



Department  
of Energy &  
Climate Change

# Renewable Heat Incentive and Renewable Heat Premium Payments quarterly statistics

December 2012

# Statistical Release: RHI and RHPP Deployment Data. November 2012

## RHI key points

- As at 30 November 2012 there were 1,165 full applications (i.e. installed renewable heating systems). Of these applications 622 were accredited and were eligible for tariff payment.
- The majority of the applications (67 per cent) and accreditations (70 per cent) were for small solid biomass boilers (< 200 kW). Overall 87 per cent of applications were for biomass boilers.
- Total capacity for the full applications was 322 MW, of which 133 MW of capacity was for accredited systems.
- Almost all (99 per cent) of the accredited installation capacity relates to solid biomass boilers.
- Accredited installations on the RHI scheme had generated 59,107 MWh of heat, 99 per cent of which was generated from biomass boilers.

## RHPP householder voucher scheme phase 1 and phase 2 key points

- A total of 7,253 vouchers were issued under phase 1 and of these, 5,230 were redeemed. As at 30 November 2012, 4,136 have been issued under phase 2 with 2,190 redeemed.
- Solar Thermal and Air Source Heat Pumps accounted for two-thirds of redeemed vouchers in phase 1 and four-fifths of redeemed vouchers in phase 2 to date.
- The total capacity of installations supported by phase 1 of the scheme is 51 MW and 9 MW for phase 2 to date.
- The greatest contributor to the capacity comes from air source heat pumps which accounted for 43 per cent in phase 1 and 49 per cent in phase 2 to date.

## Introduction

This quarterly publication provides a summary of the deployment of renewable heat technologies under the Non-Domestic Renewable Heat Incentive (RHI) and Renewable Heat Premium Payment (RHPP) householder voucher schemes. The RHI domestic scheme is currently proposed to be introduced in summer 2013 and will in time replace the reported statistics for the RHPP householders scheme. This publication provides data on the number of full applications, installations and capacity of technologies installed. Figures are given separately by region, month and technology.

### Non Domestic RHI

The Non-Domestic RHI Scheme supports renewable heat installations in business, industry and the public sector as well as district heating schemes for domestic properties. It has been open for applications since 28 November 2011.

The Non-Domestic RHI Scheme currently supports the following technologies:

- Biomass
- Heat pumps - ground source, water source and deep geothermal
- Solar thermal collectors
- Biogas
- Bio-methane injected into the gas grid

### RHPP Householders voucher scheme Phase 1 and Phase 2

The RHPP scheme distributes vouchers as a one off grant to eligible applicants installing renewable heating systems to offset the cost of installation. The supported technologies are:

- Ground and water source heat pumps
- Air-to-water heat pumps
- Solid biomass boilers
- Solar thermal systems

For further details of both schemes please refer to [Appendix 1](#) of this release.

## Renewable Heat Incentive (RHI) data

As at 30 November 2012 there were 1,165 full applications. Of these applications 622 were accredited and generating heat eligible for tariff payment. The majority of the applications and 70 per cent of accreditations were for small solid biomass boilers (< 200 kW). Overall 87 per cent of all applications have been for biomass boilers.

**Table 1.1: Number of applications and accreditations by technology<sup>1</sup>, 30 November 2012**

Tariff Band	Full Applications		Of which Accredited Installations		Capacity of full applications (MW)		Capacity of accredited installations (MW)	
Small Solid Biomass Boiler (< 200 kW)	786	67%	455	70%	81	25%	49	37%
Medium Solid Biomass Boiler (200-1000kW)	209	18%	98	18%	109	34%	52	39%
Small Solar Thermal (< 200 kW)	70	6%	29	5%	1	0%	0	0%
Small Water or Ground Source Heat Pump (< 100 kW)	66	6%	31	5%	2	1%	1	1%
Large Solid Biomass Boiler (> 1000 kW)	17	1%	6	1%	121	38%	30	23%
Large Water or Ground Source Heat Pump (> 100 kW)	10	1%	1	0%	8	2%	0	0%
Small Bio-Methane (< 200 kW)	5	0%	1	0%	0	0%	0	0%
Small Biogas (< 200 kW)	2	0%	1	0%	0	0%	0	0%
<b>Total</b>	<b>1,165</b>		<b>622</b>		<b>322</b>		<b>133</b>	

As at 30 November 2012 over half of applications (53 per cent) had been accredited by Ofgem. Over a third of applications were with the applicant as additional information was requested as part of the application process to enable the accreditation assessment to be completed. Around one in ten applications were being reviewed by Ofgem. In addition, 6 applications had been rejected by Ofgem or withdrawn by the applicant.

**Table 1.1a Application Status**

Application status	Number of full applications	
Accredited	622	53%
In review	126	11%
With applicant	417	36%
<b>Total</b>	<b>1,165</b>	

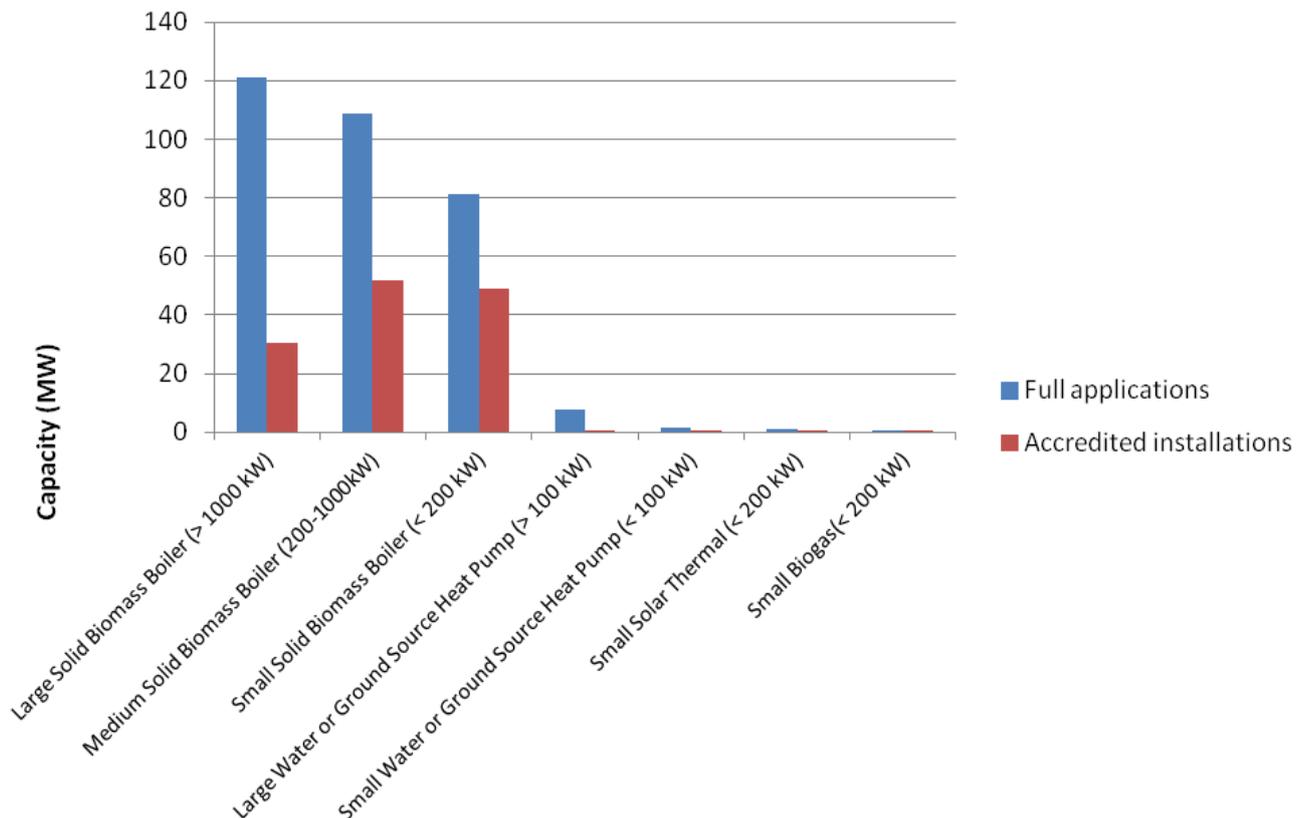
A large proportion of applicants are located in regions with large rural populations such as Scotland (19 per cent) and South West (20 per cent). It is likely this is because many rural communities are not on the gas grid and will be replacing solid fuel or oil burning systems with renewable systems.

<sup>1</sup> A full application and an accredited installation are not mutually exclusive i.e. once a system has become accredited, it is counted as both a full application and an accredited installation.

**Table 1.2: Number of applications by region, 30 November 2012**

Region	Full applications		Accredited installations		Capacity of full applications (MW)		Capacity of accredited installations (MW)	
	Count	%	Count	%	Count	%	Count	%
<b>England</b>	<b>881</b>	<b>76%</b>	469	75%	240	75%	86	64%
South West	231	20%	127	20%	41	13%	17	13%
South East and London	149	13%	74	12%	55	17%	10	8%
West Midlands	119	10%	76	12%	31	10%	21	15%
North West	109	9%	39	6%	45	14%	3	3%
East of England	95	8%	51	8%	26	8%	10	8%
Yorkshire and the Humber	75	6%	43	7%	18	5%	10	8%
East Midlands	58	5%	31	5%	13	4%	7	5%
North East	45	4%	28	5%	11	4%	7	5%
<b>Scotland</b>	<b>218</b>	<b>19%</b>	114	18%	64	20%	33	25%
<b>Wales</b>	<b>66</b>	<b>6%</b>	39	6%	18	5%	14	11%
<b>Total</b>	<b>1,165</b>		<b>622</b>		<b>322</b>		<b>133</b>	

The total capacity for applications is 322 MW, consisting of 133 MW of capacity installed in accredited systems, and a further 189 MW of capacity installed in systems awaiting accreditation.

**Figure 1: Installed capacity by technology, 30 November 2012**

As at 30 November 2012, installations on the RHI scheme had generated 59,107 MWh of heat, 99 per cent of which has been generated from biomass boilers. The figure for the eligible heat generated is calculated by scheme participants, and collated through Ofgem collecting meter readings in order to make the appropriate support payments. Installations with a capacity below 1MW submit readings on a quarterly basis and those over 1MW on a monthly basis.

Large solid biomass boilers (> 1000 kW) make the largest contribution to the amount of renewable heat produced. They account for 38 per cent of accredited capacity and 40 per cent of the total heat produced, but only currently make up 1 per cent of the number of accredited installations.

**Table 1.3: Heat generated, 30 November 2012**

<b>Technology</b>	<b>Heat generated (MWh)</b>
Large Biomass Boiler (> 1000 kW)	23,902
Medium Biomass Boiler (200-1000kW)	22,601
Small Biomass Boiler (< 200 kW)	11,724
Small Water or Ground Source Heat Pumps (< 100 kW)	780
Large Water or Ground Source Heat Pumps (> 100 kW)	72
Solar Thermal (< 200 kW)	28
<b>Total</b>	<b>59,107</b>

After a slightly slower initial period during December 2011 and January 2012, the number of applications received by month has remained fairly consistent from February to June this year. There was a notable increase in applications in July to over 100 applications a month and a further step to over 150 applications in November.

**Table 1.4: Number of full applications by month<sup>2</sup>**

<b>Month</b>	<b>Number of applications</b>	<b>Cumulative number of applications</b>
November 2011	10	10
December 2011	43	53
January 2012	64	117
February 2012	90	207
March 2012	81	288
April 2012	81	369
May 2012	85	454
June 2012	81	535
July 2012	115	650
August 2012	124	774
September 2012	108	882
October 2012	130	1,012
November 2012	153	1,165

<sup>2</sup> The RHI started on the 28 November 2011

## Renewable Heat Premium Payments Householder scheme Phase 1<sup>3</sup> and Phase 2<sup>4</sup> data

A total of 7,253 vouchers were issued under phase 1 and of these, 5,230 were redeemed. As at 30 November 2012, 4,136 vouchers have been issued under phase 2 with 2,190 redeemed at that time. Solar Thermal and Air Source Heat Pumps accounted for two-thirds of redeemed vouchers in phase 1 and four-fifths of redeemed vouchers in phase 2 to date. This differs to the RHI where the majority of installations are biomass boilers.

**Table 2.1: Number of vouchers issued and redeemed or claimed by technology for phase 1 and 2.**

Technology	Redeemed Vouchers		Claimed Vouchers		Issued in Total			
	Phase 1		Phase 2		Phase 1		Phase 2	
Ground or Water Source Heat Pump	1,000	19%	251	11%	1359	19%	614	15%
Biomass Boiler	733	14%	212	10%	977	13%	451	11%
Air-to-water Source Heat Pump	1,837	35%	655	30%	2505	35%	1,323	32%
Solar Thermal	1,660	32%	1,072	49%	2412	33%	1,748	42%
<b>Total</b>	<b>5,230</b>		<b>2,190</b>		<b>7,253</b>		<b>4,136</b>	

The number of vouchers issued and those redeemed differs because the vouchers have an expiry date and if they are not used within this period, or are rejected for failing the eligibility criteria, they cannot be redeemed and then re-issued. Vouchers claimed have been reported for RHPP 2 as this represents the most accurate number of installations as at end of November due to the small time lag in processing applications.

For solar thermal installations, rather than the capacity of the installation being provided during the application process, the annual estimated amount of heat generated, as given on the MCS certificate, is collected. For air and ground source heat pumps and biomass boilers the capacity of the installations is collected. Table 2.3 reports these figures.

As three of the four technologies are only available to people living in homes off the gas grid, there are a greater number of installations in regions with larger rural populations.

<sup>3</sup> Phase 1 ran from the 1 August 2011 to the 31 March 2012

<sup>4</sup> Phase 2 opened on the 1 May 2012 and will close on the 31 March 2013

**Table 2.2: Installations by region for phase 1 and 2.**

Region	Installations			
	Phase 1		Phase 2	
<b>England</b>	<b>4,157</b>	<b>79%</b>	<b>1,798</b>	<b>82%</b>
South West	1,097	21%	414	19%
South East and London	795	15%	435	20%
West Midlands	414	8%	159	7%
North West	414	8%	155	7%
East of England	656	13%	287	13%
Yorkshire and the Humber	335	6%	128	6%
East Midlands	285	5%	143	7%
North East	161	3%	77	4%
<b>Scotland</b>	<b>659</b>	<b>13%</b>	<b>254</b>	<b>12%</b>
<b>Wales</b>	<b>414</b>	<b>8%</b>	<b>138</b>	<b>6%</b>
<b>Total</b>	<b>5,230</b>		<b>2,190</b>	

The greatest contributor to the capacity comes from air source heat pumps which account for 44 per cent of the total. When compared with the number of vouchers redeemed for air source heat pumps (34 per cent) it is clear that the average capacity of installed air source heat pumps is greater than that of the other technologies.

**Table 2.3: Installed capacity by technology**

Technology	Total capacity (MW)	
	Phase 1	Phase 2
Ground or Water Source Heat Pump	11.5	1.5
Biomass Boiler	17.6	3.3
Air-to-water Source Heat Pump	21.7	4.6
<b>Total</b>	<b>50.8</b>	<b>9.3</b>

	Total estimated heat generated per year (MWh)	
	Phase 1	Phase 2
Solar Thermal	3,609	1,128

Table 2.4 shows increases in the numbers of vouchers claimed per month for both phase 1 and phase 2 to the end of November 2012.

There is a large increase in the number of vouchers being claimed in March 2012. This is because this was the final month of operation of phase 1 of the RHPP scheme and this caused a surge in the number of claims before the deadline, some of which were processed in April.

**Table 2.4: Vouchers redeemed or claimed by month and phase.**

<b>Phase</b>	<b>Month</b>	<b>Vouchers redeemed</b>	<b>Cumulative number of vouchers redeemed</b>
1	August 2011	80	80
	September 2011	203	283
	October 2011	330	613
	November 2011	497	1,110
	December 2011	447	1,557
	January 2012	621	2,178
	February 2012	607	2,785
	March 2012	2,256	5,041
	April 2012	189	5,230
<b>Phase</b>	<b>Month</b>	<b>Vouchers claimed<sup>5</sup></b>	<b>Cumulative number of vouchers claimed</b>
2	May 2012	133	133
	June 2012	183	316
	July 2012	251	567
	August 2012	327	894
	September 2012	315	1,209
	October 2012	463	1,672
	November 2012	518	2,190

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<sup>5</sup> The number of vouchers claimed have been reported for RHPP 2 as this represents the most accurate number of installations as at end of November due to the small time lag in processing applications.

## Glossary

<b>Heat Pumps</b>	A heat pump is a device that transfers thermal energy from a heat source to a heat sink (e.g. the ground to a house). There are many varieties of heat pump but for the purposes of the policies they fall into 3 categories: air, ground and water source heat pumps. The first word in the title refers to the heat source from which the pump draws heat. The pumps run on electricity, however less energy is required for their operation than they generate in heat, hence their status as a renewable technology.
<b>Renewable Heat</b>	Heat energy that comes from a natural source.
<b>Full application</b>	A completed application submitted to Ofgem E-serve with a relevant system already installed.
<b>Accreditation</b>	A system that has submitted an application and has gone through full checks by Ofgem E-serve to make sure that it complies with the relevant conditions.
<b>Tariff band</b>	The different rates paid per kWh of heat produced or bio-methane injected depending on the size and type of installation.
<b>Redeemed voucher</b>	A voucher which has been issued and subsequently, successfully returned and exchanged for its monetary value.
<b>Claimed voucher</b>	A voucher issued following self-certification by the applicant which is then submitted to EST post-installation for final eligibility checks before payment.
<b>Microgeneration Certification Scheme (MCS)</b>	The Microgeneration Certification Scheme (MCS) is an industry-led and internationally recognised quality assurance scheme, which demonstrates compliance to industry standards.
<b>Ofgem (Office of the Gas and Electricity Markets)</b>	Ofgem is the regulator of the gas and electricity industries in Great Britain. Ofgem E-Serve is Ofgem's delivery arm that administers the RHI scheme.
<b>Energy Savings Trust (EST)</b>	The Energy Saving Trust Foundation gives impartial advice to communities and households on how to reduce carbon emissions. Their main activities include testing low carbon technologies, providing certificates and assurances to businesses and consumer goods and collecting and energy data. EST are responsible for the delivery of the RHPP scheme on behalf of the department.

## Further information and feedback

Any enquiries or comments in relation to this statistical release should be sent to Vicky Thompson in DECC's Heat and Industry Statistics Team at the following email address: [Victoria.Thompson@decc.gsi.gov.uk](mailto:Victoria.Thompson@decc.gsi.gov.uk)

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The statistician responsible for this publication is Julian Prime.

Further information on energy statistics is available at <http://www.decc.gov.uk/en/content/cms/statistics/statistics.aspx>

## Next release

These figures will continue to be updated on a quarterly basis. The next release is due to be published on Thursday 21 March 2013 at 9:30am.

## Appendix 1: Scheme Background

### Non Domestic RHI

RHI payments are made to the owner of the heat installation, or producer of bio-methane for injection to the gas grid, over a 20 year period and tariff levels have been calculated to bridge the financial gap between the cost of conventional and renewable heat systems.

Currently applicants may apply to receive payments on systems installed and commissioned any time after 15 July 2009 and for heat generated for a prescribed purpose such as space, water or process heating (not for electricity production). Producers of bio-methane for injection can also apply for registration. Installations below 45kW capacity must be certified under the [Microgeneration Certification Scheme \(MCS\)](#) which is the independent mark of quality assurance for microgeneration systems and installation.

All heat generating systems must be fitted with a meter which measures the eligible heat output of the installation. Payment is calculated by multiplying the metered heat output (kWh) by the tariff rate (pence per kWh).

The scheme is administered by Ofgem E-serve. For more information please see the [DECC RHI](#) webpage in relation to the policy the or the [Ofgem E-serve](#) webpage for how to apply, and scheme eligibility and guidance.

The non-domestic phase of the RHI opened in November 2011 and the domestic phase is due to open in 2013.

### RHPP Phase 1 and Phase 2

The RHPP scheme was introduced as an interim measure in the absence of the domestic RHI. It was designed to support the uptake of domestic renewable heat and maintain the supply chain, to learn about renewable heat technologies and the way consumers use them to better shape the domestic RHI policy and contribute to the renewable energy target.

Phase 1 of the scheme ran from 1 August 2011 until 31 March 2012. Phase 2 opened on 1 May 2012 and will close on 31 March 2013.

Vouchers are issued to home owners with basic energy efficiency measures in place including loft insulation up to 250mm and cavity wall insulation where practical. Vouchers can be redeemed only upon the installation of an MCS accredited system and meter. The value of the vouchers is fixed for each type of technology and has been calculated to equal approximately 10 per cent of the cost of installation.

Applicants that are not on the gas grid are able to claim vouchers when installing: heat pumps, solid biomass boilers or solar thermal systems.

Applicants on the gas grid are eligible to receive vouchers for solar thermal systems only.

The scheme is administered by the Energy Saving Trust (EST); more details on the eligibility criteria and the scheme in general can be found on the [RHPP pages](#) of their website.

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