Department of Energy & Climate Change

Renewable Heat Incentive quarterly statistical release, December 2014

22 January 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 December 2014, a total of 11,487 full applications to join the scheme had been received since it launched in November 2011, with a combined capacity of 1.9 GW. Of the 11,487 applications, 7,258 have been accredited with a combined capacity of 1.2 GW, with 6,073 of these accreditations receiving payment for heat generated under the scheme.

- In quarter four of 2014 there were a total of 2,563 full applications to join the non-domestic scheme. This was 26 per cent higher than in the third quarter of 2014, and more than triple the number of applications seen in quarter four in 2013. This increase was largely driven by a high number of applications received for small biomass boilers in December, likely due to November's degression announcement of a reduction to the small biomass tariff of 10 per cent, from 8.4 p/KWh to 7.6 p/KWh, with effect from 1 January 2015.

- Since the launch of the scheme, 88 per cent of both full applications and 86 per cent of accreditations have been for small biomass boilers. Small and medium biomass boilers combined are responsible for around 95 per cent of both applications and accreditations.

Domestic RHI

- As at 31 December 2014 there had been 22,755 unique applications to join the scheme (6,633 from new installations installed since 9 April 2014), of which 19,309 had been accredited.

- Of the 19,309 accreditations, 4,998 were from new installations (applicants who had systems installed on or after the domestic RHI scheme launch date of 9 April 2014) and 14,311 were from legacy applications (applications for systems installed between 15 July 2009 and launch of the scheme, on 9 April 2014).

- As at 31 December 2014, 36 per cent (7,007) of all accreditations were for air source heat pumps, 22 per cent (4,193) were for solar thermal, 27 per cent (5,187) were for biomass boilers, with ground source heat pumps accounting for 15 per cent (2,922) of accreditations.

- Of the 4,998 accreditations from new installations, 27 per cent (1,325) were for air source heat pumps, 15 per cent (743) were for solar thermal, 53 per cent (2,667) were for biomass boilers, with ground source heat pumps accounting for 5 per cent (263) of accreditations.

- A 10% reduction to the biomass trigger came into force from 1 January 2015 which has encouraged an increase in new biomass applications throughout December. In total the 4th calendar quarter of 2014 saw a 28 per cent increase in applications from the 3rd. This was primarily driven by an increase in biomass applications however installation numbers across the other technologies also increased during this period.

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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Will Rose – William.rose@decc.gsi.gov.uk

Section 1 - Non-domestic Renewable Heat Incentive scheme

Key points

- As at 31 December 2014, a total of 11,487 full applications to join the scheme had been received since it launched in November 2011, with a combined capacity of 1.9 GW. Of the 11,487 applications, 7,258 have been accredited with a combined capacity of 1.2 GW, with 6,073 of these accreditations receiving a payment for heat generated under the scheme.

- In quarter 4 of 2014 there were a total of 2,563 full applications to join the non-domestic scheme. This was 26 per cent higher than in the third quarter of 2014, and more than triple the number of applications seen in quarter 4 in 2013. This increase was largely driven by a high number of applications received for small biomass boilers in December, likely due to November's degression announcement of a reduction to the small biomass tariff of 10 per cent, from 8.4 p/KWh to 7.6 p/KWh, with effect from 1 January 2015.

- Since the launch of the scheme, 88 per cent of both full applications and 86 per cent of accreditations have been for small biomass boilers. Small and medium biomass boilers combined are responsible for around 95 per cent of both applications and accreditations.

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, who 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 December 2014 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 December 2014, 11,487 full applications had been received (including both successful and unsuccessful applications) to join the scheme. Of these, 7,258 have been accepted onto the scheme, and of these 6,073 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 full applications and 86 per cent of accreditations.

At the end of December 2014 there were an additional 101 preliminary applications, 33 per cent of which were for medium solid biomass boilers, a further 13 per cent of which were for large solid biomass boilers and 50 per cent 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, at the end of December 2014 there had been 17 full applications for air source heat pumps and five preliminary applications for Combined Heat and Power units (CHP). 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 December 2014

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)	10,086	88%	6,276	86%	0	0%	1,213.8	64%	752.0	62%	0	0%
Medium Solid Biomass Boiler (200-1000 kW)	767	7%	592	8%	33	33%	435.0	23%	344.9	28%	23.5	13%
Large Solid Biomass Boiler (> 1000 kW)	29	0%	19	0%	13	13%	191.6	10%	103.7	9%	67.5	37%
Small Solar Thermal (< 200 kW)	228	2%	161	2%	0	0%	3.7	0%	2.6	0%	0.0	0%
Small water or ground source heat pumps (< 100 kW)	270	2%	178	2%	0	0%	7.8	0%	5.2	0%	0.0	0%
Large water or ground source heat pumps (>100 kW)	35	0%	18	0%	0	0%	16.2	1%	5.3	0%	0.0	0%
Bio-Methane[5]	27	0%	6	0%	0	0%	0.0	0%	0.0	0%	0.0	0%
Biogas	28	0%	6	0%	50	50%	18.9	1%	1.5	0%	23.7	13%
Air Source Heat Pumps	17	0%	2	0%	0	0%	0.8	0%	0.1	0%	0.0	0%
CHP	0	0%	0	0%	5	5%	0.0	0%	0.0	0%	67.3	37%
Deep Geothermal	0	0%	0	0%	0	0%	0.0	0%	0.0	0%	0.0	0%
Total[4]	11,487	100%	7,258	100%	101	100%	1,887.8	100%	1,215.3	100%	182.0	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.

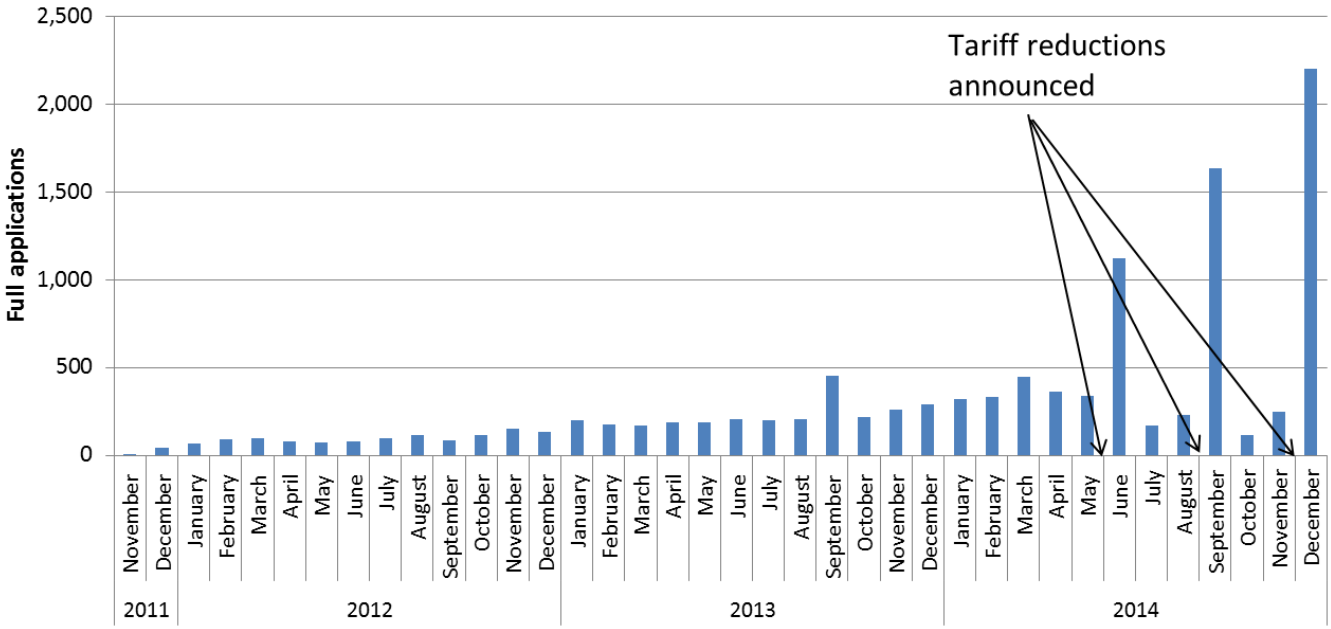
Source:
Ofgem

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 around 250 full applications per quarter at the beginning of the scheme in November 2011 to over 1,000 in the first quarter of 2014, around 2,000 in the second and third quarters and over 2,500 applications in the fourth quarter.

The peaks in applications seen in June, September and December 2014 are due to announcements in the respective previous month of a reduction 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.

Figure 1.1 – Number of full applications per month



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 should have started generating heat from the 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 Q4 2014

		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	50	50	2	2	0.0	0.0
2012	Q1	252	302	16	18	2.3	2.4
	Q2	230	532	94	112	35.4	37.8
	Q3	303	835	211	323	39.9	77.6
	Q4	396	1,231	393	716	66.8	144.5
2013	Q1	547	1,778	476	1,192	100.1	244.6
	Q2	577	2,355	536	1,728	109.0	353.6
	Q3	854	3,209	635	2,363	131.4	485.0
	Q4	767	3,976	523	2,886	91.1	576.1
2014	Q1	1,095	5,071	852	3,738	112.5	688.6
	Q2	1,821	6,892	1,077	4,815	162.1	850.7
	Q3	2,032	8,924	1,240	6,055	186.6	1,037.3
	Q4	2,563	11,487	1,203	7,258	178.0	1,215.3
Total		11,487		7,258		1,215.3	

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 December 2014, installations on the non-domestic RHI scheme had provisionally generated 2.0 TWh of eligible heat, up from 1.7TWh at the end of September 2014. Biomass boilers dominate heat generation with 5,756 systems responsible for 95 per cent of heat generated and paid for under the scheme – small biomass boilers 38 per cent (782GWh), medium biomass boilers 37 per cent (764 GWh), and large biomass boilers 19 per cent (397 GWh). Bio-methane was responsible for 4 per cent (83 GWh) of heat generated. Table 1.3 shows total heat generated at the end of December 2014 by technology. These data relate to the period when the payment was received for heat generated not the period in which heat was actually generated.

Table 1.3 - Heat generated and number of installations receiving payment by technology type, Great Britain, November 2011 to December 2014

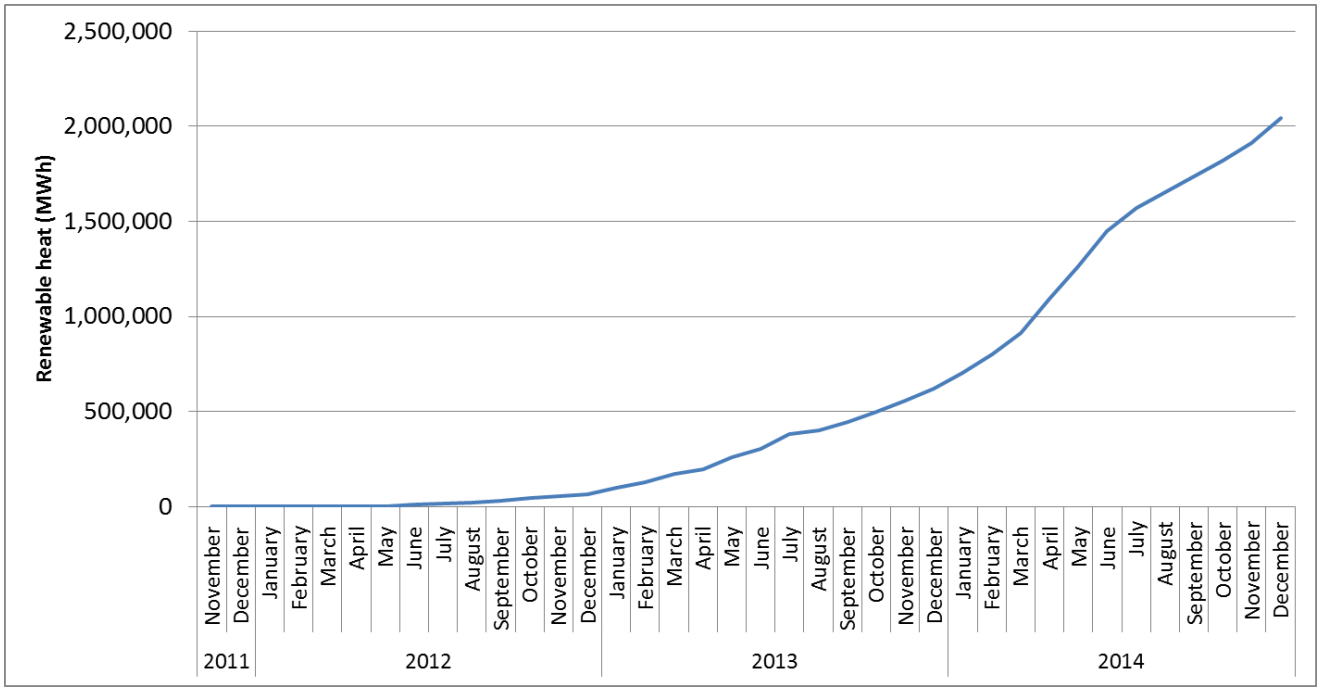
Technology	Heat generated and paid for under the scheme		Number of installations receiving payment	
	MWh	%	Number	%
Small biomass boiler (<200 kW)	782,059	38%	5,182	85%
Medium biomass boiler (200-1000 kW)	763,634	37%	556	9%
Large biomass boiler (>1000 kW)	397,332	19%	18	0%
Solar thermal (<200 kW)	1,337	0%	144	2%
Small water or ground source heat pumps (< 100 kW)	10,823	1%	153	3%
Large water or ground source heat pumps (>100 kW)	6,433	0%	14	0%
Air Source Heat Pumps	40	0%	2	0%
CHP	0	0%	0	0%
Deep Geothermal	0	0%	0	0%
Biogas	1,037	0%	4	0%
Total (1)	1,962,694	96%	6,073	100%
	Equivalent heat generated by gas produced		**Number of installations receiving payment**	
	MWh		Number	
Bio-methane (2)	82,700	4%	3	0%
Overall total (1) + (2)	2,045,394	100%	6,076	100%

Notes:
A distinction has been made between the heat generated and the equivalent energy generated by gas production because biogas can either be fired on site to produce heat or can be cleaned and fed into the gas grid.

Source:
Ofgem

Figure 1.1 shows the upward trajectory in heat generated and paid for under the non-domestic RHI scheme, which increased by 308 GWh between Q3 and Q4 2014. This is a slight increase on the 288 GWh increase between Q2 and Q3 2014, likely due to Q3 2014 covering the summer months, during which time heating installations are often used less intensively.

Figure 1.1 – Cumulative heat generated and paid for, Great Britain, November 2011 to December 2014



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 (16 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.

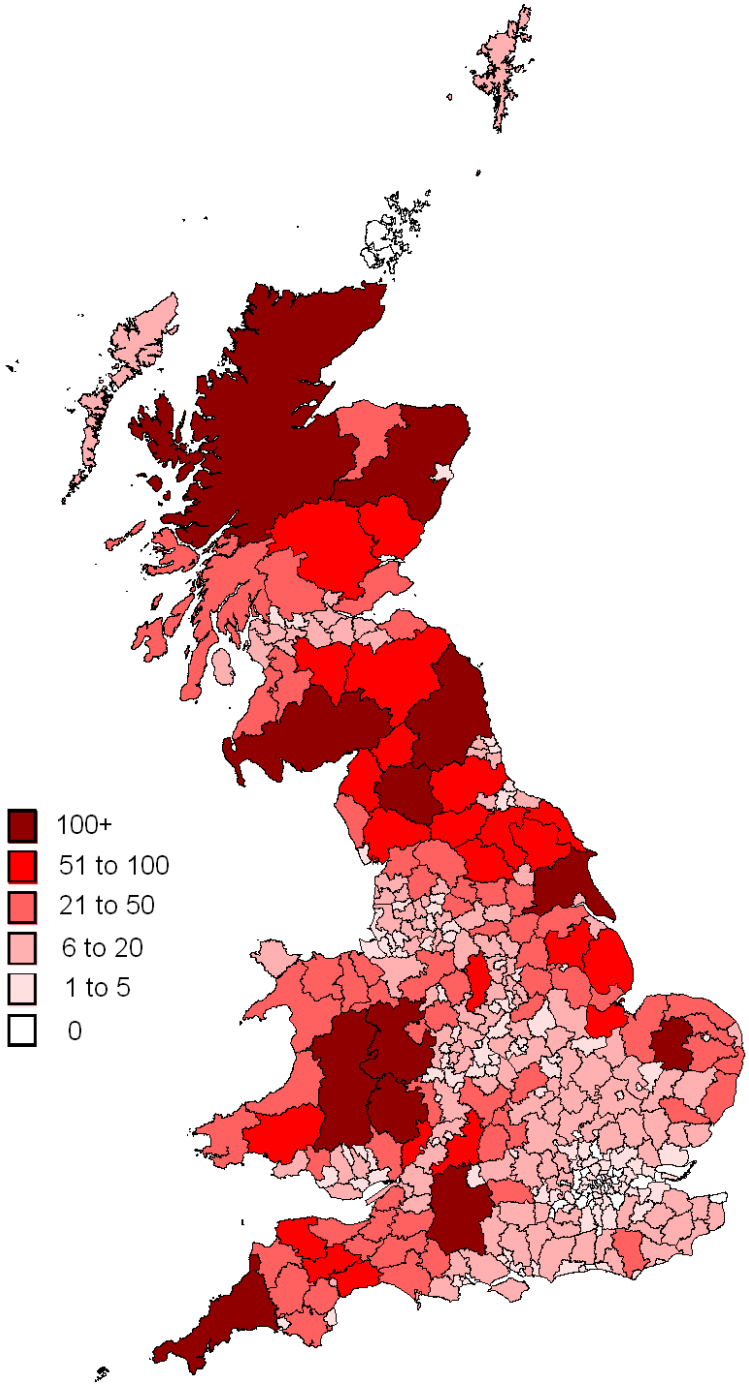
Table 1.4 - Number of applications and capacity by region, November 2011 to December 2014

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	8,226	72%	5,337	74%	1,329.2	70%	900.7	74%
South West	1,822	16%	1,243	17%	238.5	13%	167.3	14%
West Midlands	1,118	10%	760	10%	204.3	11%	153.0	13%
Yorkshire and the Humber	1,177	10%	778	11%	187.5	10%	131.8	11%
North West	1,060	9%	668	9%	169.1	9%	113.9	9%
South East	761	7%	467	6%	113.6	6%	69.8	6%
East Midlands	1,028	9%	613	8%	187.3	10%	114.6	9%
East of England	807	7%	521	7%	154.3	8%	99.0	8%
North East	400	3%	250	3%	58.7	3%	38.9	3%
London	53	0%	37	1%	15.8	1%	12.4	1%
Scotland	2,133	19%	1,274	18%	396.4	21%	225.2	19%
Wales	1,128	10%	647	9%	162.1	9%	89.4	7%
Total	11,487		7,258		1,887.8		1,215.3	

Source:

Ofgem

Figure 1.2 - Number of accredited installations by local authority, 31 December 2014

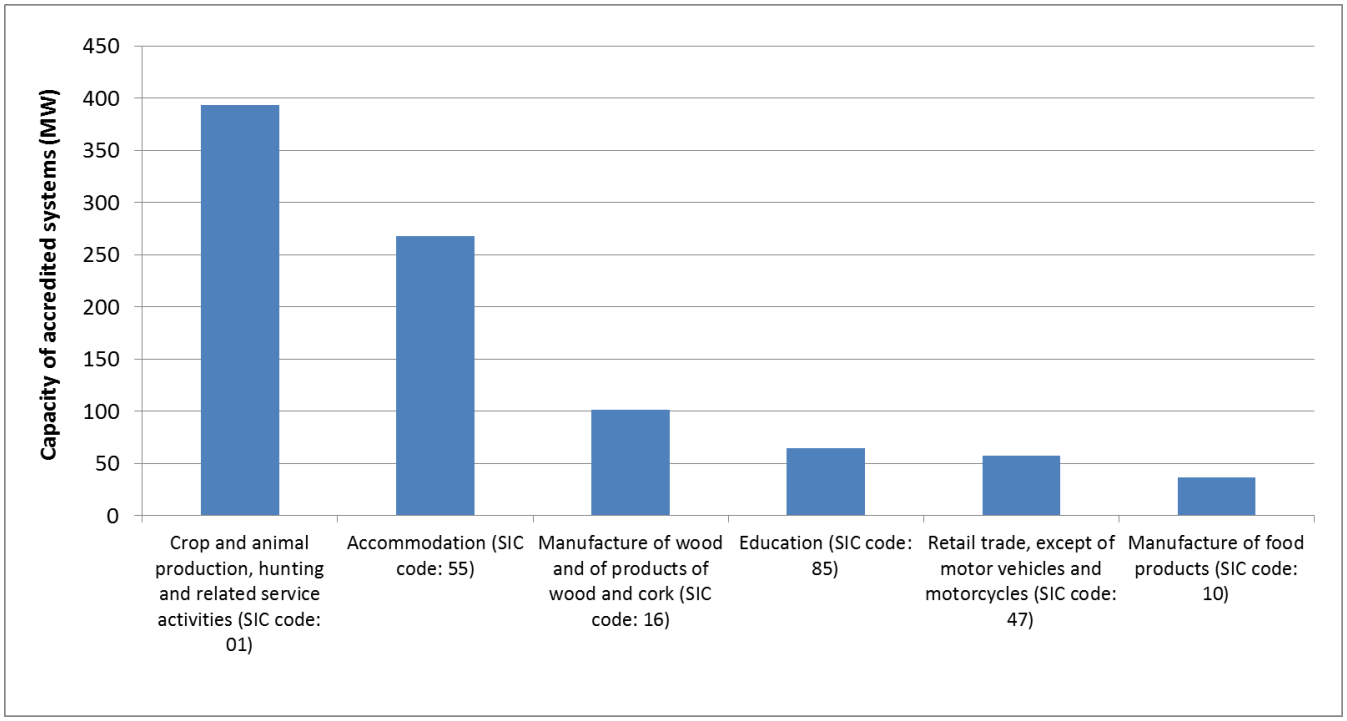


Source:
Ofgem

1.6 Installed capacity by Standard Industrial Classification (SIC) code

As at 31 December 2014, the combined capacity of all accredited installations was 1,215.3 MW. Just over 32 per cent of accredited capacity has been installed in the crop and animal production sector (SIC Code 1), and just over 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 December 2014



Source:
Ofgem

Further information on SIC codes are 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 December 2014 there had been 22,755 unique applications to join the scheme (6,633 from new installations installed since 9 April 2014), of which 19,309 had been accredited.
- Of the 19,309 accreditations, 4,998 were from new installations (applicants who had systems installed on or after the domestic RHI scheme launch date of 9 April 2014) and 14,311 were from legacy applications (applications for systems installed between 15 July 2009 and launch of the scheme, on 9 April 2014).
- As at 31 December 2014, 36 per cent (7,007) of all accreditations were for air source heat pumps, 22 per cent (4,193) were for solar thermal, 27 per cent (5,187) were for biomass boilers, with ground source heat pumps accounting for 15 per cent (2,922) of accreditations.
- Of the 4,998 accreditations from new installations, 27 per cent (1,325) were for air source heat pumps, 15 per cent (743) were for solar thermal, 53 per cent (2,667) were for biomass boilers, with ground source heat pumps accounting for 5 per cent (263) of accreditations.
- A 10% reduction to the biomass trigger came into force from 1 January 2015 which has encouraged an increase in new biomass applications throughout December. In total the 4th calendar quarter of 2014 saw a 28 per cent increase in applications from the 3rd. This was primarily driven by an increase in biomass applications however installation numbers across the other technologies also increased during this period.

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 departments 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 December 2014 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 December 2014 there had been 22,755 applications and 19,309 accreditations of which 29 per cent of applications and 26 per cent of accreditations 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 December 2014 there had been 6,633 applications for new installations to join the domestic RHI scheme and 4,998 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, 27 per cent for ASHP, 15 per cent for solar thermal and 5 per cent for GSHP.

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 December 2014, of the 22,755 applications to join the domestic RHI scheme, 71 per cent (16,122) were from legacy applicants. 14,311 of the 16,122 legacy applications have been accredited, with 40 per cent of accreditations for ASHP, 24 per cent for solar thermal, 18 per cent for biomass systems and 19 per cent for GSHP. Of the 14,311 accredited legacy applicants, approximately 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 total capacity by technology type, Great Britain, April 2014 to December 2014[1]

New installations[2]

Tariff Band	Applications[3]		Accreditations	
	Number	% of total	Number	% of total
Air source heat pump	1,713	26%	1,325	27%
Ground source heat pump	371	6%	263	5%
Biomass systems	3,690	56%	2,667	53%
Solar thermal	859	13%	743	15%
Total	6,633	100%	4,998	100%

Legacy installations[4]

Tariff Band	Applications		Accreditations	
	Number	% of total	Number	% of total
Air source heat pump	6,485	40%	5,682	40%
Ground source heat pump	3,060	19%	2,659	19%
Biomass systems	2,730	17%	2,520	18%
Solar thermal	3,847	24%	3,450	24%
Total	16,122	100%	14,311	100%

Total (New & legacy installations combined)

Tariff Band	Applications		Accreditations	
	Number	% of total	Number	% of total
Air source heat pump	8,198	36%	7,007	36%
Ground source heat pump	3,431	15%	2,922	15%
Biomass systems	6,420	28%	5,187	27%
Solar thermal	4,706	21%	4,193	22%
Total	22,755	100%	19,309	100%

Notes:

1. Data cover the period 9 April 2014 (launch date of the domestic RHI scheme) to 31 December 2014.

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 December 2014, 19,309 applications had received accreditation. There were 2,487 applications under review by Ofgem in order to determine the applicant's eligibility for accreditation onto the scheme (11 per cent of all applications received). A further 916 applications (4 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 43 applications which gained accreditation 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 December 2014

Tariff Band		Application status					
		Accredited	In review[2]	Rejected[1,3]	Failed[1,3]	Cancelled[3]	Total
Air source heat pump	Number	7,007	720	442	14	15	8,198
	% of total	85%	9%	5%	0%	0%	
Ground source heat pump	Number	2,922	339	160	5	5	3,431
	% of total	85%	10%	5%	0%	0%	
Biomass systems	Number	5,187	1,131	78	7	17	6,420
	% of total	81%	18%	1%	0%	0%	
Solar thermal	Number	4,193	297	201	9	6	4,706
	% of total	89%	6%	4%	0%	0%	
Total	Number	19,309	2,487	881	35	43	22,755
	% of total	85%	11%	4%	0%	0%	

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 been increasing, with peaks in July, October and December 2014. The July and October 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.

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 (Q4 2014), 11,175 applications to the domestic RHI scheme were received, and 9,374 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.

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

		Number of applications	Cumulative number of applications	Number of accreditations	Cumulative number of accreditations
2014	April	772	772	374	374
	May	992	1,764	746	1,120
	June	1090	2,854	1146	2,266
	July	3677	6,531	2564	4,830
	August	2640	9,171	2539	7,369
	September	2409	11,580	2566	9,935
	October	4270	15,850	3343	13,278
	November	3022	18,872	2778	16,056
	December	3883	22,755	3253	19,309
2014	Q1	-	-	-	-
	Q2	2,854	2,854	2,266	2,266
	Q3	8,726	11,580	7,669	9,935
	Q4	11,175	22,755	9,374	19,309
Total		22,755		19,309	

Note:

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

Source:

Ofgem

2.5 Heat generated

As at 31 December 2014, 48.5GWh of heat have been paid for under the domestic RHI scheme. 15.2 GWh of heat were produced from air source heat pumps (31 per cent), 9.5 MWh from ground source heat pumps (20 per cent), 22.5 GWh from biomass systems (46 per cent) and 1.4 GWh from solar thermal (3 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 46 per cent of heat generated is from biomass systems they account for only 16 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 25 per cent of the installations receiving payment yet just 3 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 December 2014

Tariff Band	Heat paid for under the domestic scheme		Number of installations receiving payment	
	MWh	%	Number	%
Air source heat pump	15,214	31%	4,035	37%
Ground source heat pump	9,481	20%	1,791	16%
Biomass systems	22,452	46%	2,280	21%
Solar thermal	1,398	3%	2,768	25%
Total	48,544	100%	10,874	100%

Source:

Ofgem

The heat figures above are calculated using the data on tariff payments made as at 31 December 2014 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 (18 per cent) and Scotland (16 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.

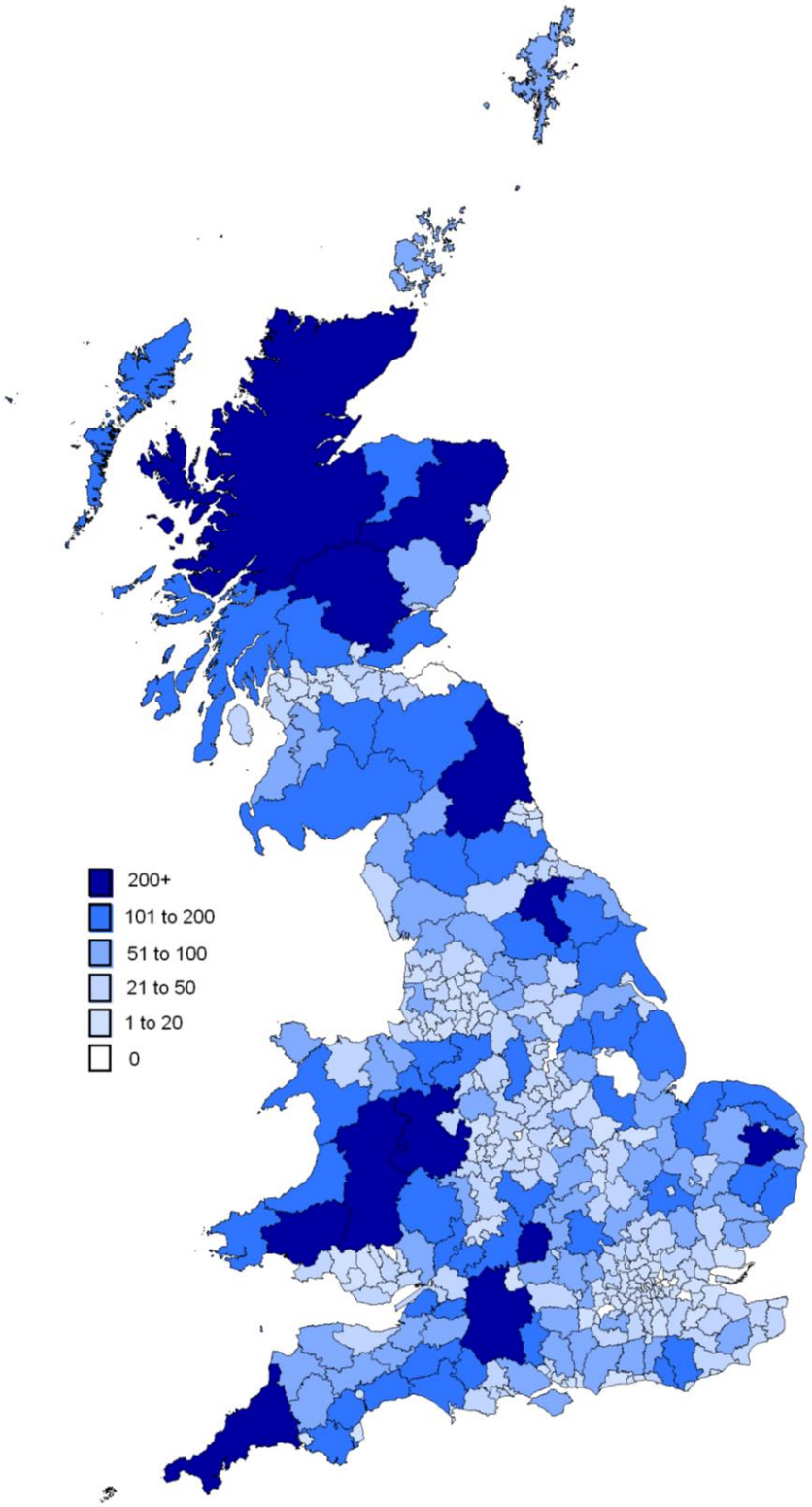
Table 2.5 - Number of applications and accreditations by region, April 2014 to December 2014

Region	Applications		Accredited	
	Number	% of total	Number	% of total
England	17,450	77%	14,812	77%
South West	4,131	18%	3,556	18%
West Midlands	1,435	6%	1,167	6%
Yorkshire and the Humber	1,938	9%	1,596	8%
North West	1,414	6%	1,173	6%
South East	3,052	13%	2,651	14%
East Midlands	1,943	9%	1,680	9%
East of England	2,557	11%	2,167	11%
North East	685	3%	565	3%
London	295	1%	257	1%
Scotland	3,549	16%	3,000	16%
Wales	1,756	8%	1,497	8%
Total	22,755		19,309	

Source:

Ofgem

Figure 2.1 - Number of accredited installations by local authority, 31 December 2014



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 (legacy and new installations) as at 31 December 2014, 40 per cent were replacing oil boilers. Oil was the most common system being replaced across all technologies. Solar thermal systems do not follow the same trend as the other technologies as panels are installed alongside other traditional heating systems.

Systems being replaced by air source heat pumps are generally more varied due to smaller size and ease of retrofit.

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 December 2014

Tariff Band		Fuel type displaced							
		Oil	Biomass	LPG	Coal	Electricity	Gas	Other / NA[1]	Total
Air source heat pump	Number	2,624	9	365	342	1,152	767	1,748	7,007
	% of total	37%	0%	5%	5%	16%	11%	25%	100%
Ground source heat pump	Number	913	2	133	68	300	107	1,399	2,922
	% of total	31%	0%	5%	2%	10%	4%	48%	100%
Biomass systems	Number	3,191	63	410	284	594	231	414	5,187
	% of total	62%	1%	8%	5%	11%	4%	8%	100%
Solar thermal[2]	MW	1,013	16	147	89	375	1,926	627	4,193
	% of total	24%	0%	4%	2%	9%	46%	15%	100%
Total	MW	7,741	90	1,055	783	2,421	3,031	4,188	19,309
	% of total	40%	0%	5%	4%	13%	16%	22%	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 prope
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 December 2014, 90 per cent of systems accredited onto the domestic RHI were attributable to Owner Occupiers. A further 8 per cent were from Social Landlords, and 2 per cent from Private Landlords. Of the 1,462 accredited heating systems installed by Social Landlords, 78 per cent were for air source heat pumps.

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

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

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	161	42%	1,147	78%	5,699	33%	7,007	36%
Ground source heat pump	93	24%	159	11%	2,670	15%	2,922	15%
Biomass systems	82	21%	9	1%	5,096	29%	5,187	27%
Solar thermal	46	12%	147	10%	4,000	23%	4,193	22%
Total	382	2%	1,462	8%	17,465	90%	19,309	

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 December 2014, 58 per cent of installations to have gained accreditation onto the domestic RHI scheme are situated within detached houses. A further 24 per cent of installations are situated within bungalows, 13 per cent are installed in semi-detached houses, 5 per cent are situated within Terraced houses, and 1 per cent are situated within a flat or maisonette.

Air source heat pumps are popular across all property types as their size 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. 72 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, 66 per cent of biomass installations are in detached houses. 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.

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 (70 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 84 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 84 per cent and 83 per cent of applications received respectively are from households located off the gas grid, compared with 65 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 December 2014

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	3,277	29%	971	40%	521	51%	2,101	46%	137	77%	7,007	36%
Ground source heat pump	2,105	19%	216	9%	67	7%	529	12%	5	3%	2,922	15%
Biomass systems	3,440	31%	636	26%	193	19%	905	20%	13	7%	5,187	27%
Solar thermal	2,301	21%	614	25%	238	23%	1,018	22%	22	12%	4,193	22%
Total	11,123	100%	2,437	100%	1,019	100%	4,553	100%	177	100%	19,309	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 December 2014

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		1,727	3,985	121	723	71	380	1,919	5,088
Ground source heat pump		580	1,690	48	364	28	212	656	2,266
Biomass systems		638	2,850	154	1,106	50	389	842	4,345
Solar thermal		2,206	1,136	157	327	99	268	2,462	1,731
Total (excluding solar thermal)	Number	2,945	8,525	323	2,193	149	981	3,417	11,699
	% of total	26%	74%	13%	87%	13%	87%	23%	77%
Total	Number	5,151	9,661	480	2,520	248	1,249	5,879	13,430
	% of total	35%	65%	16%	84%	17%	83%	30%	70%

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

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)
Capacity	The capacity of the system is the maximum power output. It depends on the installations size and technical capability.
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.
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.
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 19 February 2015. The next quarterly publication will be at 9:30am on 23 April 2015.

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