Department of Energy & Climate Change

Renewable Heat Incentive quarterly statistical release, deployment to March 2015

23 April 2015

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This document is also available from our website at www.gov.uk/decc

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Key points

Non-domestic RHI

- As at 31 March 2015, a total of 13,023 full applications to join the scheme had been received since it launched in November 2011, with a combined capacity of 2.1 GW. Of the 13,023 applications, 8,913 have been accredited with a combined capacity of 1.5 GW, with 7,675 of these accreditations having received a payment for heat generated under the scheme.

- In quarter 1 of 2015 there were a total of 1,568 full applications to join the non-domestic scheme. This was 39 per cent less than in the fourth quarter of 2014. This decrease was largely due to a lower number of applications being received for small biomass boilers in March than three months earlier in December, likely due to the lower small biomass tariff on offer, which has subsequently been further reduced from 6.8 p/KWh to 5.87 p/KWh with effect from 1 April 2015.

- Since the launch of the scheme, 88 per cent of both full applications and accreditations have been for small biomass boilers. Small and medium biomass boilers combined are responsible for 94 per cent of full applications and 95 per cent of accreditations.

- In total, 2,818 GWh of heat has been generated and paid for under the non-domestic RHI scheme, 93 per cent of which has come from biomass installations.

Domestic RHI

- As at 31 March 2015 there had been 36,707 unique applications to join the scheme (11,149 from new installations installed since 9 April 2014), of which 30,695 had been accredited.

- As at 31 March 2015, 42 per cent (12,766) of all accreditations were for air source heat pumps, 19 per cent (5,785) were for solar thermal, 26 per cent (7,861) were for biomass boilers, with ground source heat pumps accounting for 14 per cent (4,283) of accreditations.

- Of the 30,695 accreditations, 9,078 were from new installations (applicants who had systems installed on or after the domestic RHI scheme launch date of 9 April 2014) and 21,617 were from legacy applications (applications for systems installed between 15 July 2009 and launch of the scheme, on 9 April 2014).

- Of the 9,078 accreditations from new installations, 28 per cent (2,571) were for air source heat pumps, 13 per cent (1,151) were for solar thermal, 53 per cent (4,801) were for biomass boilers, with ground source heat pumps accounting for 6 per cent (555) of accreditations.

- A 20% reduction to the biomass tariff came into force from 1 April 2015 whichraged an increase in new biomass applications throughout March. The spike in biomass

applications during March mirrors the spike seen in December as a result of the previous biomass reduction coming into effect from 1 January 2015.

Introduction

This quarterly publication provides a summary of the deployment of renewable heat technologies under the non-domestic Renewable Heat Incentive (RHI), which was launched in November 2011, and the domestic RHI, which was launched in April 2014.

Statistics are reported on the number of applications, accredited installations, installed capacity and heat generation. Breakdowns are provided by region, quarter and technology where appropriate.

The statistics are based on data collected as part of the application process for each scheme. Some RHI applications have not been through all checks within the application process so applicants may not meet all eligibility requirements of each scheme and as such figures are subject to change.

This statistical release contains two sections:

- Section 1 provides deployment data on the non-domestic RHI scheme;
- Section 2 provides deployment data on the domestic RHI scheme.

Feedback

The purpose of this statistical release is to provide useful information about the RHI scheme, therefore we welcome any feedback from users.

Please direct any comments on the content of the report or suggestions for improvements to:
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Section 1 - Non-domestic Renewable Heat Incentive scheme

Key points

- As at 31 March 2015, a total of 13,023 full applications to join the scheme had been received since it launched in November 2011, with a combined capacity of 2.1 GW. Of the 13,023 applications, 8,913 have been accredited with a combined capacity of 1.5 GW, with 7,675 of these accreditations having received a payment for heat generated under the scheme.

- In quarter 1 of 2015 there were a total of 1,568 full applications to join the non-domestic scheme. This was 39 per cent less than in the fourth quarter of 2014. This decrease was largely due to a lower number of applications being received for small biomass boilers in March than three months earlier in December, likely due to the lower small biomass tariff on offer, which has subsequently been further reduced from 6.8 p/KWh to 5.87 p/KWh with effect from 1 April 2015.

- Since the launch of the scheme, 88 per cent of both full applications and accreditations have been for small biomass boilers. Small and medium biomass boilers combined are responsible for 94 per cent of full applications and 95 per cent of accreditations.

- In total, 2,818 GWh of heat has been generated and paid for under the non-domestic RHI scheme, 93 per cent of which has come from biomass installations.

1.1 Background to the scheme

The non-domestic Renewable Heat Incentive (RHI) is a long-term financial incentive scheme introduced in Great Britain in November 2011 to support the uptake of renewable heat in the non-domestic sector.

The scheme provides payments to industrial, commercial, public sector and not-for-profit organisations, as well as district heating schemes for domestic properties, which are generating heat from technologies including:

- Biomass boilers;
- Heat pumps;
- Solar thermal;
- Biogas; and
- Biomethane.

As of 28 May 2014 a change in the non-domestic scheme regulations came into effect. These new regulations introduced additional eligible technologies (for example air source heat pumps) which are included in this release.

Further information on the non-domestic RHI scheme can be found at:
https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies/supporting-pages/renewable-heat-incentive-rhi.

This section provides statistics on the number of applications and accreditations from the 28 November 2011 (launch date) to the 31 March 2015 based on data captured as part of the application process for the scheme.

The tables that accompany this statistical release are available at:
https://www.gov.uk/government/collections/renewable-heat-incentive-renewable-heat-premium-payment-statistics.

1.2 Applications and accreditations

As at 31 March 2015, 13,023 full applications had been received to join the scheme. Of these, 8,913 have been accepted onto the scheme, and of these 7,675 have received one or more payments for heat generated under the scheme. Small biomass boilers continue to dominate the scheme, representing 88 per cent of both full applications and accreditations.

At the end of March 2015, 106 preliminary applications applications had been received, 24 per cent of which were for medium solid biomass boilers, 12 per cent of which were for large solid biomass boilers and 58 per cent of which were for biogas. A preliminary accreditation provides applicants with reassurance that once the proposed installation is built and the owner submits a full application, it will be granted as long as the installation is built in line with the submitted plans and all other conditions are met.

Following the introduction of additional technologies to the scheme in May 2014, at the end of March 2015 34 full applications for air source heat pumps had been received. One full and six preliminary applications for Combined Heat and Power units (CHP) had also been received. These are included in the numbers given above.

Table 1.1 below sets out the number of applications and accreditations by technology.

Table 1.1 – Number of applications and accreditations by technology, Great Britain, November 2011 to March 2015

Tariff Band[1]	Full[2] applications		Accredited installations		Preliminary[3] applications and accreditations		Capacity of full applications		Capacity of accredited installations		Capacity of preliminary applications and accreditations	
	Number	% of total	Number	% of total	Number	% of total	MW	% of total	MW	% of total	MW	% of total
Small Solid Biomass Boiler (< 200 kW)	11,499	88%	7,843	88%	-	-	1,383.0	65%	955.6	65%	-	-
Medium Solid Biomass Boiler (200-1000 kW)	787	6%	628	7%	25	24%	463.9	22%	369.9	25%	17.6	10%
Large Solid Biomass Boiler (> 1000 kW)	30	0%	22	0%	13	12%	196.3	9%	133.0	9%	69.3	37%
Small Solar Thermal (< 200 kW)	249	2%	172	2%	-	-	3.8	0%	2.7	0%	-	-
Small Water or Ground Source Heat Pumps (< 100 kW)	300	2%	194	2%	-	-	8.5	0%	5.6	0%	-	-
Large Water or Ground Source Heat Pumps (>100 kW)	59	0%	22	0%	-	-	35.7	2%	8.5	1%	-	-
Biomethane[5]	27	0%	20	0%	1	1%	-	-	-	-	-	-
Biogas	37	0%	9	0%	61	58%	22.2	1%	3.5	0%	28.4	15%
Air Source Heat Pumps	34	0%	3	0%	-	-	1.4	0%	0.2	0%	-	-
CHP	1	0%	0	0%	6	6%	0.1	0%	0.0	0%	69.6	38%
Deep Geothermal	0	0%	0	0%	0	0%	0.0	0%	0.0	0%	0.0	0%
Total[4]	13,023	100%	8,913	100%	106	100%	2,115.0	100%	1,479.0	100%	184.9	100%

Notes:

1. A change to the non-domestic regulations came into effect on 28 May 2014. These changes allow more technologies onto the scheme and adjust how some of the tariff bands are structured.
2. 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.
3. A preliminary application can become accredited but is removed from this column if subsequently a full application is made.
4. Duplicate, withdrawn and cancelled applications are not included in this or any other table.
5. Biomethane plants do not generate power and therefore do not have an associated capacity.
6. Heat pumps, solar thermal and small biomass boilers are not eligible to submit preliminary applications.

Source:

Ofgem

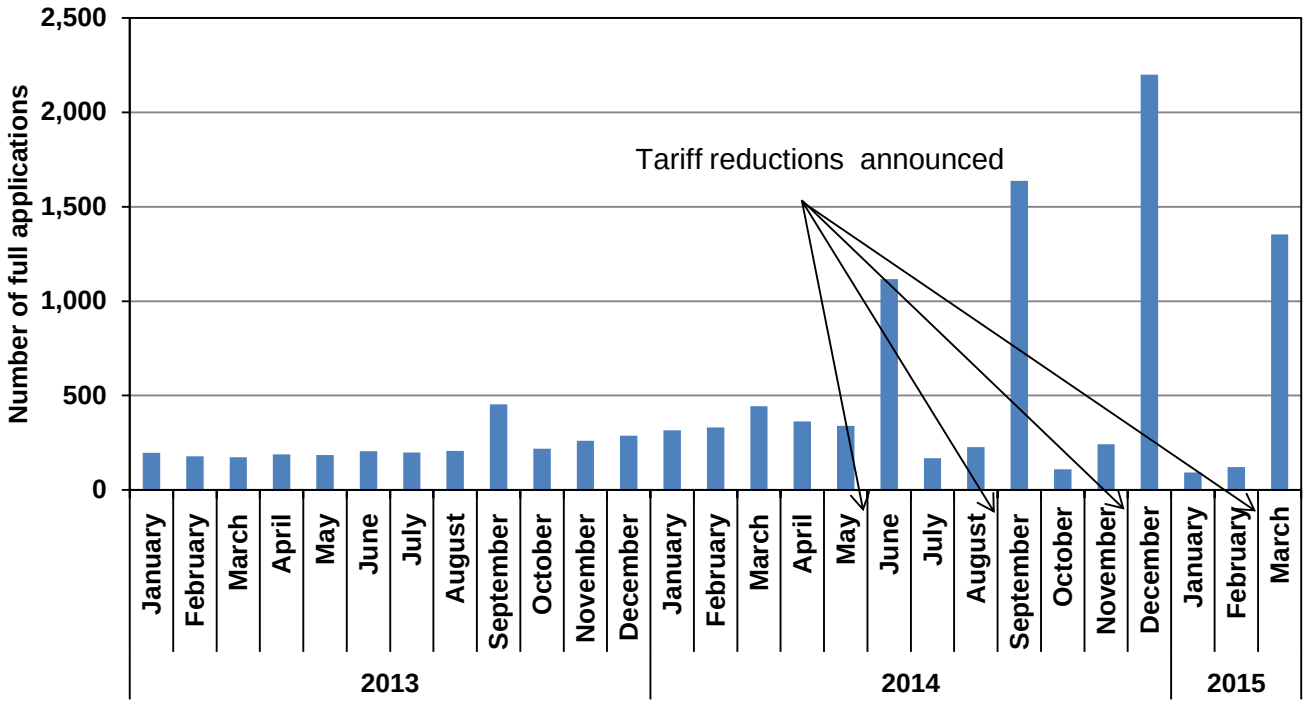
1.3 Application and accreditation rates

Since the scheme began there has been a steady increase in the number of full applications received per quarter, rising from 250 full applications in the first quarter of 2012, to over 500 in the first quarter of 2013, to in excess of 1,000 and 1,500 full applications being received in the first quarters of 2014 and 2015 respectively. Applications received per quarter have to date peaked in the fourth quarter of 2014 during which in excess of 2,500 applications were received.

The peaks in applications seen in June, September and December 2014, and March 2015, are due to announcements in their respective previous months of reductions to the small biomass tariff. These announcements prompt applicants who may be planning on submitting an application in the coming months to act earlier to ensure they receive the higher tariff rate.

Tariffs are automatically reduced if forecast expenditure to a particular technology, or the scheme as a whole, exceeds pre-determined levels. Further information is available at: https://www.gov.uk/government/statistical-data-sets/rhi-mechanism-for-budget-management-estimated-commitments

Figure 1.1 – Number of full applications per month, Great Britain



Source:

Ofgem

Table 1.2 below shows the number of applications by date of first submission and the number of accreditations by date of first approval. Installations are eligible to receive RHI payments for heat generated from their date of first submission. The increase in applications seen between Q2 and Q3 2013 was partly due to changes in air quality requirements that came into effect on the 24 September 2013, and which require applicants who install biomass boilers to submit an RHI emission certificate or an environmental permit with their application. Further details of the air quality regulations can be found on the government website at:

https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies/supporting-pages/renewable-heat-incentive-rhi.

Table 1.2 - Number of applications per quarter, Great Britain, Q4 2011 to Q1 2015

		Number of full applications (by date of first submission)	Cumulative number of full applications	Number of full accreditations (by date first approval)	Cumulative number of full accreditations	Total installed capacity (MW) (by date of first approval)	Cumulative installed capacity
2011	Q4	49	49	2	2	0.0	0.0
2012	Q1	250	299	16	18	2.3	2.4
	Q2	230	529	94	112	35.4	37.8
	Q3	303	832	211	323	39.9	77.6
	Q4	394	1,226	393	716	66.8	144.5
2013	Q1	546	1,772	474	1,190	99.9	244.4
	Q2	576	2,348	535	1,725	108.8	353.2
	Q3	848	3,196	633	2,358	131.2	484.4
	Q4	765	3,961	520	2,878	90.8	575.2
2014	Q1	1,092	5,053	851	3,729	112.5	687.7
	Q2	1,819	6,872	1,076	4,805	162.1	849.7
	Q3	2,032	8,904	1,238	6,043	186.2	1,035.9
	Q4	2,551	11,455	1,203	7,246	178.0	1,213.9
2015	Q1	1,568	13,023	1,667	8,913	265.0	1,479.0
Total		13,023		8,913		1,479.0	

Notes:
The RHI started on the 28 November 2011. Please note figures may change between monthly publications as applicants provide additional information and installation dates may change.

Source:
Ofgem

1.4 Heat generated

Heat generated is calculated by Ofgem from the meter readings of accredited scheme participants. Meter readings are collected and processed to ensure that the correct amount of support can be paid.

As at 31 March 2015, installations on the non-domestic RHI scheme had provisionally generated 2.8 TWh of eligible heat, up from 2.1 TWh at the end of December 2014. Biomass boilers dominate heat generation with 7,319 systems responsible for 93 per cent of heat generated and paid for under the scheme – small biomass boilers 41 per cent (1,145GWh), medium biomass boilers 34 per cent (953 GWh), and large biomass boilers 19 per cent (531 GWh). Bio-methane was responsible for 6 per cent (163 GWh) of heat generated. Table 1.3 shows total heat generated at the end of March 2015 by technology.

Table 1.3 - Heat generated and number of installations receiving payment by technology type, Great Britain, November 2011 to March 2015

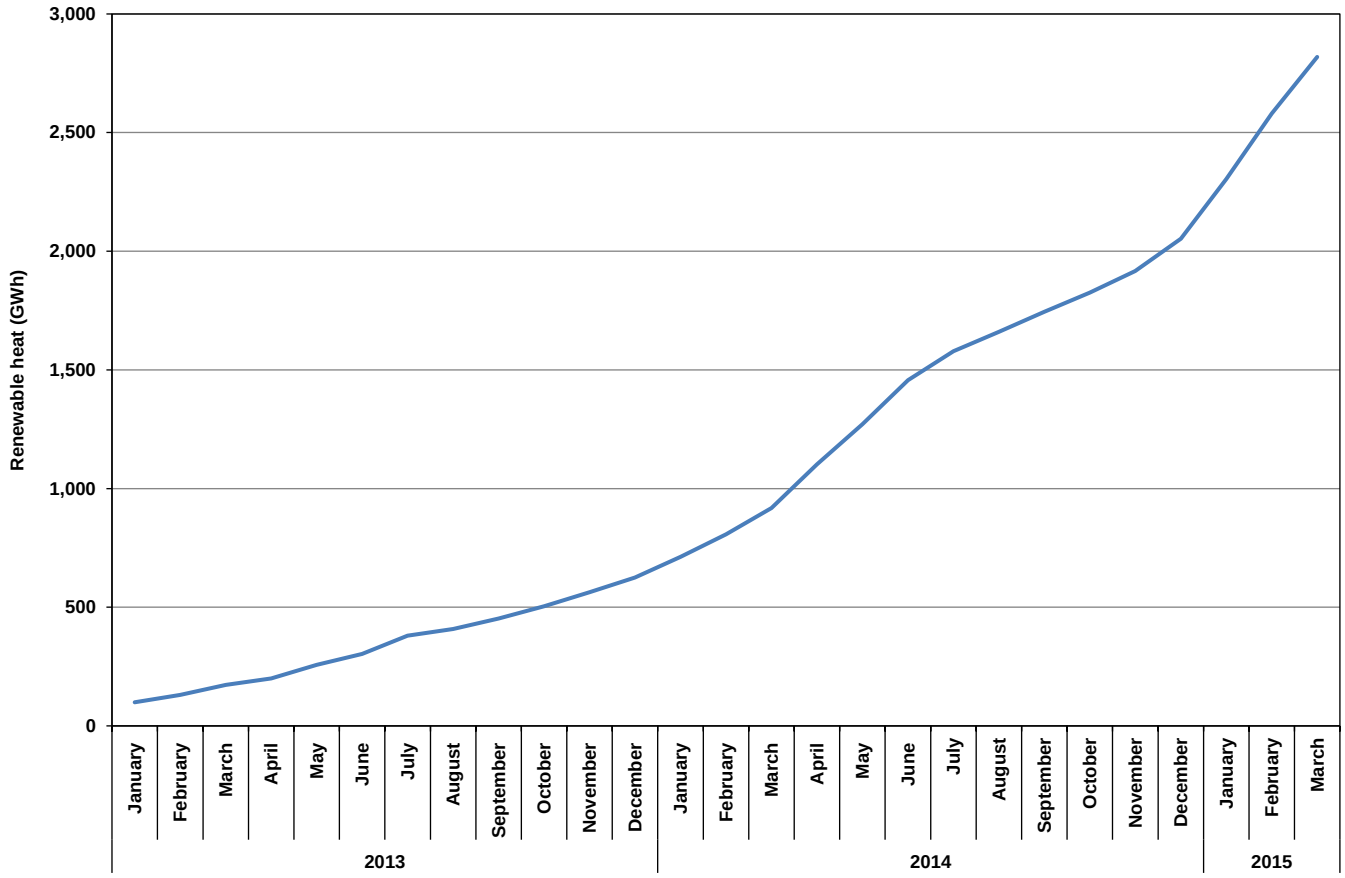
Technology	Heat generated and paid for under the scheme		Number of installations receiving payment	
	GWh	%	Number	%
Small biomass boiler (<200 kW)	1,145	41%	6,708	87%
Medium biomass boiler (200-1000 kW)	953	34%	591	8%
Large biomass boiler (>1000 kW)	531	19%	20	0%
Solar thermal (<200 kW)	1	0%	153	2%
Small water or ground source heat pumps (< 100 kW)	14	0%	170	2%
Large water or ground source heat pumps (>100 kW)	8	0%	16	0%
Air Source Heat Pumps	0	0%	2	0%
CHP	0	0%	0	0%
Deep Geothermal	0	0%	0	0%
Biogas	3	0%	7	0%
Total (1)	2,655	94%	7,667	100%
	Equivalent heat generated by gas produced		**Number of installations receiving payment**	
	GWh	%	Number	%
Biomethane (2)	163	6%	8	0%
Overall total (1) + (2)	2,818	100%	7,675	100%

Notes:
A distinction has been made between metered heat, generated on site and the equivalent energy of biomethane injected into the gas grid.

Source:
Ofgem

Figure 1.1 shows heat generated and paid for under the non-domestic RHI scheme, which increased by 766 GWh between Q4 2014 and Q1 2015. This is substantially higher than the 308 GWh increase seen between Q3 and Q4 2014, likely due to the number of installations accredited onto the scheme having increased significantly, and Q1 2015 payments largely covering heat generated during the winter months, during which time heating installations are often used most intensively.

Figure 1.1 – Cumulative heat generated and paid for, Great Britain



Notes:
These data relate to the period when the payment was made for heat generated not the period in which heat was actually generated.

Source:
Ofgem

1.5 Regional breakdown of applications

A large proportion of applicants are located in regions with large rural areas such as the South West (15 per cent) and Scotland (19 per cent). It is likely this is because many rural areas are not on the gas grid and applicants will be replacing solid fuel or oil burning systems with renewable systems.

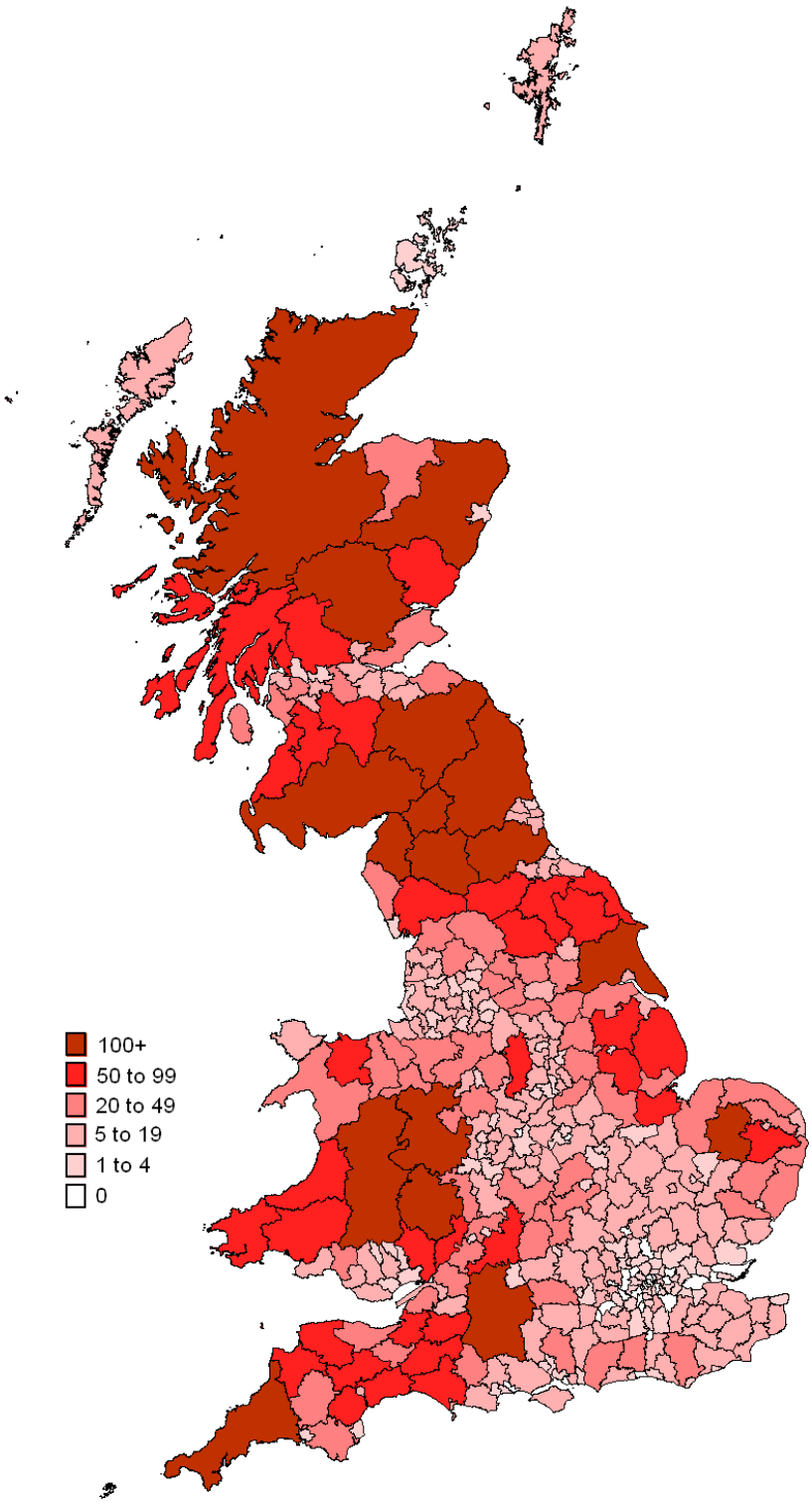
Table 1.4 shows a regional breakdown for the number of applications, accreditations and their capacities.

Table 1.4 - Number of applications and capacity by region, November 2011 to March 2015

Region	Full applications		Accredited installations		Capacity of full applications		Capacity of accredited installations	
	Number	% of total	Number	% of total	MW	% of total	MW	% of total
England	9,215	71%	6,498	73%	1,484.0	70%	1,077.3	73%
South West	1,973	15%	1,435	16%	254.3	12%	189.7	13%
West Midlands	1,251	10%	894	10%	229.0	11%	173.4	12%
Yorkshire and the Humber	1,337	10%	921	10%	210.1	10%	151.6	10%
North West	1,191	9%	819	9%	187.8	9%	137.8	9%
South East	835	6%	562	6%	134.9	6%	84.0	6%
East Midlands	1,188	9%	842	9%	212.4	10%	153.7	10%
East of England	891	7%	674	8%	167.6	8%	127.0	9%
North East	485	4%	309	3%	67.5	3%	46.4	3%
London	64	0%	42	0%	20.4	1%	13.6	1%
Scotland	2,467	19%	1,589	18%	445.2	21%	267.7	18%
Wales	1,341	10%	826	9%	185.8	9%	133.9	9%
Total	13,023	100%	8,913	100%	2,115.0	100%	1,479.0	100%

Source:
Ofgem

Figure 1.2 - Number of accredited installations by local authority, 31 March 2015

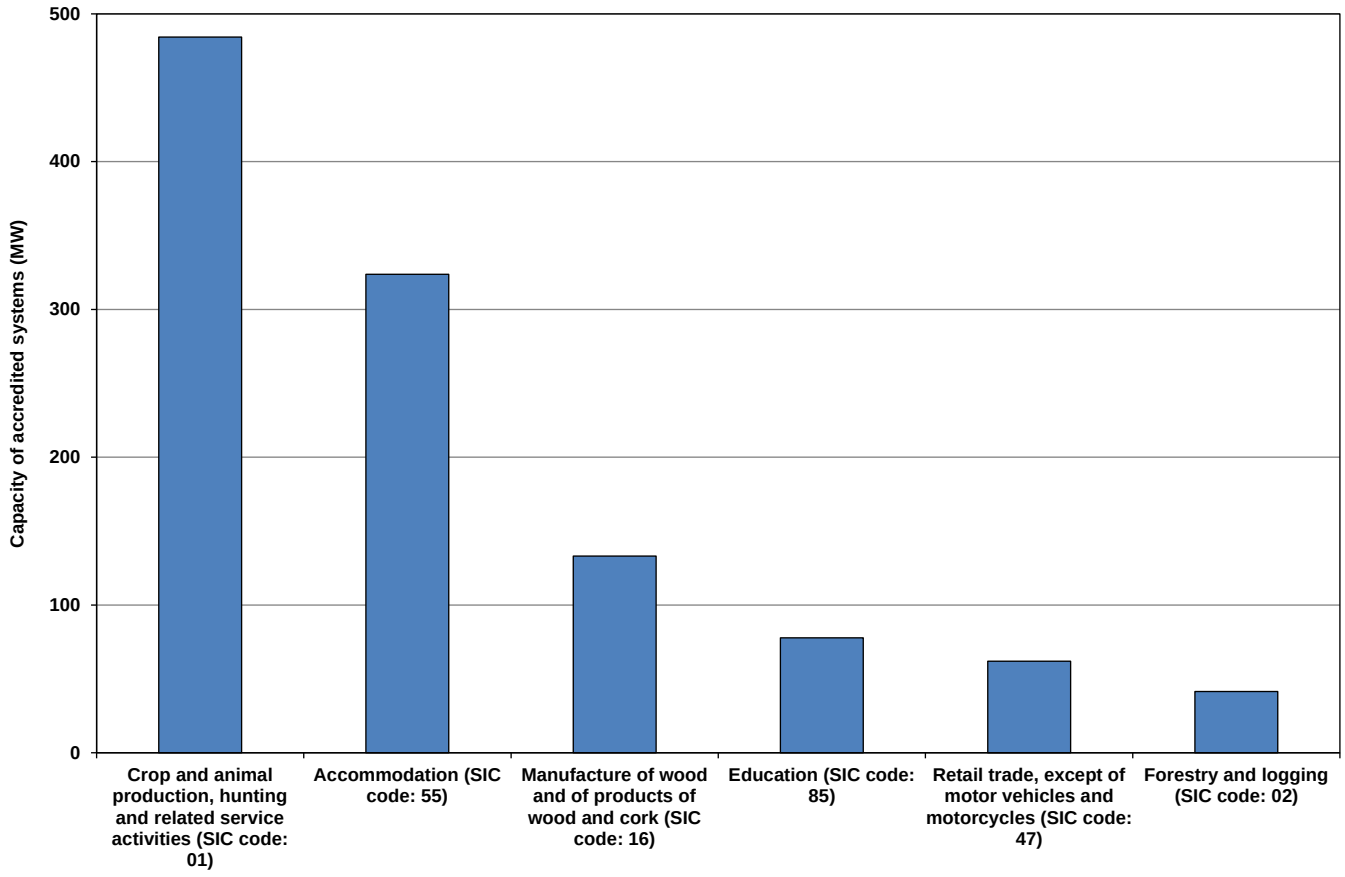


Source:
Ofgem

1.6 Installed capacity by Standard Industrial Classification (SIC) code

As at 31 March 2015, the combined capacity of all accredited installations was 1,479 MW. Thirty-three per cent of accredited capacity has been installed in the crop and animal production sector (SIC Code 1), and 22 per cent has been installed in the accommodation sector (SIC Code 55).

Figure 1.3 - Capacity of accredited installations by Standard Industrial Classification Code (SIC), Great Britain, November 2011 to March 2015



Source:
Ofgem

Further information on SIC codes is available at:

http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/standard-industrial-classification/index.html

Section 2 - Domestic Renewable Heat Incentive scheme

Key points

- As at 31 March 2015 there had been 36,707 unique applications to join the scheme (11,149 from new installations installed since 9 April 2014), of which 30,695 had been accredited.
- As at 31 March 2015, 42 per cent (12,766) of all accreditations were for air source heat pumps, 19 per cent (5,785) were for solar thermal, 26 per cent (7,861) were for biomass boilers, with ground source heat pumps accounting for 14 per cent (4,283) of accreditations.
- Of the 30,695 accreditations, 9,078 were from new installations (applicants who had systems installed on or after the domestic RHI scheme launch date of 9 April 2014) and 21,617 were from legacy applications (applications for systems installed between 15 July 2009 and launch of the scheme, on 9 April 2014).
- Of the 9,078 accreditations from new installations, 28 per cent (2,571) were for air source heat pumps, 13 per cent (1,151) were for solar thermal, 53 per cent (4,801) were for biomass boilers, with ground source heat pumps accounting for 6 per cent (555) of accreditations.
- A 20% reduction to the biomass tariff came into force from 1 April 2015 which encouraged an increase in new biomass applications throughout March. The spike in biomass applications during March mirrors the spike seen in December as a result of the previous biomass tariff reduction coming into effect from 1 January 2015.

2.1 Background to the scheme

The domestic Renewable Heat Incentive (RHI) is a financial incentive scheme introduced to encourage a switch to renewable heating systems in the domestic sector. This scheme is replacing the renewable heat premium payment (RHPP) schemes as the department's main programme of support for domestic renewable heat. Launched on 9 April 2014 in Great Britain, participants of the scheme receive tariff payments for the heat generated from an eligible

renewable heating system which is heating a single dwelling. The scheme covers single domestic dwellings and is open to owner-occupiers, private landlords, social landlords and self-builders. There are four renewable heating technologies covered by the scheme:

- Air-source heat pumps (ASHP);
- Ground and water-source heat pumps (GSHP);
- Biomass-only boilers and biomass pellet stoves with integrated boilers; and
- Solar thermal panels.

Further information on the domestic RHI scheme can be found at:

https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies/supporting-pages/renewable-heat-incentive-rhi

This section provides statistics on the number of applications and accreditations from 9 April 2014 (launch date) to 31 March 2015 based on data captured as part of the application process for the scheme.

The tables that accompany this statistical release are available at:

https://www.gov.uk/government/collections/renewable-heat-incentive-renewable-heat-premium-payment-statistics

2.2 Applications and accreditations

At 31 March 2015 there had been 36,707 applications and 30,695 accreditations of which 30 per cent of each were from new installations.

2.2.1 New installations

New installations refer to systems installed on or after the launch of the domestic RHI scheme on 9 April 2014. Such applicants have not received RHPP or any other government funding. As at 31 March 2015 there had been 11,149 applications for new installations to join the domestic RHI scheme and 9,078 of these had gone through full checks by Ofgem to ensure they comply with the relevant conditions, and had been accredited.

Since scheme launch, 53 per cent of accreditations from new installations were for biomass systems, 28 per cent for ASHPs, 13 per cent for solar thermal and 6 per cent for GSHPs.

2.2.2 Legacy installations

Legacy applicants are those who installed between 15 July 2009, when the scheme was first announced, and 9 April 2014 when the RHI scheme was first launched. As at 31 March 2015, of the 36,707 applications to join the domestic RHI scheme, 70 per cent (25,558) were from legacy applicants. 21,617 of the 25,558 legacy applications have been accredited, with 47 per cent of accreditations for ASHP, 21 per cent for solar thermal, 14 per cent for biomass systems and 17 per cent for GSHP. Of the 21,617 accredited legacy applicants, just over half had previously received a grant from the renewable heat premium payment scheme.

Table 2.1 below details the number of applications and accreditations by technology and by legacy and new installations.

Table 2.1 - Number of applications and accreditations by technology type, Great Britain, April 2014 to March 2015

New installations[2]

Tariff Band	Applications[3]		Accreditations	
	Number	% of total	Number	% of total
Air source heat pump	3,177	28%	2,571	28%
Ground source heat pump	720	6%	555	6%
Biomass systems	5,942	53%	4,801	53%
Solar thermal	1,310	12%	1,151	13%
Total	11,149	100%	9,078	100%

Legacy installations[4]

Tariff Band	Applications		Accreditations	
	Number	% of total	Number	% of total
Air source heat pump	12,268	48%	10,195	47%
Ground source heat pump	4,678	18%	3,728	17%
Biomass systems	3,305	13%	3,060	14%
Solar thermal	5,307	21%	4,634	21%
Total	25,558	100%	21,617	100%

Total (New & legacy installations)

Tariff Band	Applications		Accreditations	
	Number	% of total	Number	% of total
Air source heat pump	15,445	42%	12,766	42%
Ground source heat pump	5,398	15%	4,283	14%
Biomass systems	9,247	25%	7,861	26%
Solar thermal	6,617	18%	5,785	19%
Total	36,707	100%	30,695	100%

Notes:

1. Data cover the period 9 April 2014 (launch date of the domestic RHI scheme) to 31 March 2015.
2. New installations refers to applications for systems installed after the launch of the domestic RHI scheme on 9 April 2014.
3. An 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.
4. Legacy refers to all applications for systems installed before the launch of the domestic RHI scheme on 9 April 2014, whether they claimed a RHPP voucher or not.

Source:

Ofgem

Analysis from this point forward is based on new and legacy installations combined – unless specified.

2.3 Applications received by application status

As at 31 March 2015, 30,695 applications had received accreditation. There were 4,762 applications under review by Ofgem in order to determine the applicant's eligibility for accreditation onto the scheme (13 per cent of all applications received). A further 1,134 applications (3 per cent of applications received) either failed to meet the criteria of the online application system or were rejected by Ofgem upon the application being reviewed manually. There are 116 applications which gained accreditation and have subsequently been cancelled by the applicant.

Table 2.2 below shows applications received by technology and status of application as at 31 December 2014.

Table 2.2 - Application status, Great Britain, April 2014 to March 2015

Tariff Band		Application status					
		Accredited	In review[2]	Rejected[1,3]	Failed[1,3]	Cancelled[3]	Total
Air source heat pump	Number	12,766	1,998	638	11	32	15,445
	% of total	83%	13%	4%	0%	0%	100%
Ground source heat pump	Number	4,283	931	147	9	28	5,398
	% of total	79%	17%	3%	0%	1%	100%
Biomass systems	Number	7,861	1,270	79	6	31	9,247
	% of total	85%	14%	1%	0%	0%	100%
Solar thermal	Number	5,785	563	237	7	25	6,617
	% of total	87%	9%	4%	0%	0%	100%
Total	Number	30,695	4,762	1,101	33	116	36,707
	% of total	84%	13%	3%	0%	0%	100%

Notes:

1. Rejected applicants have been manually reviewed by Ofgem whereas failed application did not progress past the online application system.
2. The number in review will fluctuate over time as applications are processed and the status changes to one of the other categories in the table.
3. Where subsequent applications are received in place of a previously rejected, failed or cancelled application only the later is counted for our figures, as such the numbers in these categories will fluctuate over time.

Source:

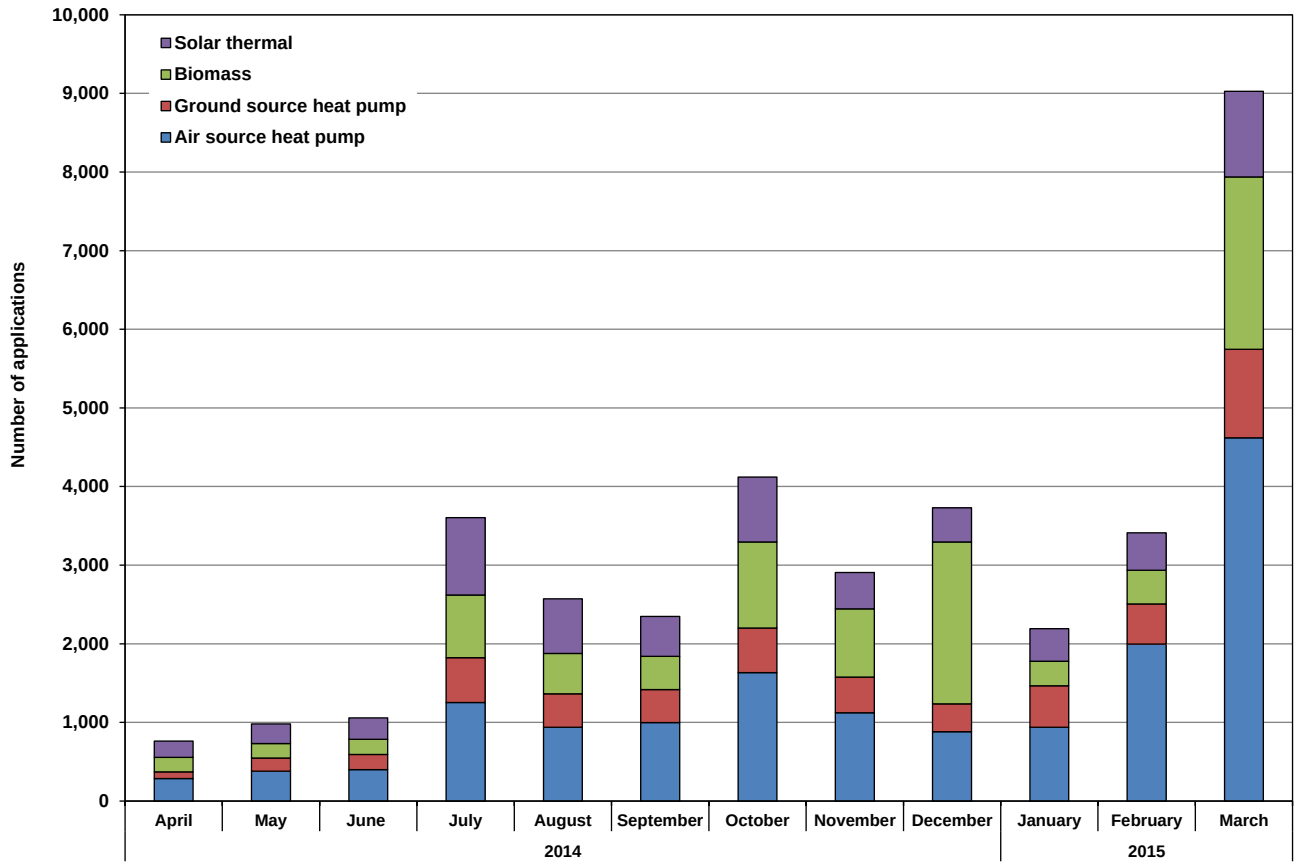
Ofgem

2.4 Application and accreditation rates

Since the scheme began applications received and accreditations granted per month have generally increased. There were specific increases in application rates during July, October and December 2014 and a large spike in applications in March 2015. The July and October 2014 peaks are largely due to two groups of RHPP recipients being eligible to apply; the first group became eligible on 9 July 2014 and the second on 9 October 2014. The increased application rate in December was likely to be due to new biomass applicants submitting applications before the tariff reduction by 10 per cent from 1 January 2015. As Figure 2.1 shows, the increased application levels only effected biomass in December 2014.

The large spike in applications in March 2015 was predominantly due to legacy applicants joining the scheme before the deadline for participation arrived on 8 April 2015. There was also an increase in new biomass applicants due to a 20% reduction to the biomass tariff effecting new participants applying after 1 April 2015. Out of these two contributing effects, legacy applicants dominated, accounting for 66 per cent of applications in March.

Figure 2.1 – Applications per month by technology, Great Britain, April 2014 to March 2015



Source:

Ofgem

Table 2.3 below shows the number of applications by date received and the number of accreditations onto the scheme by date accredited. In the last quarter (Q1 2015), 14,629 applications to the domestic RHI scheme were received, and 11,550 applications were granted accreditation. The number of applications has increased in each quarter since the start of the scheme due to the continued increase in new applications and the 2 cohorts of RHPP applicants becoming eligible in July and October. The deadline for legacy applications to apply to the domestic RHI is 8 April 2015 - there will be no more legacy application after this date. During the first year of the DRHI, legacy applicants have accounted for 70 per cent of participants.

Table 2.3 - Number of applications and accreditations per month, Great Britain, April 2014 to March 2015

		Number of applications	Cumulative number of applications	Number of accreditations	Cumulative number of accreditations
2014	April	763	763	369	369
	May	981	1,744	738	1,107
	June	1,057	2,801	1,140	2,247
	July	3,605	6,406	2,548	4,795
	August	2,571	8,977	2,524	7,319
	September	2,347	11,324	2,550	9,869
	October	4,119	15,443	3,287	13,156
	November	2,905	18,348	2,763	15,919
	December	3,730	22,078	3,226	19,145
2015	January	2,191	24,269	2,585	21,730
	February	3,411	27,680	2,872	24,602
	March	9,027	36,707	6,093	30,695
2014	Q1	-	-	-	-
	Q2	2,801	2,801	2,247	2,247
	Q3	8,523	11,324	7,622	9,869
	Q4	10,754	22,078	9,276	19,145
2015	Q1	14,629	36,707	11,550	30,695
Total		36,707		30,695	

Note:

Monthly application figures may change as amendments are made to applications.

Source:

Ofgem

2.5 Heat generated

As at 31 March 2015, 139GWh of heat have been paid for under the domestic RHI scheme. 37GWh of heat were produced from air source heat pumps (27 per cent), 23GWh from ground source heat pumps (17 per cent), 75GWh from biomass systems (54 per cent) and 3GWh from solar thermal (2 per cent). This is based on both annual deemed heat demands, where the applicant receives a set amount each quarter based upon the property's heat demand (determined via green deal assessment), and metered heat where the applicant provides meter readings.

Whilst 54 per cent of heat generated is from biomass systems they account for only 29 per cent of installations to have received one or more payments. This discrepancy is due to biomass systems typically being more powerful and therefore more likely to be installed within larger households. Conversely solar thermal accounts for 21 per cent of the installations receiving payment yet just 2 per cent of the heat paid for. This is because solar thermal is a complimentary heating technology not typically capable of producing heat in the volumes seen from the other technologies.

Accredited applicants will not receive their first payment until at least 3 months after they have been accredited. This is the reason for the discrepancy between the number of accredited applications and the number receiving payment.

Table 2.4 - Heat generated and number of installations receiving payment by technology, Great Britain, April 2014 to March 2015

Tariff Band	Heat paid for under the domestic scheme		Number of installations receiving payment	
	MWh	%	Number	%
Air source heat pump	37,235	27%	7,458	35%
Ground source heat pump	23,441	17%	3,176	15%
Biomass systems	75,013	54%	6,173	29%
Solar thermal	3,096	2%	4,388	21%
Total	138,785	100%	21,195	100%

Note:
Figures may not add up due to rounding.

Source:
Ofgem

The heat figures above are calculated using the data on tariff payments made as at 31 March 2015 to both new and legacy applicants.

2.6 Regional breakdown of applications and accreditations

A large proportion of applicants are located in regions with large rural areas such as the South West (17 per cent) and Scotland (19 per cent). It is likely this is because many rural areas are not on the gas grid and will be replacing solid fuel or oil burning systems with renewable systems.

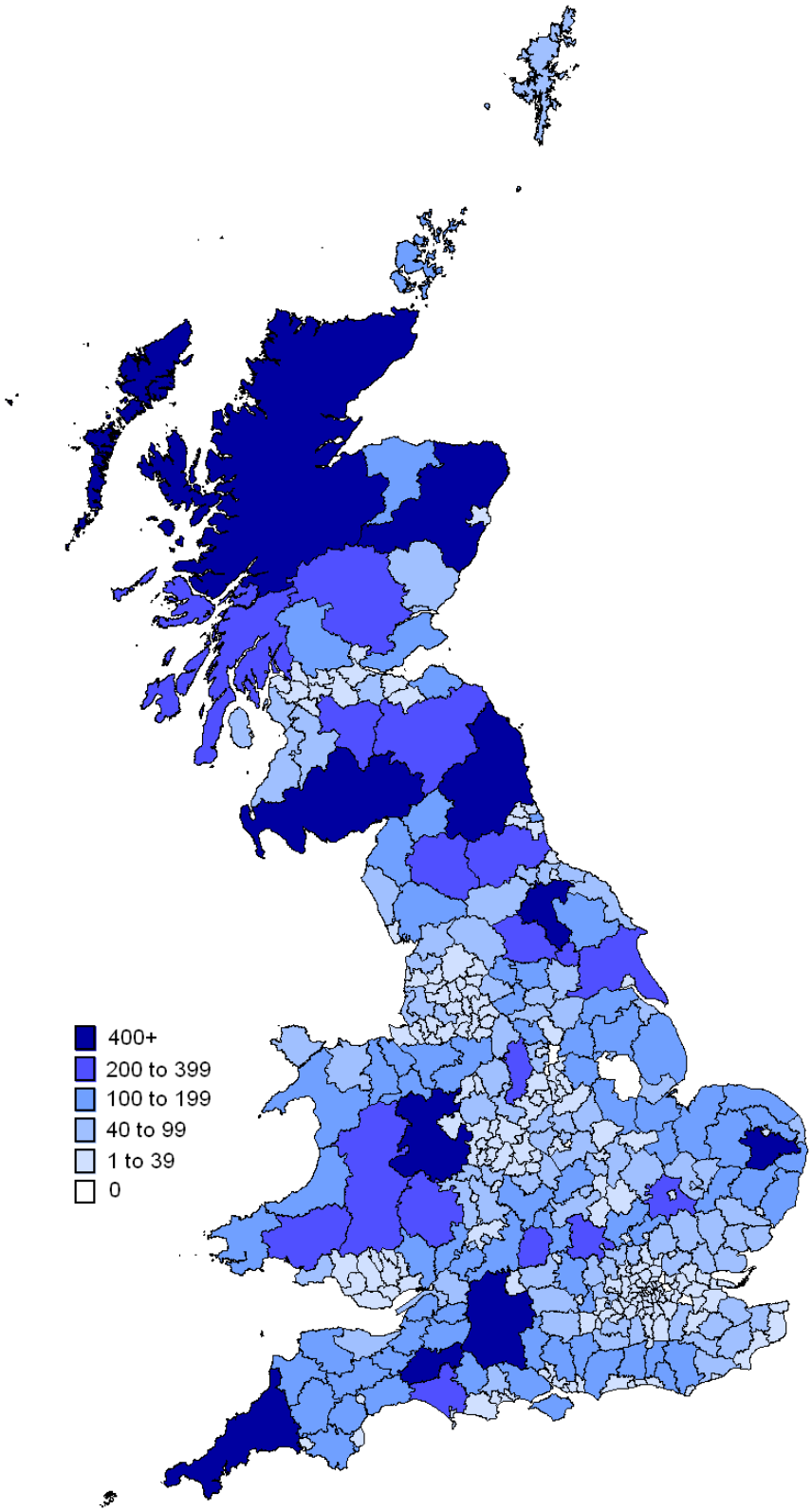
Table 2.5 below shows applications and accreditation by region.

Table 2.5 - Number of applications and accreditations by region, April 2014 to March 2015

Regions	Total			
	Applications		Accreditations	
	Number	% of total	Number	% of total
England	27,363	75%	22,746	74%
South West	6,299	17%	5,266	17%
West Midlands	2,272	6%	1,816	6%
Yorkshire and the Humber	3,128	9%	2,556	8%
North West	2,273	6%	1,877	6%
South East	4,718	13%	3,875	13%
East Midlands	2,750	7%	2,373	8%
East of England	4,278	12%	3,586	12%
North East	1,200	3%	1,032	3%
London	445	1%	365	1%
Scotland	6,800	19%	5,827	19%
Wales	2,544	7%	2,122	7%
Total	36,707	100%	30,695	100%

Source:
Ofgem

Figure 2.2 - Number of accredited installations by local authority, 31 March 2015



Source:
Ofgem

2.7 Fuel types displaced

As part of the application process, applicants are asked what fuel type they have replaced with their renewable system. Of the total accreditations Oil was the most common system being replaced across all technologies, however across the different technologies there are different factors effecting which systems are likely to be being replaced.

60 per cent of biomass systems are replacing oil boilers, this is likely because biomass systems are easily retro-fitted to work with conventional central heating systems. Nearly half (47 per cent) of GSHP installations fall into the other/NA category, it is anticipated that the majority of these systems are being installed in self built properties so are not replacing a previous system. GSHP's are probably more likely to be installed in self built properties because of the difficulties associated with retrofitting. ASHP's are replacing a mix of oil (29 per cent) electricity (30 per cent) and other/NA (22 per cent). Unlike the other technologies, solar thermal panels are complimentary heating systems and will be installed alongside another conventional or renewable heating system. Because of this a high proportion are displacing heat previously generated by mains gas.

Table 2.6 provides a breakdown of fuel type displaced by technology for accredited installations.

Table 2.6 – Accreditations by previous fuel type, April 2014 to March 2015

Tariff Band		Fuel type displaced							
		Oil	Biomass	LPG	Coal	Electricity	Gas	Other / NA[1]	Total
Air source heat pump	Number	3,705	15	473	802	3,887	1,043	2,841	12,766
	% of total	29%	0%	4%	6%	30%	8%	22%	100%
Ground source heat pump	Number	1,269	6	188	102	558	143	2,017	4,283
	% of total	30%	0%	4%	2%	13%	3%	47%	100%
Biomass systems	Number	4,747	100	637	458	982	346	591	7,861
	% of total	60%	1%	8%	6%	12%	4%	8%	100%
Solar thermal[2]	Number	1,357	28	189	145	583	2,532	951	5,785
	% of total	23%	0%	3%	3%	10%	44%	16%	100%
Total	Number	11,078	149	1,487	1,507	6,010	4,064	6,400	30,695
	% of total	36%	0%	5%	5%	20%	13%	21%	100%

Notes:

1. The 'Other / NA' category covers any application that is replacing a fuel type which is not covered by one of the six fuels in the table. It also covers accredited systems installed in new properties so no previous system was replaced.
2. Solar thermal panels are a complimentary technology that will be used in conjunction with another heating system.

Source:

Ofgem

2.8 Accreditations by tenure

At the end of March 2015, 79 per cent of systems accredited onto the domestic RHI were attributable to Owner Occupiers. A further 18 per cent were from Social Landlords, and 2 per cent from Private Landlords. ASHP's are far and away the most popular technology for social landlords, accounting for 82 per cent of systems installed by this demographic.
The proportion of applications from social landlords has increased substantially in the first quarter of 2015. At the end of December 2014 social landlords accounted for just 8 per cent of total accreditations, however this proportion had more than doubled by the end of March 2015. The increase in applications from social landlords is probably due in part to the removal of their obligation to have green deal assessments for all the properties for which they apply. Social landlords also make up a significant number of the potential legacy applicants which had a deadline of 8 April 2015 by which they must apply.

Table 2.7 provides a breakdown of tenure by technology for accredited installations.

Table 2.7 - Accreditations by tenure, Great Britain, April 2014 to March 2015

Tariff Band	Private Landlord		Social Landlord		Owner Occupier		Total	
	Number	% of total	Number	% of total	Number	% of total	Number	% of total
Air source heat pump	311	45%	4,648	82%	7,807	32%	12,766	42%
Ground source heat pump	129	19%	367	6%	3,787	16%	4,283	14%
Biomass systems	173	25%	195	3%	7,493	31%	7,861	26%
Solar thermal	71	10%	460	8%	5,254	22%	5,785	19%
Total	684	100%	5,670	100%	24,341	100%	30,695	100%

Notes:
1. Rejected applicants have been manually reviewed by Ofgem whereas failed application did not progress past the online application system.

Source:
Ofgem

2.9 Accreditations by property type

As at 31 March 2015, 51 per cent of installations to have gained accreditation onto the domestic RHI scheme are situated within detached houses. A further 25 per cent of installations are situated within bungalows, 15 per cent are installed in semi-detached houses, 8 per cent are situated within Terraced houses, and 2 per cent are situated within a flat or maisonette.
Air source heat pumps are popular across all property types as their requirements and variety of size mean they are suitable for most types of dwelling. Ground source heat pumps are far more likely to be installed within a detached house than any other property type as they often need outside space to install ground loops or drill bore holes. 69 per cent of accredited GSHPs have been installed within detached houses and 18 per cent in bungalows. Biomass boilers are more likely to be installed in a detached or semi-detached house as these systems are more

economical for larger properties with higher heat demands and often also require outside space to store fuel. Only 2 per cent of domestic RHI installations are used to heat either a Flat or Maisonette despite such properties accounting for 22 per cent of households in Great Britain.

The first quarter of 2015 has seen a slight increase in the proportions of systems installed in terraced, semi-detached houses, bungalows and flats or maisonettes. This is most likely attributed to an increase in the number of applications from social landlords in this period.
Table 2.8 shows a breakdown of accredited installations by property type and technology.

2.10 On/off gas split of accredited installations

The majority of accredited RHI installations on the domestic scheme are within households located off the gas grid (72 per cent). This is likely due to the financial incentive appealing more to off-gas recipients where installations will be replacing typically more expensive heating sources such as solid fuel or oil burning systems. The split is most pronounced for biomass systems, where 85 per cent are situated within households located off gas grid.

Table 2.9 shows a breakdown of the number of applications received from households on and off the grid, by country. The split is more pronounced in Scotland and Wales than England, where 87 per cent and 84 per cent respectively of applications received are from households located off the gas grid, compared with 67 per cent in England.

Solar thermal is the only technology to be installed in more on gas grid than off gas grid households (59 per cent within on gas grid households). This is likely due to solar thermal being installed to run in tandem with the primary heating units being used within household, as opposed to being installed to replace them.

Table 2.8 - Accreditations by property type, Great Britain, April 2014 to March 2015

Tariff Band	Detached house		Semi-detached house		Terraced house[1]		Bungalow[2]		Flat or Maisonette[3]		Total	
	Number	% of total	Number	% of total	Number	% of total	Number	% of total	Number	% of total	Number	% of total
Air source heat pump	4,564	29%	2,231	49%	1,412	60%	4,074	54%	485	88%	12,766	42%
Ground source heat pump	2,974	19%	418	9%	120	5%	762	10%	9	2%	4,283	14%
Biomass systems	5,095	32%	999	22%	379	16%	1,368	18%	20	4%	7,861	26%
Solar thermal	3,056	19%	881	19%	462	19%	1,346	18%	40	7%	5,785	19%
Total	15,689	100%	4,529	100%	2,373	100%	7,550	100%	554	100%	30,695	100%

Notes:

1. Terraced house includes: Enclosed-end-terrace house, Enclosed-mid-terrace house, Mid-terrace house, End-terrace house.
2. Bungalow includes: Mid-terrace bungalow , Detached bungalow , End-terrace bungalow , Semi-detached bungalow and park homes.
3. Flat or Maisonette includes: Basement flat, Basement maisonette, Ground-floor flat, Mid-floor flat, Top-floor flat, Top-floor maisonette.

Source:

Ofgem

Table 2.9 - Number of accredited installations on/off the gas grid by country, Great Britain, April 2014 to March 2015

Tariff Band		England		Scotland		Wales		Great Britain	
		On grid	Off grid	On grid	Off grid	On grid	Off grid	On grid	Off grid
Air source heat pump		2,719	6,848	217	2,360	100	522	3,036	9,730
Ground source heat pump		813	2,524	64	510	44	328	921	3,362
Biomass systems		903	4,308	235	1,752	78	585	1,216	6,645
Solar thermal		2,958	1,673	267	422	125	340	3,350	2,435
Total (excluding solar thermal)	Number	4,435	13,680	516	4,622	222	1,435	5,173	19,737
	% of total	24%	76%	10%	90%	13%	87%	21%	79%
Total	Number	7,393	15,353	783	5,044	347	1,775	8,523	22,172
	% of total	33%	67%	13%	87%	16%	84%	28%	72%

Notes:

This table was created using a list of off-gas postcodes generated by xoserve:
http://www.xoserve.com/wp-content/uploads/Off-Gas-Postcodes.xlsx

Source:

Ofgem
xoserve

Glossary

Accreditation (domestic and non-domestic)	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.
Air source heat pump	An air source heat pump (ASHP) is a central heating system which uses refrigerants, compressors and condensers to absorb heat from the outside air and transfer it to heat the inside of a building
Application (domestic)	All attempted online applications, including both successful and unsuccessful submissions.
Application effective date	The date from which an applicant can claim RHI payments for the renewable heat generated by their system.
Biomass system	Is a central heating boiler system fuelled by biomass (wood pellets, chips or logs)
Biogas	Biogas is a mixture of combustible gases produced by biological feedstock/ fuel which are burnt to generate heat.
Biomethane	Instead of burning biogas to generate heat on site, it can be processed to bring the calorific value of the gas to the same as that of natural gas and then injected into the gas network to be used elsewhere.
Capacity	The capacity of the system is the maximum power output. It depends on the installations size and technical capability.
Combined heat and power (CHP)	A system which generates electricity whilst also capturing usable heat generated in the process
Date of approval	The date on which Ofgem approved the eligibility of the application and accredited the installation.
Date of first submission	When the application was first registered with Ofgem.
Deep geothermal	Refers to the heat generated through radioactive decay below the surface of the earth.
Degression	The reduction of a tariff offered to new applicants to the scheme due to high demand. Existing recipients of the scheme retain their original tariff. Further information is available at: https://www.gov.uk/government/statistics/domestic-rhi-mechanism-for-budget-management-estimated-commitments
Failed (domestic)	One or more of the fields on the online application were invalid or did not meet the eligibility criteria meaning that the application could not be submitted to Ofgem.
Full application (non-domestic)	A completed application submitted to Ofgem E-serve with a relevant system already installed.
Ground source heat pump	A ground source heat pump (GSHP) is a central heating system which uses a ground heat exchanger to absorb heat from the ground and transfer it to heat the inside of a building
Heat Pumps	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.
Legacy	Refers to all applications for systems installed before the launch of the domestic RHI scheme on 9 April 2014, whether they claimed and RHPP voucher or not.
Microgeneration Certification Scheme (MCS)	The Microgeneration Certification Scheme (MCS) is an industry-led and internationally recognised quality assurance scheme, which demonstrates compliance to industry standards.
MW	MW stands for megawatt. A watt is a unit of power and a megawatt is a million watts.
MWh	MWh stands for a megawatt hour and is a unit of energy. It is equal to the amount of energy a system will generate in an hour whilst running at a megawatt power output.
New installations (non-Legacy)	Refers to applications for systems installed after the launch of the domestic RHI scheme on 9 April 2014.
Ofgem (Office of the Gas and Electricity Markets)	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.
Rejected (domestic)	An application which has not met one or more of the eligibility criteria after being manually reviewed by Ofgem.
Renewable Heat	Heat energy that comes from a natural source.
Solar thermal	Solar thermal panels use heat from the sun to provide hot water.
Seasonal performance factor (SPF)	A seasonal performance factor (SPF) is a seasonally adjusted coefficient of performance (COP). A COP is a measure of efficiency based on the proportion of useful energy given out compared with the amount taken to run the system. Therefore a system with a COP of 2 will produce twice the amount of thermal energy than electrical energy that it takes to run. Because the COP is calculated under laboratory conditions, seasonal adjustments are made to give its average performance across all times of the year to give us the SPF.
Tariff band	The different rates paid per kWh of heat produced or bio-methane injected depending on the size and type of installation.
Under review	An application that is currently being considered for accreditation.

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. The non-domestic phase of the RHI opened in November 2011.

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).

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).

Change to Non-Domestic Regulations

Amendments to the Non-domestic RHI regulations came into force on the 28th April 2014. The changes to the regulations include, but are not limited to: alterations to some tariff rates, changes to some tariff banding structures and the addition of several other technologies to the scheme.

Domestic RHI

The domestic RHI is an incentive scheme where participants receive tariff payments for the heat generated from an eligible renewable heating system which is heating a single dwelling. Payments are made over a 7 year period and tariff levels for each eligible technology have been calculated to bridge the financial gap between the cost of renewable and off-gas heating systems.

The eligible technologies are air source heat pumps, ground source heat pumps, biomass boilers and biomass stoves with integrated boilers and solar thermal panels. All systems must be installed under the Microgeneration Certification Scheme (MCS) or an equivalent scheme. MCS is an independent mark of quality assurance for microgeneration products and their proper installation.

In most cases, the amount of renewable heat generated will be estimated (‘deemed’). However, in some cases involving heat pumps and biomass systems, it will be assessed on meter readings, for example, where there is a secondary heating system in place. For heat pumps

and biomass systems, the deemed heat generation is estimated using values from the Energy Performance Certificate (EPC) of the relevant residence. An EPC contains values for the space heating and hot water demands of the property which have been calculated based on the physical characteristics of the dwelling. For solar thermal systems, the deemed amount is based on a calculation done by the MCS installer. In cases where metering is required, readings are used as the basis for working out RHI payments, capped at the deemed amount for that dwelling. In all cases, payment is calculated by multiplying the heat demand for the property by the tariff rate (pence per kWh).

Before applying for the RHI, applicants must have a Green Deal Assessment done on their property. They must also install loft and cavity wall insulation where these measures are recommended by their EPC, unless there are valid reasons not to. An updated EPC will be needed as evidence of their installation.

The scheme opened on 9 April 2014 and applicants may claim for eligible systems which were installed after 15 July 2009. Anyone who installs their heating system after 9 April 2014 can apply at any point, provided it is within 12 months of that installation. In order to control the flow of applications being received, Ofgem are taking a phased approach to those who installed their system between 15 July 2009 and 9 April 2014 (legacy applicants).

The approach is as follows:

- if the heating system was commissioned before 9 April 2014, but did not receive Renewable Heat Premium Payment (RHPP) funding, an application can be submitted now
- if RHPP funding was applied for before 20 May 2013 applicants will be permitted to apply three months after scheme launch, i.e. from 9 July 2014
- if RHPP funding was applied for on or after 20 May 2013 applicants will be permitted to apply six months after scheme launch, i.e. from 9 October 2014
- legacy applicants must apply before 9 April 2015. Recipients of public grants (including RHPP) will have their RHI payments adjusted accordingly.

Further information and feedback

Any enquiries or comments in relation to this statistical release should be sent to Andrew Wilson in DECC's Heat Statistics Team at the following email address: andrew.a.wilson@decc.gsi.gov.uk

Contact telephone: 0300 068 6589

The statistician responsible for this publication is William Rose.

Further information on energy statistics is available at https://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics

Next release

The data contained in this publication are updated on a monthly basis, with the next data scheduled for web release at 9:30am on 21 May 2015. The next quarterly publication will be at x9:30 on 23 July 2015.

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