

Non-Domestic Renewable Heat Incentive (NDRHI) **Annual Report**

Scheme Year 12 (1 April 2022 – 31 March 2023)



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Executive Summary

Ofgem runs a range of environmental and social schemes on behalf of government and for the devolved administrations. Together, these are worth over £9 billion each year. Our schemes fall into three main categories: renewable electricity schemes, renewable heat schemes, and energy efficiency and social schemes.

The Non-Domestic Renewable Heat Incentive (NDRHI) scheme launched in 2011 and it is designed to help Great Britain (GB) reduce its carbon emissions and contributes towards reaching Net Zero. The scheme provides financial incentives to increase the uptake of low carbon heating systems by businesses, the public sector and non-profit organisations in GB.

Under the NDRHI scheme, eligible installations receive quarterly payments over 20 years based on the amount of heat generated, or in the case of biomethane, the volume of green gas injected into the gas grid. The scheme closed to most new applicants on 31 March 2021, however, in line with the regulations, Tariff Guarantee and extension applications were accepted till 31 March 2023. From 1 April 2023, the scheme closed to all entrants.

Ofgem has been responsible for administering the NDRHI scheme in GB on behalf of the Department for Energy Security and Net-Zero (DESNZ)¹ since its introduction. Our role includes processing applications and amendments, calculating and making payments to accredited participants and engaging with scheme stakeholders. Additionally, we conduct annual audit programmes to ensure participants are complying with the scheme rules which helps ensure the fair and effective use of public funds.

The Northern Ireland (NI) RHI, similar to the NDRHI scheme in GB, supports non-domestic organisations in NI to take up low carbon heat. The activity under the NI RHI scheme is not covered in this report².

As a part of our responsibilities, we produced this report summarising activity during the twelfth year of the NDRHI scheme in GB (Scheme Year 12), covering the period 1 April 2022 to 31 March 2023.

¹ From February 2023 the new DESNZ (Department for Energy Security and Net-Zero) are responsible for RHI policy in GB. This responsibility was previously held by BEIS (Department for Business, Energy & Industrial Strategy) and DECC (Department of Energy & Climate Change).

² The Department for the Economy (DfE) set the policy and tariffs, and report on the NI RHI.
[Northern Ireland Renewable Heat Incentive](https://www.ofgem.gov.uk/environmental-and-social-schemes/non-domestic-renewable-heat-incentive-rhi/northern-ireland-renewable-heat-incentive): <<https://www.ofgem.gov.uk/environmental-and-social-schemes/non-domestic-renewable-heat-incentive-rhi/northern-ireland-renewable-heat-incentive>>
[Renewable Heat Incentive for non-domestic customers](https://www.nidirect.gov.uk/articles/renewable-heat-incentive-non-domestic-customers): <<https://www.nidirect.gov.uk/articles/renewable-heat-incentive-non-domestic-customers>>

Accreditations (page 11)

The impact of the NDRHI scheme since it started has been significant. The scheme has supported 22,602 low carbon heating systems to become fully operational across GB. In Scheme Year 12 (SY12), we received 546 applications in total. This represents an increase of over 41% in applications received compared to (Scheme Year 11) SY11, with nearly 30% received in March 2023 before the closure of the scheme. In SY12 we accredited 732 additional installations to the scheme. This represents a decrease of 48% compared to SY11, which can be attributed to the diminishing queue of increasingly complex applications.³

Solid biomass boilers are the most common technology type deployed under the scheme, making up around 77% of all accredited installations. Since 2014, tariff reductions due to a degression mechanism⁴ have led to changes in the make up of applications being received which saw a decrease in the share of solid biomass boilers. However, by SY12, solid biomass boilers again accounted for almost 67% of newly accredited capacity compared to over 43% last year. Meanwhile, ground source heat pumps (GSHP), which made up only 2.2% of capacity accredited between SY1 to SY8, made up nearly 22% of newly accredited capacity in SY12. This is a drop from 28% in SY11 and 34% SY10.

Payments and heat generation (page 26)

Nearly 66.7 TWh of heat generation has been subsidised by the scheme so far, with payments made in relation to around 10.7 TWh generation during SY12 alone. Additionally, more than 2.1 billion m³ of green gas has been injected into the grid since the start of the scheme, with payments made in relation to the injection of 418 million m³ in SY12. A total of £4.99 billion in payments have been made to participants since the start of the scheme; £886 million of this was paid out in SY12. Participants who continue to meet scheme rules may receive payments for a period of up to 20 years.

³ An error in the way some accredited Tariff Guarantee applications were previously being counted has resulted in a historical undercount in the number of accredited installations. This error has now been corrected and the historical values updated, and the comparison here is made based on the updated values (1,407 accreditations in SY11). Further information on this can be found in Chapter 2.

⁴ The degression mechanism is an automatic tariff reduction to help control budgeting of the scheme. This is determined by the projected growth rates of eligible technologies. More information on degression is available on the UK government's website: [NDRHI mechanism for budget management: estimated commitments – NDRHI degression factsheet](https://www.gov.uk/government/publications/rhi-mechanism-for-budget-management-estimated-commitments): <<https://www.gov.uk/government/publications/rhi-mechanism-for-budget-management-estimated-commitments>>

Audit and compliance (page 30)

We take non-compliance with scheme obligations very seriously. Whilst the NDRHI scheme has closed to new applications, we continued to actively monitor participant compliance to ensure that only those that continue to meet scheme rules receive payments. This, along with the counter fraud measures that we continue to implement, ensures that we only pay subsidies on eligible heat generation, thereby ensuring fair and effective use of public funds.

The aim of our audit programme is to check the compliance of scheme participants with the scheme regulations and our guidance. In SY12, we conducted 414 statistical and targeted audits. Just above 52% of statistical and nearly 38% of targeted audit cases were classed as materially non-compliant, suggesting a potential financial impact⁵. The most common reason for material non-compliance was 'no evidence of sustainable fuel', accounting for nearly 34% of instances. This means that these generators could not provide evidence that the fuels used met sustainability requirements. However, the percentage of payments going out erroneously ('error rate') on the scheme was estimated to be just 0.3% in SY12, a reduction from the 0.4% for SY11.

We have the power to open a compliance investigation when we suspect a scheme participant is non-compliant. In SY12, we completed 696 compliance investigations where we protected or expect to recover nearly £2.8 million of public funds. Relying on our well-established debt recovery process, during SY12 we were able to recover a total of £1.4 million originating from various scheme years. This sum comprised of nearly £1.3 million recovered via offsetting from periodic payments and over £135,000 recovered through direct repayments and repayments plans. In light of the current cost-of-living pressures, we have reviewed our debt management process and made some improvements to ensure that we are taking a more participant-focussed approach.

As in previous years, we took a proactive approach to compliance on the NDRHI scheme. We engaged with all scheme participants and potential applicants to ensure that they are aware of key scheme updates which were vital to the effective and robust operation of the NDRHI scheme.

⁵ Material non-compliance identified during audit is subject to further compliance investigation. It is often the case that after further investigation it is determined that there is no financial impact. Further information on this can be found in Chapter 4.

Please note: a spreadsheet containing the data used in the production of this report is published alongside the report on our website.

Feedback

We welcome feedback from readers on the content of this report.

If you wish to get in touch, please contact us at SchemesReportingFeedback@ofgem.gov.uk with your comments or suggestions.

22,602

Accredited installations

In total, **22,602 installations** have been accredited to the scheme with a **combined capacity of 5,980 MW**.

66.7 TWh

Heat generated

66.7 TWh of heat has been generated under the scheme to date, with payments made in relation to **10.7 TWh** generation during (Scheme Year 12) SY12.

2.1 billion m³

Green gas injected

2.1 billion m³ of green gas has been injected into the gas grid over the life of the scheme, with payments made in relation to the injection of **418 million m³** in SY12.

£4.99 billion

Payments made

£4.99 billion in payments have been made since the start of the scheme. **£886 million** of this was paid during SY12.

1.3 million

Homes

Heat generation and green gas injection during SY12 would be enough to heat almost **1.3 million average UK homes** for a year or to heat **5.6 billion hot baths**.

1. About the scheme

Chapter summary

This chapter introduces the context and legislative background to the Non-Domestic Renewable Heat Incentive (NDRHI) scheme, including Ofgem's administrative duties. This chapter also summarises the changes to the scheme affecting and/or coming into force during Scheme Year 12 (SY12).

Introduction

- 1.1 The Non-Domestic Renewable Heat Incentive (NDRHI) scheme was introduced in England, Scotland and Wales in November 2011 by the Department for Energy and Climate Change (DECC)⁶ and is a financial incentive designed to encourage the uptake of low carbon heating systems. The scheme is designed to help the United Kingdom reduce its carbon emissions and contributes towards reaching Net Zero.
- 1.2 The Northern Ireland (NI) RHI, similar to the NDRHI scheme in Great Britain (GB), supports businesses, public sector, and other non-domestic and non-profit organisations in NI to take up low carbon heat. The Department for the Economy (DfE) set the policy and tariffs, and report on the NI RHI scheme. The NI scheme is not covered in this report.
- 1.3 The Gas and Electricity Markets Authority (the Authority) is the statutory body responsible for administering the NDRHI scheme in GB. The Authority's functions are performed by Ofgem, the office of the Authority. As administrator, Ofgem performs a number of functions including:
 - publishing guidance
 - the review of applications to join the scheme
 - ensuring scheme participants continue to meet their ongoing obligations
 - receiving and checking participants' periodic data submissions before making periodic support payments, and
 - ensuring the scheme is guarded against fraud and error.

⁶ From July 2016 the Department for Business, Energy and Industrial Strategy (BEIS) assumed the roles and responsibilities of the Department of Energy and Climate Change (DECC). From February 2023 the new Department for Energy Security and Net-Zero (DESNZ) are responsible for RHI policy in GB.

- 1.4 The Renewable Heat Incentive Scheme Regulations 2018 (as amended) (the Regulations)⁷ require us to produce and publish an annual report on the scheme by 31 July following the end of a scheme year. Each scheme year covers the period 1 April to 31 March with this report covering 1 April 2022 to 31 March 2023. The Regulations set out what should be reported on in this annual report. However, we also include additional information that we believe is of interest to stakeholders and the general public.

Changes to the scheme

- 1.5 We continue to implement changes made to the legislation. We are working closely with the Department for Energy Security and Net-Zero (DESNZ) to ensure the scheme is being delivered effectively and in accordance with policy.

Scheme extension

- 1.6 In response to COVID-19, on 19 January 2022, DESNZ announced they would implement a 12-month extension to the NDRHI commissioning deadline, from 31 March 2022 to 31 March 2023. No applications were accepted beyond 31 March 2023.⁸
- 1.7 Regulations impacting this extension were made and took effect on 1 April 2022. The extension only applied to NDRHI technologies with eligible Tariff Guarantee or extension applications, including to biomethane projects that could not become eligible for the Green Gas Support Scheme (GGSS). Please refer to the NDRHI Guide to Tariff Guarantees for further details.⁹
- 1.8 Applicants that wished to modify their proposed plant (i.e. Tariff Guarantee and extension application cases where were applicants were still seeking accreditation for their plants) were allowed to submit a 'plan to modify' by 31 March 2023 for consideration post-deadline.

⁷ [Renewable Heat Incentive Scheme Regulations 2018](https://www.legislation.gov.uk/uksi/2018/611/contents/made):

<<https://www.legislation.gov.uk/uksi/2018/611/contents/made>>

⁸ From 1 April 2023, the scheme closed to all entrants, however, currently, accredited installations can be replaced, relocated, or sold whilst maintaining their accreditation. In these cases, a new application for re-accreditation must be made.

⁹ [Non-Domestic RHI main guidance](https://www.ofgem.gov.uk/publications/non-domestic-rhi-main-guidance): <<https://www.ofgem.gov.uk/publications/non-domestic-rhi-main-guidance>>

Maintenance requirements and fuel quality

- 1.9 Ensuring that biomass boilers are well maintained can lead to better air quality. The government's commitment to reduce the impact of particulate emissions on public health is highlighted in the Clean Air Strategy.¹⁰ Consequently, on 1 April 2022 new annual maintenance requirements came into effect for those using solid biomass, or solid biomass contained in waste, as fuel in an accredited biomass boiler. The changes require participants to ensure a maintenance check (at the relevant standard) is carried out in each payment year (or 12-month period).⁹
- 1.10 The criteria for woodfuel quality¹¹, as set out in Schedule 4A of the Regulations, was initially introduced on 1 April 2021 and came into force on 1 April 2022. This requirement was introduced to ensure that the fuel used complies with the sustainability criteria, burns efficiently, and so, the biomass industry can support the Clean Air Strategy.¹² As of 23 November 2022, DESNZ temporarily suspended the woodfuel quality criteria for wood pellets until 22 November 2023 to address the issue of global woodfuel supply shortages.
- 1.11 From November 2022, participants needed to ensure they have, and can prove, any shared ownership of a heat pump on a shared ground loop system. This ensured that Ofgem could continue to access all additional heat pumps for auditing and compliance processes.

New reporting requirement for biomethane producers

- 1.12 In November 2021 we published our decision¹³ along with final guidance requiring that as of 1 April 2022, all biomethane producers must submit an independent annual report on their NDRHI/RTFO¹⁴ interaction with their annual sustainability audit. This further validation is in addition to the ongoing requirement, since 1 April 2021, for producers to provide a self-declaration about their interaction with the RTFO with their quarterly NDRHI claims.

¹⁰ [Clean Air Strategy 2019](https://www.gov.uk/government/publications/clean-air-strategy-2019):

<<https://www.gov.uk/government/publications/clean-air-strategy-2019>>

¹¹ It was a requirement for all wood pellets to meet the EN Plus A1 standard, a subsequent version of that standard, or an equivalent approved standard.

¹² [February 2022 amendments to the RHI regulations](https://www.legislation.gov.uk/ukxi/2022/159/contents/made):

<<https://www.legislation.gov.uk/ukxi/2022/159/contents/made>>

¹³ [Our decision on further validation of NDRHI/RTFO interactions](https://www.ofgem.gov.uk/publications/decision-final-guidance-further-validation-ndrhirtfo-interaction-biomethane-producers-when-submitting-biomethane-claims):

<<https://www.ofgem.gov.uk/publications/decision-final-guidance-further-validation-ndrhirtfo-interaction-biomethane-producers-when-submitting-biomethane-claims>>

¹⁴ The Renewable Transport Fuel Obligation (RTFO) supports the government policy on decarbonising transport by encouraging the production and use of renewable fuels that do not damage the environment.

2. Accreditations

Chapter summary

This chapter analyses the accreditations under the NDRHI scheme. It includes detailed information on applications (including Tariff Guarantee and Extension applications), accredited technology types, a breakdown of accredited capacity by technology and country, eligible heat use and system types replaced since the start of the scheme and in Scheme Year 12 (SY12).

Applications

- 2.1 One of our key functions administering the NDRHI scheme is to assess the eligibility of those wishing to join the scheme. This helps to ensure that only those eligible to receive support do so, thereby ensuring effective and fair use of public funds. Following our assessment, if we determine that an applicant is eligible to receive payments, they are granted accreditation. Participants who continue to meet scheme rules may receive payments for a period of up to 20 years.
- 2.2 The scheme closed to most new applicants on 31 March 2021 and all new entrants on 31 March 2023. Certain applicants who have been granted a Tariff Guarantee¹⁵ had until midnight March 2023 to commission their plant, commence injection (biomethane applications only) and submit a correct application for accreditation or registration (Stage 3 of application). While Stage 3 applications were not considered as additional applications, they were added to the queue and after further review and approval, they were considered full.¹⁶
- 2.3 As a result of the COVID-19 pandemic, in November 2020 DESNZ announced a new extension mechanism for applications that were not eligible for Tariff Guarantees.¹⁷ This new mechanism allowed eligible installations the opportunity to apply for a 12-month

¹⁵ A Tariff Guarantee allows applicants to the scheme to secure a tariff rate (a “guaranteed tariff” that will apply if the plant becomes accredited or registered for biomethane) before their installation is commissioned and fully accredited. This provides a level of investment certainty for larger installations.

¹⁶ Tariff Guarantee Stage 1: applicants submit application and evidence clarifications of proposed heat use, connection agreements and planning permission. Stage 2: applicants submit evidence of financial close and a tariff guarantee will be awarded. Stage 3: with a tariff guarantee confirmed, the final stage is for the installation to be commissioned and for the final details of the application to be completed, the information reviewed and approved by Ofgem. Full accreditation is awarded and an accreditation letter is issued. [Non-Domestic RHI main guidance – Guide to Tariff Guarantees:](https://www.ofgem.gov.uk/publications/non-domestic-rhi-main-guidance)

<<https://www.ofgem.gov.uk/publications/non-domestic-rhi-main-guidance>>

¹⁷ [Details on changes made to the scheme in response to COVID-19:](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933108/changes-to-rhi-support-covid19-response-further-govt-response.pdf)

<https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933108/changes-to-rhi-support-covid19-response-further-govt-response.pdf>

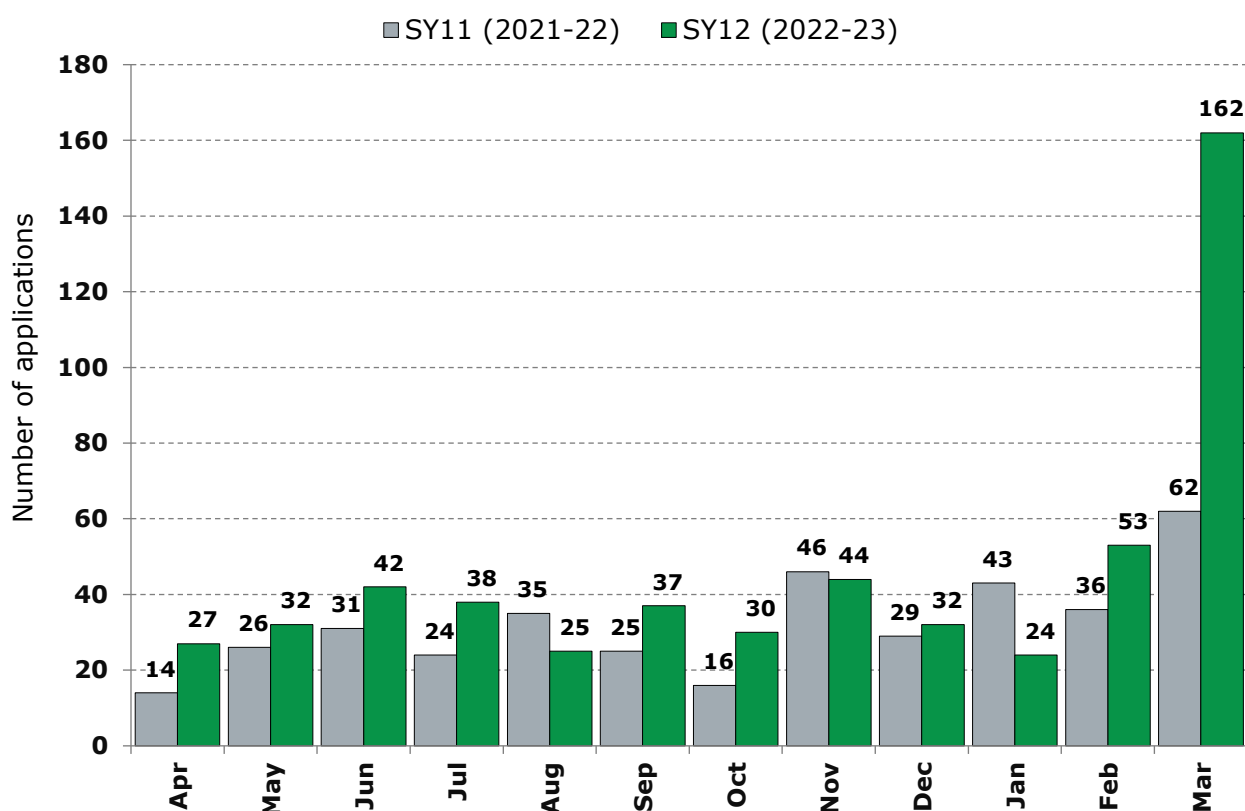
extension by submitting a properly-made extension application.¹⁸ The extension application route closed on 31 March 2021.

- 2.4 Due to the continued difficulties being faced by some applicants, on 19 January 2022, a further 12-months to commission were provided to those that had submitted a properly-made extension application by the 31 March 2021 deadline. Supported by an approved extension application, applicants were able to submit a new, full accreditation application till 31 March 2023. Additionally, existing participants could also submit applications for relocation or replacement plants.
- 2.5 As shown in **Figure 2.1** below, we received a total of 546 applications in SY12. This represents an increase of over 41% in applications received compared to SY11. A growth in the volume of applications submitted can be observed in the run up to scheme closure in March 2023. However, this was a smaller increase compared to the spike in the number of applications received (1,062) ahead of scheme closure to most new applicants in March 2021 (SY10).

¹⁸ Only plants which were not eligible for Tariff Guarantees, and were not expected to be commissioned before scheme closure and could demonstrate that significant capital, or significant human or material resource has been invested in the development of a plant on or before 17 August 2020, were eligible to make an extension application. More information can be found in the extension application guidance on Ofgem's website. [Non-Tariff Guarantee Extension Applications:](https://www.ofgem.gov.uk/publications-and-updates/non-tariff-guarantee-extension-applications) <<https://www.ofgem.gov.uk/publications-and-updates/non-tariff-guarantee-extension-applications>>

Figure 2.1: Number of applications received, by month in SY11 (2021-22) and SY12 (2022-23)

The clustered column chart below shows the number of applications received each month during SY11 and SY12. Scheme closure at the end of March 2023 led to a higher number of applications (162) that month. On average 46 applications were submitted each month during SY12.



Tariff Guarantees and Extension applications

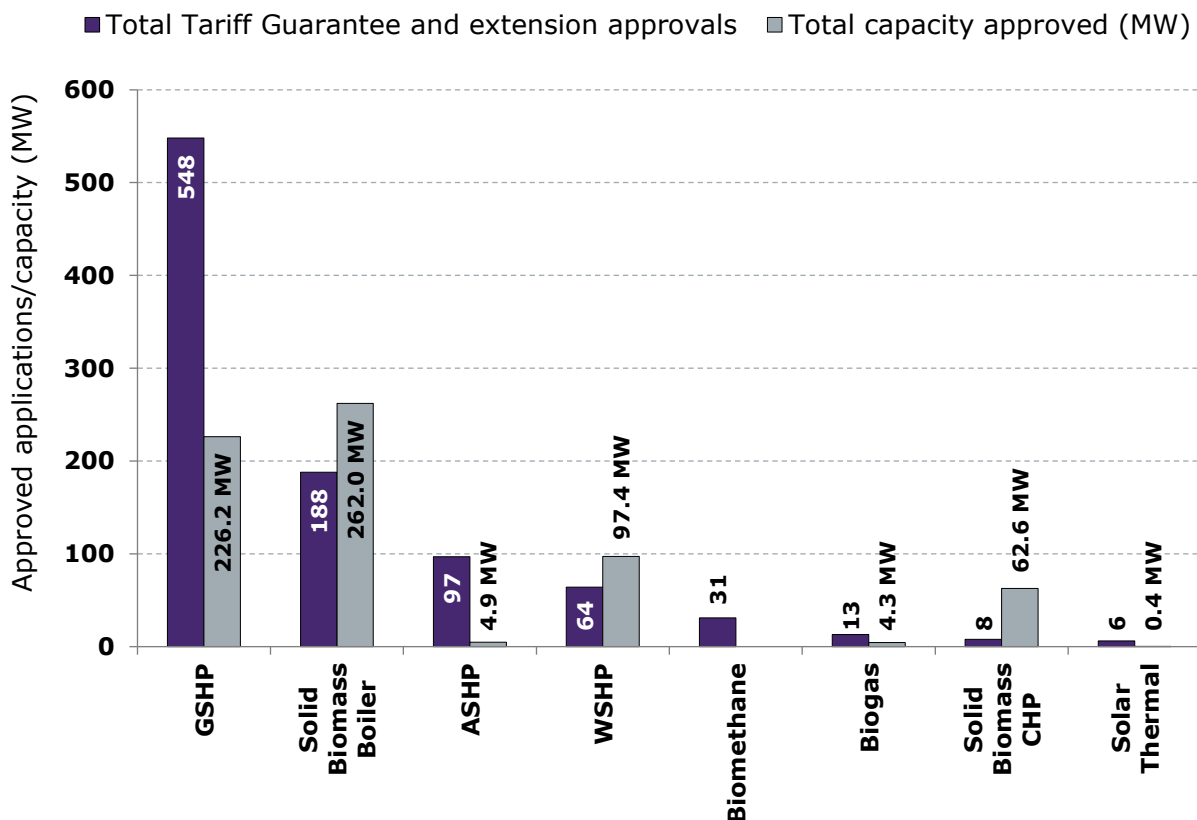
2.6 Since Tariff Guarantee applications were introduced to the scheme in May 2018, we have received 714 of these in total. Following our assessment, we granted a total of 321 Tariff Guarantee applications (Stage 2) with a committed spend of £144.29 million. We approved 261 applications (Stage 3), rejected 273 for not meeting eligibility requirements and 121 applications were cancelled by applicants. At the time of writing the remaining 59 applications were still being processed.

2.7 In total, 694 extension applications were approved. All extension applications were processed in 2021.

2.8 **Figure 2.2** provides an overview of the technology split of applications approved through the Tariff Guarantee and extension application routes. Please note that as biomethane plants do not generate heat, they are included in the count of accredited systems, but not in the capacity figures.

Figure 2.2: Technology split of approved Tariff Guarantee and Extension applications

The clustered column chart below shows the share of different technology types and additional capacity accredited under the scheme through the Tariff Guarantee and extension application routes. Of the 955 applications approved, 548 were submitted for ground source heat pumps (GSHP), with 157 Tariff Guarantee and 391 extension applications providing 226.22 MW capacity, making GSHP the most common technology type to be approved through the above application routes. The second and third most common technology types to be approved were solid biomass boilers and air source heat pumps (ASHP), followed by water source heat pumps (WSHP).



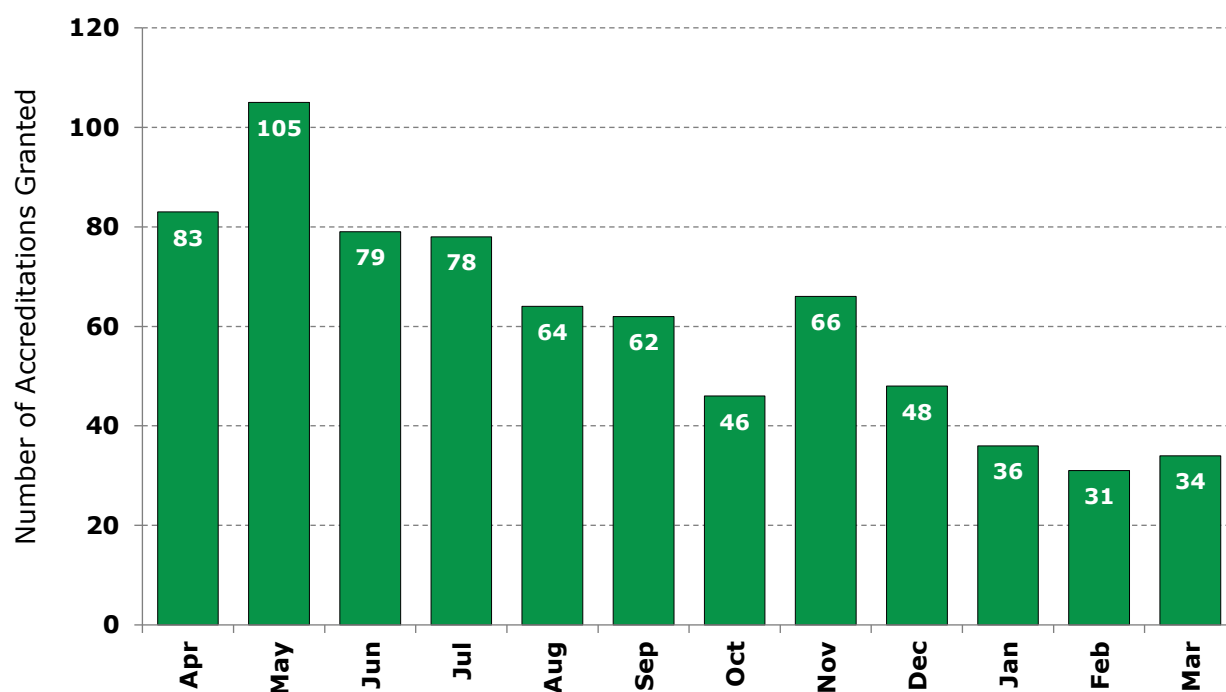
Accreditations

2.9 Following our assessment of applications, if we determine that an applicant is eligible to receive payments, they are granted accreditation. The values presented in this section relate to accredited full applications and include full (Stage 3) Tariff Guarantee applications for accreditation/biomethane registration.¹⁹

2.10 In SY12, 732 applications were accredited on to the scheme, bringing the total number of accredited installations under the scheme to 22,602. This is a drop compared to the 1,407 accreditations granted during SY11. The total number of accreditations granted each month during SY12 are detailed below in **Figure 2.3**.

Figure 2.3: Applications accredited during SY12 (2022-23)

The column chart below shows the number of applications accredited each month from April 2022 to March 2023. Applications accredited range from a low of 31 in February to a high of 105 in May. The average number of applications accredited each month for the year is 61. Overall, a downward trend can be observed in the number of applications accredited, which can be attributed to the diminishing queue of increasingly complex applications.



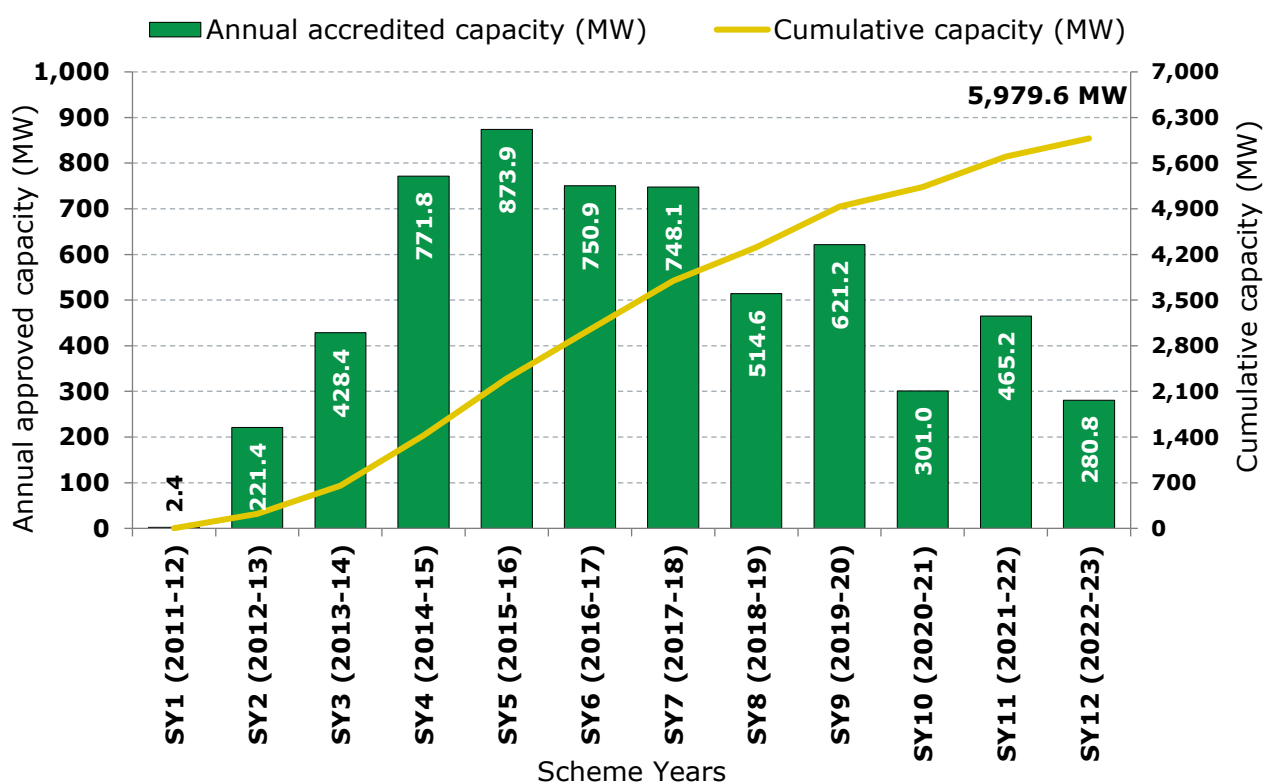
¹⁹ An error in the way some accredited Tariff Guarantee applications were previously being counted has resulted in a historical undercount in the number of accredited installations. The changes to some values reported in last year's report is due to this being corrected, namely by the inclusion of previously missing accredited full Tariff Guarantee applications.

2.11 The total accredited capacity²⁰ on the scheme as of 31 March 2023 stands at 5,980 MW. This means in SY12, an additional 280.8 MW of capacity was approved. Despite the scheme closing to all new entrants on 31 March 2023, the total capacity on the scheme will continue to rise as outstanding applications are granted approval during SY13.

2.12 The growth in cumulative accredited capacity since the start of the scheme can be seen in further detail in **Figure 2.4** below. Despite the decrease in the number of accredited applications, the average capacity of those installations increased from 330.6 kW in SY11 to 383.7 kW in SY12.

Figure 2.4: NDRHI annual and cumulative accredited capacity

The combined column and line chart below shows that the cumulative accredited capacity each year has grown steadily over the lifetime of the scheme. The highest amount of capacity approved was in SY5 (873.9 MW) and the lowest (aside from SY1 and SY2) was SY12 with 280.8 MW accredited.



²⁰ The capacity figures shown represent all technology types on the scheme except for biomethane. Biomethane installations are awarded payments based on the amount of gas injected into the gas grid, instead of the amount of heat generated. Additionally, an error in the way some accredited Tariff Guarantee applications were previously being counted has resulted in a historical undercount in the accredited capacity. The changes to values reported in last year's report are due to this being corrected, namely by the inclusion of previously missing accredited full Tariff Guarantee applications.

Technology

2.13 As indicated below in **Figure 2.5**, the solid biomass boiler is the most installed technology type under the NDRHI scheme. Additionally, as shown in **Figure 2.6**, the share of capacity being accredited for solid biomass boilers has been decreasing from the high levels seen at the start of the scheme.

Figure 2.5: Proportion of accredited installations by technology type since the start of the scheme

The pie chart below shows that of all accredited installations since the start of the scheme: 77.09% are solid biomass boilers; 11.85% are ground source heat pumps (GSHP); 4.13% are air source heat pumps (ASHP); 3.42% are biogas; 1.52% are solar thermal; and all other technology types represent less than 1% each. During SY12, 345 solid biomass boiler, 268 GSHP, 68 ASHP, 20 water source heat pump (WSHP), 14 biogas, ten biomethane, five solar thermal and two solid biomass CHP installations were accredited.

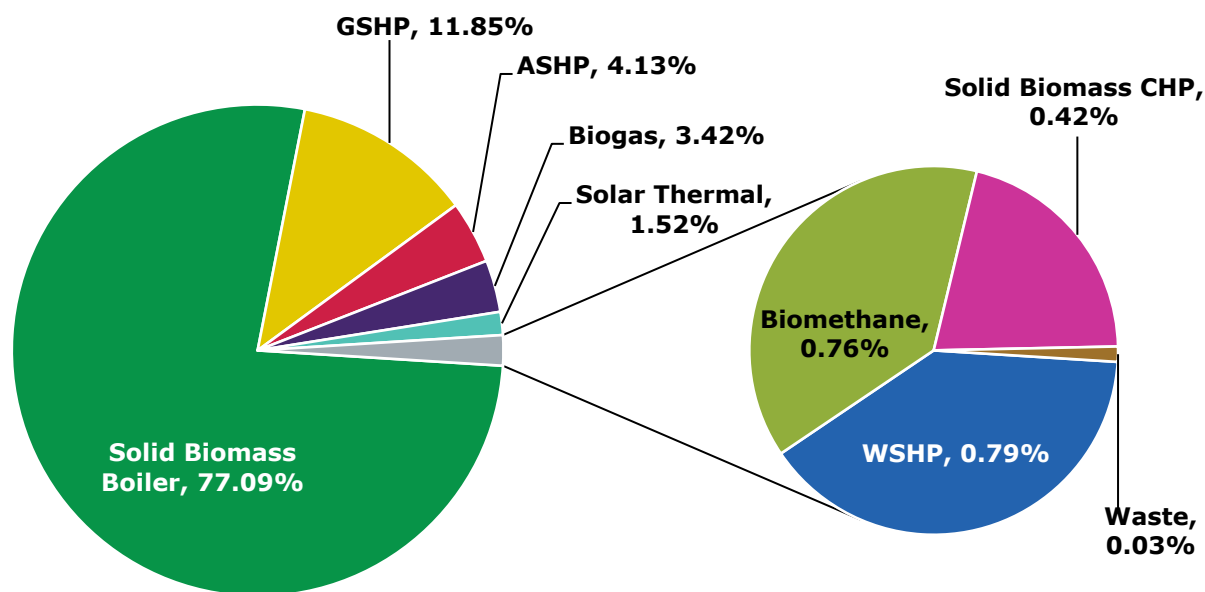
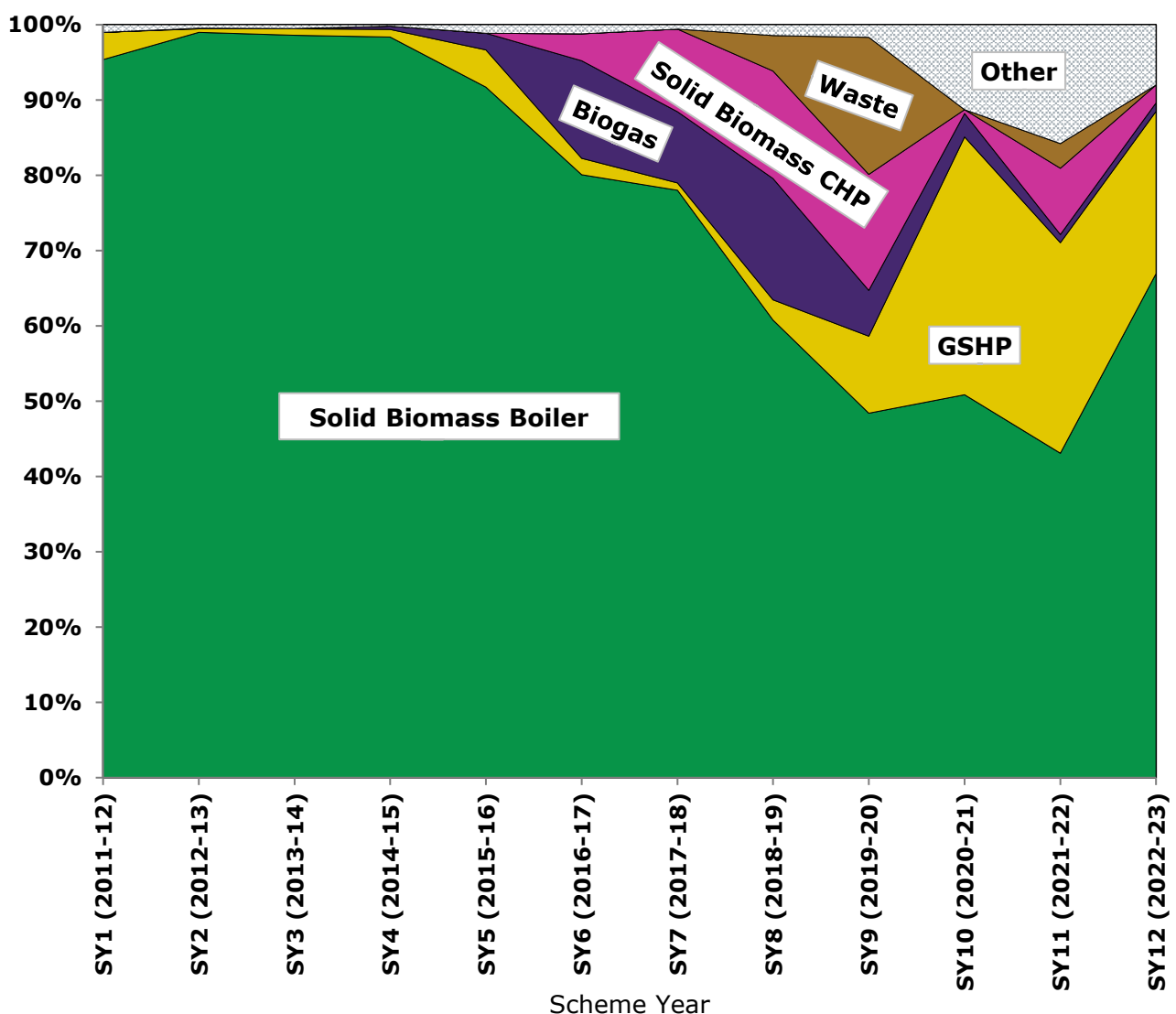


Figure 2.6: Accredited capacity by technology and scheme year

The stacked area chart below shows the proportion of capacity accredited annually by technology type, over the life of the scheme. Solid biomass boilers have consistently contributed the highest proportion of capacity accredited each year (76.0% during the lifetime of the scheme). From SY5 onwards GSHP, biogas, solid biomass CHP and waste plants have also been playing a more significant part, collectively accounting for as high as 49.9% of accredited capacity under the scheme in SY9. In this chart, the 'other' category includes water source heat pump, air source heat pump and solar thermal technology types.



2.14 Solid biomass boilers made up more than 95% of newly accredited capacity for the first four years of the scheme. However, the proportion of solid biomass boiler capacity accredited each year dropped as low as 43.1% in SY11 before increasing again to 66.9% in SY12.

- 2.15 Ground source heat pumps, which made up only 2.2% of capacity accredited between SY1 to SY8, made up 21.6% of newly accredited capacity in SY12, although this is a drop from 27.9% in SY11 and 34.2% SY10.
- 2.16 The prior reduction in the proportion of newly accredited biomass capacity was in part driven by tariff reductions because of the degression mechanism.²¹ The increasing proportion of capacity derived from other technology types followed scheme changes implemented in May 2014 (SY4).²² These changes saw increased financial support for biomass CHP, deep geothermal, ground source heat pumps, solar-thermal, biogas combustion, and also for large biomass boilers (over 1 MW). These changes also introduced support for air source heat pumps and commercial and industrial energy from waste.

²¹ The degression mechanism is an automatic tariff reduction to help control the scheme budget. This is determined by the projected growth rates of eligible technologies. More information on degression is available on the UK government's website: [NDRHI mechanism for budget management: estimated commitments – NDRHI degression factsheet](https://www.gov.uk/government/publications/rhi-mechanism-for-budget-management-estimated-commitments-ndrhi-degression-factsheet):

<<https://www.gov.uk/government/publications/rhi-mechanism-for-budget-management-estimated-commitments>>

²² The summary of changes implemented in May 2014 can be viewed on the government's website at the following link: [Summary of changes to the NDRHI](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/265853/Summary_of_changes_to_the_non-domestic_RHI_-_December_2013.pdf):

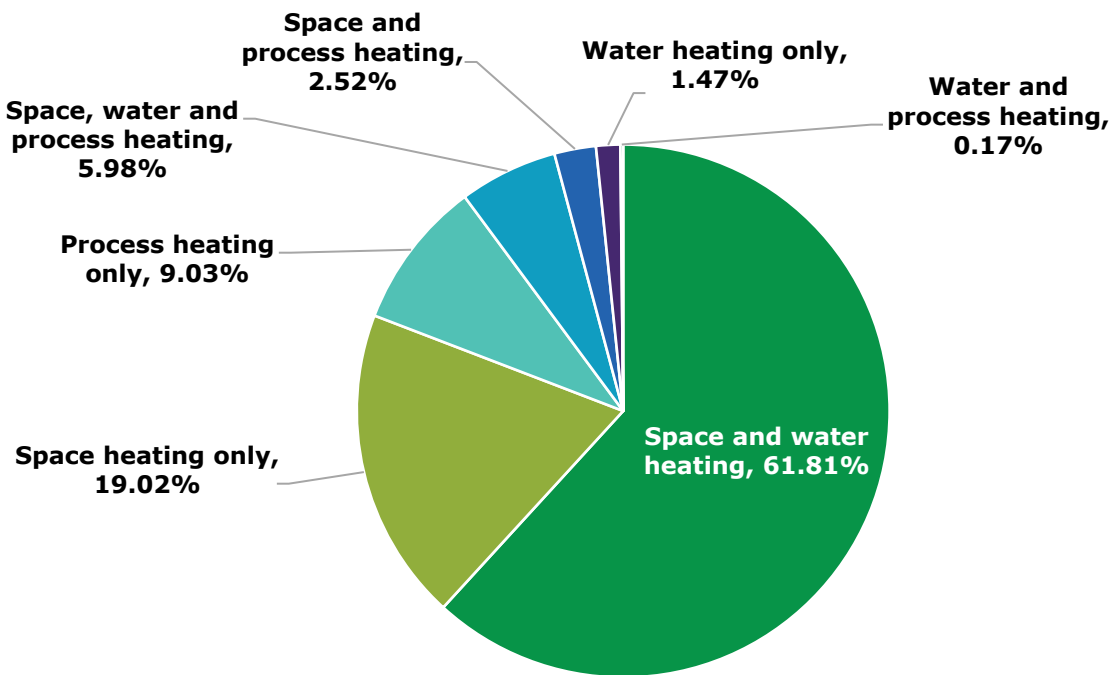
<https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/265853/Summary_of_changes_to_the_non-domestic_RHI_-_December_2013.pdf>

Eligible heat use

2.17 To gain accreditation onto the NDRHI scheme, heat generated by installations must be used for an eligible purpose. This can be space heating in a building, heating water for direct use, or heat for use in a process (excluding for the generation of electricity). In **Figure 2.7** you can see the breakdown of heat uses for all heat generating installations (excluding biomethane installations).

Figure 2.7: Eligible heat uses for accredited installations

The pie chart below shows the stated eligible heat use for accredited installations: Space and water heating account of 61.81% of installations; space heating only (19.02%); process heating only (9.03%); space, water and process heating (5.98%); space and process heating (2.52%); water heating only (1.47%); and water and process heating (0.17%). Overall, no significant changes occurred in the split since last year.



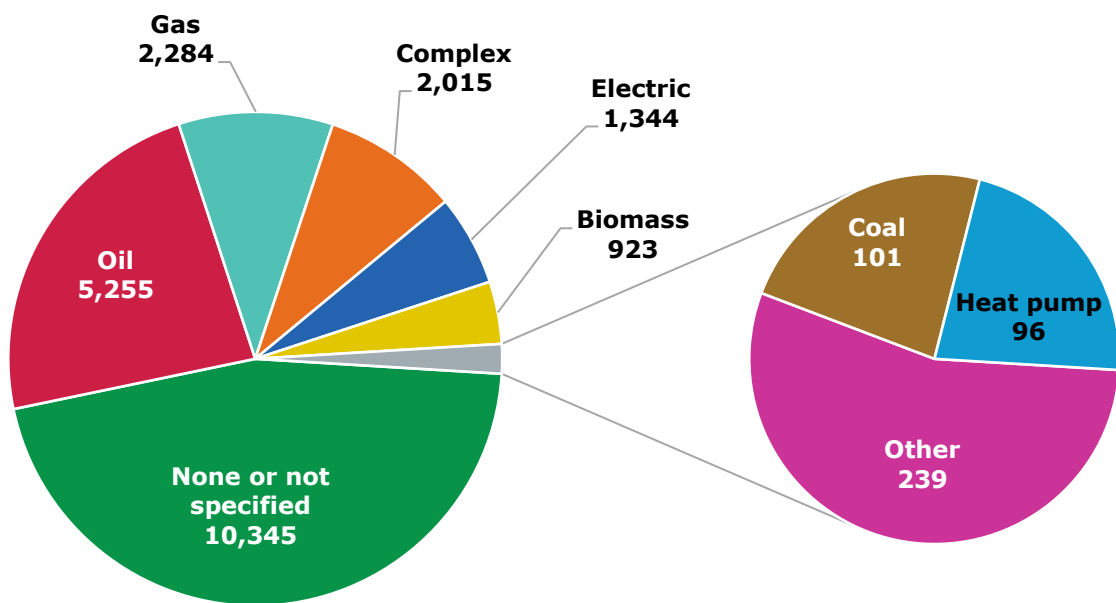
System type replaced

2.18 When applying for accreditation on the NDRHI scheme, we ask applicants for information on the heating system being replaced by the NDRHI installation. **Figure 2.8** shows this information for all installations granted accreditation since the start of the scheme. The accompanying table shows the same information for installations granted accreditation during SY12.

2.19 It should be noted that applicants were not required to respond to this question and those who did described their replaced heating systems in free text form. We analysed these descriptions to produce the simplified categories depicted below. Where several heating systems of different types were replaced, we have categorised these as *Complex*. Where we have been unable to determine the replaced technology type, we have categorised these as *Other*.

Figure 2.8: System type replaced for all accredited installations

The pie chart below shows the system type replaced for all accredited installations since the start of the scheme. The largest proportion is 'None or not specified' with 10,345 installations and second to this is Oil, accounting for 5,255. In SY12, in 399 instances 'no or no specified information' was given, accounting for 54.5% of accreditations. In addition to this, 114 biomass, 89 oil, 50 electric, 36 gas, 20 complex, 18 other and six heat pump-based heating systems were replaced.



- 2.20 The most common category is *None or not specified*, which for all accredited applications accounts for 46% of the total. As applicants were not required to respond to this question, this could mean that the NDRHI heating system was not replacing any previous heating system, or that the applicant did not provide a response to the question.
- 2.21 Based on this data we can say that at least 34% (or 7,640) of all replaced systems were fossil fuel (oil, gas or coal) heating systems. The actual percentage is expected to be significantly higher given the high number of applicants that did not respond to this question. Moreover, in cases where based on the information provided we were unable to determine if a fossil fuel heating system was replaced.

UK Standard Industrial Classification

- 2.22 We also collect information on the industry sectors within which the heat is used. To do this we use the UK Standard Industrial Classification (UK SIC)²³ to categorise the area of economic activity. The top ten sectors by the total number of accredited installations are shown in **Figure 2.9**. The same information for SY12 accreditations is shown in the **Figure 2.10**. The complete dataset of installations by UK SIC can be found in the spreadsheet published alongside this report.

²³ [UK SIC 2007](https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007):

<<https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007>>

Figure 2.9: UK SIC for accredited installations

The clustered bar chart below shows installations with a SIC for 'Accommodation' are the most frequent (7,179 with 812.0 MW installed capacity). However, the 'Crop and animal production, hunting and related activities' SIC has a greater total installed capacity of (2,111.4 MW with 5,966 installations).

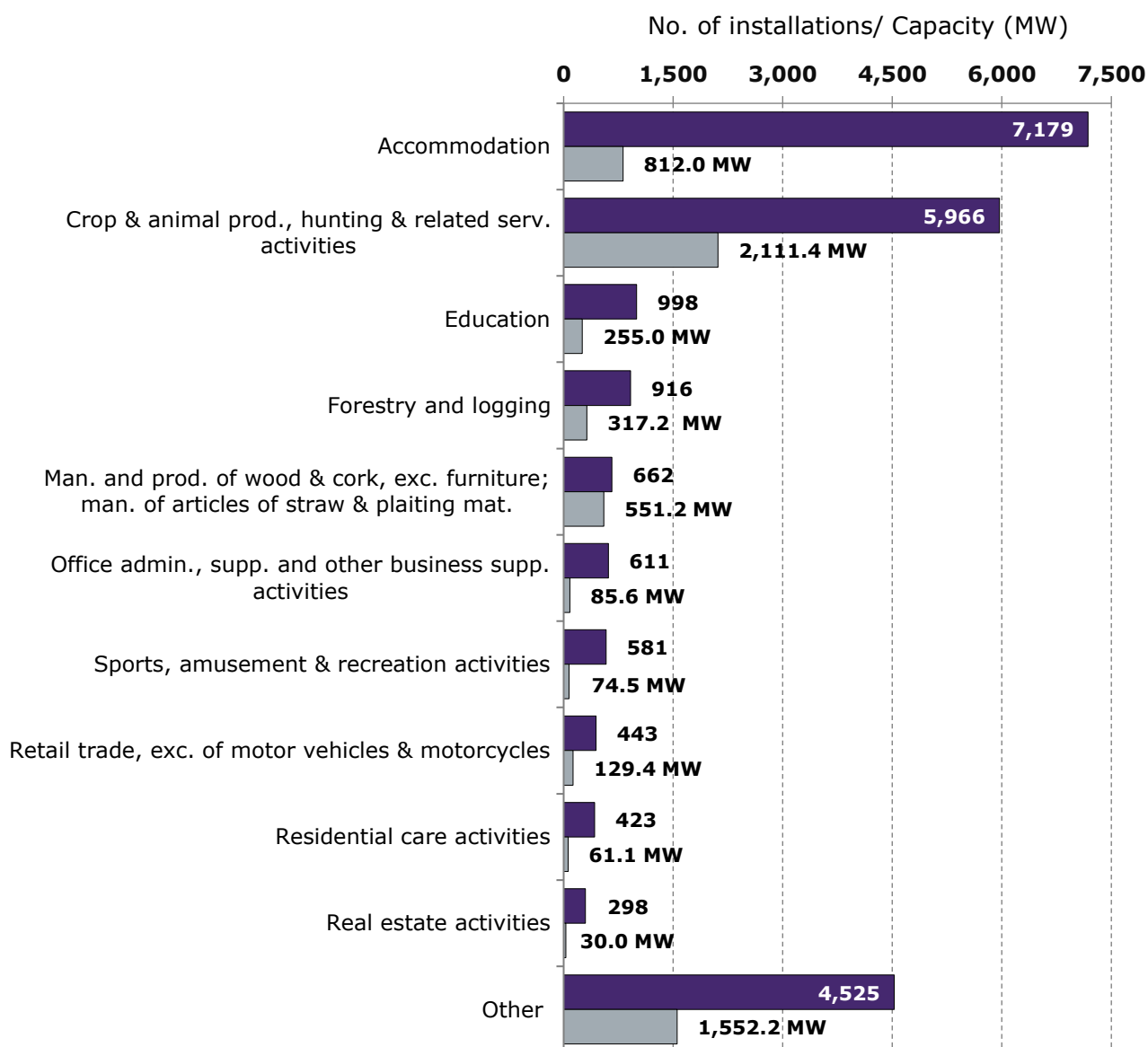


Figure 2.10: UK SIC for accredited installations SY12 (2022-23)

Industry sector	Number of installations	Capacity (MW)
Accommodation	249	34.70
Crop and animal production, hunting and related service activities	166	114.79
Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	46	25.06
Forestry and logging	37	11.73
Education	22	6.65
Office administrative, office support and other business support activities	18	3.92
Sports activities and amusement and recreation activities	16	0.97
Residential care activities	15	2.06
Electricity, gas, steam and air conditioning supply	15	5.43
Food and beverage service activities	13	0.68
All other industry sectors	135	74.86
Total	732	280.85

Geographic distribution of accredited installations

2.23 **Figure 2.11** below shows the split in both the number of accreditations and the installed capacity across Great Britain.²⁴

2.24 Please note that as biomethane plants do not generate heat, they are included in the count of accredited systems, but not in the capacity figures.

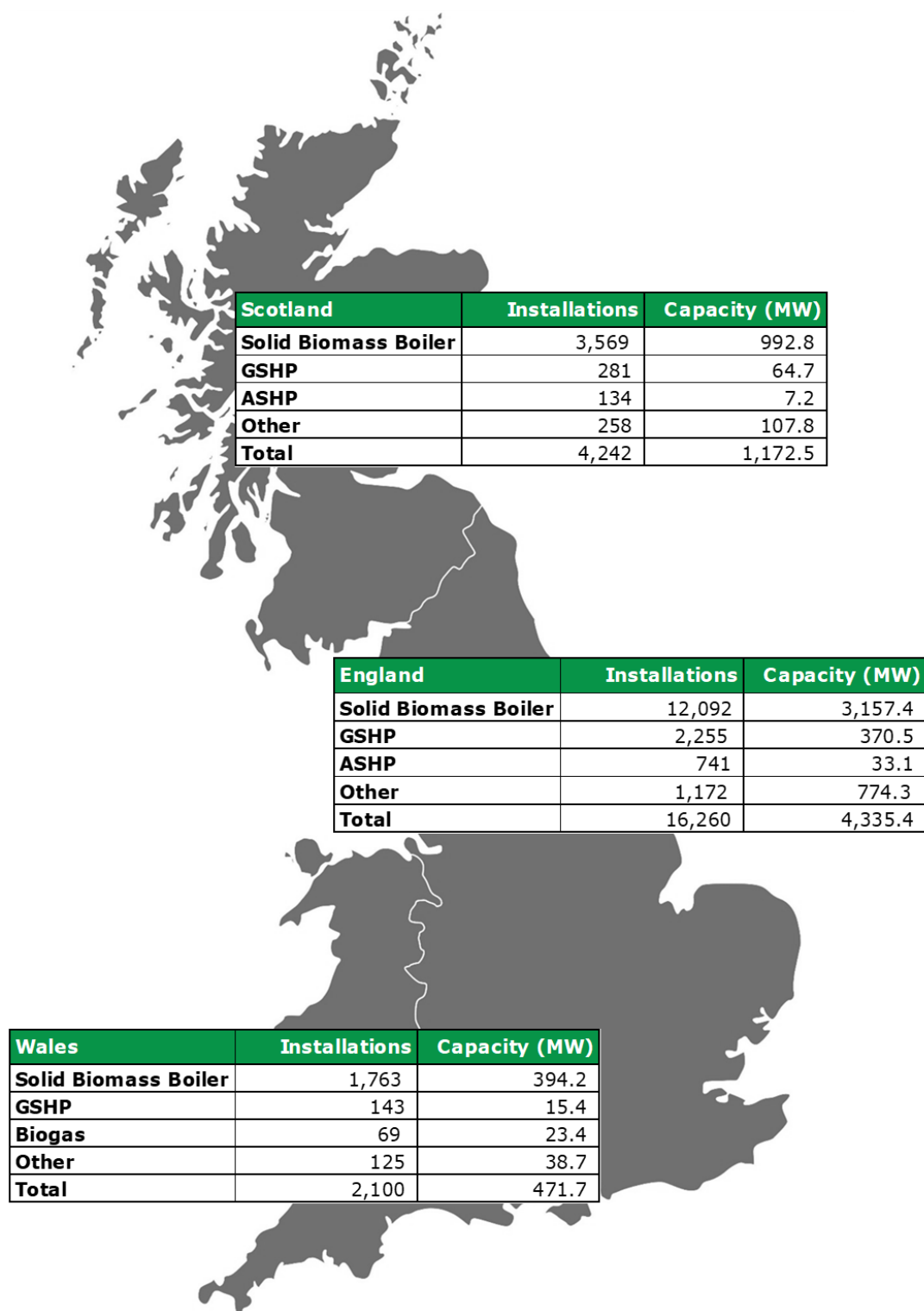
2.25 The figures show that by some margin the majority of NDRHI accreditations, as well as the majority of installed capacity, are located in England.

2.26 A full regional breakdown by technology type and installation capacity can be found in **Appendix 1**.

²⁴ An error in the way some installation postcodes were previously matched to countries has historically resulted in an incorrect presentation of the split in the number of accreditations and installed capacity across GB. The changes to values reported in NDRHI Q1 2023 quarterly report (reported period: January to March 2023) are due to this being corrected.

Figure 2.11: Total number of accredited systems and capacity by country

The map below shows that systems have been accredited across Great Britain as follows: England 16,260 (71.9%) installations and 4,335 MW (72.5%) installed capacity; Scotland 4,242 (18.8%) installations and 1,172 MW (19.6%) installed capacity; Wales 2,100 (9.3%) installations and 472 MW (7.9%) installed capacity.



3. Payments & Heat Generation

Chapter summary

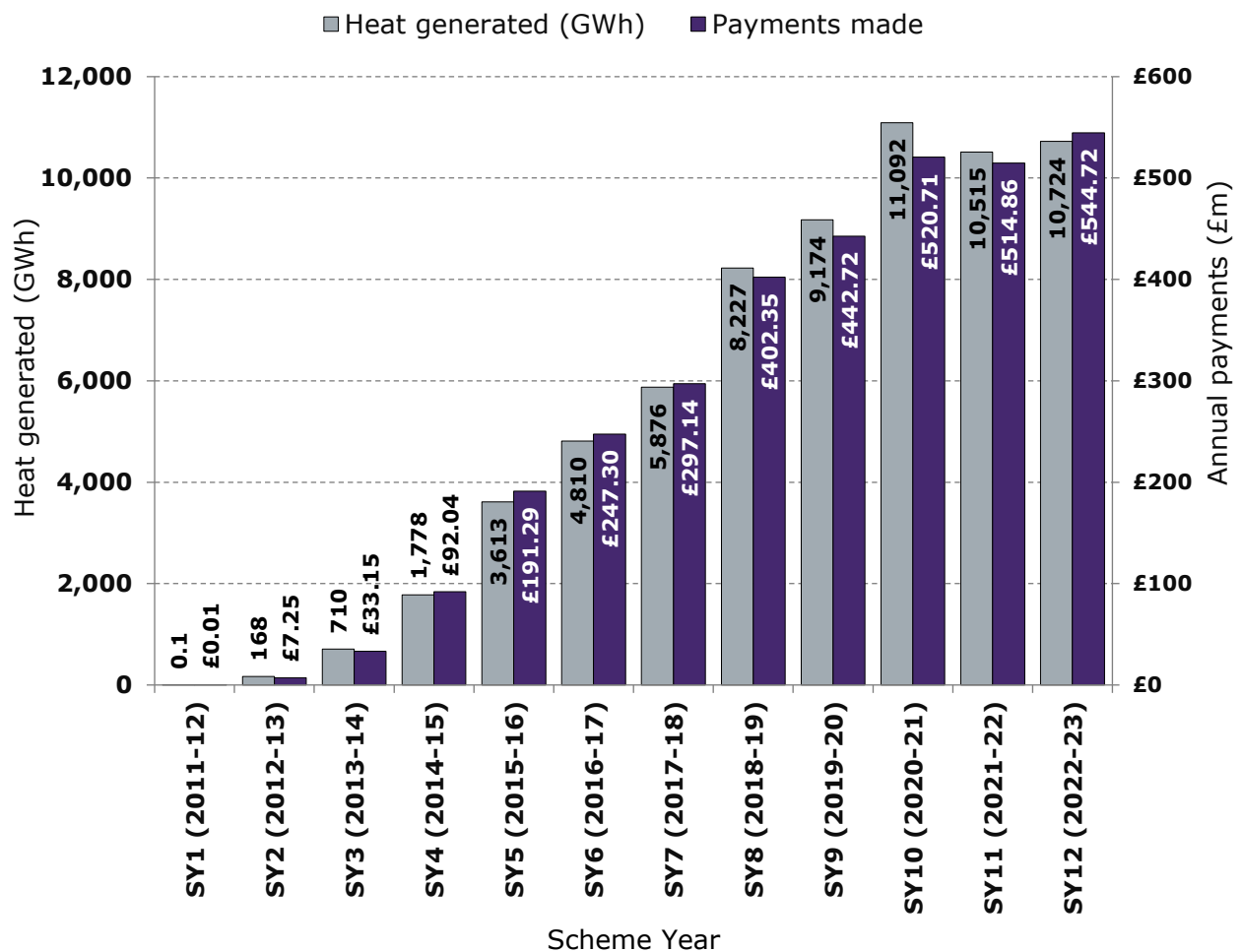
This chapter gives an update on the heat generation, green gas injected to the grid and payments made under the NDRHI scheme in Scheme Year 12 (SY12) and since the start of the scheme.

- 3.1 RHI payments are made quarterly for up to 20 years and are based on the eligible heat output of installations. Payments made to biomethane producers follow a separate calculation formula because heat is not generated in the process; instead, payments are based on the amount of eligible biomethane injected directly into the gas grid. For this reason, from paragraph 3.4 onwards details of biomethane payments are discussed separately.
- 3.2 Payments are only made to accredited installations that continue to meet the scheme rules. The tariff rates are set by the DESNZ and are adjusted annually to account for inflation.²⁵
- 3.3 Since the NDRHI scheme began in 2011, a total of £4.99 billion has been paid out to participants. £886 million in payments were made in SY12 alone.
- 3.4 **Figure 3.1** below shows that nearly £545 million in payments were made during SY12 to heat generating installations. These payments were made against heat generation of 10,724 GWh. This brings total payments made to heat generating installations over the lifetime of the scheme to £3.29 billion, corresponding to 66,687 GWh of heat generation.
- 3.5 The amount paid to participants and the associated heat generated during SY12 increased by almost 2% from the previous year. SY11 saw the first reduction in payments and heat generated since the scheme started; in SY12, the payments increased, however, heat generation still did not reach the SY10 level. We believe that there could be a number of factors contributing to this including well publicised supply chain issues and rising costs. These issues may have impacted the ability of some participants to carry out their usual activities, thereby reducing the amount of heat required.

²⁵ [Information on NDRHI payments and tariffs](https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/non-domestic-rhi-tariffs-and-payments): <<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/non-domestic-rhi-tariffs-and-payments>>

Figure 3.1: NDRHI heat generated and payments made (ex. Biomethane production)

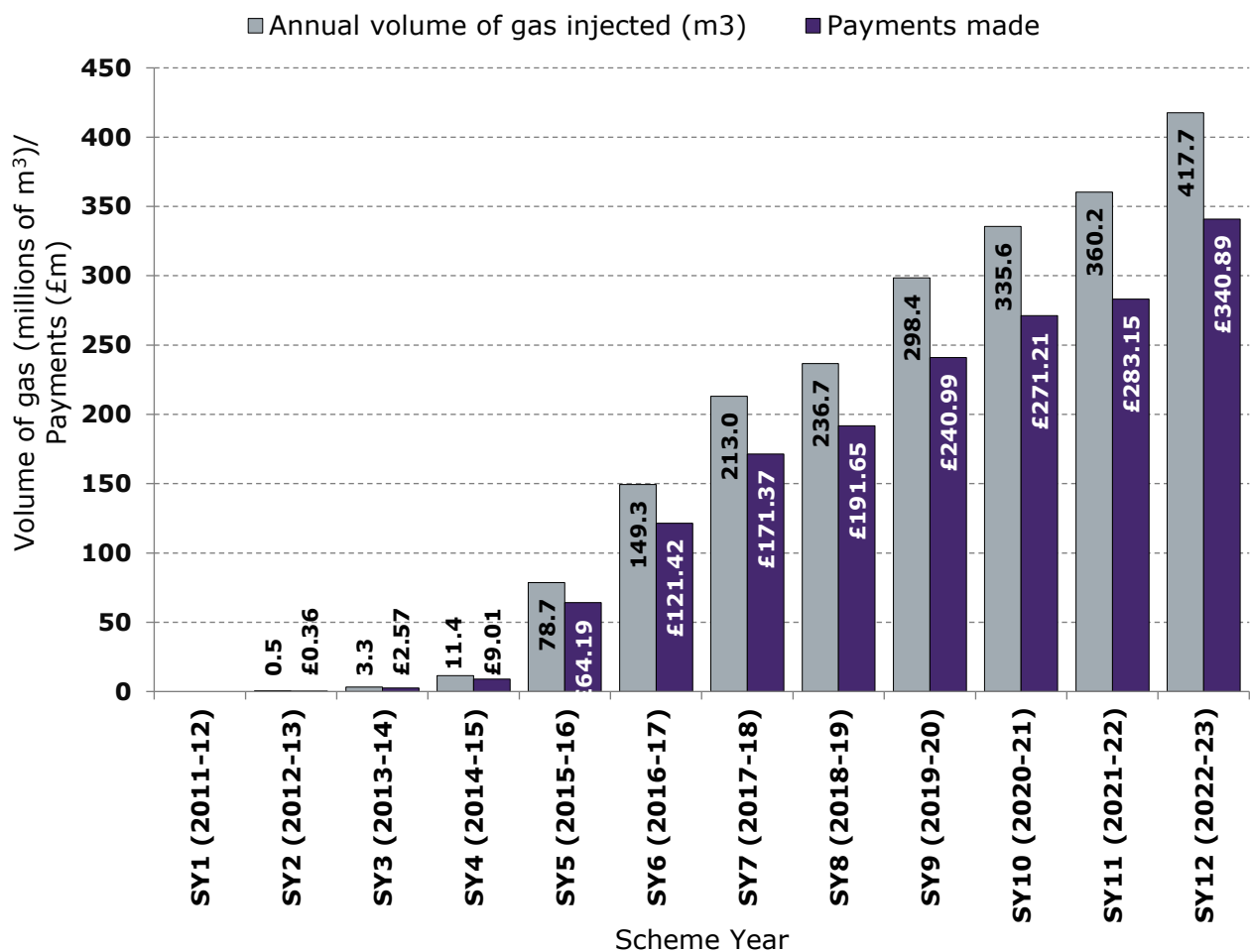
The clustered column chart below shows payments and the associated heat generated under the scheme since launch. Both have grown significantly, from around £10,000 and 0.1 GWh in SY1, to a peak of almost £545 million in payments (with 10,724 GWh generation) in SY12, and over 11,092 GWh generation (with £521 million in payments) in SY10.



3.6 Information on the volume of gas injected into the grid and payments made to biomethane producers (which started in SY2) can be seen in **Figure 3.2** below. Nearly £341 million of payments were made during SY12 in relation to the injection of almost 418 million m³ of gas into the grid. The volume of gas increased by over 15.9%, and payment figures increased by 20.4% from SY11. The total gas injected over the lifetime of the scheme amounts to over 2.1 billion m³, resulting in nearly £1.7 billion in payments.

Figure 3.2: NDRHI biomethane - volume of gas injected and payments made

The clustered column chart below shows both the volume of gas injected and associated payments under the scheme since launch. Both have grown significantly, from around 500,000 m³ and £360,000 in SY2 to a peak of almost 418 million m³ and £341 million in SY12.



3.7 **Figure 3.3** outlines the payments and heat generated or gas injected by technology type since the scheme launched. This shows that 85.9% of payments went to two technology types. Solid biomass boiler installations accounted for 51.9%, and a further 34.0% went to biomethane installations. These two technology types account for 78.4% of accredited installations.

Figure 3.3: NDRHI lifetime payments made, heat generated and gas injected - by technology type

Technology Type	Payments (£m)	Payments (% of total)	Associated heat generation (GWh)	Associated volume of gas injected (m ³)
Air Source Heat Pump (ASHP)	£4.66	0.1%	168.0	-
Biogas	£331.93	6.7%	6,197.6	-
Biomethane	£1,696.80	34.0%	-	2,104,656,979
Ground Source Heat Pump (GSHP)	£149.17	3.0%	1,813.2	-
Solar Thermal	£1.38	0.0%	12.9	-
Solid Biomass Boiler	£2,590.02	51.9%	53,255.5	-
Solid Biomass CHP	£167.72	3.4%	3,898.8	-
Waste	£15.76	0.3%	950.4	-
Water Source Heat Pump (WSHP)	£32.89	0.7%	390.2	-
Total	£4,990.33	100%	66,686.6	2,104,656,979

4. Audit & Compliance

Chapter summary

This chapter covers audit and compliance activity in respect of the NDRHI scheme during Scheme Year 12 (SY12). It provides an overview of the results of targeted and statistical audits, compliance investigations, and the delivery of our debt program.

- 4.1 Ofgem takes any non-compliance with scheme obligations seriously. The aim of our audit programme is to check the compliance of scheme participants with the scheme regulations and our guidance. This is to help ensure payments are only made against eligible heat generation, thereby protecting the public purse. Our audit strategy has been developed in line with best practice from the National Audit Office (NAO) and we review and update it annually.
- 4.2 We open a compliance investigation when we suspect that a scheme participant is non-compliant, for instance after the completion of an audit. Non-compliance can be either material or non-material. Material non-compliance can have a financial impact and may have led or may lead to funds being paid out in error, while non-material non-compliance has no financial impact.
- 4.3 Where we find instances of non-material non-compliance, we advise participants what actions they need to take to rectify the situation, and inform them of the consequences of inaction. Consequences include payments being recouped or permanently withheld. Where we confirm instances of material non-compliance, we take enforcement actions, such as recovering overpayments, permanently withholding payments, and ultimately, revoking accreditations.

Audit Activity

- 4.4 We undertake both statistical and targeted audit programmes. Statistical audits are randomly selected to provide a representative view of the scheme population. This provides us with assurance that the results of audits will reflect the level and types of non-compliance within the population.
- 4.5 Targeted audits are used where we identify sites that may have an increased risk of non-compliance with the scheme. We primarily identified installations for targeted audits during the course of performing our administrative duties. We also used data analytics to identify sites at higher risk of non-compliance.

4.6 The SY12 audit programme has been completed. We conducted 414 audits throughout the year. **Figure 4.1** and **Figure 4.2** below provide a summary of audit activity undertaken during SY12 and SY11.

4.7 It should be noted that material non-compliance identified during audit is subject to further compliance investigation. It is often the case that after further investigation it is determined that there is no financial impact. As such, the audit non-compliance rates below should not be viewed as final.²⁶

Figure 4.1: NDRHI statistical audit activity SY12 (2022-23) and SY11 (2021-22)

Scheme Year	Closed audits	Compliant audits	Non-compliant audits	Non-compliance rate	Material non-compliance	Material non-compliance rate
SY12 (2022-23)	168	50	118	70.2%	88	52.4%
SY11 (2021-22)	168	70	98	58.3%	59	35.1%

Figure 4.2: NDRHI targeted audit activity SY12 (2022-23) and SY11 (2021-22)

Scheme Year	Closed audits	Compliant audits	Non-compliant audits	Non-compliance rate	Material non-compliance	Material non-compliance rate
SY12 (2022-23)	246	86	160	65.0%	93	37.8%
SY11 (2021-22)	325	109	216	66.5%	115	35.4%

4.8 As material non-compliance can lead to funds being paid out in error, it is important that we monitor the level of error in payments each year (percentage of payments going out erroneously). The error rate is the estimated level of error across the scheme population, expressed as a percentage of all payments to date. To calculate this, we focus on the findings of our statistical audit programme which provides a representative of the error rate in scheme population as a whole.

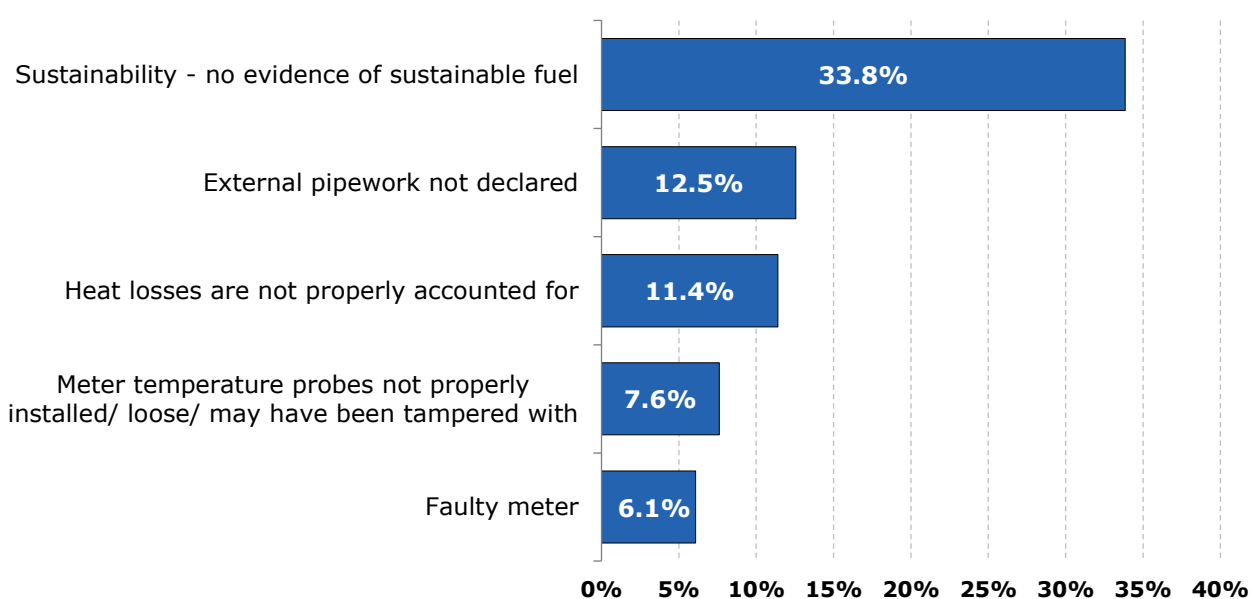
²⁶ At the time when audits are conducted, the evidence of compliance may not be available, however, the compliance investigation gives the participant time to provide evidence of their compliance. If evidence is provided, we do not take further action. For example, evidence of sustainable fuel may not be present at audit, but it may be declared later, during compliance investigation. Closing a compliance case may take up to a year or longer, subject to the pace of engagement from participants.

- 4.9 Based on the findings of the statistical audit programme, the value of payments made in error during SY12 under the NDRHI scheme is estimated at £2.1 million. It represents 0.3% of total payments within a 95% confidence interval of £1.3 million to £2.9 million.²⁷ This represents 0.1% reduction in estimated error rate from SY11. Please note that the error rate includes a forecast of expected outcomes for the remaining open audits and compliance investigations.
- 4.10 The same number of statistical audits have been carried out during SY12 and SY11, however, compared to last year the rate of non-compliance has increased by almost 12% and the rate of material non-compliance has also increased by over 17% in SY12. There were fewer targeted audits conducted in SY12 compared to last year, with a slight decrease in the non-compliance rate (1.5%), and a slight increase in the material non-compliance rate (2.4%). It should be noted that a materially non-compliant case can have one or more reasons for material non-compliance listed against it. The five most common material non-compliance reasons raised in SY12 account for a greater proportion of all non-compliances compared to SY11.
- 4.11 To provide further information on the nature of the material non-compliances identified through our statistical and targeted audits, we have included information on the five most common findings in **Figure 4.3**. The most common reason behind material non-compliances was 'no evidence of sustainable fuel'. Where this issue has been identified the generator has been unable to provide evidence that the fuel used in their plant met sustainability requirements.

²⁷ A 95% confidence interval means that we are 95% confident that the actual value of payments made in error will fall between the upper and lower values of £1.3 million to £2.9 million.

Figure 4.3: Five most common reasons for material non-compliance SY12 (2022-23)

The bar chart below shows the five most common reasons behind the occurrence of material non-compliance during SY12, as identified through our audit programme. The most common reason is 'no evidence of sustainable fuel', identified in 33.8% of instances of material non-compliance. Collectively, the five most common reasons shown here were listed against 71.5% of material non-compliance cases identified through our audit programme.



4.12 To maintain and further reduce the low levels of non-compliance on the scheme, we continue to analyse the causes behind the non-compliance cases being identified. We use this information to proactively look for ways to adapt our procedures and guidance to reduce the likelihood of non-compliances occurring.

Compliance

4.13 We closed 696 compliance investigations during SY12, with cases originating from various scheme years. Where a compliance investigation confirms that a material non-compliance has occurred, the financial impact on payments is quantified. We then use this information to take action and bring the participant back into compliance, or in certain cases where a material or a repeated breach of the regulations has been identified, we withdraw accreditation. Consequently, we can prevent payments going out erroneously in the future and recover the funds paid out in error, thereby protecting the public purse.

4.14 Ofgem's enforcement actions from the investigations closed during SY12 resulted in more than £2.8 million of public funds being either protected or expected to be recovered. Further details can be found in **Figure 4.4** below.

Figure 4.4: Compliance cases SY12 (2022-23)*

Referral Source	Cases closed	Number of non-compliant cases	Value of money protected
Operational	252	207	£2,700,040.37
Audit	435	12	£147,761.44
Counter fraud/ External investigation	9	0	£0
Total	696	219	£2,847,801.81

*Note: Cases closed between 1 April 2022 and 31 March 2023.

4.15 Of all the referrals originating from our operational delivery work of administering the scheme, the primary reason for recovering money was in relation to meter reading errors. This accounted for 59% of all sanctioned operational cases across 123 installations, resulting in sanctions totalling nearly £824,000. The highest individual sanction imposed in relation to operational referrals was due to double claiming under both RTFO and NDRHI, resulting in the recovery of approximately £970,000 via offsetting against future periodic payments.

4.16 In the case of audit referrals, most of the compliance activity was undertaken due to the lack of response or insufficient evidence provided by participants to address non-compliances raised during the audit process. We took non-engagement very seriously, thus, when the participant failed to engage and provide the required evidence, we sought to recover money for the period of non-compliance, and in certain cases revoke accreditation. During SY12, we sanctioned 5 installations for a lack of response, resulting in sanctions totalling just under £42,000. The highest individual sanction we imposed was due to a failure by the participant to let us know that their installation had been replaced. This led to the recovery of around £88,000 as we recouped by offsetting against the replacement installation.

Our debt process in SY12

4.17 We have successfully delivered the SY12 debt program. Building on the best practice developed, we have established a streamlined debt process that enabled the effective management of debt cases. Relying on our well-established debt recovery process, we were able to recover over £1.4 million during SY12 as shown in **Figure 4.5**.

4.18 This sum comprised of nearly £1.3 million recovered via offsetting from periodic payments and over £135,000 recovered through direct repayments and repayments plans. SY12 was the first year of engaging with an external debt recovery agency which received seven cases and aided the recovery of nearly £54,000.

Figure 4.5: Total debt recovered SY12 (2022-23)

Debt recovered	SY12 (2022-23)
Offsetting from periodic payments	£1,287,964.78
Direct repayment: Repaid in full	£73,575.03
Direct Repayment: Repayment plan	£8,306.52
Direct repayment: Repaid to debt agency	£53,649.04
Total	£1,423,495.37

4.19 In light of the current cost-of-living pressures, we have reviewed our debt management process and made some improvements to ensure that we are taking a more participant-focused approach.

5. Our Administration

Chapter summary

This chapter provides detail on our administration activity during Scheme Year (SY12). We perform several functions as administrator of the scheme, including processing applications and amendments, calculating and making payments, responding to enquiries, engaging with scheme stakeholders and working to ensure participants' ongoing compliance with the scheme regulations.

5.1 As administrator, Ofgem performs a number of functions including:

- publishing guidance
- the review of applications to join the scheme
- ensuring scheme participants continue to meet their ongoing obligations
- receiving and checking participants' periodic data submissions before making periodic support payments, and
- ensuring the scheme is guarded against fraud and error.

5.2 This chapter provides further information on certain aspects of our administration not covered elsewhere in the report. To ensure that we are providing a good service, we track our performance monthly and publish details on our website.²⁸

5.3 As detailed in **Figure 5.1** below, we made application decisions within six months on 48.6% of applications. This was a slight improvement from last year when 47.9% of application decisions were made within six months.

5.4 Ofgem made 98.0% of payments within 40 working days from submission. This is an increase from SY11, which saw 96.9% of payments made within 40 working days. The total number of payments made was very similar to the previous year, increasing to 81,770 compared to 76,054 in SY11.

²⁸ [Environmental programmes: Ofgem's role and delivery performance:](https://www.ofgem.gov.uk/environmental-programmes/environmental-programmes-ofgem-s-role-and-delivery-performance)

<<https://www.ofgem.gov.uk/environmental-programmes/environmental-programmes-ofgem-s-role-and-delivery-performance>>

Figure 5.1: Ofgem NDRHI Delivery Performance

Performance indicator	SY12 (2022-23)	SY11 (2021-22)
No. of application decisions²⁹	739	1,536
Application decisions within 6 months	48.6%	47.9%
No. of payments made	81,770	76,054
Payments made within 40 WD	98.0%	96.9%
No. of amendment decisions	2,106	2,471
Amendment decisions made within 6 months	96.1%	94.0%
Emails received	4,691	4,249
Emails responded to within 10 WD	99.5%	98.7%
Calls received	15,423	15,262
Abandoned call rate	3.2%	3.3%

5.5 We are continuously working to represent a good value for money for consumers. We perform several functions as the administrator of the scheme. This includes our operational delivery duties of processing applications and amendments, calculating and making payments, and our audit and compliance activities of working to ensure that scheme participants comply with the scheme rules. In SY12, for each £1 spent on our operational delivery and audit and compliance work, we have protected £0.76 in the public purse.

Stakeholder engagement

5.6 As administrators of the NDRHI scheme, engagement with key stakeholders has been critical. Ensuring that all scheme participants and potential applicants are aware of key scheme updates such as scheme closure, changes to the woodfuel criteria and compliance-related updates is vital to the effective and robust operation of the NDRHI scheme.

5.7 During SY12, we sent over 52,000 email notifications to participants and scheme applicants. These mail outs provided information on a variety of issues, such as scheme closure, annual maintenance requirements, the woodfuel quality suspension, meter recalibration requirements and modified capacity deadlines.

5.8 We hosted two external events to all prospective participants with Stage 2 Tariff Guarantee or an approved extension application highlighting the NDRHI scheme closure

²⁹ Prior to this year's report, a separate category of 'Tariff Guarantee application decision' was capturing Tariff Guarantee applications being processed, however, as the scheme closed to new Tariff Guarantee applications in 2021, full (Stage 3 approved) Tariff Guarantee applications are counted under 'No. of application decisions'.

and how to complete a properly-made application. Additionally, at the request of the REA³⁰, in March 2023 Ofgem attended the Wood Heat Forum event to outline the key issues to be resolved by participants before scheme closure. This appearance generated questions from attendees that we were able to address directly during the session.

- 5.9 As accredited applicants are eligible to receive support for up to 20 years, we will continue to engage with and inform participants through our stakeholder engagement activities until 31 March 2041.

³⁰ The Association for Renewable Energy and Clean Technology (previously Renewable Energy Association: REA) is a not-for-profit renewable energy and clean technology trade association.

6. Looking Forward

Chapter summary

This chapter provides a summary of any significant changes affecting the future of the NDRHI scheme and introduces the GGSS and BUS schemes.

- 6.1 The NDRHI provides payments for up to 20 years meaning that we will still be servicing participants until 31 March 2041. This will include processing amendments such as relocation of installations, changes of ownership or transfer of producer (for biomethane) and replacement plant.
- 6.2 To address the issue of global woodfuel supply shortages, a temporary suspension of woodfuel quality criteria³¹ for wood pellets introduced by DESNZ will be in place until 22 November 2023. Additional work will be carried out over the summer months of 2023 to assess the impact of the suspension.
- 6.3 We will continue to actively monitor participant compliance, to ensure that only those that continue to meet scheme rules receive payments. In part, this is achieved through a requirement for declarations to be submitted by participants and our extensive audit programme. This, along with the counter fraud measures that we continue to implement, ensures that we only pay subsidies on eligible heat generation, thereby ensuring fair and effective use of public funds.
- 6.4 Whilst the NDRHI has closed to new applications, the government has introduced a scheme to provide continued support for biomethane installations. The Green Gas Support Scheme (GGSS) launched on 30 November 2021 and is due to remain open for applications until November 2025.³²
- 6.5 Additionally, the Boiler Upgrade Scheme (BUS) opened for applications in 2022. The BUS supports the decarbonisation of heat in buildings, providing upfront capital grants to support the installation of heat pumps and biomass boilers in homes and small non-domestic buildings in England and Wales. Through the BUS scheme, £450 million of grant

³¹ It was a requirement for all wood pellets to meet the EN Plus A1 standard, a subsequent version of that standard, or an equivalent approved standard.

³² [Information on The Green Gas Support Scheme](https://www.ofgem.gov.uk/environmental-and-social-schemes/green-gas-support-scheme-and-green-gas-levy): <<https://www.ofgem.gov.uk/environmental-and-social-schemes/green-gas-support-scheme-and-green-gas-levy>>

funding is available over three years from 2022 to 2025.³³ The government have also announced their intention to extend the BUS to 2028.³⁴

- 6.6 It is understood at the time of writing that the scheme Regulations have been retained under the Retained EU Law (Revocation and Reform) Act 2023, which received Royal Assent on 29 June 2023, ensuring legal certainty and continuity of the scheme after Brexit. Accepting the closure of the NDRHI scheme, this means that the Regulations will continue to operate unchanged.

³³ [Information on The Boiler Upgrade Scheme](https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus): <<https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus>>

³⁴ [Powering up Britain](https://www.gov.uk/government/publications/powering-up-britain): <<https://www.gov.uk/government/publications/powering-up-britain>>

Appendix 1 – Accredited installations by region

Figure A1.1: Accredited installations by region and technology

Region	Solid Biomass Boiler	GSHP	ASHP	Biogas	Solar Thermal	WSHP	Bio-methane	Solid Biomass CHP	Waste	Total
South West	2,336	378	147	72	69	15	21	7	-	3,045
West Midlands	1,780	407	49	137	31	16	12	23	-	2,455
Yorkshire and The Humber	1,798	322	113	68	35	16	17	6	2	2,377
Wales	1,763	143	58	69	38	10	1	18	-	2,100
North West	1,609	254	90	90	28	12	5	9	1	2,098
East Midlands	1,592	184	80	92	13	8	13	2	-	1,984
East of England	1,160	248	118	62	27	17	15	6	-	1,653
South East	1,073	317	77	29	40	45	44	9	-	1,634
Southern Scotland	1,294	69	15	43	6	13	5	7	-	1,452
East Scotland	809	69	38	40	11	8	9	1	1	986
Highlands and Islands	712	37	55	26	20	4	14	2	-	870
North East	667	87	47	15	12	1	6	2	2	839
North East Scotland	513	23	6	17	4	1	4	-	-	568
West Central Scotland	241	83	20	12	5	2	2	1	-	366
London	77	58	20	1	4	10	4	1	-	175
Total	17,424	2,679	933	773	343	178	172	94	6	22,602

Figure A1.2: Installed capacity (MW) by region and technology

Region	Solid Biomass Boiler	GSHP	Biogas	Solid Biomass CHP	Waste	WSHP	ASHP	Solar Thermal	Total
West Midlands	556.24	84.56	44.37	43.07	-	2.77	2.47	0.92	734.40
East Midlands	539.81	35.38	43.15	69.47	-	9.66	2.56	0.48	700.50
Yorkshire and The Humber	513.08	39.90	29.98	7.38	25.21	4.03	3.36	0.81	623.73
North West	328.57	71.13	60.93	10.44		45.88	3.70	0.81	521.46
South West	402.03	29.26	22.52	24.76	24.10	1.83	3.67	0.41	508.58
Wales	400.20	26.78	31.17	18.32	-	4.51	5.58	1.03	487.58
East of England	394.17	15.41	23.42	34.60	-	1.27	2.32	0.51	471.70
South East	257.02	38.17	20.41	45.89	-	28.28	5.67	0.55	395.99
Southern Scotland	301.55	28.28	10.86	16.19	-	8.72	0.59	0.08	366.27
North East	137.62	34.55	14.17	31.65	88.00	0.02	1.49	0.17	307.66
East Scotland	219.11	17.48	10.27	1.80	15.02	2.51	0.63	0.27	267.07
Highlands and Islands	219.42	3.09	9.75	13.16	-	3.43	1.77	0.25	250.86
North East Scotland	186.93	10.91	4.10	-	-	0.06	0.09	0.04	202.13
West Central Scotland	65.81	4.90	2.93	2.86	-	5.37	4.14	0.15	86.17
London	22.88	10.74	1.60	7.84	-	7.75	4.63	0.04	55.49
Total	4,544.43	450.54	329.61	327.43	152.33	126.07	42.66	6.51	5,979.57

N.B. biomethane plants are not included as they do not have a heat output.

Appendix 2 – Associated Documents

The Renewable Heat Incentive Scheme Regulations 2018 (as amended) can be viewed on the legislation.gov.uk website:

[Renewable Heat Incentive Scheme Regulations:](#)

<<https://www.legislation.gov.uk/primary+secondary?title=Renewable%20Heat%20Incentive>>

The Renewable Heat Incentive Scheme (Amendment) Regulations 2022 can be viewed on the legislation.gov.uk website:

[February 2022 amendments to the RHI regulations – NDRHI guide to Tariff Guarantees:](#)

<<https://www.legislation.gov.uk/uksi/2022/159/contents/made>>

Ofgem has published guidance documents on the NDRHI scheme, which can be viewed on the Ofgem website linked below:

[Ofgem's NDRHI main guidance:](#)

<<https://www.ofgem.gov.uk/publications-and-updates/non-domestic-rhi-main-guidance>>

For more information on the NDRHI scheme, visit the Ofgem website using the following link: Guidance and Resources

[Ofgem contacts, guidance and resources about the NDRHI scheme:](#)

<<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources>>

For more information on NDRHI Tariffs and Payments, including information on how payments are calculated, visit the Ofgem website here:

[NDRHI tariffs and payments:](#)

<<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/non-domestic-rhi-tariffs-and-payments>>

Public reports and data about the NDRHI scheme can be viewed on our website:

[Ofgem's public reports and data on the NDRHI scheme:](#)

<<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/public-reports-and-data>>

Appendix 3 – Scheme Glossary³⁵

A

Air source heat pump – See Heat pump.

Anaerobic digestion – Natural process in which micro-organisms break down organic matter (e.g., animal manure or waste food) within a contained environment. This produces biogas which can then be used as fuel to generate electricity.

Authority - The Gas and Electricity Markets Authority (GEMA) (the Authority) is the statutory body responsible for administering the NDRHI in Great Britain (GB). The Authority's day-to-day functions are performed by Ofgem, the office of the Authority.

B

Biogas – Biogas is a renewable fuel produced by the breakdown of organic matter.

Biomass – Organic matter used as fuel.

Biomethane – Biomethane is a gas (biogas) produced from organic matter through anaerobic digestion and then purified. Anaerobic digestion is a natural process in which micro-organisms break down organic matter (e.g. animal manure or waste food) within a contained environment.

Boiler Upgrade Scheme (BUS) – The Boiler Upgrade Scheme (BUS) supports the decarbonisation of heat in buildings. It provides upfront capital grants to support the installation of heat pumps and biomass boilers in homes and non-domestic buildings in England and Wales.

C

Combined Heat and Power (CHP) – A plant that captures and uses heat which is created as a by-product of electricity generation.

D

DESNZ – Department for Energy Security and Net-Zero is responsible for RHI policy in GB.

³⁵ Many of the terms included in this glossary are defined in the Regulations and those definitions should be consulted for their legal meaning for the purposes of the Regulations.

E

Error rate – A measure of non-compliance. This is the estimated level of error across the scheme population, expressed as a percentage of all payments.

Extension application – A type of application introduced by BEIS (the former Department for Business, Energy and Industrial Strategy, now DESNZ) in response to the COVID-19 pandemic. Extension applications allow those who's projects had been delayed but were not eligible to submit a tariff guarantee application additional time to commission and submit a full accreditation application.

G

GEMA – The Gas and Electricity Markets Authority (GEMA) (the Authority) is the statutory body responsible for administering the NDRHI in Great Britain (GB). The Authority's day-to-day functions are performed by Ofgem, the office of the Authority.

Green Gas Support Scheme (GGSS) – The GGSS is a government environmental scheme that provides financial incentives for new anaerobic digestion biomethane plants to increase the proportion of green gas in the gas grid. The scheme is open to applicants in England, Scotland and Wales for four years from 30 November 2021.

Ground source heat pump – See Heat pump.

GW – Gigawatt, equal to one billion watts.

GWh – Gigawatt hour, equivalent to one billion watt-hours of heat output.

H

Heat pump – A heat pump is a device that extracts ambient heat from the air, ground or water and increases it to use for heating.

K

kW – Kilowatt, equal to one thousand watts.

kWh – Kilowatt hour, equivalent to one thousand watt-hours of heat output.

M

MW – Megawatt, equal to one million watts.

MWh – Megawatt hour, equivalent to one million watt-hours of heat output.

R

RTFO – The Renewable Transport Fuel Obligation (RTFO) supports the government policy on decarbonising transport by encouraging the production and use of renewable fuels that do not damage the environment.

S

Solar thermal – A system that uses energy from the sun to heat water.

Solid biomass boiler – A boiler fuelled by solid biomass such as wood.

Solid biomass CHP – A plant fuelled by solid biomass such as wood that produces both heat and electricity.

T

Tariff guarantee – A process that allows certain applicants to the NDRHI to secure a tariff rate before their installation is commissioned and fully accredited on the RHI.

TW – Terawatt, equal to one trillion watts.

TWh – Terawatt hour, equivalent to one trillion watt-hours of heat output.

W

Water source heat pump – See Heat pump.