

THE NORTHERN IRELAND RENEWABLE HEAT INCENTIVE

**Peter Hutchinson, Renewable Heat Branch,
Department of Enterprise, Trade and Investment**

The Non-Domestic Renewable Heat Incentive Scheme

In November 2012, DETI launched the Northern Ireland Renewable Heat Incentive (RHI), a mechanism to support the deployment of renewable heat technologies within the non-domestic sector in Northern Ireland. The RHI provides non-domestic generators of eligible renewable heat and producers of biomethane with incentive payments for the lifetime of the technology (to a maximum of 20 years). The tariff payments vary depending on the size and type of technology and are calculated based on the metered heat output of the installation. The scheme is administered by the GB energy regulator, Ofgem.

The purpose of the RHI is to develop the renewable heat market to a level of 10% by 2020 (starting from a baseline position of 1.7% in 2010). To meet the target it is assumed that an additional 1300 GWh of renewable heating is required by 2020. Achieving the target will ensure that Northern Ireland contributes to wider UK and EU targets, as well as benefiting from increased energy security, reduced carbon emissions and realises the potential for new green jobs in this sector.

As the RHI requires installations to be in place before the accreditation process can begin (unless the technology is of sufficient size to warrant pre-accreditation) there can often be a long lead in time for projects and for applications to be made. As at 13 September 2013, there were 46 applications for support under the RHI and 30 of those had received full accreditation.

All the applications, to date, have been for solid biomass boilers with the average size of application being in the order of 180 kW and the total combined capacity of the applications is around 8,200 kW.

The existing RHI tariffs are detailed in the table below:

Tariff name	Size	Tariff duration (years)	Northern Ireland levels (pence per kWh)
Biomass	Less than 20kW _{th}	20	6.3
	20kW _{th} and above but less than 100kW _{th}		6.1
	100kW _{th} and above but less than 1000kW _{th}		1.5
Biomethane	Biomethane all scales, biogas combustion less than 200kW _{th}	20	3.1
Ground Source Heat Pumps	Less than 20kW _{th}	20	8.8
	20kW _{th} and above but less than 100kW _{th}		4.8
	100kW _{th} and above		1.3
Solar Thermal	Less than 200kW _{th}	20	8.8

The Renewable Heat Premium Payment Scheme

The RHPP scheme was launched on 24 May 2012 as a support measure for domestic customers wishing to utilise renewable heating. This was an interim measure that was put in place in advance of the design and implementation of the domestic RHI. The scheme has proved very popular and as at 13 September 2013, DETI had received 1175 applications and issued 909 vouchers of which 575 had been returned for payment indicating the technology had been installed.

The total combined capacity of the installed technologies is 8,300kW. The total committed spend is currently in the region of £1.7m, this funding represents a total investment in the sector of £5.5m.

The breakdown across the different technologies is shown in the table below:

	Voucher value (£)	Total Vouchers Issued		Total vouchers returned for payment	
		Number	% share of technologies	Number	% share of technologies
ASHPs	1700	89	10	51	9
Biomass boilers	2500	437	48	238	41
GSHPs	3500	92	10	52	9
Solar Thermal	320	291	32	234	41
TOTAL		909		575	

Biomass boilers are clearly the most popular technology with almost half the applications received being for either wood pellet or wood log fired boilers. In terms of the displacement of other heating fuels the vast majority of applicants have notified that they are intending to displace heating oil (89%). There have been a high number of applications from those carrying out self builds (38%). Less than 3% of applicants opt to install two renewable heat technologies in their home. These applicants comply with DETI's ruling that where two technologies are installed one must be a solar thermal panel.

Phase 2 of the RHI – New technologies and long term support for domestics

In July 2013, DETI published a public consultation on proposals for Phase 2 of the RHI relating to the expansion of the current scheme and the implementation of a domestic RHI mechanism.

For the non-domestic scheme, phase 2 focuses on introducing new tariffs for more innovative renewable heat technologies, such as air source heat pumps, deep geothermal, biomass direct air and bioliquids. New support is also proposed for large scale biomass (above 1MW) and biomass and bioliquids combined heat and power.

The consultation proposes new tariffs for the non-domestic RHI as follows;

Tariff name	Size	Tariff duration (years)	Northern Ireland levels (pence per kWh)
Air to Air Air Source Heat Pumps	Less than 100kW _{th}	20	5.2
Air to Water Air Source Heat Pumps	Less than 100kW _{th}	20	2.5
Bioliquids	Less than 100kW _{th}	15	2.6
	100kW _{th} and above but less than 1000kW _{th}		2.1
Biomass (heat only)	1000kW _{th} and above	20	0.6
Biomass or Bioliquid Combined Heat and Power (new sites)	All sizes	20	3.5
Biomass or Bioliquid Combined Heat and Power (conversion from fossil fuel)	All sizes	20	1.7
Biomass Direct Air	Less than 100kW _{th}	20	5.1
	100kW _{th} and above but less than 1000kW _{th}		1.4
Deep Geothermal	All scales	20	3.7

In addition to these new tariffs, DETI has proposed to make some changes to the administration processes with the aim to simplifying procedures relating to metering. Finally, DETI is considering the introduction of an “uplift” tariff for biomass district heating schemes, where one boiler provides heat for a high number of different buildings.

Another element of phase 2 of the RHI is the introduction of a domestic RHI scheme in Northern Ireland that will ultimately replace the RHPP. The domestic RHI scheme proposed by DETI includes two elements. New applicants for the scheme would first receive a one-off payment once their application is approved and their installation accredited and then receive an ongoing annual payment for the heat output of the technology.

Applicants that have already received the RHPP would receive the ongoing tariff only and any applicants that installed without the support of the RHPP (between the period 1 September 2010 and the launch of the domestic RHI), would receive a higher tariff but no upfront payment.

The different support levels proposed are detailed below;

	Installed after 1 September 2010 and without assistance under the RHPP	New installations and those supported under RHPP	
	Tariff for 7 yrs (pence per kWh)	Up front support ^a (£)	Tariff for 7 years (pence per kWh)
Air to Water Heat Pumps	8.1	1700	3.4
Biomass	7.9	2500	5.5
Ground Source Heat Pumps	13	3500	8
Solar Thermal	16.4	320	13.1
Air to Air Heat Pumps	5.5	1000 ^b	3.5
Bioliquids	3.3	500 ^b	2.7

The established technologies that are currently supported under the RHPP will continue to be incentivised and DETI is considering introducing support for air to air heat pumps and bioliquids.

The consultation document outlines proposals relating to eligibility standards, how payments will be calculated and made, the administration processes; and how domestic systems over 45kw could be treated.

The consultation process concludes on Monday 14 October 2013. All responses should be sent to ni.rhi@detini.gov.uk.

Further information can be found at;

- Phase 2 of the RHI www.energy.detini.gov.uk
- Information on applying for RHI or RHPP www.nidirect.gov.uk/energywise
- Further guidance on the RHI scheme www.ofgem.gov.uk
- Or by contacting ni.rhi@detini.gov.uk

^a For technologies installed under the RHPP this support has already been received.

^b No support has previously been available for air to air heat pumps or bioliquids.