energy Planning and Management. Available at <http://dconnolly.net/wp-content/uploads/2014/05/100-RE-Ireland-Summary.pdf>

At the outset Friends of the Earth would recommend setting a number of clear and overarching goals for this Renewable Heat Incentive scheme. This could include

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- setting a target for the generation of renewable heat by 2020, 2025 and 2030;
  - setting a target for the reduction of greenhouse gas emissions from the heat sector by 2020, 2025 and 2030;
  - ensuring the support scheme complies with the Irish Government stated policy objective of carbon neutrality in agriculture;
  - ensuring the support scheme is designed to incentivise community and citizen participation in the generation of renewable heat; and
  - ensuring the support scheme does not contribute to the loss of valuable habitats and species that are currently experiencing ongoing decline in Ireland (and internationally).
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## **Responses to Questions in Section 6 – Design options for RHI**

### **6.2 Inclusion of ETS Sector**

Friends of the Earth are not opposed to the principle of encouraging the ETS sector to increase the proportion of renewables in its portfolio. Indeed we support the transition of all power generation, of all sizes to renewable power.

However, we think the reality of Irish power generation is such that extending the RHI to the ETS sector would simply result in existing ETS installations shifting fuels from fossil fuels to biomass fuels.

As discussed below, we are very concerned about the environmental impacts in Ireland and globally of significantly increasing the demand for biomass fuels, without a significantly robust certification scheme to insure its sustainability and evidence that the biomass used in renewable energy generation is resulting in net greenhouse gas emissions in line with the global objective of mitigating climate change.

The current use of biomass in the ETS sector in Ireland is in the form of imported pine kernels from Indonesia to co-fire the Edenderry peat power station. This practice receives support under REFIT 3 which enables the power station to remain financially viable. However, despite being classified as renewable – from the extraction and burning of peat to the support of palm oil plantations in Indonesia, this practice is completely at odds with any sensible environmental, biodiversity and climate change objectives.

In addition, if an indigenous, sustainable and truly carbon neutral supply of biomass is developed in Ireland, there is a risk that any ETS renewable heat installation could dominate the new market leaving an insufficient quantity of material to service other geographically dispersed, small scale non ETS installations.

Therefore we do not think the EHI should extend to the ETS sector at this time.

#### **6.4 Minimum Energy Efficiency Eligibility Criteria**

Friends of the Earth agree that minimum energy efficiency standards should be included as part of the RHI and that renewable heat installations should be sized according to heat demand requirements to avoid waste.

#### **6.5 Minimum Technology Requirements**

Friends of the Earth agree that minimum technology requirements should be met to ensure efficient and quality renewable heat installations.

#### **6.6 Eligibility of Heat Use for the RHI**

In order to ensure the spirit of the RHI is maintained, it needs to be guaranteed that the renewable heat generated is displacing conventional fossil fuel heat generation, thus no payments should be made to heat empty buildings or abandoned sheds as may have been the case in Northern Ireland under the RHI scheme there.

#### **6.7 The impact of biomass combustion on Air Quality and CO<sub>2</sub> emissions**

Any technology to receive support under the RHI must guarantee that there is a sufficient reduction in CO<sub>2</sub> emissions as compared to the conventional fossil fuel alternative and the impact on carbon emissions of not cutting the tree or felling the forest at all.

It is well understood that not all biomass products are equal in terms of their ability to replace conventional fossil fuels as a low carbon alternative. The types of biomass used, the harvest methods and the land use management practices in operation have a significant impact on the carbon footprint of the fuel, and the biodiversity implications for harvesting that fuel. Research emerging from international and European studies questions the CO<sub>2</sub> emissions associated with biomass combustion.

The very recent Chatham House paper, *The Impacts of the Demand for Woody Biomass for Power and Heat on Climate and Forests*<sup>2</sup> maintains “*The harvesting of whole trees for energy will in almost all circumstances increase net carbon emissions very substantially compared to using fossil fuels, both because of the loss of future carbon sequestration from growing trees and because of the release of soil carbon consequent upon the disturbance. This is particularly true for mature trees in old-growth forests, whose rate of carbon absorption can be very high*”.

The impact on air pollution must also be a feature when considering what biomass products are eligible for support. The introduction of an incentive to burn biomass must not result in a significant deterioration in air quality.

Friends of the Earth agree minimum standards for PM and NO<sub>x</sub> emissions in line with the UK should be adopted, and that the WFQA is utilised for the purpose of fuel quality assurance.

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<sup>2</sup> Brack, D; Chatham House, February 2017, *The Impacts of the Demand for Woody Biomass for Power and Heat on Climate and Forests*

<https://www.chathamhouse.org/sites/files/chathamhouse/publications/research/2017-02-23-impacts-demand-woody-biomass-climate-forests-brack-final.pdf>

## 6.8 Biomass Sustainability Criteria

Friends of the Earth strongly supports setting incentive tariffs based on contributions to greenhouse gas emission reductions. A scheme which incentivises practices which clearly result in increasing greenhouse gasses or the removal of carbon sinks would not be compatible with the spirit of this incentive.

Currently Ireland and Europe are net importers of biomass. Friends of the Earth are very concerned that existing sustainability standards in the UK and at EU level, FSC and PEFC are not robust enough to ensure that imported biomass does not have significant and detrimental impacts on the environments from where it is being harvested, e.g. old hard wood forests of North America, and plantation forests in South East Asia and South America. And as a result of the methods of harvest and the type of biomass being used, greenhouse gas emissions are not being reduced, and in some cases biomass harvest and combustion is resulting in net increases in greenhouse gas emissions as opposed to conventional fossil fuels.

Friends of the Earth do not have confidence that adopting existing EU or UK sustainability criteria for biomass imports is sufficiently, and because of this Friends of the Earth maintains that imported biomass should not be eligible for support under the RHI.

The RHI should seek to ensure a sustainable biomass crop is developed in Ireland, which can contribute to renewable heat generation and also contribute to local job creation. This will not be possible under existing forest management practices in operation in Ireland which is dominated by clear felling of single species plantation forests.

There is no doubt an opportunity for biomass production to co-exist with sustainable forest management, in particular saw mill residues, willow crops, agri-wastes and post consumer organic material etc, so long as strict criteria are applied. However where woody biomass is included, these criteria should include:

- Biomass from forests managed through continuous cover forestry should only eligible for support, i.e. Biomass from clear felled forests should not be eligible;
- Forests planted on wetland, bogland or other upland areas which in their native state act as effective carbon land sinks should not be eligible for support.
- Imported biomass should not be eligible for support.

Thus the RHI should never incentivise situations which clearly make no sense, such as

- an active peatland in the west of Ireland is drained, forested with conifer plantation forestry, and then clear felled to produce biomass for heat production; or
- an old hard wood forest in Canada is clear felled, converted to wood pellets, transported to Ireland and used in heat production; or
- a rainforest in Indonesia is felled, replaced with a palm oil plantation. The palm kernels are harvested and shipped to Ireland and used in heat production.

Any support scheme should seek to encourage the development of an industry which maximises the use of material from short rotation coppicing and sustainably managed native woodlands, targeted at eliminating or reducing local use of coal and oil and should be supported alongside the creation of

businesses in forest products which also support new native woodlands for the long term benefits of biodiversity enhancement, soil and water protection, flood relief, ecological woodland corridors and recreation areas. This would represent real Sustainable Forest Management in line with the Forest Principles agreed at Rio in 1992.

#### **6.9 Differentiation of tariff by renewable heat technology / 6.10 Differentiation by size or output**

Friends of the Earth agree that tariffs should be technology specific, and that tariffs should reflect the wider socio-economic benefits of particular technologies in addition to the costs of the technology. Thus where a certain technology exhibits high greenhouse gas reduction, high social benefits in terms of jobs and low externality costs, this technology should be favoured for support.

Friends of the Earth agrees that tariffs should be tiered on use not banded on size.

#### **6.11 Age of existing fossil fuel technologies being targeted for replacement**

Friends of the Earth agrees with the approach outlined.

#### **6.12 /6.13/6.14**

The timeframe suggested seems sufficiently long. The proposal for a profile of payments is welcomed and metering is essential, and the approach of the department on adjustments to tariffs is considered appropriate.

#### **6.15/6.16/6.17/6.18**

The SEAI is considered the suitable administrative body.

Clarity of the return of the scheme will be essential to ensure uptake.

Many thanks for the opportunity to participate in this consultation. Friends of the Earth hope that a decision on the Renewable Heat Incentive will be made in the near future to encourage a sustainable and efficient renewable heat industry in Ireland.

Kind Regards,

Kate Ruddock

Deputy Director  
Friends of the Earth