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Non-Domestic Renewable Heat Incentive (NDRHI)

Annual Report

Scheme Year 13 (1 April 2023 – 31 March 2024)

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Contents

Foreword

Heating for non-domestic buildings and industrial processes accounts for around 24% of the UK's carbon emissions[1], therefore, the decarbonisation of heat is a fundamental challenge in reaching net zero. The Climate Change Committee has said, "Radical decarbonisation of heat supply in the UK will be essential to meeting carbon reduction targets under the Climate Change Act, and delivering on commitments made in the Paris Agreement."[2]

Launched in Great Britain in November 2011, the Non-Domestic Renewable Heat Incentive (NDRHI) scheme has played a significant part in government efforts to reduce carbon emissions in the non-domestic sector. The NDRHI supports businesses, the public sector, and non-profit organisations to install renewable and low-carbon technologies for space, water and industrial process heating. By paying tariffs to participants for the generation of renewable or low-carbon heat and the injection of green gas into the grid, the scheme provides financial incentives for the uptake of low-carbon heat technologies.

The NDRHI is one of a range of schemes Ofgem administers on behalf of the UK government and the devolved administrations. Worth almost £10 billion in the year 2022 to 2023, our schemes are designed to advance decarbonisation and support vulnerable consumers.

The Department for Energy Security and Net Zero (DESNZ) maintain overall responsibility for the scheme and NDRHI policy. Ofgem has been appointed as the scheme administrator. Key to our role is publishing guidance, processing applications to the scheme, receiving and validating participants' data submissions, calculating and making quarterly payments for eligible heat generation or green gas injection, and guarding the scheme against fraud and error.

The NDRHI has made significant contributions to the UK's energy system throughout its lifetime. Over the past thirteen years, the scheme has paid £5.94 billion to 22,812 low-carbon and renewable heat installations in the non-domestic sector, subsidising the generation of 78.1 TWh of heat energy and the injection of 2.5 billion m^3 of biomethane. Combined, this is equivalent to the amount required to heat over 9 million typical UK homes for a year.

Although the scheme is closed to new applications as of 31 March 2023, we will be servicing eligible participants with payments until March 2041, and we continue to accept applications for amendments to existing accreditations. Most applications to join the scheme have already been processed, except a small number which are taking longer than usual due to the complexity of proposed projects. As we work through the remaining applications, we will continue to see growth across the scheme. This scheme year represents the biggest to date, with more participants, more heat generation, and more money paid than ever before. The

[1] Heat decarbonisation - Catapult: <https://es.catapult.org.uk/guide/decarbonisation-heat/>
[2] Best practice in heat decarbonisation policy (UKERC) - Climate Change Committee: <https://www.theccc.org.uk/publication/ukerc-best-practice-in-heat-decarbonisation-policy/>

scheme's closure to new entrants does not mean we are slowing down in our administrative duties, and we remain dedicated to optimising processes across all areas of business.

As part of our administrative function, we operate robust audit and compliance programmes to ensure that our participants are complying with the eligibility criteria and fulfilling their ongoing obligations. When participants fail to comply with scheme rules, we reserve the right to pursue compliance or enforcement action when necessary, including recouping or suspending payments, and in extreme cases, terminating accreditation.

This scheme year, we have prevented, or we have detected and expect to recover, nearly £5 million of funds, assuring that only participants who follow the scheme rules will benefit. Participants should expect swift action if they are not complying with their obligations. Therefore, I would encourage participants to be proactive – to stay on top of changes to the scheme, to keep us informed of any changes that may impact their eligibility, to be prepared for audits, and to expect compliance action if they are not taking appropriate measures.

As the scheme matures, we are seeing some requirements impact participants for the first time. I would like to remind participants that it does not matter whether a specific requirement has affected them before – we can take action at any point during the scheme's lifetime as these are the conditions that participants are bound by. Our work to educate participants on their obligations, and to engage on frequent non-compliances, is part of establishing a culture of accountability. We ensure participants are aware of their responsibilities and pursue action where they do not comply.

I am proud that we continue to assert ourselves as a strong and effective administrator – executing our duties with thirteen years of scheme-specific expertise. I look forward to continuing our great work across the NDRHI scheme, particularly seeing how we can continue to incorporate insights from the experience we have acquired over the scheme's lifetime. Our work here helps us to refine our administrative and monitoring compliance functions, and in turn, helps us engage participants and stakeholders across all of our schemes. By building expertise in scheme delivery, policy, and stakeholder engagement, we can best position ourselves to support change within the energy sector.

We welcome comments from readers on the content of this report, so if you want to get in touch, please contact us at SchemesReportingFeedback@ofgem.gov.uk.

Neil Lawrence
Director, Delivery and Schemes

104.9 TWh

Heat generated

104.9 TWh of heat has been generated under the scheme to date - **78.1 TWh** from heat generating installations and **26.8 TWh** from the green gas injected into the grid[3].

2.5 billion m³

Green gas injected

2.5 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 **389.9 million m³** in SY13.

1.3 million

Homes heated

The heat generation and green gas injection during SY13 would be enough to provide **7 billion hot showers** or to heat over **1.3 million typical UK homes** for a year.

22,812

Accredited installations

In total, **22,812**[4] installations have been accredited to the scheme with a combined capacity of **6,090 MW**.

£5.94 billion

Payments made

£5.94 billion in payments have been made since the start of the scheme. **£930.1 million** of this was paid during SY13.

[3] Biomethane installations do not directly generate heat and instead are paid based on the volume of green gas injected into the gas grid. However, we calculate the equivalent heat output for the volumes of green gas injected, which has been used here.

[4] The figure reported here differs to the figure reported by Department for Energy Security and Net Zero (DESNZ). This is due to differences in how Ofgem and DESNZ count installations that are currently having applications for re-accreditation assessed. DESNZ exclude the original accreditation while an application for re-accreditation is being assessed, whereas we continue to count the original until a decision is made. If approved, we and DESNZ both count the re-accreditation in the place of the original accreditation. This means that the numbers in the report, including accredited capacity, heat generated and payments made, are slightly different from those reported by DESNZ.

Executive Summary

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

Under the NDRHI scheme, eligible installations receive quarterly payments for up to 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, some applicants were, under specific criteria[5], given until 31 March 2023 to submit a full application. After this time, the scheme closed to all new entrants.

Ofgem has been responsible for administering the NDRHI scheme on behalf of the Department for Energy Security and Net Zero (DESNZ)[6] 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 monitoring activities, including audit programmes, to ensure participants are complying with the scheme rules. Our robust monitoring practices allow us to detect non-compliance and in turn, allow us to pursue compliance action to prevent and recover fraudulent and erroneous payments, helping to 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 report[7].

As a part of our ongoing responsibilities, we produce an annual report following the end of each scheme year. This report summarises activity during the thirteenth year of the NDRHI scheme in GB (Scheme Year 13 (SY13)), covering the period 1 April 2023 to 31 March 2024.

[5] Applications supported by extensions or tariff guarantees had until 31 March 2023 to submit a full application. See page 16 for details on these application routes.
[6] DESNZ are currently responsible for RHI policy in GB. This responsibility was previously held by DECC (Department of Energy and Climate Change) until its dissolution in July 2016, and then by BEIS (Department for Business, Energy and Industrial Strategy) until its change into DESNZ in February 2023.
[7] 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> Renewable Heat Incentive for non-domestic customers: <https://www.nidirect.gov.uk/articles/renewable-heat-incentive-non-domestic-customers>

Accreditations (page 15)

The NDRHI scheme has supported the uptake of 22,812 low carbon heating systems across GB. In SY13, we accredited 440 installations to the scheme, including re-accreditations[8]. This 39.9% decrease from SY12 can be attributed to lower volumes of applications following the scheme's closure to new entrants. We now work to process 33 outstanding applications to join the scheme, submitted before the deadline, and a much smaller pool of applications to re-accredit existing installations. The total accredited capacity[9] on the scheme stands at 6,090.2 MW, with 179.8 MW of capacity approved in SY13. The total accredited capacity will continue to rise as outstanding applications to join the scheme are granted approval.

Solid biomass boilers are the most common technology type deployed under the scheme, making up around 76.5% of all accredited installations. The introduction of several changes throughout the lifetime of the scheme, notably the degression mechanism[10] and tariff guarantee applications[11], has led to varying rates of deployment for each technology across scheme years. Biomass boilers' proportion of newly accredited capacity fell, representing a 95% share for the first four years of the scheme, compared to 55.2% in SY13. Meanwhile, ground source heat pumps have risen in prominence, accounting for 11% of newly accredited capacity in SY13, compared to only 2.2% of capacity accredited between SY1 and SY8.

We estimate that at least 34% (or 7,764) of systems installed were replacing a fossil fuel (oil, gas or coal) heating system. The actual percentage is expected to be higher given the voluntary nature of responding to this question on the application (46% responded none/not specified); however, it should be noted that not all installations replace an existing system.

We also track the industry sectors within which the heat is used by asking participants to categorise their area of economic activity into the UK Standard Industrial Classification (SIC)[12]. Installations with a SIC of 'Accommodation' are the most frequent (7,296 with 827.8 MW installed capacity). However, the 'Crop and animal production, hunting and related activities' SIC has a greater total installed capacity of 2,184.6 MW with 6,001 installations.

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[8] Applications for re-accreditation (due to relocation, replacement, or change of ownership of existing installations) continue to be accepted and are counted here separate to their original accreditations
[9] Total accredited capacity includes all NDRHI eligible technology types except for biomethane installations, which are paid based on the volume of gas injected into the grid instead of heat generated.
[10] The degression mechanism is an automatic tariff reduction to help control budgeting of the scheme. NDRHI mechanism for budget management: <https://www.gov.uk/government/publications/rhi-mechanism-for-budget-management-estimated-commitments>
[11] A tariff guarantee allows applicants to the scheme to secure a tariff rate before their installation is commissioned and fully accredited. This provides a level of investment certainty for larger installations.
[12] UK SIC 2007: <https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007>

Payments and heat generation (page 31)

SY13 is the biggest scheme year to date, with more eligible heat output and more money paid than ever before. Over 104.9 TWh of heat has been subsidised by the scheme so far – 78.1 TWh of this from heat generating installations, and the equivalent of 26.8 TWh through the injection of nearly 2.5 billion m^3 of green gas into the grid. In SY13, payments were made in relation to generation of 11.2 TWh of heat and the injection of 389.9 million m^3 of biomethane.

A total of £5.94 billion in payments have been made to participants since the scheme started. £930.1 million of this was paid out in SY13, with £581.2 million for eligible heat output and £348.8 million for biomethane injection. The total amount paid to heat-generating and biomethane installations in SY13 represents a 3.1% increase from the amount paid in SY12.

SY10 was previously the year with the most heat generated, with 11.1 TWh of eligible heat output across all technologies excluding biomethane. However, between SY10 and SY11, heat generation fell by 5.2%, partially in relation to the Covid-19 pandemic, supply chain issues, and rising costs. It was not until this scheme year that heat output exceeded pre-pandemic levels. The amount of heat generated and the associated payments during SY13 increased by 1.3% and 3.7% respectively. The larger percentage increase in payments can be attributed to tariffs being uplifted by retail price index (13.4%) and consumer price index (10.5%).

Monitoring compliance (page 35)

Ofgem takes any non-compliance with scheme obligations seriously. We operate audit and compliance programmes to ensure that payments are only made against eligible heat generation, thereby protecting the public purse. As in previous years, we took a proactive approach to compliance by engaging with scheme participants, providing key updates which were vital to the effective and robust operation of the NDRHI.

Our audit programme aims to check the compliance of participants with the scheme rules. In SY13, we conducted 414 statistical and targeted audits. 42.9% of statistical and 40.7% of targeted audit cases were classed as materially non-compliant, suggesting a potential financial impact[13]. The most common reason for material non-compliance was participants failing to provide evidence during an audit that the fuels used met sustainability requirements, accounting for 40.4% of instances.

[13] Material non-compliance identified during audit is subject to further compliance investigation, which may conclude there is no financial impact. Further information on this can be found in Chapter 4.

Our statistical audit programme looks at a representative sample of scheme participants, allowing us to extrapolate non-compliance trends to the wider scheme population. This means we can estimate the level of fraudulent and erroneous payment ('error rate') resulting from non-compliant accreditations on the scheme. The error rate on the scheme was estimated to be just 0.2% in SY13, a slight reduction from the 0.3% for SY12.

We have the power to open a compliance investigation when we suspect a scheme participant is non-compliant. In SY13, we concluded 972 compliance investigations, where we prevented the payment of, or expect to recover, nearly £5 million of public funds.

Relying on our well-established debt recovery process, we recovered a total of £1.43 million in SY13, originating from erroneous payments made in various scheme years. The majority of this was recovered via offsetting from ongoing payments to those participants found to be non-compliant. In light of the current cost of living pressures, we continue to make improvements to our processes and adopt a more participant-focussed approach, ensuring we work with participants when demanding repayment so that we do not put them into financial difficulty.

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

Contacts

For more information visit the Ofgem website[14]. You will find details about the scheme's closure, the accreditation process, and ongoing obligations.

If you can't find the information you need on our website, our customer service team will be happy to help on **0300 003 2289** or email rhi.enquiry@ofgem.gov.uk.

Press enquiries

For press enquiries please contact Ofgem's press office at press@ofgem.gov.uk

[14] Non-Domestic Renewable Heat Incentive (RHI) webpage: <https://www.ofgem.gov.uk/environmental-and-social-schemes/non-domestic-renewable-heat-incentive-rhi>

1. About the Scheme

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 changes to the scheme relevant to Scheme Year 13 (SY13).

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)[15] and is a financial incentive designed to support businesses, public sector, and other non-domestic and non-profit organisations to take up low carbon heat. 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), encourages the uptake of low carbon heating systems in the non-domestic sector. 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 on behalf of the Department for Energy Security and Net Zero (DESNZ). The Authority's functions are performed by Ofgem, the office of the Authority. As administrator, Ofgem perform a number of functions including:

- publishing guidance
- reviewing 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.

[15] The Department for Energy Security and Net Zero (DESNZ) are currently responsible for RHI policy in GB. This responsibility was previously held by DECC until its dissolution in July 2016, and then by BEIS (Department for Business, Energy and Industrial Strategy) until its change into DESNZ in February 2023.

1.4 The Renewable Heat Incentive Scheme Regulations 2018 (as amended) (the Regulations)[16] 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 2023 to 31 March 2024. 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 This scheme year, there were no active legislative changes, meaning no new or previous legal changes have come into effect for the first time during the period covered by this report. We have instead included information on other recent changes impacting the scheme and participants. We continue to work closely with DESNZ to ensure the scheme is being delivered effectively and in accordance with the policy, and to implement any changes made to the legislation as appropriate.

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 to join the scheme were accepted beyond 31 March 2023. However, accredited installations can be replaced, relocated, or sold whilst maintaining their accreditation. In these cases, a new application for reaccreditation must be made.

1.7 Regulations impacting this extension were made and took effect on 1 April 2022. The extension only applied to NDRHI technologies that were eligible for tariff guarantee or extension applications, including 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.[17]

Maintenance requirements and fuel quality

1.8 As boilers are a major source of local air pollution, ensuring that biomass boilers on the scheme are well maintained helps to limit impact on air quality. The government's commitment to reducing the impact of particulate emissions on public health is

[16] Renewable Heat Incentive Scheme Regulations 2018: <https://www.legislation.gov.uk/uksi/2018/611/contents/made>
[17] Non-Domestic RHI main guidance: <https://www.ofgem.gov.uk/publications/non-domestic-rhi-main-guidance>

highlighted in the Clean Air Strategy.[18] 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).[19]

1.9 The criteria for woodfuel quality[20], as set out in Schedule 4A of the Regulations, was also 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 and burns efficiently, so the biomass industry can support the Clean Air Strategy.[21] The government suspended the woodfuel quality criteria for wood pellets between 23 November 2022 and 22 November 2023 to address the issue of global woodfuel supply shortages.

1.10 Accredited participants have an ongoing responsibility to provide us reasonable access to installation sites for inspection purposes. 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 ensures Ofgem can access all heat pumps.

Reporting requirement for biomethane producers

1.11 The Renewable Transport Fuel Obligation (RTFO) supports government policy on decarbonising transport by encouraging the production and use of renewable fuels that do not damage the environment. The RTFO/NDRHI interaction self-declaration was introduced following an amendment to the RHI Regulations on 1 April 2021, which set a legal obligation to ensure eligible biomethane generators receiving support through the NDRHI were not double claiming payments on the same units of gas through the RTFO.

1.12 As of 1 April 2022, all biomethane producers must submit an independent annual report on their NDRHI/RTFO interaction as part of their annual sustainability audit. This further validation is in addition to the ongoing requirement for producers to provide a self-declaration detailing their interactions with RTFO certificates and NDRHI payments.

[18] Clean Air Strategy 2019:
<https://www.gov.uk/government/publications/clean-air-strategy-2019>
[19] For more details see Chapter 7 of the NDRHI Guidance Vol. 2:
<https://www.ofgem.gov.uk/publications/non-domestic-rhi-main-guidance>
[20] 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.
[21] February 2022 amendments to the RHI regulations:
<https://www.legislation.gov.uk/uksi/2022/159/contents/made>

2. Accreditations

This chapter analyses accreditations under the NDRHI scheme, both since the start of the scheme and in Scheme Year 13 (SY13), looking at the makeup of the scheme population in terms of capacity, technology type, heat use, system type replaced, and industrial classification. It also details the application process and the status of the queue of applications.

2.1 Assessing the eligibility of scheme participants is one of our key administrative functions. Through this, we ensure that the installations supported through the scheme are compliant with the eligibility criteria and that we are therefore supporting scheme objectives by only paying for eligible generation. This assures that we are using public funds fairly and effectively, and that we are maximising value for money.

2.2 Applicants who meet the eligibility criteria to receive payments are granted accreditation and, if they continue to comply with scheme rules, may receive payments up to a maximum of 20 years, or until 31 March 2041, whichever comes first.

2.3 The NDRHI scheme closed to most applicants on 31 March 2021 with the exception of certain extension and tariff guarantee applications which were given until 31 March 2023 to submit a full properly made application[22]. This is explained in more detail in paragraphs 2.6 and 2.7.

2.4 Following the NDRHI's closure to new applicants, we have processed most applications to join the scheme. We continue to process 33 applications for accreditation that remain in the queue post-closure, which are taking longer to reach a final decision on due to the complexity of proposed projects. We will also continue to receive and process amendments to existing accreditations, and applications for reaccreditation due to the relocation, replacement, or change in ownership of accredited installations.

2.5 We collect a variety of information on installations that allows us to report on the makeup of the scheme population in terms of various factors. These include capacity, technology type, the heating system being replaced, how and in what industry the heat is used, and the geographical location.

[22] A 'properly made' application must include all information we ask for in the application form to a suitable standard, to enable us to make a decision on the eligibility of the installation.

Applications

2.6 Tariff guarantees allow applicants to secure a tariff rate before their installation is commissioned and fully accredited, providing a level of certainty of investment for installations that are larger and/or have a longer lead time. Applicants awarded a tariff guarantee before 31 March 2021 were given until 31 March 2023 to commission their installations (or in the case of biomethane applications, to commence injection) and submit a properly made stage 3 application[23].

2.7 The extension mechanism was introduced in November 2020 by the Department of Business, Energy and Industrial Strategy[24] in response to the COVID-19 pandemic, which impacted the ability of applicants to commission and accredit their projects before scheme closure[25]. Applicants with an extension were granted until 31 March 2023 to submit a full, properly made application for accreditation. However, they still had to submit their initial application for an extension before the scheme closed on the 31 March 2021, demonstrating that significant resources had already been invested into their project prior to 17 August 2020.

2.8 Additionally, new applications for reaccreditation due to the relocation, replacement, or change in ownership of existing accredited installations continue to be accepted.

2.9 Further information on the application process, including tariff guarantees, extensions, and amendments to existing accreditations, can be found by referring to our guidance.

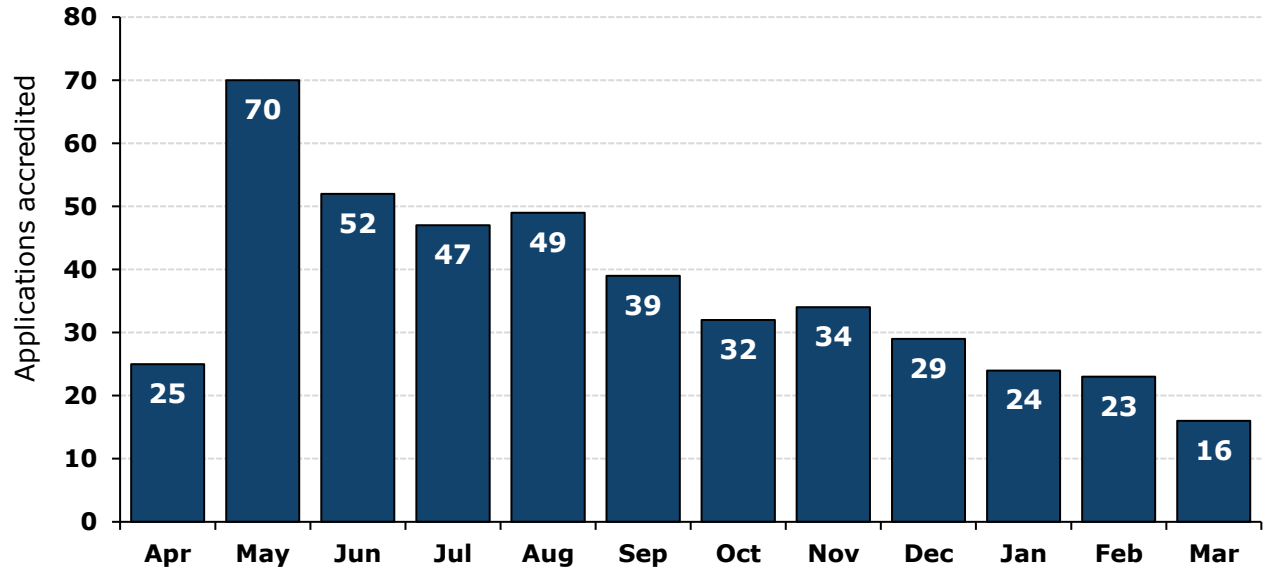
Accreditations

2.10 If we determine an applicant is eligible to receive payments following our assessment, they are granted accreditation. The values presented in this section relate to accredited full applications, stage 3 tariff guarantee applications, and approved reaccreditations[26].

[23] Stage 1: applicants submit application and supporting evidence; if approved they are issued a provisional tariff guarantee notice. Stage 2: applicants provide proof of financial close and are awarded a tariff guarantee. Stage 3: applicants commission the installation (or in case of biomethane producers, commence injection) and submit full application; if approved they are awarded full accreditation.
[24] The Department of Business, Energy and Industrial Strategy (BEIS) were responsible for RHI policy in GB between July 2016 and February 2023, until DESNZ took over the responsibility.
[25] 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>
[26] Approved accreditations are counted in the place of their original accreditations (i.e. they are not double counted), but their approval is counted separately to their initial accreditation's approval.

2.11 In SY13 440 applications were accredited on to the scheme, including reaccreditations, bringing the total number of accredited installations under the scheme to 22,812.[27] This is a 39.9% drop compared to the 732 accreditations granted during SY12, which can be attributed to lower volumes of incoming applications following the closure of the scheme to new applicants. Besides the small number of complex applications submitted pre-closure still being assessed for first time accreditation, we now work to process a much smaller intake of applications for re-accreditation. The total number of accreditations granted each month during SY13 is detailed below in **Figure 2.1**.

Figure 2.1: Applications accredited during SY13 (2023 to 2024)[28]



The column chart above shows the number of applications accredited each month from April 2023 to March 2024. Applications accredited range from a low of 16 in March to a high of 70 in May, compared to the range in SY12 of a low of 31 in February to a high of 105 in May. The increase between April and May 2023 is the result of processing the increased volume of applications submitted just before final closure of the scheme on 31 March 2023. The average number of applications accredited each month for the year is 37, down from 61 per month last year. Overall, a downward trend can be observed in the number of applications accredited, which can be attributed to an overall reduced volume of applications incoming.

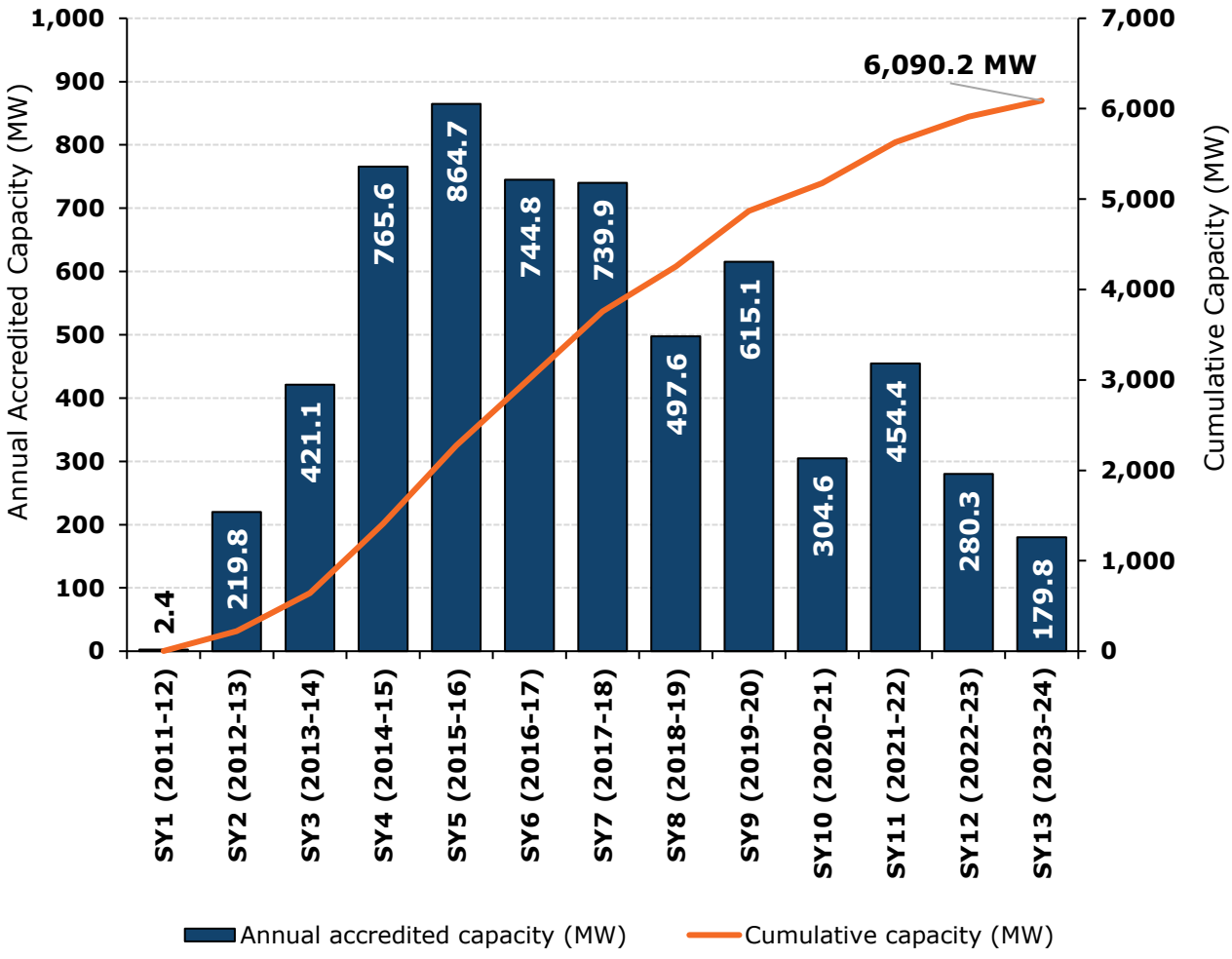
[27] The figures reported here differ to the figures reported by DESNZ. This is due to differences in how we count installations that are currently having applications for re-accreditation assessed. DESNZ exclude the original accreditation while an application for re-accreditation is being assessed, whereas we continue to count the original until a decision is made. If approved, we would both count the re-accreditation in the place of the original accreditation. This leads to discrepancies across many figures due to our inclusion of installations awaiting a decision on their application for re-accreditation. These discrepancies include accredited capacity, heat generated and payments made.

[28] Note that applications for re-accreditation due to the replacement, relocation or change of ownership of existing plants continue to be accepted and their approvals are counted here as applications accredited.

2.12 The total accredited capacity[29] on the scheme as of 31 March 2024 stands at 6,090.2 MW. This means in SY13, an additional 179.8 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 in future scheme years as outstanding applications are approved.

2.13 The growth in cumulative accredited capacity since the start of the scheme can be seen in further detail in **Figure 2.2** below. Despite the decrease in the number of accreditations this scheme year, the annual average capacity of the installations accredited increased from 389.9 kW in SY12 to 409.7 kW in SY13.

Figure 2.2: NDRHI annual and cumulative accredited capacity



The combined column and line chart 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 (864.7 MW) and the lowest (aside from SY1) was SY13 with 179.8 MW accredited.

[29] 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.

Tariff guarantee applications and applications with an extension

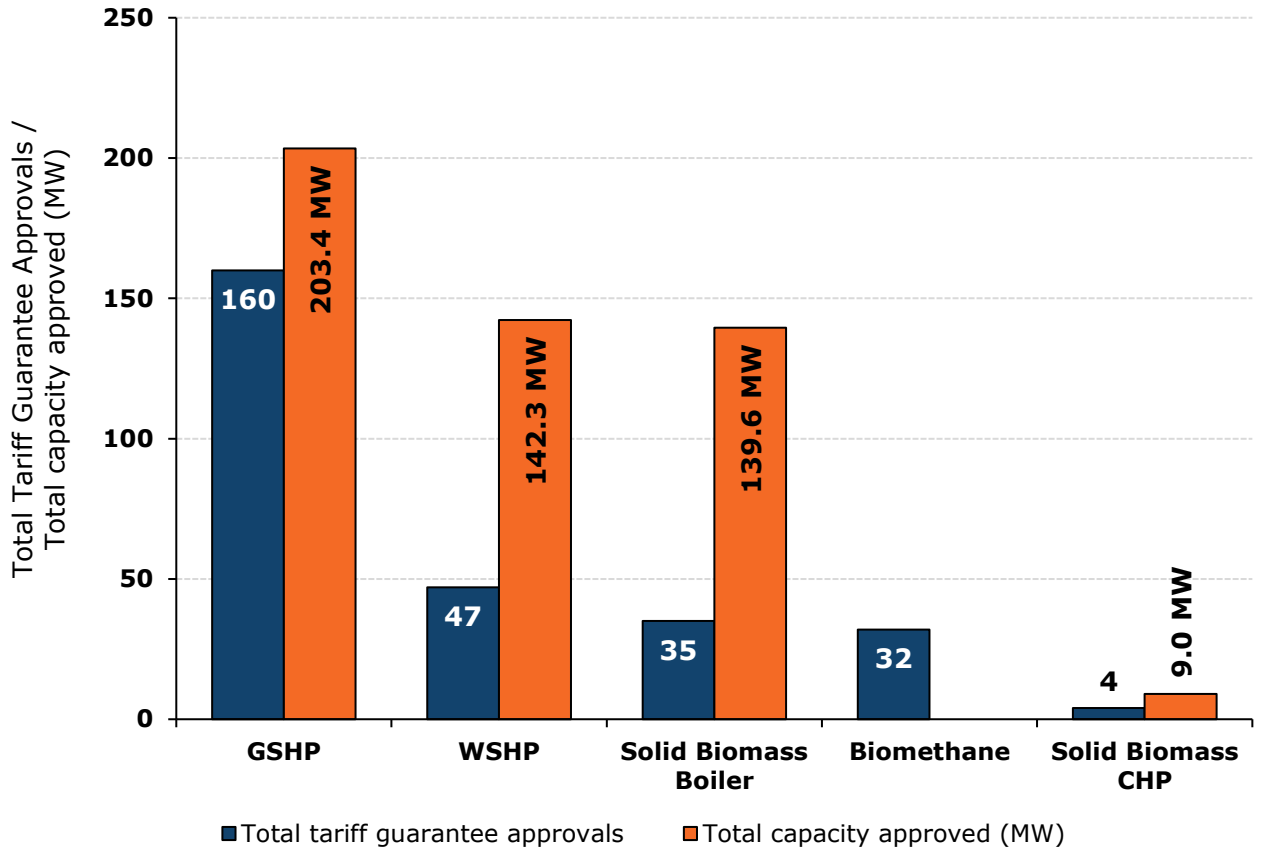
2.14 Since their introduction to the scheme in May 2018, we have received 715 tariff guarantee applications in total[30]. Following our assessment, we granted a total of 443 stage 2 tariff guarantees with a committed spend of £233.6 million. Of these, 278[31] applicants went on to submit a successful full stage 3 application and were accredited to the scheme. At the time of writing, there are six remaining tariff guarantee applications still being processed and awaiting decision.

2.15 Most applications for an extension were processed in 2021[32], however, a small number of applications were held in the queue for longer than usual in order to remain within budget constraints. Overall, we granted 700 applicants an extension, which meant that they were then able to submit an additional properly made, full application for accreditation before the 31 March 2023 deadline. Note that these are separate application processes and not all applicants granted an extension went on to submit a successful application for accreditation. So far, 472 applicants went to submit a successful, full application for accreditation supported by an extension, and a further 12 applications for accreditation are still under review.

2.16 **Figure 2.3** provides an overview of the technology split of applications approved through the tariff guarantee application route. 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 2.4** provides an overview of the technology split of applications approved with the support of an extension. This figure details the 472 applications that were approved for full accreditation with support of an extension, rather than the 700 successful applications for an extension.

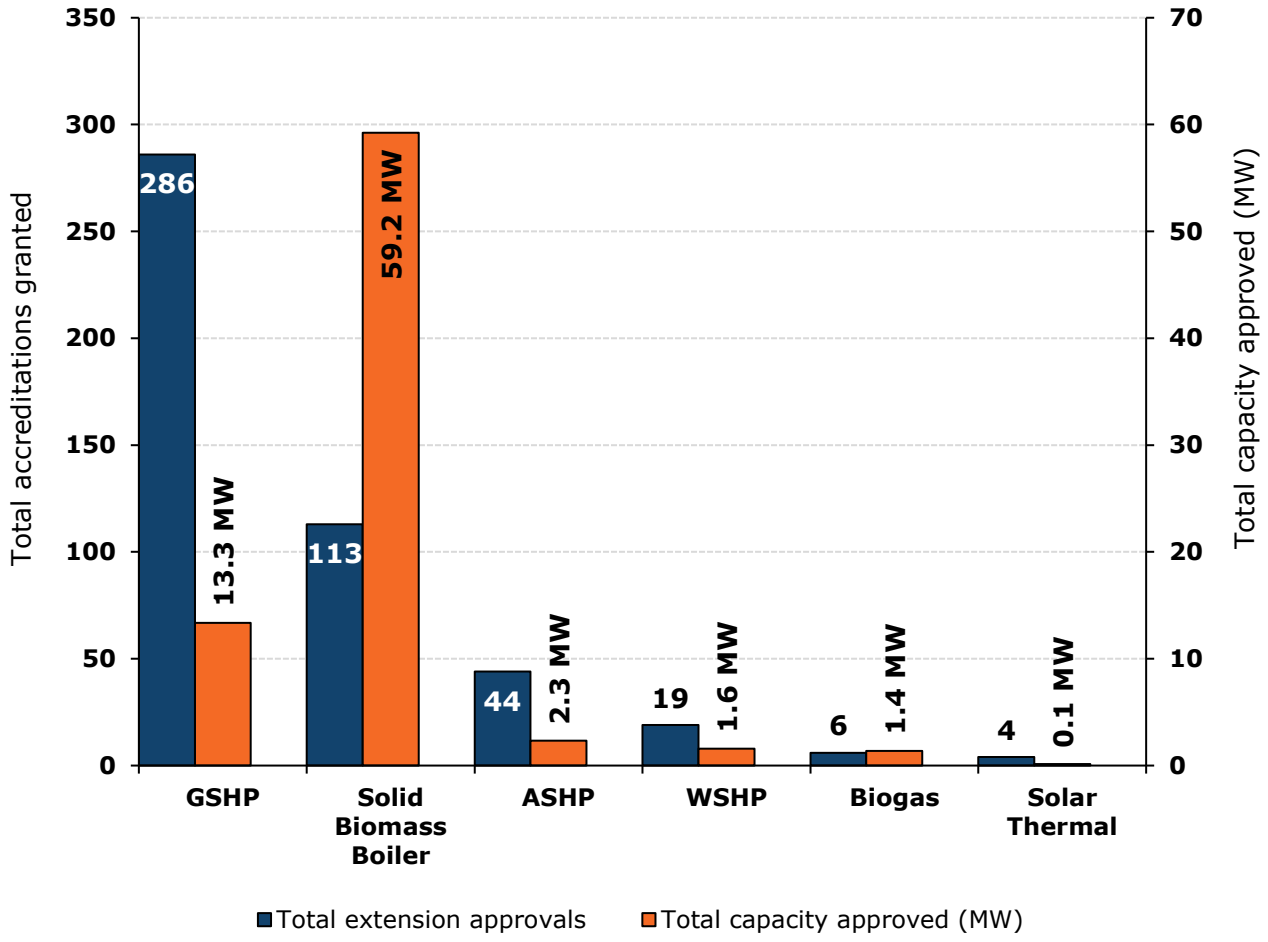
[30] This figure has increased by one since last year's report despite the scheme being closed to all new applicants this scheme year; this is due to an IT issue that has been resolved in this scheme year.
[31] The figures here differ slightly from those reported by DESNZ. This stems from slight differences in how DESNZ and Ofgem classify the accreditation date and accreditation status of certain stage 3 tariff guarantees. We are working with DESNZ to align our methodologies so that the figures match in future.
[32] We previously reported that all extension applications were processed in 2021. More accurately, all extension applications, except for one application that was resubmitted due to applicant error, were received in 2021. The majority were approved in 2021 and the remaining 15 were approved in 2022.

Figure 2.3: Technology split of tariff guarantee approvals



This clustered column chart shows the share of different technology types and their capacity accredited through the tariff guarantee application route. Of the 278 applications granted full stage 3 approval, 160 were submitted for ground source heat pumps (GSHP) providing 203.4 MW capacity - making GSHP the most common technology type approved through tariff guarantees. The second and third most common technology types to be approved were water source heat pumps (WSHP) and biomethane. This is then followed by solid biomass boilers and solid biomass CHP technology types.

Figure 2.4: Technology split of extension-based approvals

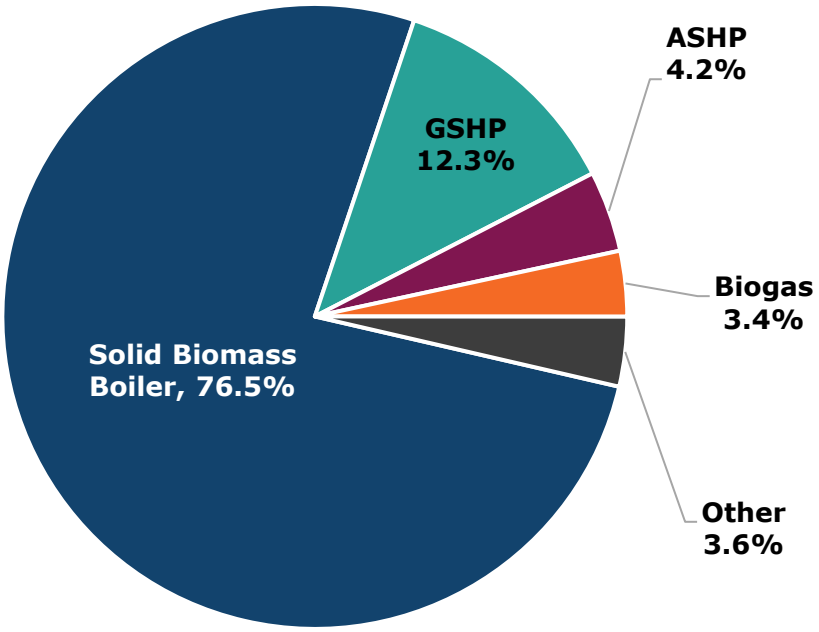


This clustered column chart shows the share of different technology types and their capacity accredited with the support of an extension. Of the 472 applications accredited, 286 were submitted for ground source heat pumps (GSHP) providing 13.3 MW capacity - making GSHP the most common technology type approved with the support of an extension. With 113 installations, solid biomass boilers were the second most common technology type approved with the support of an extension but accounted for most of the capacity (59.2 MW) accredited through this route. This is then followed by air source heat pumps (ASHP), water source heat pumps (WSHP), biogas and solar thermal technology types.

Technology

2.17 As indicated in **Figure 2.5**, the solid biomass boiler is by far the most installed technology type under the NDRHI scheme with 17,460 installations. Solid biomass boilers represent 76.5% of installations and 75.2% of accredited capacity on the scheme, accounting for 4582 MW in total. Ground source heat pumps are the second most popular technology, representing 12.3% of installations and 7.7% of accredited capacity.

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

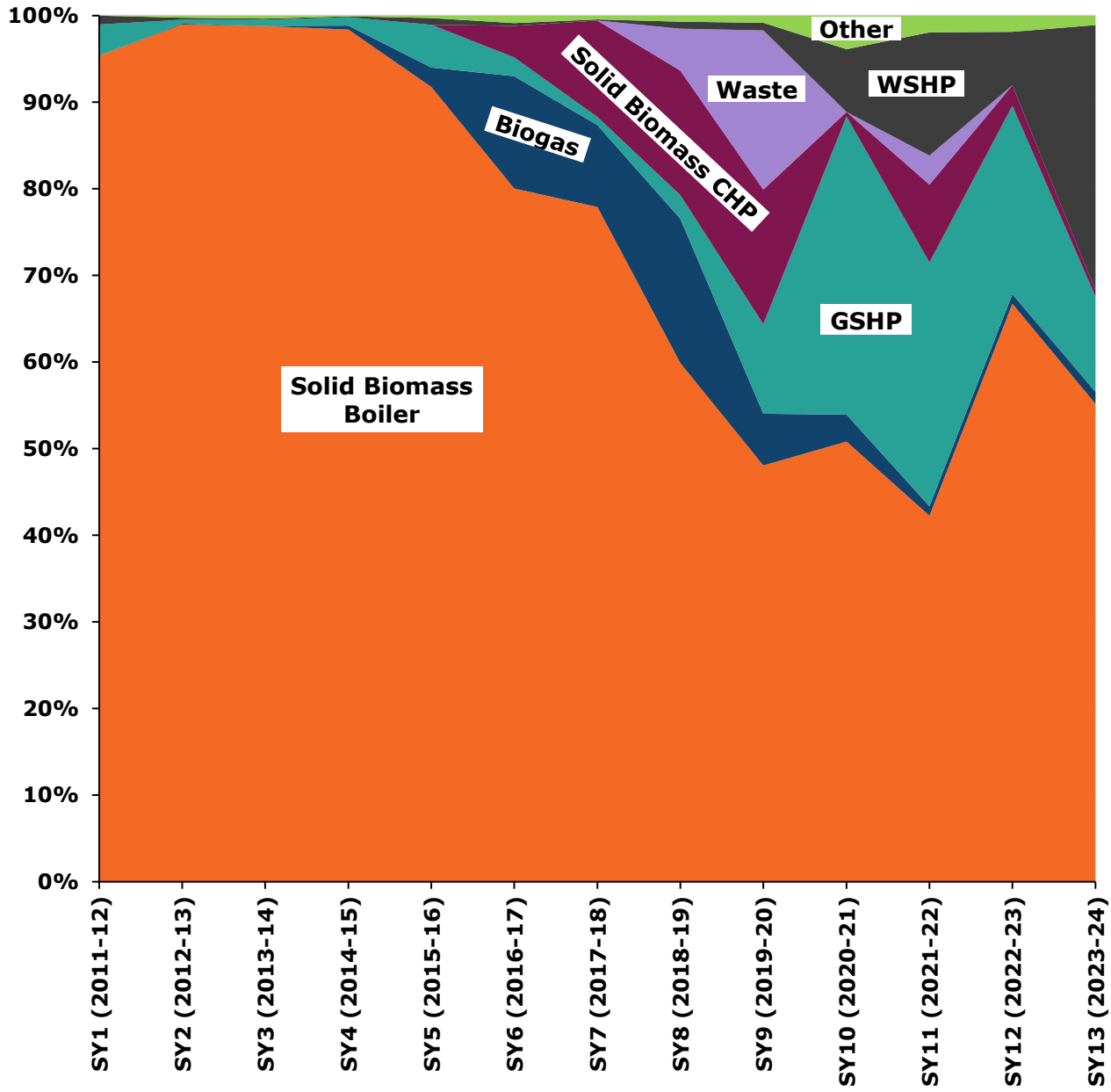


The pie chart shows that of all accredited installations since the start of the scheme: 76.54% are solid biomass boilers; 12.28% are ground source heat pumps (GSHP); 4.19% are air source heat pumps (ASHP); and 3.39% are biogas. In the Other category: solar thermal (1.50%), water source heat pumps (WSHP) (0.90%), biomethane (0.76%), solid biomass CHP (0.41%) and solid biomass in waste (0.03%). During SY13, 236 solid biomass boiler, 136 GSHP, 28 WSHP, 24 ASHP, 12 biogas, two solar thermal, one biomethane and one solid biomass CHP installations were accredited.

2.18 As shown in **Figure 2.6**, the rates of deployment for each technology have varied across scheme years. Notably, the deployment of solid biomass boilers has dramatically decreased over the scheme lifetime – accounting for over 95% of newly accredited capacity for the first four years of the scheme, down to a low of 42.3% in SY11. While this proportion has slightly increased since SY11, this is mostly because reaccreditations of existing biomass plants due to amendments are counted as new accreditations, rather than a significant uptick in new biomass boilers receiving first-time accreditation.

2.19 Other technologies, especially ground source heat pumps and water source heat pumps, have become more common towards the latter years of the scheme. Ground source heat pumps, which made up only 2.1% of capacity accredited between SY1 to SY8, increased their share to 10.3% of newly accredited capacity in SY9 before peaking at 34.4% in SY10. This share has since decreased but still exceeds the early years of the scheme.

Figure 2.6: Proportion of annual accredited capacity by technology



The stacked area chart 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 (75.2% during the lifetime of the scheme). From SY5 onwards other technology types besides solid biomass boilers have been playing a more significant part, accounting for as high as 57.8% of accredited capacity under the scheme in SY11. In this chart, the 'Other' category includes air source heat pump and solar thermal technology types.

2.20 The initial reduction in the deployment of biomass boilers is in part due to automatic biomass tariff reductions through the degression mechanism, which was introduced in SY4. This mechanism, in addition to other considerations[33], factors in the spending for each technology type relative to the overall scheme budget. If the conditions for degression are met, new accreditations under that technology type will be offered a new, lower tariff rate. This means that technology types that consistently exceed their expected deployment will see repeated degression to their tariffs.

2.21 Furthermore, a restructuring of tariffs in SY8 replaced small, medium and large biomass tariffs with a single biomass tariff. This meant that generators would no longer receive a higher tariff rate per kWh for small and medium installations compared to large boilers, contributing to a dramatic decrease in the deployment of small and medium biomass boilers. Whilst there was a small uptick in the deployment of large systems, ultimately small and medium systems accounted for the majority of biomass installations and therefore this change saw significant changes to biomass boiler deployment.

2.22 The increasing proportion of capacity derived from other technology types besides biomass boilers followed scheme changes implemented in SY4.[34] These changes saw increased financial support for biomass CHP, deep geothermal, ground source heat pumps, solar-thermal, biogas combustion, and large biomass boilers (over 1 MW). These changes also introduced support for air source heat pumps, and commercial and industrial energy from waste.

2.23 The introduction of tariff guarantees in SY8 was intended to help secure investment for more complex or larger installations, reducing risk for installations which tend to have longer lead-times. Following this, the proportion of large heat pumps increased, particularly for ground source and water source heat pumps, as these were the two most popular technologies for tariff guarantee applications.

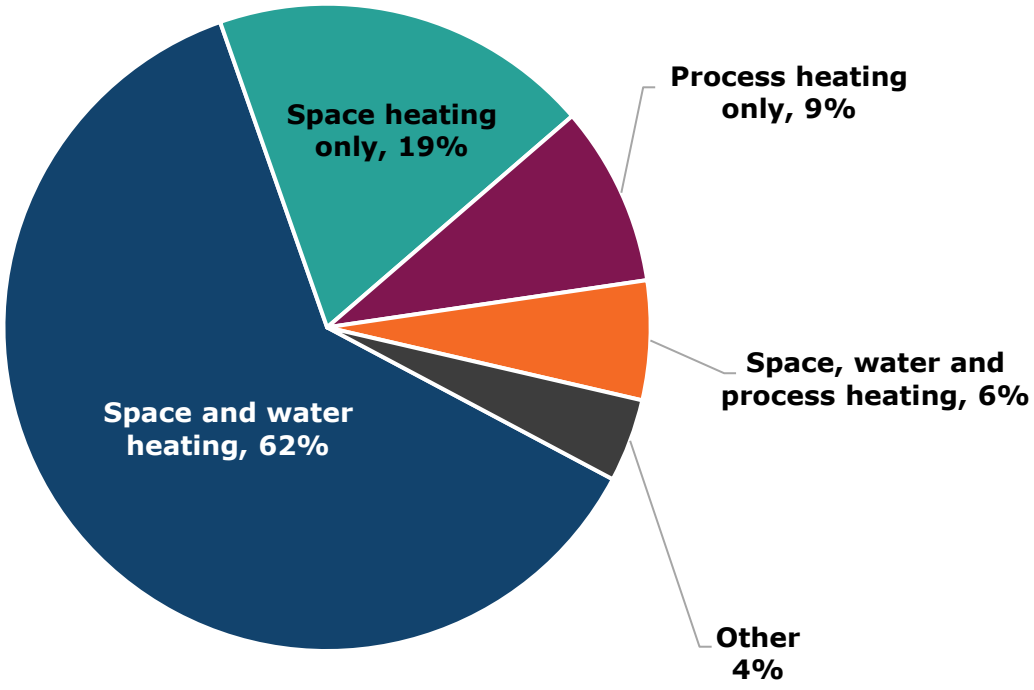
[33] The degression mechanism is an automatic tariff reduction to help control the scheme budget. This is determined by the projected growth rates of eligible technologies. More information on degression is available on the UK government's website: NDRHI mechanism for budget management: estimated commitments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

[34] 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>

Eligible heat use

2.24 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



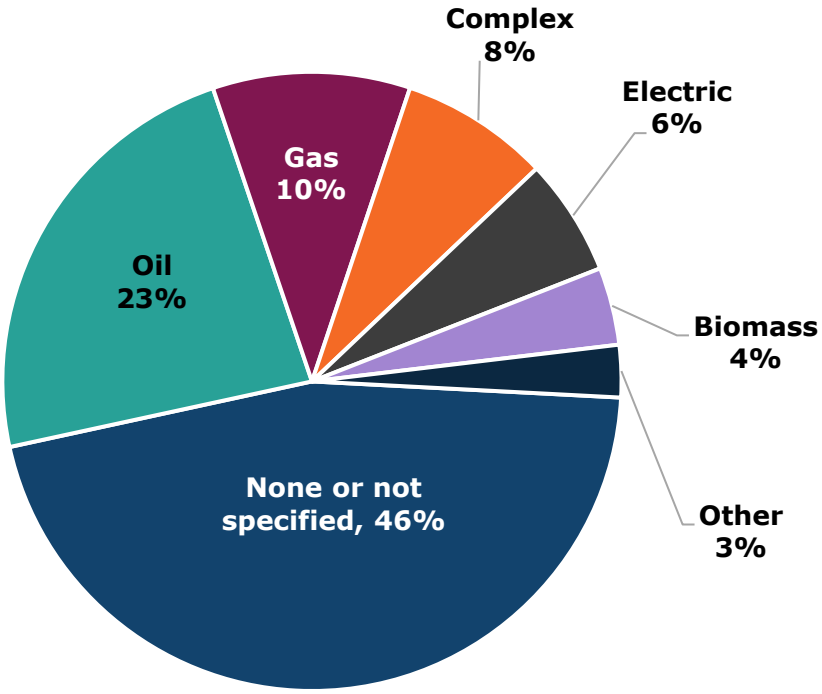
The pie chart shows the stated eligible heat use for accredited installations: Space and water heating account for 61.86% of installations; space heating only (19.04%); process heating only (8.99%); and space, water and process heating (5.95%). The Other category consists of space and process heating (2.53%); water heating only (1.46%); and water and process heating (0.17%). Overall, no significant changes occurred in the split since last year.

System type replaced

2.25 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. **Figure 2.9** shows the same information for installations accredited in SY13.

2.26 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 *Undetermined*.

Figure 2.8: System type replaced for all accredited installations



The pie chart shows the system type replaced for all accredited installations since the start of the scheme. The largest proportion is 'None or not specified' with 10,440 installations. Second to this is Oil, accounting for 5,296 installations. Gas is third, accounting for 2,354 installations. This is then followed by Complex (1,778), Electric (1,397) and Biomass (924). The Other category on this chart consists of Undetermined (393), Heat Pump (116) and Coal (114).

2.27 The most common category is *None or not specified,* which accounts for 45.8% of all accredited installations. 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.

2.28 Based on this data we can say that at least 34% (or 7,764) of all replaced systems were fossil fuel (oil, gas or coal) heating systems. The actual percentage is expected to be higher given the number of applicants that did not respond to this question.

Figure 2.9: System type replaced for installations accredited in SY13 (2023 to 2024)

System type replaced	Number of installations	% of total for SY13
None or not specified	232	52.7%
Biomass	105	23.9%
Oil	40	9.1%
Gas	23	5.2%
Complex	17	3.9%
Electric	11	2.5%
Heat Pump	8	1.8%
Undetermined	4	0.9%
Total	**440**	**100%**

2.29 The mix of system types replaced for installations accredited in SY13 mostly follows the pattern seen across the lifetime of the scheme, with the exception of biomass systems accounting for 23.9% of newly accredited installations in SY13, compared to 4.1% since the scheme launched. This is again mostly due to amendments to existing biomass installations on the scheme which require installations to be reaccredited. These 'new' accreditations are classed as replacing the previously accredited biomass system.

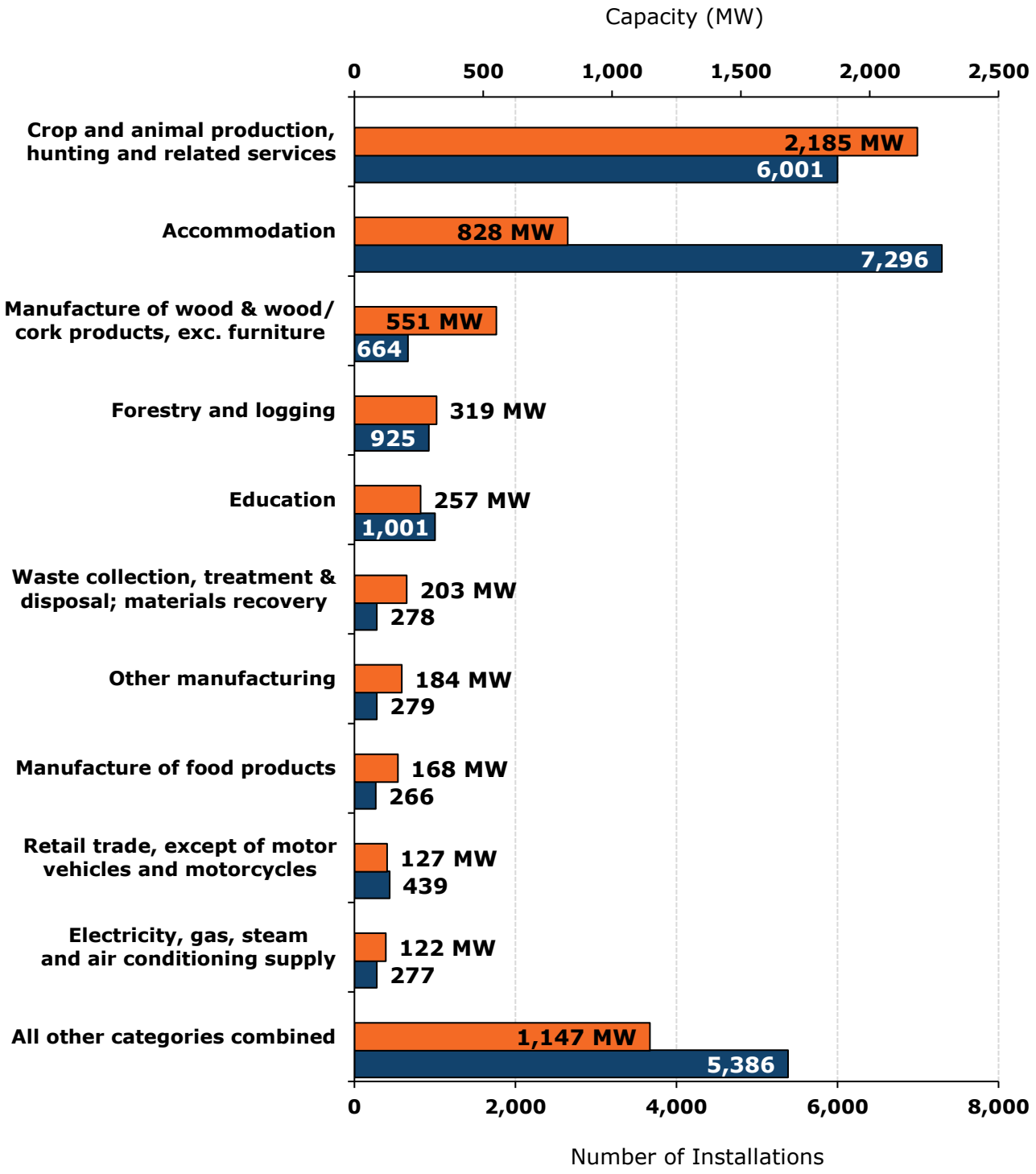
UK Standard Industrial Classification

2.30 We collect information on the industry sectors within which the heat is used by asking participants to categorise their area of economic activity using the UK Standard Industrial Classification (UK SIC)[35].

2.31 The top ten sectors by the total capacity of accredited installations are shown in **Figure 2.10**. The same information for SY13 accreditations is shown in the **Figure 2.11**.

[35] UK SIC 2007: <https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007>

Figure 2.10: UK SIC for accredited installations



The clustered bar chart shows installations with a SIC for 'Accommodation' are the most frequent (7,296 with 827.8 MW installed capacity). However, the 'Crop and animal production, hunting and related activities' SIC has a greater total installed capacity of (2,184.6 MW with 6,001 installations).

Figure 2.11: UK SIC for installations accredited in SY13 (2023 to 2024)

Industry sector	Capacity (MW)	Number of installations
Crop and animal production, hunting and related services	90.8	93
Accommodation	22.3	173
Forestry and logging	13.9	41
Manufacture of wood and products of wood/cork, except furniture; manufacture of straw and plaiting materials	12.7	24
Education	4.2	11
Financial service activities, excluding insurance and pension funding	4.0	1
Other manufacturing	3.8	10
Manufacture of basic pharmaceutical products and pharmaceutical preparations	3.1	3
Warehousing and support activities for transportation	3.0	2
Manufacture of beverages	2.7	1
All other categories combined	19.4	81
Total	**179.8**	**440**

Geographic distribution of accredited installations

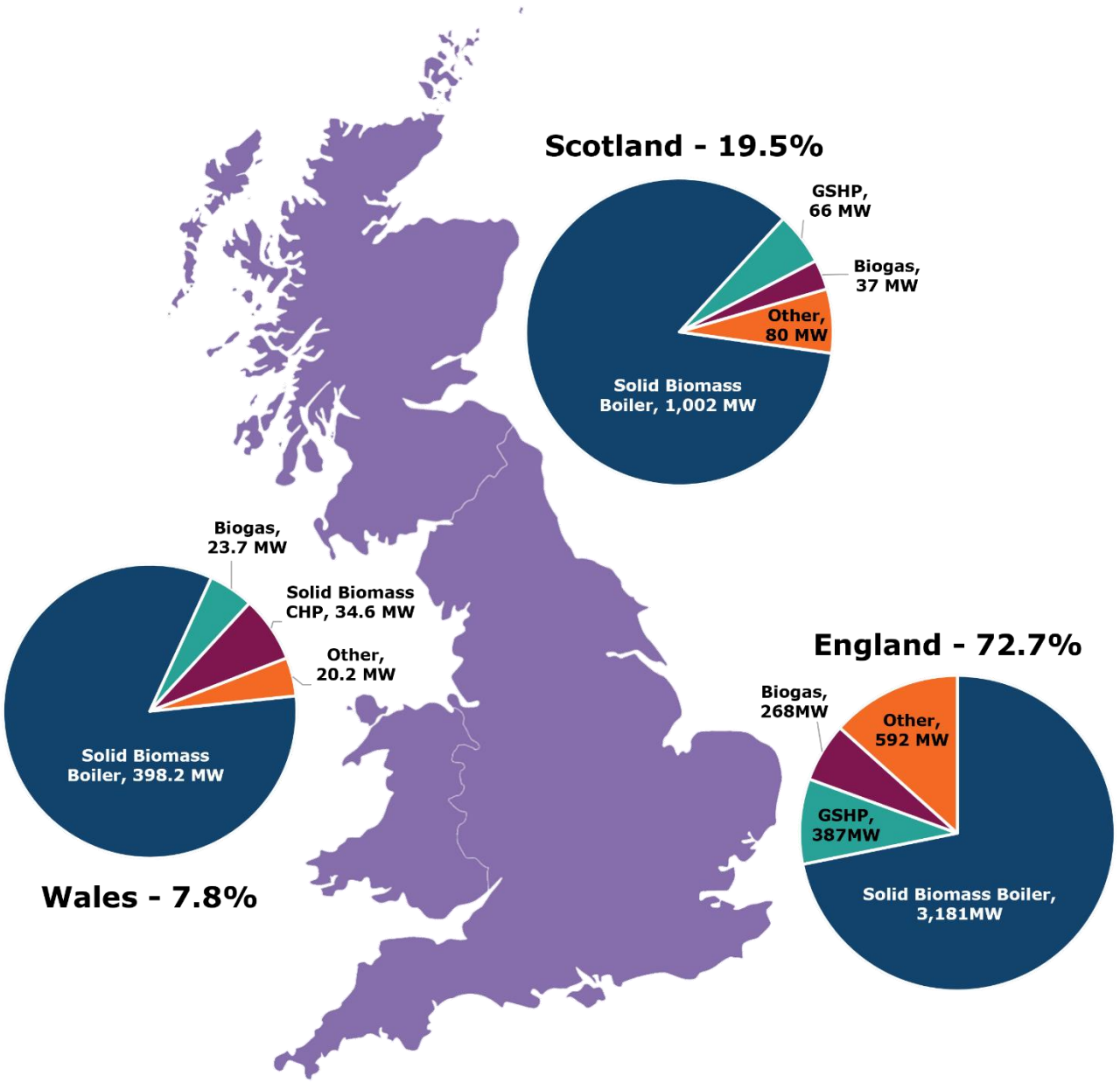
2.32 The majority of installations and accredited capacity under the NDRHI are concentrated in England, which accounts for 71.9% of installations and 72.3% of total capacity.

2.33 **Figure 2.12** shows the split of installed capacity across Great Britain.[36] Please note that as biomethane plants do not generate heat, they are not included in the capacity figures.

[36] An error in the way some installation postcodes were matched to countries has previously 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 2024 quarterly report (reported period: 1 January to 31 March 2024) are due to this being corrected.

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

Figure 2.12: Total accredited capacity by country



The map shows that systems have been accredited across Great Britain as follows: England 4,428.8 MW (72.7%) of installed capacity with 16,405 (71.9%) installations; Scotland 1,184.7 MW (19.5%) installed capacity with 4,284 (18.8%) installations; Wales 476.7 MW (7.8%) installed capacity with 2,123 (9.3%) installations.

3. Payments and Heat Generation

This chapter updates statistics on payments made under the NDRHI scheme alongside the associated heat generated and green gas injected into the grid. This includes both since the start of the scheme and Scheme Year 13 (SY13).

3.1 RHI payments are made quarterly for up to 20 years and are based on the eligible heat output of heat generating installations, or in the case of biomethane producers, the volume of eligible biomethane injected directly into the gas grid.

3.2 Payments are only made to accredited installations that continue to meet the scheme rules. Tariff rates are set by DESNZ and are adjusted annually to account for inflation.[37]

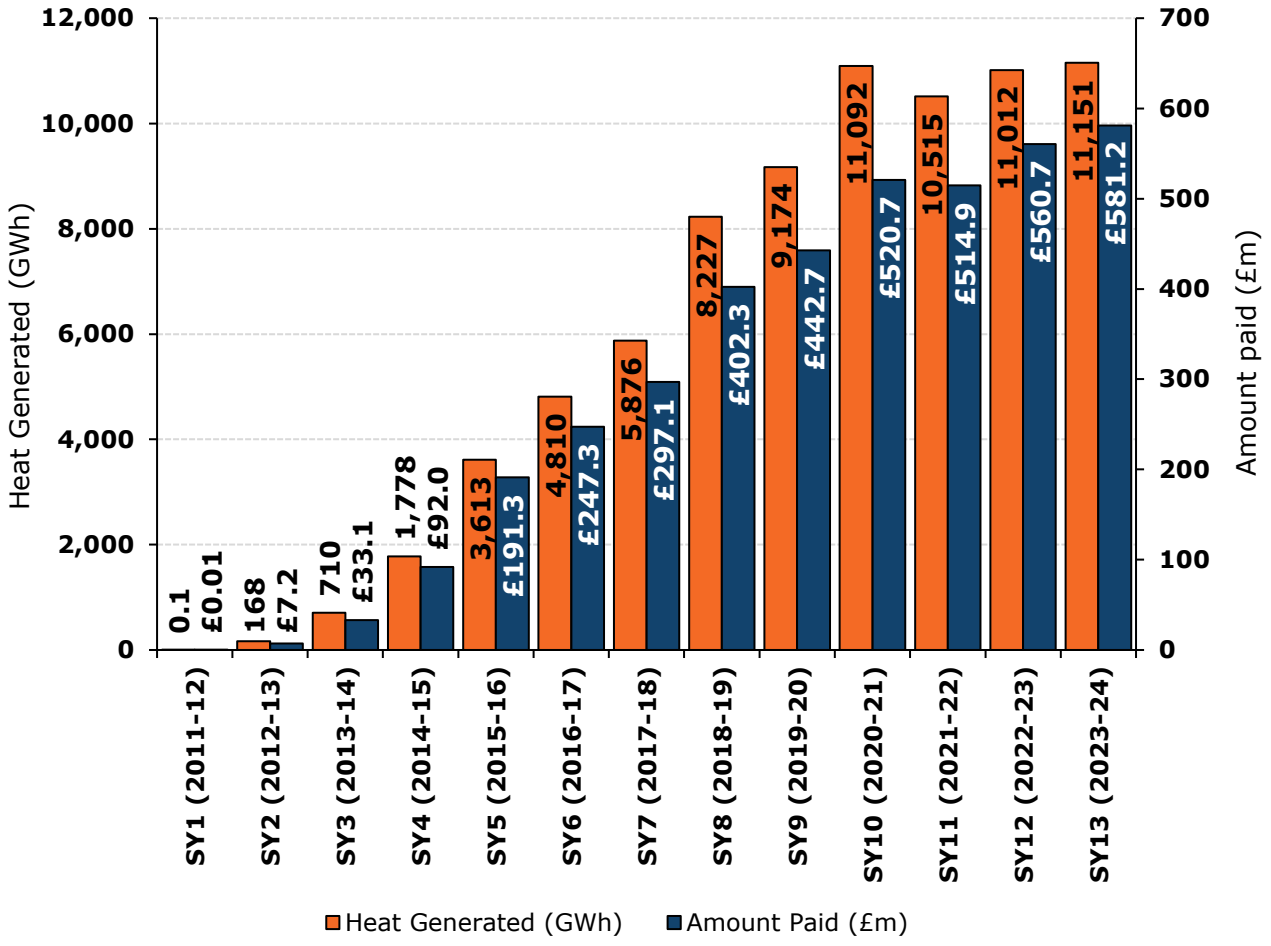
3.3 As biomethane production does not directly generate heat, payments made to biomethane producers follow a separate calculation formula. For this reason, when speaking of biomethane payments in this chapter we use the volume of green gas injected into grid. However, we also calculate the equivalence of biomethane volumes in terms of eligible heat output so its contributions can be viewed alongside other technology types.

3.4 Since the NDRHI scheme began in 2011, a total of £5.94 billion has been paid out to participants. £930.1 million in payments were made in SY13 alone. This corresponds to the generation of 104.9 TWh of heat on the scheme – 78.1 TWh from heat generating installations, and the equivalent of 26.8 TWh from the injection of 2.5 billion m^3 of biomethane to the gas grid.

3.4 **Figure 3.1** shows that £581.2 million in payments were made during SY13 to heat generating installations. These payments were made against heat generation of 11,151 GWh. This brings total payments made to heat generating installations over the lifetime of the scheme to £3.89 billion, corresponding to 78,126 GWh of heat generation.

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

Figure 3.1: NDRHI annual heat generated and payments made (ex. biomethane)



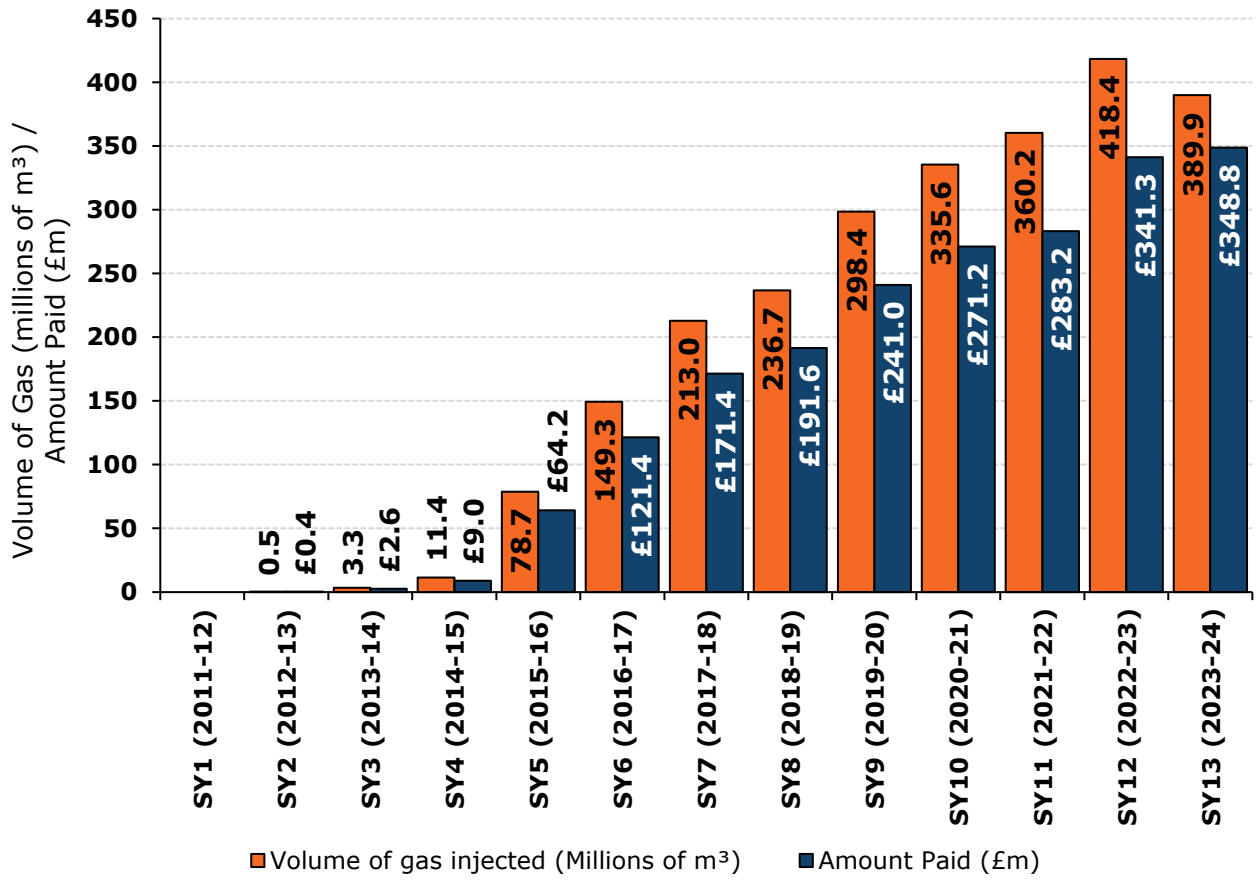
The clustered column chart shows payments and the associated heat generated under the scheme since launch. Both have grown significantly, from around £10,000 and 0.1 GWh in SY1, to a peak of £581.2 million in payments and 11,151.2 GWh generation in SY13.

3.5 SY13 is the biggest scheme year to date, with more eligible heat output and more money paid than ever before. SY10 was previously the year with the most heat generated, however, heat generation fell by 5.2% between SY10 and SY11 - partially in relation to the COVID-19 pandemic. We believe that there could be several 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. Although there was a 4.7% increase in SY12, it was not until this scheme year that heat output exceeded pre-pandemic levels.

3.6 The amount paid to participants and the associated heat generated during SY13 increased by 3.7% and 1.3% respectively. The larger percentage increase in payments can be attributed to tariffs being uplifted by retail price index (13.4%) and consumer price index (10.5%).

3.7 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**. Over £348.8 million of payments were made during SY13 in relation to the injection of almost 389.9 million m^3 of gas. The reported volume of gas injected to grid in SY13 is 6.8% lower than SY12, however, this does not directly reflect a decrease in the actual volume of gas injected as figures are partially impacted by the way in which we process biomethane applications.[38] This may cause injection volumes to be backdated to a different period to their payment. Over the same period, payments increased by 2.2%, also influenced by retail price and consumer price index. The total gas injected over the lifetime of the scheme amounts to almost 2.5 billion m^3, resulting in £2.05 billion in payments.

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



The clustered column chart shows both the volume of gas injected and associated payments under the scheme since launch. Both have grown significantly from around 475,000 m^3 injected and £363,000 paid in SY2, to a peak volume of gas injected of 418.4 million m^3 in SY12 and a peak amount paid of £348.8 million in SY13.

[38] Applicants awaiting registration still submit their injection volumes each quarter. Once registered, these submissions appear against the period in which injection took place. However, payments appear against the period in which they were made, even if this differs from the injection period. Applications being processed for (re)accreditation in SY13 will show up in the annual volumes once approved.

3.8 **Figure 3.3** outlines the payments and heat generated or gas injected by technology type since the scheme launched. This shows that 85.1% of payments went to two technology types. Solid biomass boiler installations accounted for 50.6%, and a further 34.5% went to biomethane installations. These two technology types account for 77.3% of accredited installations.

Figure 3.3: NDRHI lifetime payments made, heat generated, and gas injected by tech

Technology Type	Payments (£m)	Payments (% total)	Heat generated (GWh)	Volume of gas injected (m^3)	Heat generated (% total)[39]
ASHP	£5.9	0.1%	208.7	-	0.2%
Biogas	£389.9	6.6%	7,144.0	-	6.8%
Biomethane	£2,046.0	34.5%	-	2,495,187,863	25.6%
GSHP	£204.2	3.4%	2,436.2	-	2.3%
Solar Thermal	£1.6	0.03%	14.9	-	0.01%
Solid Biomass Boiler	£3,003.6	50.6%	61,136.9	-	58.3%
Solid Biomass CHP	£203.7	3.4%	4,624.4	-	4.4%
Waste	£33.8	0.6%	2,025.1	-	1.9%
WSHP	£48.1	0.8%	535.8	-	0.5%
Total	**£5,936.7**	**100%**	**78,125.9**	**2,495,187,863**	**100%**

[39] Biomethane installations do not generate heat. However, when making payments based on the volume of green gas injected to grid, we also calculate the equivalence in terms of eligible heat output. Biomethane installations' share of heat generated is included here based on this conversion to heat output, where heat output (kWh) equals the volume of biomethane injected (m^3) multiplied by 10.75. Biomethane's equivalent heat output is 26,823 GWh, bringing total generation including biomethane to 104,949 GWh. The column 'heat generated (% total)' is calculated based on the total generation including biomethane equivalence.

4. Monitoring compliance

This chapter covers monitoring compliance activity on the NDRHI scheme during Scheme Year 13 (SY13). It provides an overview of the targeted and statistical audit programmes, compliance investigations, and the delivery of our debt program.

4.1 Ofgem takes non-compliance with scheme obligations seriously. We operate robust audit and compliance programmes to ensure that payments are only made against eligible heat generation, thereby protecting the public purse. The regulations set out the eligibility criteria and ongoing obligations that must be complied with in order to receive payments.

4.2 We can conduct audits and pursue compliance action at any point during the scheme lifetime as these are the conditions that participants are bound by. Regardless of how long a specific requirement has been in effect, it is within our remit to act against error. It is the responsibility of participants to remain on top of scheme changes that affect them, and they are obligated to inform us of changes which may impact their eligibility.

4.3 Our audit programmes aim to check that scheme participants are complying with the scheme regulations and our guidance. The audit programmes enable us to gain an understanding of where common non-compliance issues are emerging within the scheme population, allowing us to target stakeholder engagement and compliance action to address them. Our audit strategy and plans have been developed in line with best practice from the National Audit Office (NAO) and we review and update them annually.

4.4 When we suspect a scheme participant is non-compliant, we open a compliance investigation. This could be, for instance, after the completion of an audit, but it is important to note that there are a range of sources for referrals, including data analytics, investigations by counter-fraud, or detection of error through our internal controls when processing applications, amendments and payments.

4.5 When identifying non-compliances through our audits and investigations, we determine whether they have a financial impact. We classify non-compliances as either material, meaning they have a financial impact and may potentially lead to funds being paid out in error, or non-material, meaning they have no financial impact.

4.6 Where we find instances of non-compliance, we advise participants what actions they need to take to rectify the situation and work to bring them back into compliance - informing them of the consequences of inaction. These consequences include payments being recouped or permanently withheld, or in extreme cases, revoking accreditations.

Audit Activity

4.7 When auditing participants, we look at a broad range of evidence related to scheme obligations. On the most basic level, this can include documentation of compliance to fuel sustainability standards, receipts or certificates of service and maintenance, and proof of ownership. Participants also have an ongoing obligation to provide reasonable access to the installation and associated metering in the case of a site visit. Failing to meet these obligations may subject participants to further investigation and enforcement action.

4.8 The NDRHI scheme allows audits to be conducted without prior notice to participants. For example, Ofgem conducted an NDRHI audit 'day of action' in March 2024. This consisted of 11 unannounced audits in a single day at a range of accredited installations. At many sites, we identified issues that indicated potential non-compliance and engagement with participants is ongoing. Some of these installations have had payments suspended while we work to determine any non-compliance.

4.9 We undertake both statistical and targeted audit programmes. Statistical audits are randomly selected to provide a representative sample of the scheme population. This provides us with assurance that the results of audits will reflect the level and types of non-compliance across the wider scheme population.

4.10 Targeted audits are used where we identify sites that may have an increased risk of non-compliance with the scheme. We primarily identify installations for targeted audits during the course of performing our administrative duties. We also use data analytics to identify sites at higher risk of non-compliance.

4.11 The SY13 audit programme has been completed. We conducted 414 audits throughout the year. **Figure 4.1** and **Figure 4.2** provide a summary of audit activity undertaken during SY13 and SY12.

4.12 It should be noted that material non-compliance identified during audit is subject to further compliance investigation. It is often the case that participants fail to provide evidence during audits but are able to provide it during further investigation, and it is therefore then determined that there is no financial impact.

4.13 Participants found to be materially non-compliant following an audit may also be brought back into compliance without financial impact, and are then decided to be materially compliant at the conclusion of their compliance case. The audit non-compliance rates should not be viewed as final because we ultimately confirm non-compliance and whether it has a financial impact when we conclude a compliance investigation.

Figure 4.1: NDRHI statistical audit activity SY13 and SY12

Scheme Year	Closed audits	Compliant audits	Non-compliant audits	Non-compliance rate	Material non-compliance	Material non-compliance rate
SY13 (2023 to 2024)	168	44	124	73.8%	72	42.9%
SY12 (2022 to 2023)	168	50	118	70.2%	88	52.4%

Figure 4.2: NDRHI targeted audit activity SY13 and SY12

Scheme Year	Closed audits	Compliant audits	Non-compliant audits	Non-compliance rate	Material non-compliance	Material non-compliance rate
SY13 (2023 to 2024)	246	57	189	76.8%	100	40.7%
SY12 (2022 to 2023)	246	86	160	65.0%	93	37.8%

4.14 We monitor trends in non-compliance and the level of fraud and error on the scheme through our audit programmes. The value of payments made in error during SY13 is estimated at £1.77 million. This represents 0.2% of total payments within a 95% confidence interval of £901,000 to £2.65 million[40]; down from 0.3% in SY12. This means we estimate an additional £850,000 was prevented from being made in error this year. Please note that this error rate forecasts outcomes for ongoing compliance investigations.

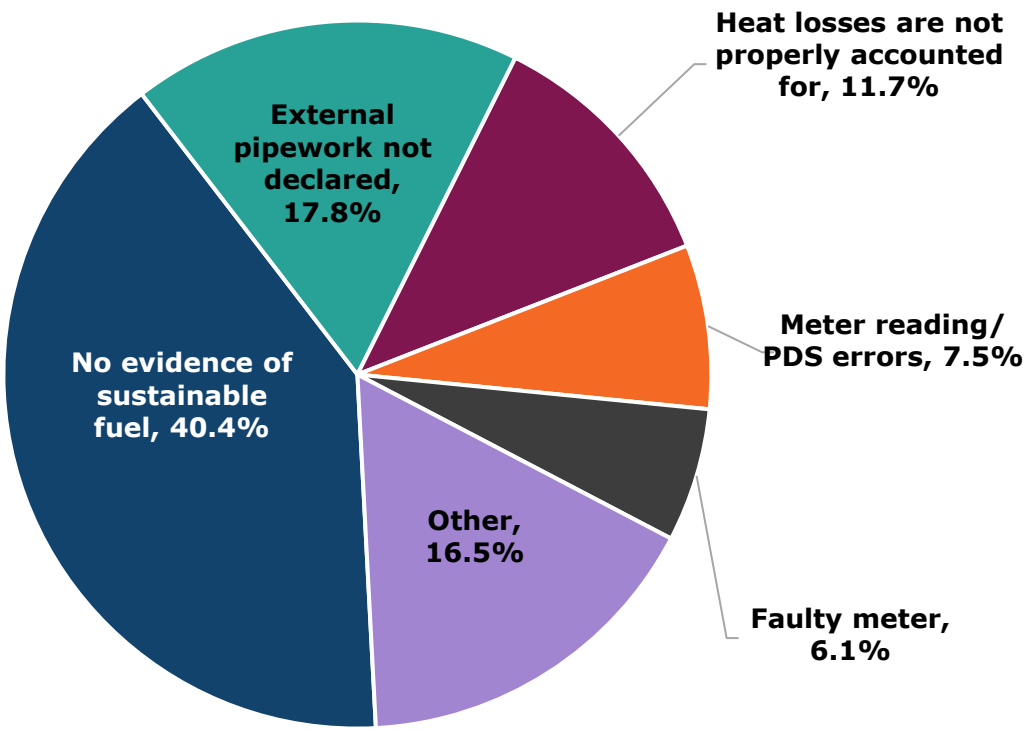
4.15 The same number of statistical audits have been carried out during SY13 and SY12. Compared to last year, the rate of non-compliance has increased by 3.6 percentage points (pp) while the rate of material non-compliance fell by 9.5 pp. The increase in the non-compliance rate is partially attributed to a large number of installations being affected by certain obligations for the first time in this scheme year. For example, the 12-month biomass boiler maintenance requirement[41] was introduced on 1 April 2022, meaning its implications for non-compliance rates became relevant in this scheme year.

[40] A 95% confidence interval means that there is a 95% chance that the actual value of payments made in error will fall between the upper and lower values of £901,000 to £2.65 million.
[41] The biomass boiler maintenance requirements mean that participants using solid biomass in an accredited biomass boiler must carry out an annual maintenance check in each payment year.

4.16 The same number of targeted audits were carried out in SY13 and SY12. The non-compliance rate increased by nearly 12 pp and the material non-compliance rate by almost 3 pp. Alongside the increasing significance of certain requirements, this can be partially attributed to improvements in the analytics used to identify sites for the targeted audit. By incorporating data insights from our work assessing applications, amendments and payments, we have increased the accuracy of our targeting meaning the installations we selected are more likely to be non-compliant than in previous years.

4.17 To provide further information on the nature of the material non-compliances identified through our audits, we have included information on the five most common findings in **Figure 4.3**. It should be noted that a materially non-compliant case can have one or more reasons for material non-compliance listed against it.

Figure 4.3: Five most common reasons for material non-compliance in SY13



The pie chart shows the five most common reasons for material non-compliance during SY13, as identified through our audit programme. The most common reason is 'no evidence of sustainable fuel', identified in 40.4% of instances of material non-compliance. Collectively, the five most common reasons shown here were listed against 83.5% of material non-compliance cases identified through our audit programme. There were 7 other non-compliance reasons that altogether account for the remaining 16.5% of instances.

4.18 The five most common material non-compliance reasons raised in SY13 account for a greater proportion of all non-compliances compared to SY12, with a 12 pp increase. The most common reason for material non-compliance 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.

4.19 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

4.20 Where we suspect that participants may be failing to comply with the eligibility criteria or their ongoing obligations, we reserve the right to take action against them. We try and work with participants to bring them back into compliance before considering enforcement action.

4.21 We can exercise a range of enforcement powers under the scheme regulations, including:

- Withholding or reducing payments (temporarily and permanently)
- Recovering overpayments
- Revoking the accreditation or registration of a participant

4.22 We quantify the financial impact of non-compliances during our investigations to ensure proportionate sanctions. In certain cases of significant or repeated breach of the regulations, we may revoke accreditations. Consequently, we can prevent payments going out erroneously in the future and recover the funds paid out in error.

4.23 Ofgem's enforcement actions from the investigations closed during SY13 resulted in almost £5 million of public funds being either protected or detected and expected to be recovered. Further details on the outcomes of our compliance cases closed this scheme year[42] can be found in **Figure 4.4**.

[42] Compliance cases can take several months or longer, and hence, may not conclude within the same scheme year in which they were opened. This means that the compliance cases closed in SY13 can originate from other scheme years.

Figure 4.4: Compliance cases closed in SY13 (2023 to 2024)

Referral source	Cases closed	Non-compliant cases	Value of Prevented Error	Value of Detected Error
Operational	506	224	£456,079.97	£1,875,879.66
Audit – Statistical	125	13	£5,412.73	£44,096.38
Audit - Targeted	156	19	£13,683.84	£2,583,796.96
Counter-fraud/ External investigation	185	150	£0.00	£14,461.85
Total	**972**	**406**	**£475,176.54**	**£4,518,234.85**

4.24 Of the 972 cases closed in Scheme Year 13, 406 were found to be materially non-compliant, meaning 42% of cases closed were found to have a financial impact.

4.25 The 506 operational referrals, which stem from our internal controls when processing applications, amendments and payments, accounted for 52% of cases. 44% of these cases were sanctioned, totalling £2,331,960 in detected or prevented error.

4.26 Of all the operational referrals originating from our work of administering the scheme, the majority of the financial sanctions were related to woodfuel quality (93 cases) and meter readings (89 cases). These reasons account for 42% and 40% of operational sanctions respectively, resulting in sanctions totalling £1,248,237 for woodfuel quality and £699,348 for meter readings.

4.27 The 281 audit programme referrals accounted for 29% of all cases. Overall, 32 (11%) of these cases were sanctioned, totalling £2,646,990 in prevented and detected error - equating to 53% of all prevented and detected error. Although the audit programmes account for fewer referrals for compliance investigation than operational activity, the value of error prevented and detected through the cases referred by audits is higher.

4.28 For audit referrals, most of the compliance activity was undertaken due to a lack of response or insufficient evidence provided by participants to address non-compliances raised following an audit. We take non-engagement very seriously, thus, when participants fail to engage with us or fail to provide required evidence, we seek to recoup money for the period of non-compliance, and in certain cases, revoke accreditation.

Our debt process in SY13

4.29 We have successfully delivered the SY13 debt program, which aims to recover all detected error from compliance cases. Applying best practice, we reviewed and improved processes to enable the effective management of debt cases. By using our established debt recovery process, we were able to recover £1,426,332 during SY13, as shown below in **Figure 4.5**.

Figure 4.5: Total debt recovered in SY13 (2023 to 2024)

Debt recovery method	Debt recovered in SY13 (2023 to 2024)
Offsetting from ongoing payments	£1,383,540.89
Direct repayment: Repaid in full	£34,889.06
Direct Repayment: Repayment plan	£7,901.81
Direct repayment: Repaid to debt agency	£0
Total	**£1,426,331.76**

4.30 This sum comprised of over £1.38 million recovered via offsetting from ongoing payments and £42,791 recovered through direct repayments and repayment plans. SY13 was the second year of engaging with an external debt recovery agency. We have submitted ten cases to the external debt recovery agency this financial year, all of which are still ongoing.

4.31 In light of the current cost of living pressures, we continue to review our processes to ensure we adopt a more participant-focussed approach, working with participants when demanding repayment so that we do not put them into financial difficulty.

5. Our Administration

This chapter provides details on our administration activity during Scheme Year 13. This includes statistics on delivery performance indicators for our various administrative functions, as well as information on our stakeholder engagement activities.

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

- publishing guidance
- reviewing 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.[43]

5.3 As detailed in **Figure 5.1** below, we made application decisions within six months on 58.6% of applications. This was a significant improvement from last year when 48.6% of application decisions were made within six months. This is because we saw a spike of over 1,000 applications prior to scheme closure on 31 March 2021, creating a backlog in the queue that carried over into SY12 and leading to many cases remaining in the queue for over six months. As this queue reduces, we are dealing with fewer cases and therefore processing a higher percentage within a six-month period.

5.4 Ofgem made 97.3% of payments within 40 working days from submission, which was a slight 0.7 pp decrease from in SY12. The total number of payments made also fell from the previous year, decreasing to 73,831 compared to 81,770 in SY12. As eligible heat output and the total amount paid has continued to increase during the same period, this implies that there are fewer payments being made but with higher tariff rates. Therefore, this has not impacted the amount that participants are paid.

[43] 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 to 2023)	SY13 (2023 to 2024)	Change
No. of application decisions	739	486	-253
Application decisions within 6 months	48.6%	58.6%	+10 pp
No. of payments made	81,770	73,831	-7,939
Payments made within 40 WD	98.0%	97.3%	-0.7 pp
No. of amendment decisions	2,106	3,276	+1,170
Amendment decisions made within 6 months	96.1%	86.2%	-9.8 pp
Enquiries emails received	4,691	4,954	+263
Enquiry emails responded to within 10 WD	99.5%	99.7%	+0.2%
Calls received	15,423	15,504	+81
Abandoned call rate	3.2%	5.0%	+1.7 pp

Value for money

5.5 The NDRHI has played a significant part in government strategy to incentivise the decarbonisation of heat in the non-domestic sector, having paid out £5.94 billion to eligible participants so far. As the scheme administrator, we are concerned with ensuring that the public money we allocate is spent fairly and effectively, and that we conduct our administrative duties efficiently to support the government in their delivery of policy objectives.

5.6 We are continuously working to represent good value for money for consumers by guarding against fraud and error, and making sure that only those eligible for support receive payments. In SY13, for each £1 spent on our operational delivery and audit and compliance work, in addition to the successful administration of the scheme, we protected £1.08 in the public purse. This is a significant improvement on last year where we protected £0.76 for every £1 spent, demonstrating that we continue to optimise our processes even beyond the closure of the scheme.

Stakeholder engagement

5.7 As administrators of the NDRHI scheme, engagement with stakeholders has been critical. Ensuring that all scheme participants are aware of key scheme updates, such as changes to the woodfuel criteria and compliance-related updates, is vital to the effective and robust operation of the NDRHI scheme. Ultimately, participants are responsible for maintaining their own compliance with scheme rules, but our efforts here are part of establishing a culture of accountability – where we have acted to ensure that participants have the knowledge to fulfil their obligations.

5.8 To do this effectively, we carry out a wide range of activities with organisations and individuals representing scheme participants and scheme users. We meet them in a diverse range of settings, from board-level meetings and roundtables to conferences and other events.

5.9 This allows for regular, detailed dialogue to take place between Ofgem and our external stakeholders. This ensures that we are not making administrative decisions in isolation, but rather with expert input from groups with a wide range of perspectives.

5.10 Alongside other engagement, during SY13, we kept participants and scheme applicants up to date with email notifications. These notifications provided information on a variety of issues, such as annual maintenance requirements and the end of the woodfuel quality suspension.

5.11 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.

6. Looking Forward

This chapter provides a summary of significant changes affecting the future of the NDRHI scheme and discusses the ongoing support for low-carbon gas and heat following the closure of the scheme to new applicants.

6.1 The NDRHI provides payments for up to 20 years up until 31 March 2041, meaning that we will still be servicing participants until then. Alongside calculating and making payments, we will continue to process amendments and relocations, replacements, or changes of ownership (or transfers of producer in the case of biomethane installations) of existing installations.

6.2 We will continue to actively monitor participant compliance through our extensive audit programmes, as well as internal checks during our work administering the scheme, and requirements for participants to submit declarations. This, alongside 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. We continue to incorporate insights from our administrative work and our monitoring compliance activity to proactively look for ways to adapt our procedures and guidance to reduce the likelihood of non-compliances occurring.

6.3 Whilst the NDRHI has closed to new applications, the government provides continued support for biomethane installations. The Green Gas Support Scheme (GGSS)[44] launched on 30 November 2021 and provides tariff payments for up to 15 years for biomethane produced via anaerobic digestion and injected into the gas grid. An extension to the GGSS was announced in June 2024 and the scheme is now due to remain open for applications for another three years, until 31 March 2028.

6.4 Under the previous government, DESNZ published their Biomass Strategy[45] in August 2023, which assessed the potential uses of biomass in the UK's transition to net zero. The strategy outlined a continuing commitment to facilitating sustainable biomass deployment in the UK through policy measures, including incentives and requirements.

[44] Information on The Green Gas Support Scheme: <https://www.ofgem.gov.uk/environmental-and-social-schemes/green-gas-support-scheme-and-green-gas-levy>
[45] Biomass Strategy 2023: https://www.gov.uk/government/publications/biomass-strategy

6.5 DESNZ have also issued a call for evidence[46] to help develop a future policy framework for biomethane production. This call for evidence closed on 25 April 2024 and the outcome will be published in due course. The feedback and evidence from the call for evidence will be used by DESNZ to inform the development of a new policy framework ahead of a more detailed future consultation.

6.6 The Boiler Upgrade Scheme (BUS)[47] 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 funding is available over three years from 2022 to 2025. In March 2023, DESNZ announced an extension to the BUS from 2025 until April 2028. On 18 December 2023, the government announced £1.5 billion additional funding for the BUS extension over three years.[48]

6.7 As of July 2022, Ofgem has been asked to regulate the growing heat networks sector. The Energy Act 2023[49] creates a framework for Ofgem to be the future regulator for Heat Networks across Great Britain. It contains powers to introduce an authorisation regime so that organisations that supply heat through a heat network or operate a heat network can be effectively regulated. The framework will ensure consumer protections are in line with other domestic energy markets and we are currently developing a proportionate regulatory framework to protect the customers of heat networks whilst supporting investments in the sector.

[46] Future policy framework for biomethane production: call for evidence <https://www.gov.uk/government/calls-for-evidence/future-policy-framework-for-biomethane-production-call-for-evidence>
[47] Information on The Boiler Upgrade Scheme: <https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus>
[48] Powering up Britain: <https://www.gov.uk/government/publications/powering-up-britain>
[49] Energy Act 2023: <https://www.legislation.gov.uk/ukpga/2023/52/contents>

Appendix 1 – Accredited installations by region

Figure A1.1: Installed capacity (MW) by region and technology

Region	Solid Biomass Boiler	GSHP	Biogas	Solid Biomass CHP	WSHP	Waste	ASHP	Solar Thermal	Region total (MW)
West Midlands	560.8	88.5	44.2	43.1	3.1	0.0	2.5	0.9	**743.2**
East Midlands	540.3	35.5	43.3	69.5	9.7	0.0	2.6	0.5	**701.3**
Yorkshire and The Humber	530.9	44.3	29.9	8.7	13.7	25.2	3.4	0.8	**656.9**
East	331.6	73.1	60.9	10.4	79.5	0.0	4.3	0.7	**560.6**
North West	405.0	29.9	22.5	24.8	1.8	24.1	3.7	0.4	**512.2**
South West	395.0	29.5	31.2	18.3	4.6	0.0	5.7	1.0	**485.4**
Wales	398.2	16.1	23.7	34.6	1.3	0.0	2.4	0.5	**476.7**
South East	256.2	38.4	20.4	45.9	31.9	0.0	5.7	0.6	**399.1**
Southern Scotland	301.3	29.1	11.1	14.4	9.5	0.0	0.9	0.1	**366.4**
North East	139.1	36.8	14.2	31.7	0.0	88.0	1.6	0.2	**311.5**
Eastern Scotland	220.2	17.7	11.6	1.8	2.7	15.0	0.6	0.3	**269.8**
Highlands and Islands	224.7	3.1	8.5	13.2	3.4	0.0	1.8	0.2	**254.9**
North Eastern Scotland	189.7	10.9	4.3	0.0	0.1	0.0	0.1	0.1	**205.2**
West Central Scotland	66.3	4.9	1.7	2.9	8.4	0.0	4.1	0.1	**88.5**
London	22.6	10.8	1.6	7.8	10.7	0.0	5.2	0.0	**58.7**
Grand Total (MW)	**4,582.0**	**468.6**	**328.9**	**326.9**	**180.5**	**152.3**	**44.5**	**6.5**	**6,090.2**

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

Figure A1.2: Accredited installations by region and technology

Region	Solid Biomass Boiler	GSHP	ASHP	Biogas	Solar Thermal	WSHP	Bio-methane	Solid Biomass CHP	Waste	Region Total
South West	2,333	435	152	72	69	16	21	7	**-**	**3,105**
West Midlands	1,781	420	49	139	31	20	12	23	**-**	**2,475**
Yorkshire and The Humber	1,811	332	114	66	35	17	17	7	2	**2,401**
Wales	1,775	153	59	70	37	10	1	18	**-**	**2,123**
North West	1,611	255	91	90	28	12	5	9	1	**2,102**
East Midlands	1,591	186	82	92	13	8	13	2	**-**	**1,987**
East	1,166	253	120	62	26	22	15	6	**-**	**1,670**
South East	1,068	321	78	29	41	45	45	9	**-**	**1,636**
Southern Scotland	1,296	74	18	45	6	21	5	6	**-**	**1,471**
Eastern Scotland	811	76	38	41	11	11	9	1	1	**999**
Highlands and Islands	715	37	55	25	20	4	14	2	**-**	**872**
North East	665	90	50	15	12	1	6	2	2	**843**
North Eastern Scotland	519	23	6	18	5	1	4	-	**-**	**576**
West Central Scotland	242	83	20	9	5	4	2	1	**-**	**366**
London	76	63	24	1	4	13	4	1	**-**	**186**
Grand Total	**17,460**	**2,801**	**956**	**774**	**343**	**205**	**173**	**94**	**6**	**22,812**

Appendix 2 – Associated Documents

The Renewable Heat Incentive Scheme Regulations 2018 (as amended) can be viewed on the legislation.gov.uk website. Please note that this link returns legislation for both the domestic and non-domestic RHI schemes:

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:
<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 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 Glossary[50]

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.

[50] 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

RFTO – 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.