

From: [Hughes, Seamus](#)
To: [Trimble, David](#)
Cc: [Wightman, Stuart](#); [Willis, Adele](#)
Subject: RE: Practical On-farm Renewable Energy event, 29th October 2015
Date: 14 September 2015 09:52:41
Attachments: [RHI article for CAFRE renewables event on 29 October 2015.DOCX](#)

David

Attached please find article from Stuart on the RHI.

Regards

Seamus

Seamus Hughes

Energy Efficiency Branch
Department of Enterprise, Trade & Investment
Netherleigh
Massey Avenue
Belfast, BT4 2JP
Tel: 028 9052 9532 (ext: 29532)
TextRelay: 18001 028 9052 9532
Web: www.detini.gov.uk

Please consider the environment - do you really need to print this e-mail?

From: Trimble, David
Sent: 14 September 2015 09:08
To: Hughes, Seamus
Subject: RE: Practical On-farm Renewable Energy event, 29th October 2015

Seamus,

Thanks for letting me know – today will be fine for your article.

Regards

David

From: Hughes, Seamus
Sent: 11 September 2015 16:40
To: Trimble, David
Subject: RE: Practical On-farm Renewable Energy event, 29th October 2015

David

Just a short email to let you know I show have the RHI contribution with you on Monday. It's drafted and with Stuart for clearance but he has got caught up in some other issues and hasn't got to it yet . I hope this is still ok for your deadline?

Regards

Seamus

Seamus Hughes

Energy Efficiency Branch
Department of Enterprise, Trade & Investment
Netherleigh
Massey Avenue
Belfast, BT4 2JP
Tel: 028 9052 9532 (ext: 29532)
TextRelay: 18001 028 9052 9532
Web: www.detini.gov.uk

Please consider the environment - do you really need to print this e-mail?

From: Trimble, David
Sent: 06 August 2015 14:09
To: Ellis, Cathal; Johnston, Chris; Harrison, John; Atkinson Michael; Hughes, Seamus; Harris, Michael; Christopher Osborne; Kilpatrick, Charlie; Moore, Nigel
Subject: Practical On-farm Renewable Energy event, 29th October 2015

Colleagues,
Good afternoon.

We are well advanced in our plans for the Practical On-farm Renewable Energy event on Thursday 29th October 2015. This will be the sixth such event held at Greenmount Campus and the tenth overall. This year there are a few developments to the seminar programme with the subjects of Natural Pollution Control and Alternative Fuel Vehicles included in the Technology section and the Role of the Utility Regulator and Rates Payment for renewable energy installations included in the Challenges section.

We appreciate your involvement in this training event once again and hope that it will be as beneficial as in previous years. The seminar programme is almost finalised and I will forward you a copy shortly. The main priority at present is the preparation of the Booklet and for this could you have your article with me by **Friday 11th September**. I appreciate that this comes quite quickly after the summer break, however it is necessary to allow time for editing and getting the Booklet printed prior to the event.

Looking forward to working together once again.

David

CHSDB
Greenmount Campus,
CAFRE
Tel: 9442 6682 (63682)

THE NORTHERN IRELAND RENEWABLE HEAT INCENTIVE

**Stuart Wightman 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% or 300gWh in 2010). The estimated total heat demand in 2020 is 16.7tWh of which the 10% target equates to 1670 gWh to meet the target therefore 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 1 September 2015, there were 841 applications for support under the RHI and 664 of those had received full accreditation. This represents a significant upsurge in applications over the past year driven largely by the uptake of biomass technology in the poultry sector.

The majority of applications to date have been for solid biomass, mostly of 99kW capacity. In terms of other technologies there are 6 ground source heat pumps and 3 solar thermal currently accredited or in the application system. The total combined capacity of current installations based on applications is in the order of 77MW with an estimated annual generation of 359gWh.

The current 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	6.7
	20kW _{th} and above but less than 100kW _{th}		6.4
	100kW _{th} and above but less than 1000kW _{th}		1.5
Biomethane	Biomethane all scales, biogas combustion less than 200kW _{th}	20	3.3
Ground Source Heat Pumps	Less than 20kW _{th}	20	9.0
	20kW _{th} and above but less than 100kW _{th}		4.6
	100kW _{th} and above		1.3
Solar Thermal	Less than 200kW _{th}	20	9.1

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 proved very popular and at the scheme closure in November 2014 some 1300 installations were supported.

The total combined capacity of the installed technologies is in the order of 20MW with expenditure in the order of £2.3m.

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

	Voucher value (£)	Total installations supported	
		Number	% share of technologies
ASHPs	1700	165	13
Biomass boilers	2500	583	45
GSHPs	3500	152	12
Solar Thermal	320	389	30
TOTAL		1289	

Biomass boilers were 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 notified that they were displacing heating oil (89%). There were also 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 was also proposed for large scale biomass (above 1MW), biomass and bioliquids combined heat and power, and an uplift tariff for biomass district heating where one boiler provides heat for a number of different buildings.

In addition to these new tariffs, DETI also proposed to make other changes around biomass sustainability requirements, air quality standards, cost control measures to maintain affordability and ensure we remain within budget, and a number of other administrative changes to simplify processes. Consideration and finalising of amendments to the non domestic scheme will be undertaken forward in two stages during 2015 and 2016.

The first stage will see the introduction of a new biomass and bioliquid combined heat and power tariff in November 2015 to coincide with changes to the ROC's regime. Along with the new CHP tariffs, cost control measures are

being introduced for the most popular biomass technology. This will involve the widening of the current biomass tariff banding 20kW – 99kW to 20kW to 199kW to facilitate greater adoption of larger more efficient boilers. Alongside this a two tier tariff will be introduced; the first 1314 peak operating hours will be paid at the standard tariff, and hours over and above paid at a reduced rate of 1.5 pence per kWh. A maximum annual cap of 400,000kWh heat payment will also be applied over which no further RHI payments will be made.

The Domestic Renewable Heat Incentive Scheme

The domestic RHI was introduced in December 2014 to replace the RHPP which closed to applications in November 2014. The domestic RHI scheme which is administered by DETI includes two elements. New applicants for the scheme receive a one-off payment once their application is approved and their installation accredited and then receive an ongoing annual payment, (paid in arrears), for the heat output of the technology for a 7 year period.

Applicants that have already received the RHPP are able to apply and receive the ongoing tariff only and any applicants that installed without the support of the RHPP after the period 1 September 2010 and where the installation meets the scheme criteria receive an upfront payment and ongoing tariff support.

The current support levels are detailed below;

	New installations and those supported under RHPP	
	Up front support ^a (£)	Tariff for 7 years (pence per kWh)
Air to Water Heat Pumps	1700	3.6
Biomass	2500	5.7
Ground Source Heat Pumps	3500	8.3
Solar Thermal	320	13.7

The established technologies that were supported under the RHPP continue to be incentivised under RHI. The spread of technologies under the domestic RHI to date has broadly followed the pattern from RHPP with biomass still remaining the largest technology installed. A current snapshot of the technology mix is presented below:-

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

Technology	Upfront Payment (£)	Total applications made to date	
		Number	% share of technologies
ASHPs	1700	51	15
Biomass boilers	2500	125	37
GSHPs	3500	50	15
Solar Thermal	320	116	34
TOTAL		342	

Further information can be found at;

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

From: [Trimble, David](#)
To: [Graham, Stephen \(DARD\)](#); [McCracken, Alistair](#); [Noel Gavigan](#); [Harrison, John](#); [Gilkinson, Stephen](#); [Atkinson Michael](#); [Hughes, Seamus](#); [Harris, Michael](#); [Kilpatrick, Charlie](#); andrewgoodwin@hsbc.com
Subject: Publicity flyer for Practical On-farm Renewable Energy event
Date: 16 September 2015 15:09:14
Attachments: [Flyer POFRE 2015.jpg](#)

Colleagues,

Good afternoon. I have attached a copy of the publicity flyer for the Practical On-farm Renewable Energy event which will be held on Thursday 29th October. Can you please use this widely among your circle of contacts to publicise the event.

Regards

David



Practical on-farm Renewable Energy Event

CAFRE, Greenmount Campus
Thursday 29th October 2015
11am – 8.30pm
In association with the Ulster Farmers' Union and the Agri-Food and Biosciences Institute.

 **cafre**
College of Agriculture,
Food & Rural Enterprise



CHSDB
Greenmount Campus,
CAFRE
Tel: 9442 6682 (63682)

Practical on-farm renewable energy



This event provides practical information on renewable energy issues for farmers and the rural sector.

Seminars

Case studies on renewable energy technologies:

- Anaerobic digestion
- Alternative fuel vehicles
- Energy saving measures
- Energy storage systems
- Heat from biomass
- Micro-hydro power
- Pollution control by energy crops
- Solar PV
- Wind power

Issues associated with renewable energy:

- A future for renewable technologies?
- Finance
- Grid connection
- NI Renewable Obligation Certificates
- Payback times
- Planning permission
- Renewable Heat Incentive

CAFRE,
Greenmount Campus, Antrim
Thursday 29th October 2015
11.00am – 8.30pm

Tour the College's renewable energy installations

Over 60 trade companies will be exhibiting their products and services

For further information contact:

David Trimble

Tel: (028) 9442 6682

Email: david.trimble@dardni.gov.uk

For trade enquiries contact:

Cathal Ellis

Tel: (028) 9442 6793

Email: cathal.ellis@dardni.gov.uk

Version 10

Version numbers added by RHI

Taskforce - 6 April 2017

Northern Ireland Renewable Heat Incentive

Seamus Hughes
Energy Division
29 October 2017

DFE-106574



Department of
**Enterprise, Trade
and Investment**
www.detini.gov.uk

Overview

- This session will aim to cover the following;
 - Background to the NI RHI
 - RHI Phase 1
 - RHI Phase 2
 - Next steps
 - Question and Answer



Background

- The RHI is a mechanism whereby non-domestic & domestic generators of eligible renewable heat are paid for the renewable heat output for the lifetime of the technology.
- The primary objective for the Northern Ireland RHI is to increase the uptake of renewable heat to 10% by 2020. The 10% target for renewable heat equates to 1600GWh (or an additional 1300GWh when considering existing levels).
- It is expected that the RHI will have a number of other wider benefits in terms of fuel security, lower emissions and ‘green jobs’.
- Renewable heat technologies are currently unable to compete with existing fossil fuel alternatives given the often higher capital costs and also the lack of understanding and awareness amongst consumers.



RHI Phase 1 (Non-domestic)

- The Non-domestic RHI Scheme was launched in Nov 2012 and is administered by Ofgem (through a SLA with DETI).
- The Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012 provide the legal basis for the scheme.
- Phase 1 of the Non-domestic RHI covered the most well-established renewable heat technologies for the non-domestic sector. Eligible technologies are Biomass, Biomethane, Solar Thermal & Ground Source Heat Pumps (GSHP).
- RHI Statistics at 19 Oct 2015:
 - 1092 applications had been received
 - 741 accredited installations
 - Total installed heat capacity of 103MW
 - Total installed heat output 463GWh



RHI Phase 1 (Non-domestic)

- The RHI aims to compensate investors for the additional costs of renewable heat compared to traditional fossil fuel systems.
- Tariffs take into account all the various types of costs involved (including capital, financing, barrier, fuel and operating) to produce a pence per kWh cost figure.
- A rate of return is included in order to stimulate interest in a developing unknown marketplace and to provide compensation for financing costs.
- Once an installation is accredited under the scheme they will receive a fixed level of support which will be adjusted annually in line with inflation with payments made on a quarterly basis.
- Annual RHI payments will continue for 20 years.



RHI Phase 1 (Non-domestic)

Tariff Name	Eligible Technologies	Size (kWth)	NI levels (pence per kWh)
GSHP	Including water source heat pumps and deep geothermal	Less than 20kWth	9.0
		20 kWth and above up to but not including 100 kWth	4.6
		100 kWth and above	1.5
Biomass	Solid biomass; municipal solid waste	Less than 20kWth	6.7
		20 kWth and above up to but not including 100 kWth	6.4
		100 kWth and above up to but not including 1000 kWth	1.5
Biomethane	Biomethane injection and biogas combustion, except from landfill gas	All scales biomethane, biogas combustion < 200	3.3
Solar Thermal		< 200	9.1

RHI Phase 1 (Domestic)

- The Renewable Heat Premium Payment Scheme (RHPP) was launched in May 2012 as an interim measure for households in advance of the full domestic RHI scheme.
- The RHPP provided upfront support towards the installation costs of a domestic renewable heating system. It closed in December 2014

	Voucher value (£)	% Share
ASHPs	1700	12%
Biomass	2500	47%
GSHPs	3500	12%
Solar thermal	320	29%

- The RHPP provided in the order of £2.3m of funding and incentivised some 1300 renewable heat installations (20MW capacity).



RHI Phase 2 Proposals

- Public consultation on the Phase 2 proposals was completed in October 2013:
 - expanding the scheme to cover domestics – the domestic RHI was launched on 9 December 2014.
 - introduction of new non-domestic tariffs to cover additional renewable heat technologies.
 - consideration of some administrative aspects regarding biomass sustainability, air quality, metering etc.



RHI Phase 2

Domestic Scheme

- Launched on 9 December 2014, 470 applications received to date.
- Domestic properties only – i.e. A property that is solely, or predominately, used for domestic uses and has not been adapted for commercial reasons.
- Provision of domestic EPC is a key determinant.
- Second homes, holiday homes and rental properties are eligible but require metering.
- Technologies supported are the same as RHPP (ASHPs, Biomass, GSHPs & Solar Thermal). Same upfront payments but also 7 year tariff based payments.



RHI Phase 2

Domestic Scheme

- Payments are calculated for the asset life (20 years) and then compressed to pay out the full amount through an upfront payment and 7 annual tariff payments.
- Households with accredited RHPP installations will be able to apply for domestic RHI tariff payments.

	Proposed Tariffs	
	Up front	Tariff for 7 yrs (pence per kWh)
Air to Water Heat Pumps	£1700	3.6
Biomass	£2500	5.7
Ground / Water Source Heat Pumps	£3500	8.3
Solar thermal	£320	13.7



RHI Phase 2

Domestic Scheme

- In most cases payments will be made on the ‘deemed’ heat demand of the property, calculated using the potential heating requirements provided on the property’s Energy Performance Certificate (EPC).
- Meters will be required for “Second homes” (rental prop, holiday homes, social housing) or in properties, where a ‘back-up’ boiler remains.
- Meters won’t be required for solar thermal.
- Where meters are installed the payments will be capped at the deemed level as calculated using the EPC information
- All payments will be capped at £2500/year.



RHI Phase 2

Non – domestic stage 1

- New tariffs for combined heat and power (CHP).
- Medium biomass tariff banding changed to 20-199kW range.
- Tiered tariff introduced for biomass.
 - **Tier 1 first 1314 hours paid at standard rate (6.4p or 6.7 p per kWh)**
 - **Tier 2 remaining hours paid at 1.5 p per kWh**
- A cap of 400,000kWh in annual heat payment will apply to all new small or medium biomass installations

RHI Phase 2 Non – domestic stage 2

- Air Source Heat Pumps
- Deep Geothermal (currently treated as GSHP)
- Bioliquids (heat only)
- Large Biomass (>1MW)
- District Heating
- Automatic tariff digression
- Biomass sustainability
- Air quality standards

Biomass Sustainability

- Requirements likely to mirror GB
- Must source fuel from approved suppliers
- For non domestic RHI quarterly self reporting to Ofgem
- Independent annual report on biomass fuel used
- Installations under 1MW can use EU default GHG emission values
- Self suppliers permitted but must be registered as such
- Domestic RHI annual declaration to DETI on fuel used

Next Steps

- Ongoing delivery of both non domestic and domestic RHI Schemes.
- Non domestic Phase 2 stage 1 amendments in place from early November 2015.
- Assessment and finalisation of policy for further changes to the RHI during 2016.



Information & Guidance

Department of Enterprise, Trade and Investment

Guidance

Northern Ireland Renewable Heat Incentive – Guidance

Volume 1: Eligibility and How to Apply
November 2012

Northern Ireland Renewable Heat Incentive – Guidance

Volume 2: Ongoing Obligations, Payments
November 2012

Renewable Heat Incentive | nidirect - Windows Internet Explorer provided by DETI

http://www.nidirect.gov.uk/renewable-heat-incentive

Renewable Heat Incentive | nidirect

Energy Wise

Get in the know.

Insulation Energy efficiency Energy saving grants Central heating Renewables Home energy check

Renewable Heat Incentive

Renewable Heat Incentive

The Northern Ireland Renewable Heat Incentive (RHI) is a scheme run by the Department of Enterprise, Trade and Investment (DETI) that provides financial support to non-domestic renewable heat generators and producers of biomethane who are based in Northern Ireland.

The purpose of the scheme

The primary objective for the RHI is to increase the uptake of renewable heat to ten percent by 2020. The ten percent target for renewable heat equates to 1.6TWh (or an additional 1.3 TWh when considering existing levels). This target was included in the Strategic Energy Framework and an interim target of four percent renewable heat by 2015 has been included in the Programme for Government.

In addition to achieving the set target, it is expected that the RHI will have a number of other wider benefits in terms of fuel security, lower emissions and 'green jobs'.

Who is the scheme for?

- Energy wise
- Insulation
- Energy efficiency
- Energy saving grants
 - Energy saving grants in your area
 - Renewable heat grants
 - Renewable Heat Premium Payment
 - Eligibility for the RHPP scheme
 - Process for the RHPP scheme
 - RHPP - Terms and conditions
 - Renewable Heat Incentive**
 - Grant to replace your boiler

Email: ni.rhi@detini.gov.uk

Web: www.energy.detini.gov.uk

www.nidirect.gov.uk/energywise

www.ofgem.gov.uk



Question & Answers

- Any questions