



Northern Ireland
Assembly

Research and Library Service Research Paper

21 February 2011

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Legislative consent motion – renewable heat incentive

NIAR 092-11

Paper providing background to the Department of Enterprise, Trade and Investment's intention to bring a legislative consent motion on renewable heat. Details of the UK renewable heat incentive are also included.

Paper 92/10

21 February 2010

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Key Points

The Department of Enterprise, Trade and Investment, in conjunction with the Department of Energy and Climate Change, intends to use the Energy Bill 2011 to grant primary powers for the introduction of a renewable heat incentive to Northern Ireland. These were established in England, Scotland and Wales through the Energy Act 2008.

Should this course of action be taken a legislative motion would need to be passed in the Assembly. The Department are aiming to secure this before dissolution. Should this not be achieved primary legislation, to introduce these powers, would be required in the next Assembly.

The Energy Act 2008 allows for the introduction of secondary legislation that will define support for renewable heat.

The UK government intends to introduce a renewable heat incentive, which is similar but not identical to the feed-in tariff for electricity, in June 2011. Full details of the incentive are not available at present. This paper outlines provisional details of the incentive that may be subject to change. A detailed announcement of the renewable heat incentive is due in March 2011.

Executive Summary

Legislative consent motion

The Energy Act 2008 contains provisions, extending to England, Scotland and Wales, which enable the introduction of a scheme to support the development of renewable heat.

These powers do not extend to Northern Ireland.

To rectify this, the Department of Enterprise, Trade and Investment, in conjunction with the Department of Energy and Climate Change, is proposing that the Energy Bill 2011 is used to amend the relevant sections of the Energy Act 2008 to extend such powers to Northern Ireland.

An alternative route to amending the Energy Act 2008, is to include provision in the Energy Bill that replicate those provisions which enable the introduction of renewable heat support in the Energy Act 2008.

Both routes would grant the Department primary powers for renewable heat, and allow for a Northern Ireland specific support scheme to be introduced through secondary legislation.

To enable either route to be followed, a legislative consent motion would have to be passed in the Assembly.

The Department of Enterprise, Trade and Investment aim to complete this action before dissolution, but recognise that the timeframe is *'challenging'*.

Alternatively, primary powers for renewable heat could be established through primary legislation in the next Assembly.

Renewable Heat in the Energy Act 2008

Section 100 of the Act provides the Secretary of State with the power to make regulations *'establishing a scheme to facilitate and encourage renewable generation of heat'* and *'about the administration and financing of the scheme'*.

The Act allows for the introduction of secondary legislation that:

1. Requires the Secretary of State, the Authority (defined as the gas and electric markets authority) or *'designated fossil fuel suppliers'* to make payments to renewable heat producers.
2. Requires *'designated fossil fuel suppliers'* to pay a levy to the Secretary of State or the Authority.

Provisions found in the Act are non-prescriptive allowing for the particulars of any resulting incentive to be defined by subsequent legislation.

The Act also lists the technologies that may be included in a scheme to promote renewable heat – biomass, biofuels, fuel cells, water, solar power, geothermal, heat from air, water or the ground, and (renewable) combined heat and power systems – but allows for the future revision of this list.

Development of the renewable heat incentive

The Labour government began consulting on the renewable heat incentive in the first part of 2010. The March 2010 Budget stated *'Government continues to review the basis for the longer term funding of the renewable heat incentive'*.

The Coalition government announced its approach to the renewable heat incentive in the September spending review. This differed to the previous government's plans. The spending review announced:

1. £850m funding for a renewable heat incentive;
2. That this money would be paid directly from the Treasury, rather than through a levy on fuel suppliers.

A finalised version of the renewable heat incentive has not been published. Provisional details are available but are subject to alteration pending the government's response to the consultation.

A detailed announcement on the incentive is expected in March 2011.

The following information is derived from provisional details:

1. The incentive will be open to anyone in England, Scotland and Wales installing a renewable heat system that uses a qualifying technology (see Table 1, page 11 for details of technologies).
2. The incentive is expected to be launched in June 2011. Systems installed after 15 July 2009 will be able to claim the incentive but will only receive payment for heat generated after June 2011.
3. The incentive will mirror the feed-in tariff for electricity, introduced in April 2010. However, since the UK does not have a national heat grid, payments will be made for generating, but not for exporting, heat.
4. The payment received will depend on technology type and size (see Table 1 on page 11 for further details).
5. The length of tariff will range between 10 to 23 years; payments will be fixed for this period. Tariff length will depend on the type and size of the technology used (see Table 1 on page 11 for further details).

6. Tariffs are unlikely to be index-linked to inflation.
7. It is estimated that current tariff levels will enable subscribers to cover their installations costs in seven to nine years.
8. Tariffs are expected to be income tax exempt.
9. The output of small installations is to be measured using a '*deemed output*' method - based upon what the installed system would be expected to produce if it were properly insulated.
10. Those who install medium sized systems will have a choice of measuring output through a meter. Only output above the deemed amount will be metered, however, and this additional output will receive a reduced tariff.
11. Large installations will be metered (see Table 1, page 11, for details of installation sizes).

Renewable heat support in other regions

A limited analysis of renewable heat support in other regions has revealed that a mixture of subsidies and tax incentives are used.

In France households who install a renewable heating system may claim back up to 50% of the equipment cost from their income tax. In Denmark, solar thermal and biomass are exempt from specific environmental taxes. Germany places an obligation on owners of new buildings to use a percentage of renewable sourced heat generation and offers subsidies for the refurbishment of existing buildings.

The Republic of Ireland offered support of up to 30% of eligible costs for Capital Investment projects and support of up to 40% of eligible costs for Feasibility Study projects which used qualifying technologies. This is to stop in 2011 due to budgetary constraints.

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1 Introduction

The Department of Enterprise, Trade and Investment's plans to use the Energy Bill 2011 to introduce primary powers for the development of renewable heat support in Northern Ireland is likely to require a legislative consent motion passed by the Assembly before dissolution.

This paper provides background to this legislative consent motion, as well as examining the powers it intends to introduce as set out in the Energy Act 2008.

The paper also outlines the development of the renewable heat incentive in Great Britain. Information on support mechanisms in other EU regions is also provided.

2 Legislative Consent Motion

The 2008 Energy Act (the Act) contains provisions which enable the introduction of a scheme to support the development of renewable heat. The provisions contained in the act extend to England, Scotland and Wales, but not Northern Ireland. As a result, the Department of Enterprise, Trade and Investment (the Department) *'does not hold primary powers for renewable heat and therefore would be unable to introduce a renewable heat incentive or make payments to generators of renewable heat'*.¹

To rectify this, the Department, in conjunction with the Department of Energy and Climate Change (DECC), is proposing that the Energy Bill 2011 (the Bill) is employed to amend the relevant sections of the Act to extend such powers to Northern Ireland. Alternatively, the Bill could be amended to include clauses similar to those contained in the Act, but with sole reference to Northern Ireland.²

Both routes would grant the Department primary powers for renewable heat, and allow for a Northern Ireland specific support scheme to be introduced through secondary legislation.³

To enable either of the above courses of action, the Department intends to table a Legislative Consent Motion (LCM) before the Assembly before it is dissolved prior to elections. The Department, in correspondence with the Committee for Enterprise, Trade and Investment (the Committee), has recognised that completing this course of action within the narrow window available is *'challenging'*. An alternative course would be to establish primary powers for renewable heat via primary legislation in the next Assembly.⁴

¹ Correspondence from the Office of the Minister, Department of Enterprise, Trade and Investment to the Committee for Enterprise, Trade and Invest, 02 February 2011

² Correspondence from the Department of Enterprise, Trade and Invest to Northern Ireland Assembly Research and Library Service, 09 February 2011.

³ *Ibid*

⁴ Correspondence from the Office of the Minister, Department of Enterprise, Trade and Investment to the Committee for Enterprise, Trade and Invest, 02 February 2011

Commenting on its current actions, the Department has stated:

DETI is currently having parliamentary instructions drafted that will advise parliamentary council and DECC lawyers on appropriate wording for the amendment. These instructions are being drafted as a matter of urgency. Exact timing on when this amendment could be included in the draft Bill will depend on the passage of the Bill through the House of Lords and then the Commons, however for the amendment to be tabled a LCM in the Assembly is required.⁵

At the time of writing, the Bill was scheduled to enter report stage, in the House of Lords, on the 2 March 2011 (the Bill was initiated in the House of Lords).⁶

3 Renewable Heat in the Energy Act 2008

Section 100 of the Act provides the Secretary of State with the power to make regulations (through secondary legislation) ‘*establishing a scheme to facilitate and encourage renewable generation of heat*’ and ‘*about the administration and financing of the scheme*’.

In drilling down into the specifics of what secondary legislation may include, the Act adds provisions which could require the Secretary of State or Authority (where the Authority is defined as the Gas and Electricity Markets Authority) to make payments or ‘*require designated fossil fuel suppliers to make payments*’ in specified circumstances to:

- (i) *the owner of plant used or intended to be used for the renewable generation of heat, whether or not the owner is also operating or intending to operate the plant;*
- (ii) *a producer of biogas or biomethane;*
- (iii) *a producer of biofuel for generating heat.*

The Act also enables the Secretary of State or Authority to define how such payments are calculated and under what circumstances they are to be collected.

Later subsections of the Act allow for the creation of a levy to be paid by ‘*designated fossil fuel suppliers*’ to the Secretary of State or the Authority. Again, the Act enables the Secretary of State or Authority, through secondary legislation, to define how such a levy is to be calculated and under what circumstances it is to be collected.

Finally, the Act defines renewable heat ‘*sources and technology*’ as:

⁵ Correspondence from the Department of Enterprise, Trade and Invest to Northern Ireland Assembly Research and Library Service, 09 February 2011.

⁶ www.parliament.uk Parliamentary Business, Energy Bill [HL] 2010-11 <http://services.parliament.uk/bills/2010-11/energyhl.html> (accessed 10 February 2011)

- biomass (defined as material, other than fossil fuel which is, or is derived directly or indirectly from plant matter, animal matter, fungi or algae);
- biofuels (defined as liquid or gaseous fuel which is produced wholly from biomass);
- fuel cells;
- water (including waves and tides);
- solar power;
- geothermal;
- heat from air, water or the ground; and
- combined heat and power systems (but only if the system's source of energy is a renewable source).

This list is left open, with the legislation allowing future regulations to modify *'the list of sources of energy and technologies'* and *'the definition of biogas or biomass'*.

The provisions set out in the Act are enabling and, in this sense, non-prescriptive, leaving the particulars of the resulting incentive to be defined by subsequent legislation. Given the statements from the Department above, this scenario is likely to be repeated in Northern Ireland should the appropriate clauses be included in the 2011 Bill.

4 Development of the renewable heat incentive

4.1 Background

The Labour government opened a consultation on the renewable heat incentive in the first part of 2010. The consultation document noted that a statement on the funding of the renewable heat incentive (RHI) would form part of the March 2010 budget.⁷ The budget stated that the *'Government continues to review the basis for the longer term funding of the renewable heat incentive'*.⁸

The subsequent change of government has led to a change in the incentive, with the September spending review announcing:

*£860 million funding for the renewable heat incentive which will be introduced from 2011-12. This will drive a more-than-tenfold increase of renewable heat over the coming decade, shifting renewable heat from a fringe industry firmly into the mainstream. The Government will not be taking forward the previous administration's plans of funding this scheme through an overly complex Renewable Heat levy.*⁹

⁷ *Ibid*

⁸ The Budget 2010, Chapter 7 – Securing low carbon growth
http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/d/budget2010_chapter7.pdf
(accessed 05/10/10)

⁹ Renewable Heat Incentive, 2010 Spending Review http://www.rhincentive.co.uk/RHI/regulation/2010_spending_review/
(accessed 16/02/11)

The key point raised by this change of direction is that the incentive will be reduced in scope by 20% and will now be paid for directly by the Treasury rather than through a levy on fuel suppliers, and by implication consumer bills, as originally planned.¹⁰

Further details of what the final incentive might look like are available on a dedicated renewable heat incentive website. The site, however, carries a caveat to the effect that the information contained on it is subject to the government's response to the consultation and is open to revision. An announcement made on the 7 February 2011 made a commitment to unveiling final proposals in March 2011.¹¹

From the information presented online it is possible to gather draft details of the eligibility criteria, potential tariff structure and how heat output is to be measured.

4.2 Eligibility criteria

The RHI is open to anyone in England, Scotland and Wales wishing to install a renewable energy system that falls under the qualifying list of technologies, outlined in Table 1. The RHI is expected to launch in June 2011. Systems installed after 15 July 2009 will be able to claim the incentive but will only receive payment for heat generated after June 2011.¹²

There are a number of excluded technologies, namely:

- Boilers powered by liquid bio-fuels – *'Except where these specifically replace oil-fired boilers at homes off the gas grid up to 45kW capacity'* (listed as biodiesel, restricted use in Table 1); and
- Wood burning stoves, open fires, air heaters and 'similar applications' – due to *'practical difficulties'* which prevent use from being monitored.

4.3 Tariff structure

The RHI will mirror the feed-in tariff (FIT) for electricity, introduced in April 2010. Although it is to be similar to the FIT, there will be one of significant difference – since there is no national heat grid in the UK, exporting heat is not possible, as a result subscribers will be paid for the energy they generate and use at home at a specified rate. This money will come from the Treasury directly. Table 1 outlines the tariff structure by eligible technology and project scale (please note, these tariff scales reflect those contained in the original consultation and are subject to change as per above).

¹⁰ *Ibid*

¹¹ Renewable Heat Incentive <http://www.rh incentive.co.uk/> (accessed 15/02/11)

¹² Renewable Heat Incentive, *Eligibility criteria and tariff levels* <http://www.rh incentive.co.uk/eligible/> (accessed 16/02/11)

Table 1: Proposed RHI tariff structure¹³

Technology	Scale	Tariff (p/kWh)	Tariff lifetime (years)
Small Installations			
Solid Biomass	up to 45kw	9	15
Biodiesel (restricted use)	up to 45kw	6.5	15
Bio-gas onsite combustion	up to 45kw	5.5	10
Ground source heat pumps	up to 45kw	7	23
Air source heat pumps	up to 45kw	7.5	18
Solar Thermal	up to 20kw	18	20
Medium Installations			
Solid Biomass	45-500kw	6.5	15
Bio-gas onsite combustion	45-500kw	5.5	10
Ground source heat pumps	45-500kw	5.5	20
Air source heat pumps	45-500kw	2	20
Solar Thermal	20-100kw	17	20
Large Installations			
Solid Biomass	500kw & above	1.6 -2.5	15
Ground source heat pumps	350kw & above	1.5	15
All Scales			
Bio-methane injection	all scales	4	15

The largest tariffs are for small and medium solar thermal generation. Tariff length varies significantly according to technology, ranging from 10 to 23 years. The price paid per kWh is fixed for the length of the tariff, which, unlike the FIT, is not index linked to inflation. It has not been decided if the principle of degression will apply, allowing the government to change tariff rates for individuals who install their systems in later years, as is the case with the FIT.¹⁴

The online documentation provides the following breakdown of potential financial benefits to an 'average household':

For the average household using 15,000kWh of heat a year, the renewable heat incentive will provide the following benefits if solar thermal panels and a biomass boiler were installed:

13,700kWh of heat generated paying the homeowner £1,400 a year (the kW difference being made up through energy efficiency measures such as insulation)

Biomass fuel costs could be as much as £575 per year

¹³ *Ibid*

¹⁴ Renewable Heat Incentive, *Durations and Variations* <http://www.rhincentive.co.uk/RHI/principles/future/> (accessed 16/02/11)

Therefore the total annual benefit is £825 per year¹⁵

It is estimated that current tariff levels will enable subscribers to cover their installations costs in seven to nine years. The rate of return is estimated to be 8-12%¹⁶, with those on higher tax rates expected to earn more (it is expected that money earned from the tariffs will be exempt from income tax).¹⁷

4.4 Heat output

Two methods will be used to measure the output of renewable heat systems – deemed output and metering. The method(s) used will depend on the size of the installations.

- Small Installation: will use deemed output, based upon what the installed system would be expected to produce if it were properly insulated.
- Medium Installations: output will be measured by the deemed method. However, a choice of metering for medium sized solid biomass installations will be offered. The documentations notes:

If metering is chosen, the same tariff levels will apply for the same deemed number of kWh for the property. However, where the metered number of kWh used exceeds the deemed number, an additional lower tariff per kWh would be paid to cover the excess.

- Large installations and biomethane injection: will use a metering system, payments will be made by calculating the metered number of kWh multiplied by the tariff per kWh. Biomethane injection will be metered at all scales.

5 Support mechanisms in other regions

The final section of this paper will briefly outline support mechanisms in other regions, namely the Republic of Ireland, Denmark, France, and Germany.

5.1 The Republic of Ireland

Until 2011, Sustainable Energy Authority of Ireland (SEAI) offered financial support to individuals wishing to install boilers fuelled by wood chips and/or wood pellets, solar thermal systems and heat pumps, through the Renewable Heat Deployment Programme (ReHeat).¹⁸ The ReHeat scheme launched in 2007 and offered support of up to 30% of eligible costs for Capital Investment projects and support of up to 40% of

¹⁵ Renewable Heat Incentive, *Fast facts on the renewable heat incentive* <http://www.rh incentive.co.uk/> (accessed 16/02/11)

¹⁶ Renewable Heat Incentive, *Quick Guide* <http://www.rh incentive.co.uk/RHI/quick/> (accessed 16/02/11)

¹⁷ Renewable Heat Incentive, *FAQs – Tariff levels, tax and money* <http://www.rh incentive.co.uk/faqs/category/28/> (accessed 16/02/11)

¹⁸ <http://www.cleanenergyireland.ie/Pages/Grants.aspx>

eligible costs for Feasibility Study projects which used qualifying technologies. The programme was discontinued in 2011 due budgetary constraints.¹⁹

The SEAI have also assisted renewable heat projects through their Greener Home Phase, which is currently in its third phase. The scheme is open to homeowners intending to install or retrofit a new renewable energy heating system in their existing home built prior to July 2008. They must install eligible products such as a wood chip/pellet boiler, wood gasification boiler; solar thermal or heat pump based heating system using installers registered with the SEAI.²⁰ Grants, ranging from €800 for a biomass stove, €2,500 for a water source heat pump and up to €3,500 for a vertical ground heat pump, are paid to individual household.²¹

5.2 Denmark

Denmark currently relies on tax exemptions to stimulate renewable heat development. The region has operated a system of environmental taxation since 1986. Current policy is outlined in the Agreement on Danish Energy Policy 2008-2011.²² Three specific tax streams apply to domestic and commercial energy – the energy tax, the CO₂ tax and the SO₂ tax (sulphur dioxide).²³ Solar thermal is exempt from energy, CO₂ and SO₂ taxes, while biofuel is exempt from CO₂ and energy taxes.²⁴

Denmark has previously subsidised renewable heat. Between 1979 and 2002 it provided 30% of installation cost of solar thermal heating systems for households in areas not served by district heating. Subsidies contributing to the cost of installing of biomass heating plants were available until 2001 – 21% of cost for households, 26% for businesses.²⁵

5.3 France

France has implemented a number of incentives to support renewable heat. Since 2005, the “sustainable development tax credit” has offered tax credits to households installing renewable heating equipment.²⁶

Tax credits enable households and businesses to deduct a percentage of equipment costs for renewable technologies from their income tax.²⁷ The level of credit is dependent on technology, as follows:

¹⁹ http://www.seai.ie/Grants/Renewable_Heat_Deployment_Programme/

²⁰ http://www.seai.ie/Grants/GreenerHomes/Homeowners/How_to_Apply/Greener_Homes_Application_Guide.pdf

²¹ http://www.seai.ie/Grants/GreenerHomes/Homeowners/How_to_Apply/Greener_Homes_Application_Guide.pdf

²² *Ibid*

²³ Speck S, *The design of carbon and broad-based energy taxes in European countries* (2008)

<http://www.vjel.org/books/pdf/PUBS10012.pdf> (accessed 18/02/11)

²⁴ International Energy Agency *Renewables for heating and cooling* (2007)

http://www.iea.org/textbase/nppdf/free/2007/Renewable_Heating_Cooling_Final_WEB.pdf (accessed 18/08/11)

²⁵ *Ibid*

²⁶ EREC, *Renewable Energy Policy Review – France*

http://www.erec.org/fileadmin/erec_docs/Projcet_Documents/RES2020/France_RES_Policy_Review_09_Final.pdf

- solar thermal – 50% of equipment cost, households only;
- biomass – 50% of equipment cost, households only; and
- biomass plants – 40% of equipment cost, businesses only.²⁸

The scheme will run until 2012.

In addition a 5.5% reduction in VAT was introduced for residential energy equipment using a renewable energy supply.²⁹

France has also set up a 'Renewable Heat Fund' in order to promote the use of renewable heat (wood, geothermal, solar) in collective housing. The fund, which launched January 2009, has a budget of €1000 million for the 2009-11 period.³⁰

5.4 Germany

Current renewable heat policy in Germany is outlined in the Renewable Heat Act which has been in operation since 2009. The act contains three measures to promote renewable heat:

- an obligation to use renewable energy in new buildings;
- financial support; and
- expansion of district heating infrastructure.

Details of the first two of these are as follows.

- **Obligation:** All owners (including private, state, and business) of newly erected buildings must use a defined percentage of renewable heat sources – either 15% solar thermal, 30% biogas, or 50% biomass or geothermal.
- **Financial support:** The use of renewable energies is supported by an annual budget of up to €500m. Subsidies are available for the installation of small scale systems in existing buildings through the *Market Incentive Programme*- solar thermal, biomass, geothermal and heat pumps. The Subsidy rates for solar thermal, for example are as follows:
 - Equipment for production of hot water or space heating 60 € per metre square (m2, referring to the size of the equipment) (max. 40m2)
 - Combination of hot water production and space heating 105 € per m2 (plant size min. 40 m2)

²⁷ Invest in France Agency *France's "Green new deal"* (August 2009) http://www.ambafrance-uk.org/IMG/pdf_Argumentaire_Grenelle_UK.pdf (accessed 17/02/11)

²⁸ EREC, *Renewable Energy Policy Review – France* http://www.erec.org/fileadmin/erec_docs/Projet_Documents/RES2020/France_RES_Policy_Review_09_Final.pdf

²⁹ *Ibid*

³⁰ *Ibid*

- Extension of existing solar thermal systems 45 € per m2 (max. 40 m2).

Loans are available for larger projects.³¹

³¹ The Federal Ministry of Economics and Technology, *Renewable Energies in Germany - Political Framework and Market Development* (2009) <http://www.programacyma.com/wp-content/uploads/2009/11/Presentacion-Renac-Sra-Haupt.pdf> (accessed 18/02/11)