

Boiler Upgrade Scheme Annual Report

Scheme Year 1 (23 May 2022 – 31 March 2023)

ofgem

Making a positive difference
for energy consumers



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Foreword

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

At least 78% of homes in England and Wales are heated using fossil fuels¹, and with households accounting for 26% of UK greenhouse gas emissions² we need to change the way we heat our homes to meet government's ambitious net zero targets. Cleaner heating systems such as heat pumps are still relatively novel, so it will take some time for installation costs to come down compared with more conventional heating such as gas boilers.

That's why the Boiler Upgrade Scheme (BUS) was introduced. It's the first grant-based scheme that we have administered to provide fixed support for consumers installing eligible heat pumps and biomass boilers. It means that households can get financial support when they want to make the switch to cleaner heating.

Launched in May 2022, the Department for Energy Security and Net Zero (DESNZ) has set a budget that will fund up to 90,000 installations of cleaner heat systems by 2025. This could deliver carbon savings over their lifetime equivalent to the amount of carbon absorbed by approximately 11.8 million mature trees over ten years.

As the scheme's administrator, Ofgem's role is to manage applications made by installers, issue vouchers and make payments, all within timescales agreed with DESNZ. To make sure that grants are only paid to those eligible to receive them, our audit and compliance programme monitors compliance with the scheme rules, taking action where necessary.

I'm proud of the work that Ofgem has done to oversee the successful launch and operation of the BUS. This has included the incremental roll out of enhanced digital functionality to improve the user experience of scheme participants whilst also making our administration more efficient. Also successful has been our close and regular engagement with industry stakeholders. This engagement has been taking place since before scheme launch and has been invaluable in helping to shape our service design.

¹ [2021 census - constituency data: Central heating](https://commonslibrary.parliament.uk/constituency-data-central-heating-2021-census/):

<<https://commonslibrary.parliament.uk/constituency-data-central-heating-2021-census/>>

² [Office for National Statistics - climate change insights, families & households, UK: Aug 2022](https://www.ons.gov.uk/economy/environmentalaccounts/articles/climatechangeinsightsuk/august2022):

<<https://www.ons.gov.uk/economy/environmentalaccounts/articles/climatechangeinsightsuk/august2022>>

The scheme design is working well, and we remain committed to improving the experience for participants and working with stakeholders to successfully deliver on the intent of the scheme.

As part of 'Powering Up Britain: Net Zero Growth Plan', the government has announced its intention to extend the BUS until 2028. We are looking forward to working with government to help the BUS continue to grow, providing an excellent user experience for applicants and stakeholders as we transition to net zero.

We welcome comments from readers on the content of this report, so if you want to get in touch, please use the contact details at the bottom of this page.

Neil Lawrence

Director, Delivery and Schemes

Feedback

We value your feedback on this report. Please contact us at SchemesReportingFeedback@ofgem.gov.uk with any comments or suggestions.

23 May
2022

The scheme opened to applicants on 23 May 2022 for three years until 2025. In total, there is budget for up to 90,000 low carbon heating system installations over this period.

9,983
Grants paid

By the end of March 2023, almost 10,000 grants had been paid following the installation of eligible heat pumps and biomass boilers. Collectively, these grants were worth over £50 million.

96.3%
ASHPs

Over 96% of the low carbon heating systems supported were air source heat pumps (ASHPs). The remaining installations were ground source heat pumps (GSHPs) (2.4%), biomass boilers (1.1%) and shared ground loop GSHPs (SGL GSHP) (0.1%).

7,398
Fossil fuelled heating systems replaced

74.1% (7,398) of grants paid by the end of March 2023 were for the replacement of fossil fuelled heating systems and 9.9% (993) were for the replacement of other heating system types e.g. direct electric. There were also 15.9% (1,592) where no heating system was being replaced – all of which were for eligible self-build properties.

99.6%
Domestic installations

99.6% of installations supported (where this information was provided) were in domestic buildings, meaning just 0.4% were declared as being non-domestic.

Executive summary

The Boiler Upgrade Scheme (BUS) launched on 23 May 2022 to support the decarbonisation of heat in buildings. It provides upfront capital grants towards the cost of installing approved heat pumps and biomass boilers in homes and small non-domestic buildings in England and Wales. Decarbonising the way we heat our homes and businesses is essential to reach net zero carbon emissions and the BUS has an important role to play in achieving this.

As scheme administrator, we ensure the scheme is operated efficiently, including managing applications made by installers, issuing vouchers and making payments. Additionally, our audit and compliance programme monitors compliance with the scheme rules, making sure that grants are only paid to those eligible to receive them. As part of our statutory responsibilities, we have produced this first BUS annual report to provide an update on activity since scheme launch on 23 May 2022 to 31 March 2023 (Scheme Year 1).

Voucher summary (page 11)

Installers are required to submit an initial voucher application (stage 1) where we check the pre-installation eligibility criteria. If the voucher application is successful, we issue the applicant with a voucher.

Following commissioning of an installation the installer can submit a voucher redemption application (stage 2). Once we have established that the remaining eligibility requirements have been met, the grant payment is made.

During the first year of the scheme to 31 March 2023, we received a total of 15,768 stage 1 applications. After completing our eligibility checks we issued 11,998 vouchers worth almost £69.1 million. We rejected a further 1,362 applications that failed our eligibility checks, and 161 applications were withdrawn.

We subsequently received 10,320 stage 2 applications from which 9,983 grant payments worth almost £50.2 million have been made. As a result of our further eligibility checks we rejected 58 of the stage 2 applications.

Analysis of grants paid (page 15)

96.3% of grants paid were for air source heat pumps and 99.6% of installations were installed in domestic properties.

When looking at the heating systems being replaced, gas boilers made up the largest proportion at 46.3%. Oil boilers were the second most common technology being replaced making up 22.9% of the total. Altogether, replaced fossil fuelled heating systems account for 74.1% of grants paid. There were also an additional 15.9% of installations where no heating system was being replaced – all of which were in eligible self-build³ properties.

Profile of BUS installers (page 22)

Over the first year 1,055 installers created a BUS installer account. Of these, 915 or 86.7% have submitted applications. Of the 140 that have yet to submit an application (as at the time the data was extracted), 35 are installers that created their accounts towards the end of the Scheme Year, between January and March 2023.

It is worth noting that the top 30 installers were responsible for 6,001 (38.1%) of applications. Conversely, there were 148 installers with a single application each.

Monitoring & compliance (page 23)

Audit

We operate a robust audit programme to help ensure that grants are only paid to applicants eligible to receive them, non-compliances are identified, and the scheme is operating in line with the regulations and scheme guidance. Doing so helps to ensure scheme funds are being spent effectively, providing value for money for the public.

We undertake both statistical and targeted audits. Statistical audits are randomly selected to provide a representative view of the scheme population. This provides us with a reliable measure of the level and types of non-compliance within the population and allows us to monitor whether non-compliance remains within risk appetite. Targeted audits focus on installations we have identified as having an increased risk of non-compliance.

³ New build properties are not eligible for the scheme except for certain 'self-builds'. A self-build must have been built mainly using the labour or resources of the first owner, and the new building has not, while the building was built or at any subsequent time, been owned wholly or partly by a person who is not an individual.

We conducted 405 statistical audits during Scheme Year 1. For audits closed to date, we assessed that 95.6% of those audited were complying with the scheme rules. Note that remedial action may bring more of these into compliance. The most common reasons for non-compliance identified were:

- 'No evidence of plant on site or plant ineligible for the scheme'
- 'Plant cannot meet eligible property space and water heating needs'
- 'Incorrect EPC provided'

These collectively accounted for over 80% of all non-compliance identified through the statistical programme.

Additionally, Scheme Year 1 saw 470 installations selected for targeted audit. As these audits target known risk areas, we expect compliance in this group to be lower. Overall we assessed that 93.3% of those audited were complying with the scheme rules.

It should be noted that the compliance rate can only be confirmed following the completion of a compliance investigation and some investigations relating to year 1 remain open at the time of writing.

Compliance

When we suspect an applicant has not complied with the scheme rules, for instance after completion of an audit, we may open a compliance investigation. If our investigation subsequently confirms a non-compliance affecting eligibility has occurred, in most cases we take compliance action by rejecting the ineligible application or revoking the voucher.

We closed 153 compliance investigations during the year of which 53 were found to be non-compliant. The most common non-compliance reason effecting eligibility was '*Existing system was not fossil fuel or electric*', accounting for 50.9% of the total. Where this issue has been identified the installer has been unable to provide evidence that the BUS installation will be replacing an existing fossil fuel or electric heat source.

In total, the compliance actions we took in Year 1 resulted in almost £270,000 of public funds being protected or recoverable - all of which (where applicable) has now been recovered.

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

1. About the scheme

Section Summary

This chapter summarises the context and legislative background to the Boiler Upgrade Scheme (BUS), including Ofgem’s administrative duties.

- 1.1. The Boiler Upgrade Scheme (BUS) supports the decarbonisation of heat in buildings. It provides upfront capital grants to support the installation of eligible heat pumps and biomass boilers in homes and small non-domestic buildings in England and Wales.
- 1.2. The scheme supports property owners to move away from their reliance on fossil fuel systems to cleaner and more efficient ways of heating their homes. In the long term, the deployment of low carbon technologies will reduce the UK’s dependency on fossil fuels, exposure to global price spikes and help the country work towards its Net Zero commitments.
- 1.3. The BUS covers three low carbon technology types offering grants of up to £6,000 towards installation costs:
 - Air source heat pumps (ASHP) (£5,000)
 - Ground source heat pumps (GSHP) (£6,000)
 - Biomass boilers (£5,000)
- 1.4. The BUS launched on 23 May 2022⁴ and is underpinned by ‘The Boiler Upgrade Scheme (England and Wales) Regulations 2022’⁵ (the BUS regulations). The Department of Energy Security & Net Zero (DESNZ) is responsible for the BUS policy and scheme regulations.
- 1.5. At launch the scheme was scheduled to run for three years with a budget of £150 million available per year. The total budget of £450 million was expected to support the installation of up to 90,000 low carbon heating installations by 2025. On 30 March 2023 the Government announced their intention to extend the BUS until 2028⁶.

⁴ Although the BUS launched on 23 May 2022, systems first commissioned from 1 April 2022 were eligible for support.

⁵ [The Boiler Upgrade Scheme \(England and Wales\) Regulations 2022:](https://www.legislation.gov.uk/ukxi/2022/565/contents/made) <<https://www.legislation.gov.uk/ukxi/2022/565/contents/made>>

⁶ [Powering up Britain:](https://www.gov.uk/government/publications/powering-up-britain) <<https://www.gov.uk/government/publications/powering-up-britain>>

- 1.6. Ofgem administers the scheme on behalf of Government and our responsibilities are set out in the BUS regulations. Our functions include but are not limited to:
- Publishing scheme guidance for installers⁷ and property owners⁸
 - Processing voucher and redemption applications
 - Making payments to installers following processing successful voucher redemptions
 - Publishing reports on the BUS
 - Monitoring and enforcing compliance with the BUS regulations.
- 1.7. This report is produced to meet our obligation to publish a report on scheme activity annually by 31 July.⁹ This first annual report covers the period from scheme launch on 23 May 2022 to 31 March 2023.
- 1.8. We also publish monthly¹⁰ and quarterly¹¹ reports covering the BUS scheme on our website.
- 1.9. Alongside this, the low carbon heating products used on the scheme must be Microgeneration Certification Scheme (MCS) certified¹². As do the installers carrying out the installations. This aims to ensure the quality, reliability and performance of the products used, the competence of installers and encourages a high-quality standard of installation. Additional consumer protection is provided as all MCS installers must be a member of a recognised consumer code¹³.

⁷ [BUS: Guidance for Installers](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers): <https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers>

⁸ [BUS: Guidance for Property Owners](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-property-owners): <https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-property-owners>

⁹ This annual report is published as required by regulation 30(5) of the Boiler Upgrade Scheme (England and Wales) Regulations 2022 (the 'Bus regulations'). In so far as the data can be provided in aggregate form, this report contains the information specified by regulation 30(3)(c) of the BUS regulations.

¹⁰ [BUS monthly scheme update](https://www.ofgem.gov.uk/publications/bus-monthly-scheme-update): <https://www.ofgem.gov.uk/publications/bus-monthly-scheme-update>

¹¹ [BUS publications](https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus/boiler-upgrade-scheme-bus-guidance-and-resources): <https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus/boiler-upgrade-scheme-bus-guidance-and-resources>

¹² [Information on MCS](https://mcs-certified.com/): <https://mcs-certified.com/>

¹³ Consumer codes are consumer organisations that set out the levels of customer service and consumer protection that MCS installers must provide.

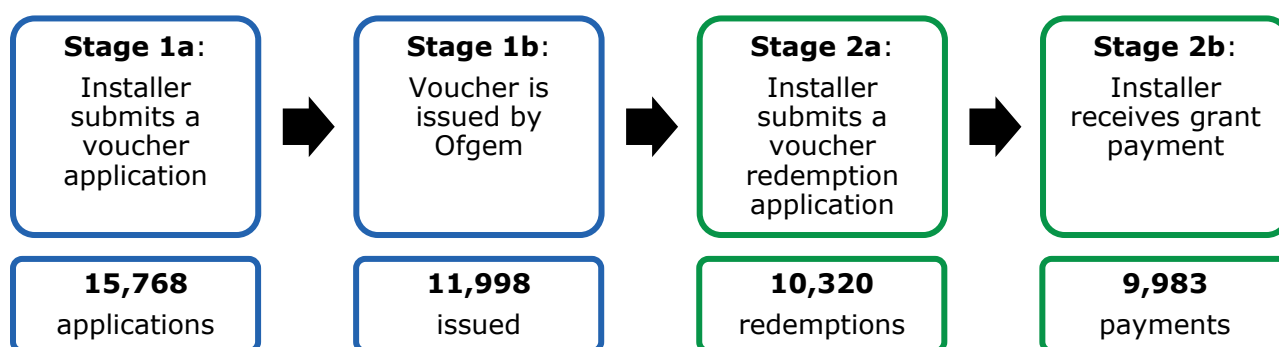
2. Voucher summary

Section Summary

This chapter provides a summary of BUS voucher applications, the vouchers we issued, and the redemption applications received.

- 2.1. The BUS grant application is a two-stage process which is illustrated in **Figure 2.1**, along with Year 1 volumes.
- 2.2. Firstly, installers are required to submit a voucher application (stage 1) where we check that the pre-installation eligibility criteria are met. If the voucher application is successful, we issue the applicant with a voucher.
- 2.3. Once a voucher has been issued to an installer, they must complete the installation and submit a redemption application within the validity period as set out in the BUS regulations. The validity period is three months for air source heat pumps (ASHPs) and biomass boilers, or six months for ground source heat pumps (GSHPs). If a redemption application is not received within the relevant validity period, the voucher expires.
- 2.4. Following commissioning of an installation the installer can submit a voucher redemption application (stage 2). Once we have established that the remaining eligibility requirements have been met, the grant payment is made.¹⁴

Figure 2.1: Summary of grant application process and Year 1 volumes



¹⁴ Further detail on the BUS application process can be found in our [BUS: Guidance for Installers](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers): <<https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers>>

Voucher applications (stage 1)

- 2.5. During BUS Year 1 a total of 15,768 applications were received with 95.9% of these being for ASHPs. It should be noted that this total can include multiple applications for the same property. For example, where a re-application is made following a voucher expiring.
- 2.6. A breakdown of applications received split by technology type is shown in **Figure 2.2**.

Figure 2.2: Applications received by technology type

ASHP	Biomass	GSHP	GSHP (Shared ground loop) ¹⁵
15,127	181	447	13

- 2.7. After completing stage 1 checks we issued 11,998 vouchers worth £69,078,000.
- 2.8. Following our eligibility checks we rejected 1,362 of the BUS applications at this stage, thereby protecting £6,844,000 of public funds. A further 161 applications were withdrawn by applicants. The most common reasons for rejection were:
- when asked, the property owner named on the application did not provide their consent for the installer to make the application on their behalf
 - a failure by the installer or property owner to provide further information to support the application when requested.
- 2.9. Once a voucher has been issued to an installer, they must complete the installation and submit a redemption application before it expires. As shown in **Figure 2.3**, a total of 1,511 vouchers expired before being redeemed. This is 15.5% of all vouchers with an expiry date before the end of the first scheme year. Where a voucher has expired a new BUS application with the same information can be made. Our analysis shows that many have reapplied with 608 (40.2%)¹⁶ of the 1,511 having already been approved and paid.

¹⁵ See glossary for description.

¹⁶ Due to the way this data was captured in Scheme Year 1 and then extracted the actual number of re-applications may be higher. Also note that some of the 1,511 had reapplied and had a new voucher issued that was not redeemed by the end of March 2023. These may still go on to successfully redeem and others may successfully reapply and get paid in subsequent scheme years.

Figure 2.3: Expired vouchers

Vouchers issued with expiry date <= 31/03/2023	Total number of expired vouchers	Percentage of vouchers expired
9,771	1,511	15.5%

2.10. When looking at the proportion of vouchers expiring for each technology type, 15.6% of ASHP vouchers expired, 12.2% of GSHP vouchers expired and 10.0% of biomass vouchers expired. There were no expired vouchers for shared ground loop GSHPs.

Redemption applications (stage 2)

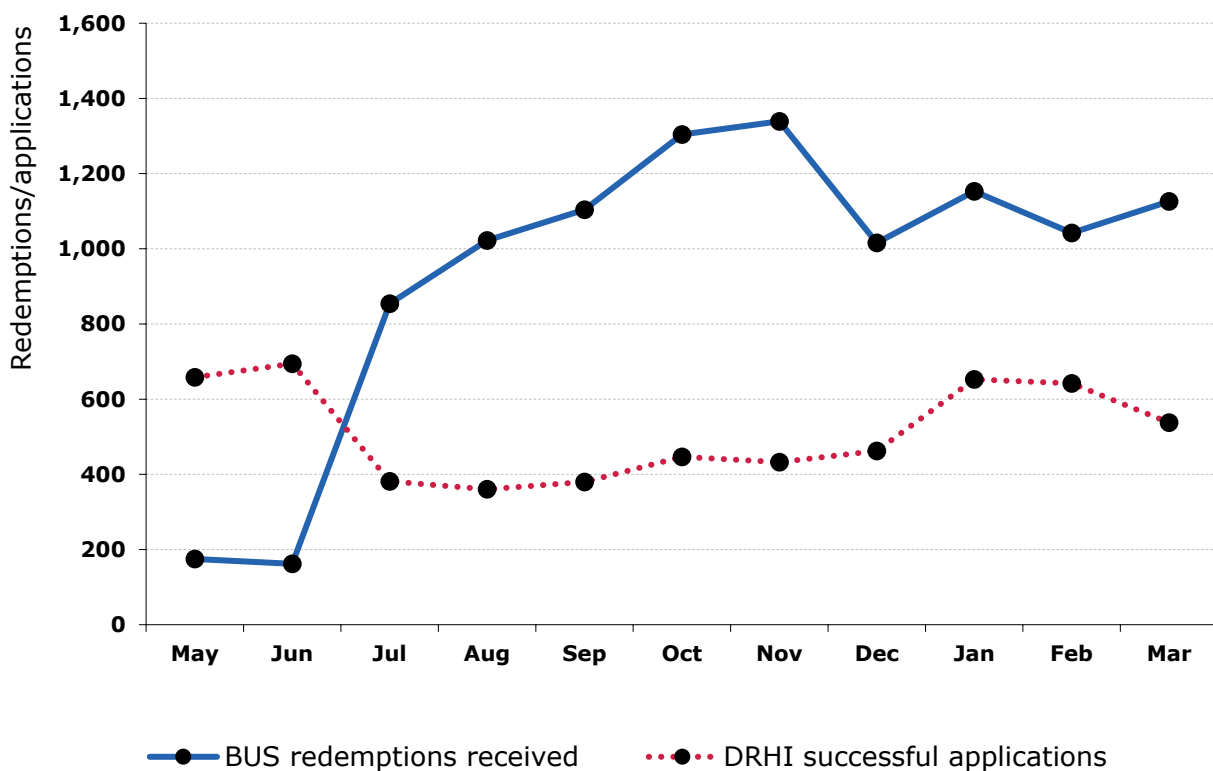
2.11. A total of 10,320 redemption applications were received during BUS Year 1. Following our further eligibility checks 9,983 went on to have grants paid and 58 were rejected - protecting a further £293,000 of public funds. The remaining 279 redemption applications were still being processed at the end of the scheme year.

2.12. As illustrated in **Figure 2.4**, when comparing monthly redemption applications on BUS to average successful monthly Domestic Renewable Heat Incentive (DRHI) applications between 2018-19 and 2020-21, the overall BUS deployment rate is 66% higher.¹⁷

¹⁷ So that a fair comparison is made, redemption applications on BUS are compared with successful applications on DRHI submitted between April 2018 and March 2021. The following DRHI applications have been removed: installations located in Scotland, applications for solar thermal installations, applications from social landlords – all of which are not eligible under the BUS. DRHI data for 2021-22 has not been used due to distorted application volumes as a result of DRHI scheme closure at the end of March 2022. The figures in the chart have been adjusted to remove re-applications.

Figure 2.4: Comparison between BUS Year 1 redemptions and average monthly DRHI deployment between 2018-19 and 2020-21

This chart shows the number of unique redemption applications received on the BUS each month and average monthly successful applications on the DRHI between 2018-19 and 2020-21. In line with expectations, redemption volumes were lower on the BUS during May and June, but picked up in July as larger volumes of the vouchers issued in the first two months of the scheme were redeemed. By July, BUS volumes had overtaken average monthly deployment on the DRHI and remained substantially higher for the remainder of the period.



3. Analysis of grants paid

Section Summary

This chapter provides information on the characteristics of the low carbon heat installations supported under the scheme.

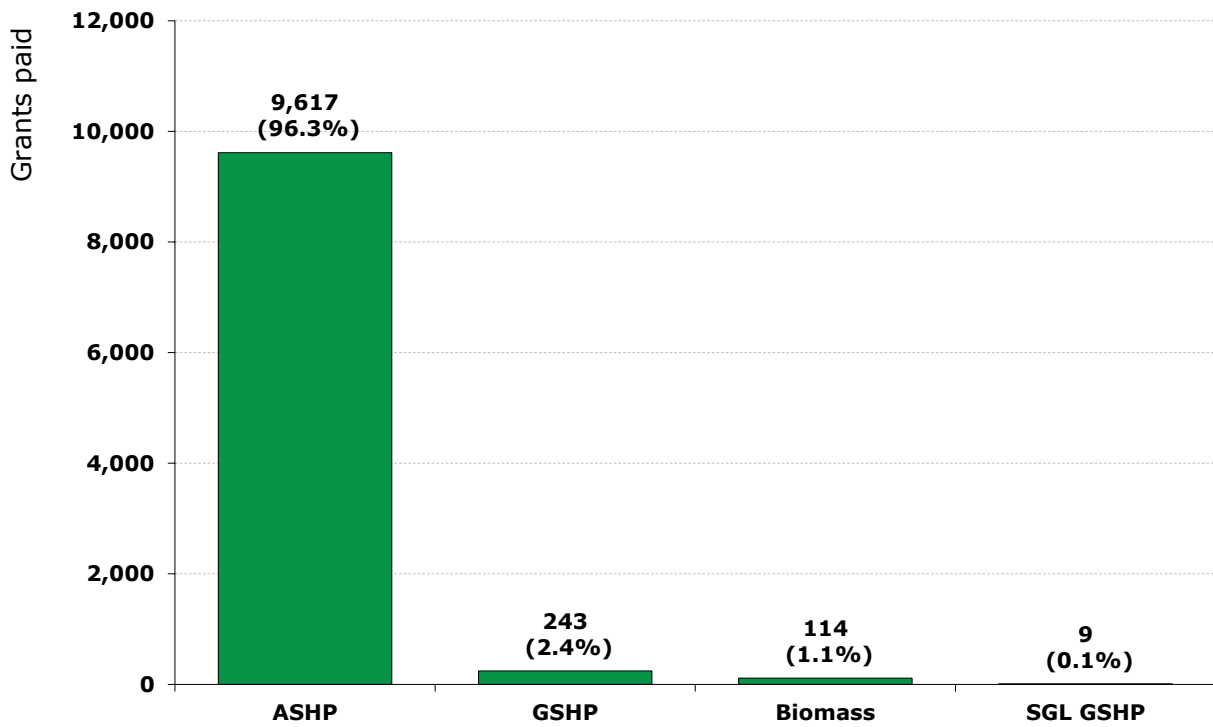
- 3.1. In total, during BUS Year 1 we paid grants worth £50,167,000 supporting the installation of 9,983 low carbon heating systems.
- 3.2. To provide insight into the characteristics of installations being supported through the BUS, we have provided information on:
 - technology types
 - the location of installations
 - the heating technologies being replaced
 - the split between domestic and non-domestic, and
 - quoted installation costs.

BUS technology types

- 3.3. Following the deployment pattern observed on the Domestic Renewable Heat Incentive (DRHI) scheme, air source heat pumps (ASHPs) make up the vast majority of BUS installations. **Figure 3.1** illustrates this, and the proportion of other technology types.

Figure 3.1: Grants paid by technology type - Scheme Year 1

This chart shows a breakdown of the 9,983 grants paid by technology type. ASHPs make up 96.3%, ground source heat pumps (GSHPs) 2.4%, biomass 1.1%, and shared ground loop ground source heat pumps (SGL GSHPs) 0.1%.

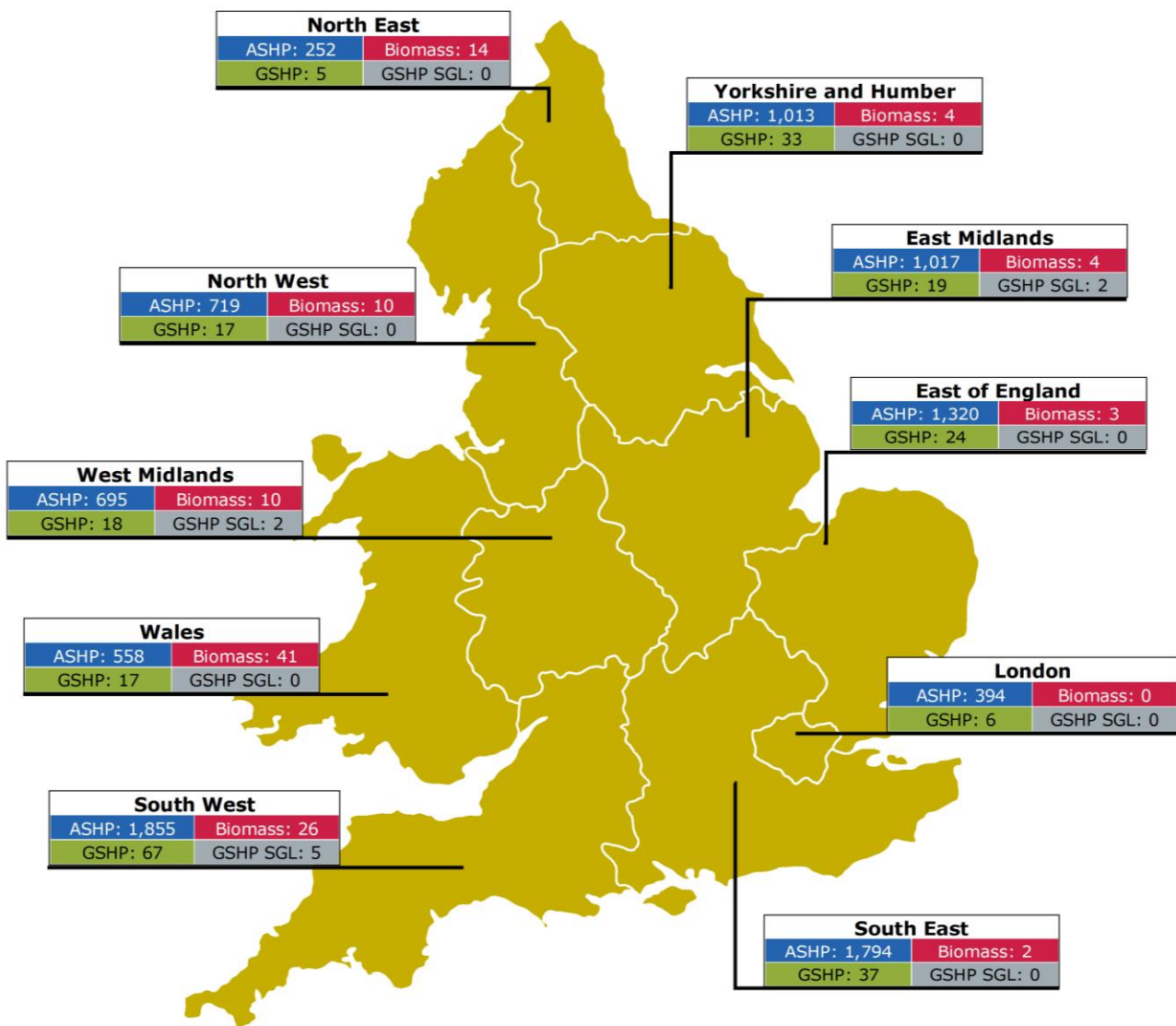


Regional distribution of BUS installations

3.4. **Figure 3.2** below shows the distribution of BUS installations across England and Wales, split by technology type.

Figure 3.2: Regional distribution of grants paid by technology type – Scheme Year 1

This map shows that South West England has the highest number of BUS installations, with 19.6% of the total. This is closely followed by South East England with 18.4% and East of England with 13.5%. At the other end of the spectrum the North East of England accounts for the lowest proportion with 2.7% of installations, followed by London with 4.0% and Wales with 6.2%.



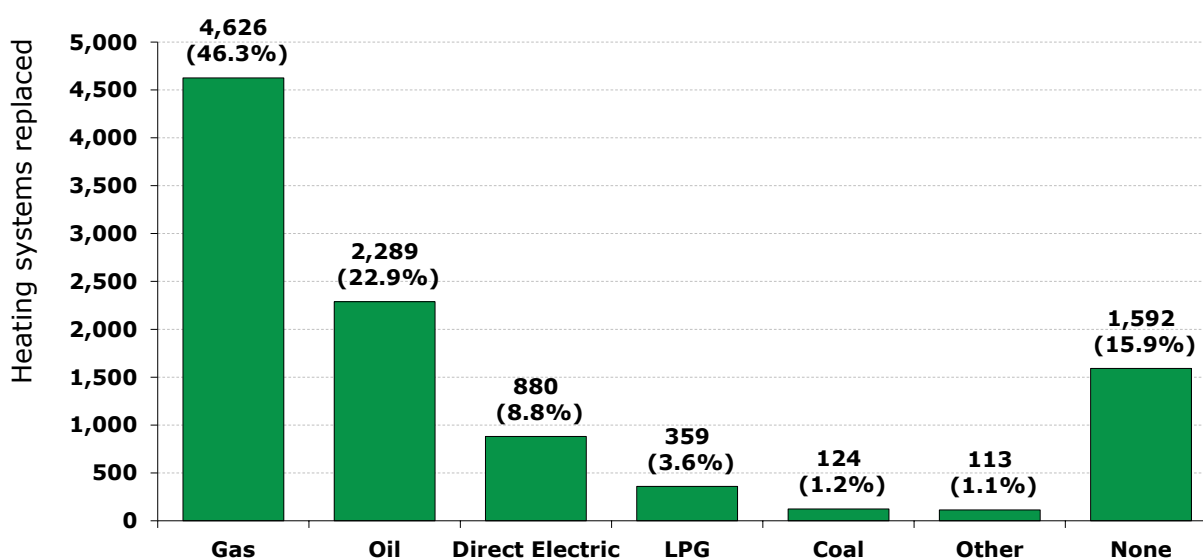
Replaced heating systems

3.5. A key policy aim of the BUS is to decarbonise homes in England and Wales by replacing fossil fuel heating systems with lower carbon alternatives. **Figure 3.3** provides details of the heating systems replaced by BUS installations as declared by installers on the BUS application form.

3.6. The BUS scheme also supports the installation of low carbon heating in eligible self-build properties¹⁸. In total, 1,639 eligible self-builds received support under the scheme during Scheme Year 1. Most of these were in newly constructed buildings or conversions of buildings without previous heating. However, a proportion were conversions where a non-domestic heating system was replaced. Therefore the number of grants paid where no heating system has been replaced is lower than the number of eligible self-builds.

Figure 3.3: Replaced heating systems – Scheme Year 1

This chart shows the number and type of heating systems that have been replaced by BUS installations. Gas systems made up 46.3% of the total and oil was the second most common at 22.9%. Overall, replaced fossil fuelled systems account for 74.1% of grants paid. 15.9% of the grants paid were for properties where there was no previous heating system.



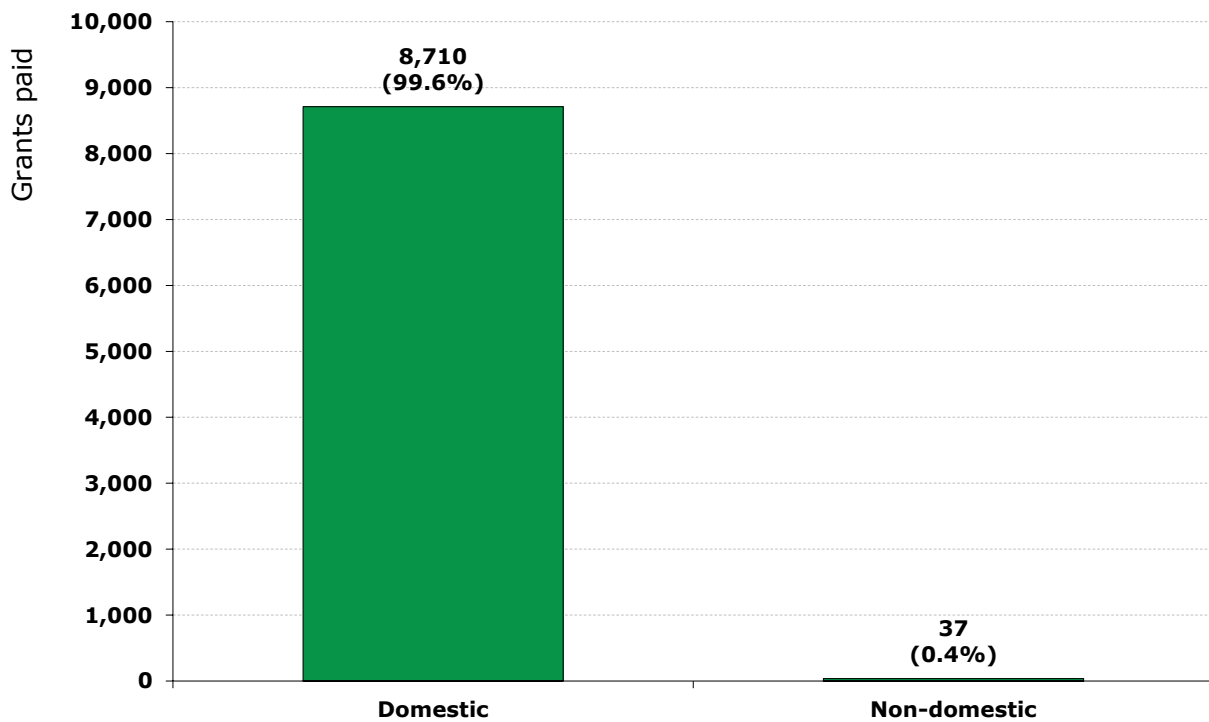
¹⁸ New build properties are not eligible for the scheme except for certain 'self-builds'. A self-build must have been built mainly using the labour or resources of the first owner, and the new building has not, while the building was built or at any subsequent time, been owned wholly or partly by a person who is not an individual.

Domestic vs non-domestic

3.7. The BUS supports the installation of low carbon heating systems up to a maximum capacity of 45 kWth. In practice this means that the scheme is targeted at domestic and small scale non-domestic buildings. **Figure 3.4** provides a breakdown of the declared building type for grants paid.

Figure 3.4: Proportion of grants paid for domestic vs non-domestic installations

This chart shows the breakdown of grants paid for domestic vs non-domestic installations. Domestic installations accounted for 8,710 or 99.6% of all installations where this information was declared by the applicant. This compares to 37 or 0.4% for non-domestic. This information was not provided by the remaining 1,236 applicants.



Installation costs

3.8. Applicants for the BUS scheme are asked to submit information on the quotes provided for installing the new heating system before the grant value has been deducted. The average total quote¹⁹ by technology type for grants paid is provided in **Figure 3.5**.

Figure 3.5: Average total quote amount for BUS grants paid (grant value included)

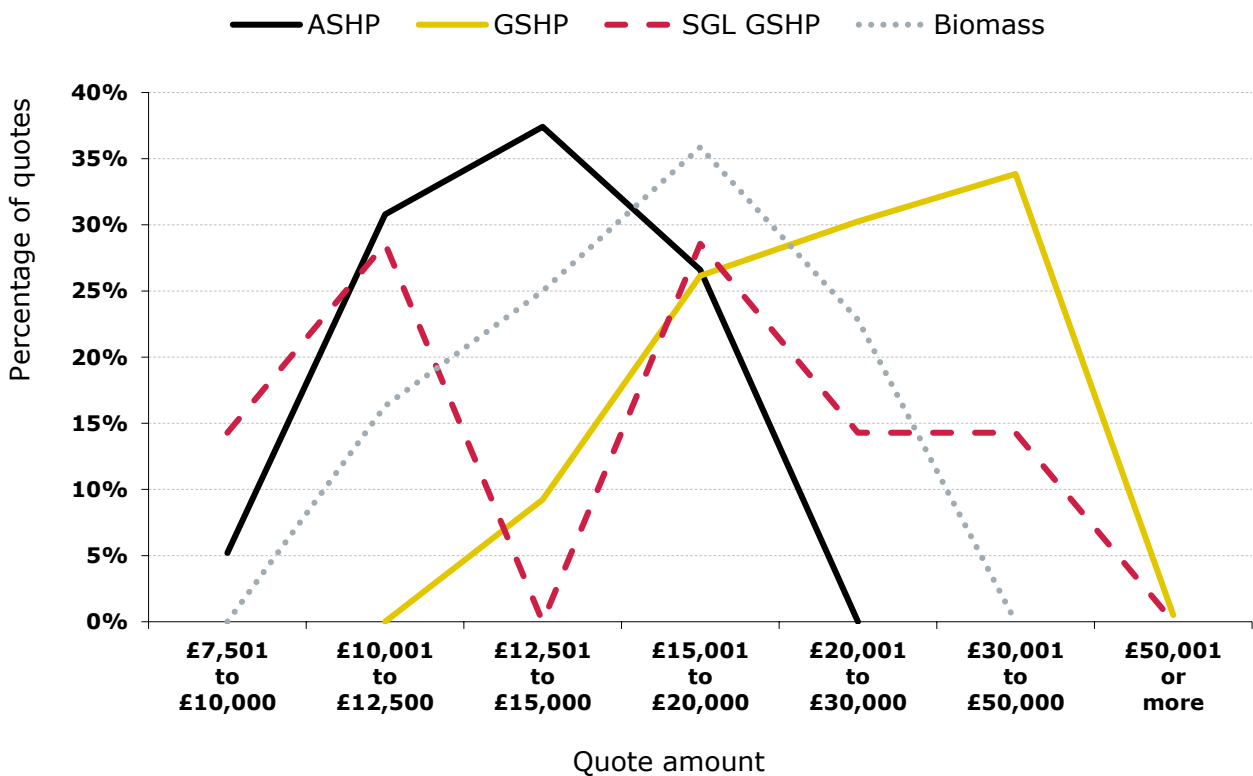
ASHP	Biomass	GSHP	SGL GSHP
£13,590	£16,716	£26,594	£18,465

3.9. **Figure 3.6** shows the installation quote distribution for each technology type.

¹⁹ The total quote amount reported by installers includes the system cost, labour and VAT. It should be noted that we do not validate the information provided. As such to account for outliers we have excluded the highest and lowest 10% of values from the data in this section. For SGL GSHP where there are only nine grants paid the single highest and lowest values have been excluded.

Figure 3.6: Installation quote distribution by technology type (grant value included)

This chart shows the distribution of installation quotes as reported by installers before the grant value has been deducted. There is a bell curve distribution for ASHP installation quotes, with installations most commonly being in the £12,501 to £15,000 range. Biomass follows a similar pattern to ASHPs but with installations most commonly falling in the £15,001 to £20,000 range. GSHPs show a distribution skewed towards the upper end of the scale with installations most commonly being in the £30,001 to £50,000 range. The distribution for SGL GSHPs does not seem to follow a pattern, but with the small sample size no reliable conclusions can be drawn.



4. Profile of BUS installers

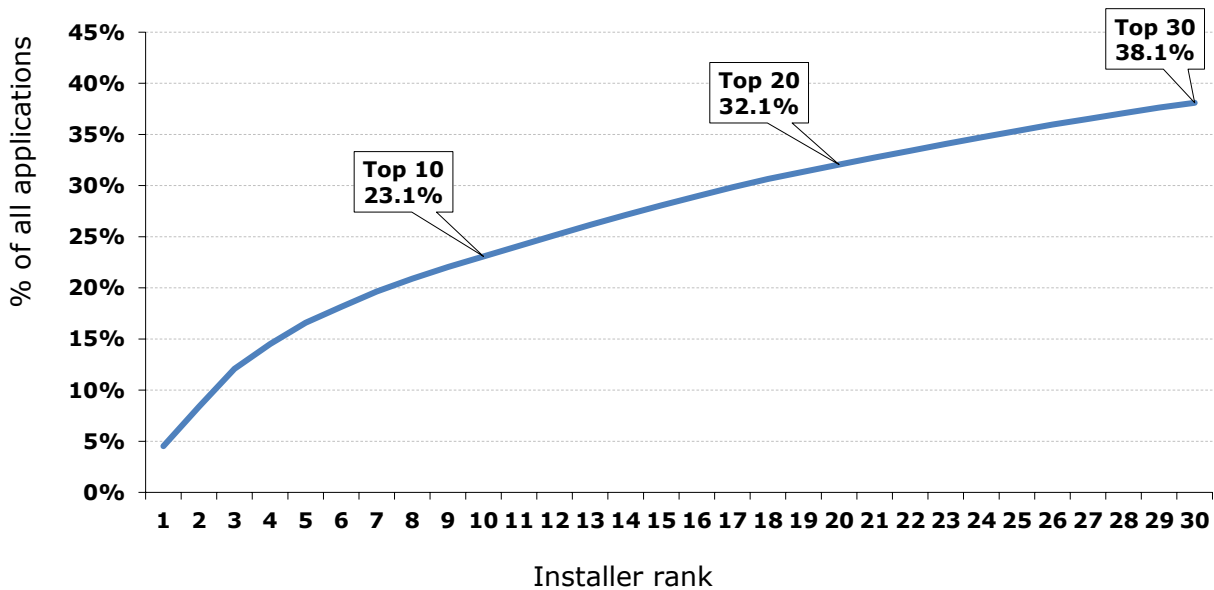
Section Summary

This chapter provides information on the installers who have created an account under the scheme.

- 4.1. Installers were able to create an installer account from 11 April 2022, in advance of the scheme opening for applications on 23 May 2022. In total, over the first year 1,055 installers successfully created a BUS installer account.
- 4.2. Of these, 915 (86.7%) have submitted applications. Of the 140 that have yet to submit an application (as at the time the data was extracted), 35 are installers that created their accounts towards the end of the Scheme Year, between January and March 2023.
- 4.3. It is worth noting that as shown in **Figure 4.1**, the top 30 installers were responsible for 6,001 (38.1%) of applications. Conversely, there were 148 installers with a single application each.

Figure 4.1: Top 30 installers ranked by number of applications

This chart shows that the top ranked installer was responsible for almost 5% of total BUS applications in Year 1. The top ten installers were responsible for 23.1%, the top 20, 32.1% and the top 30, 38.1%.



5. Monitoring & compliance

Section Summary

This chapter summarises our work monitoring compliance with the scheme rules.

- 5.1. We operate an audit programme to monitor levels and trends of non-compliance, investigate and deter non-compliance and fraud risk, identify the root causes of non-compliance, and monitor the risk of scheme abuse. Doing so helps to ensure that grants are only paid to applicants eligible to receive them and therefore scheme funds are being spent effectively; providing value for money for the public.
- 5.2. When we suspect an applicant is non-compliant, for instance after completion of an audit, we open a compliance investigation. If our investigation subsequently confirms a non-compliance affecting eligibility has occurred, we will normally reject the ineligible application or revoke the voucher.

Summary of audit activity

- 5.3. Our audit strategy has been developed in line with best practice from the National Audit Office (NAO). The strategy is reviewed annually and updated to account for emerging risks, changes to the scheme and new trends in non-compliance. We conducted a Root Cause Analysis on the types of non-compliance identified and implemented changes, designed to mitigate any risks identified.
- 5.4. We undertake both statistical and targeted audits. Statistical audits are site audits and are randomly selected to provide a representative view of the scheme population. This provides us with assurance that the results of audits will reflect the level and types of non-compliance within the population and whether non-compliance remains within risk appetite.
- 5.5. Targeted audits can be either desk or site audits, with the audit method selected based on the specific risks identified. We may change a targeted desk audit to a site audit in specific circumstances. This has been applied to three audits in the 2022-23 scheme year, all for vulnerable property owners who were provided with support on site by the site auditors.

5.6. **Figure 5.1** below gives an overview of the 2022-23 audit programme and shows the initial compliance rating for closed audits. All audits shown were from the 2022-23 period and the information is correct as of May 2023. Targeted audits are selected on a weekly basis and statistical audits are selected a month in arrears. At the time of writing several audits are still to be closed with investigations ongoing.

Figure 5.1: Statistical and targeted audits – Scheme Year 1

Audit type	Closed audits	Open audits	Total audits	Compliant audits	Non-compliant audits	Compliance rate (%)
Statistical (site)	344	61	405	329	15	95.6%
Targeted (site)	238	38	276	220	18	92.4%
Targeted (desk)	168	26	194	159	9	94.6%
Totals	750	125	875	708	42	94.4%

5.7. 405 statistical audits were conducted for grants paid in 2022-23 with a compliance rate for those closed of 95.6% when audited. The statistical audit programme is used to determine the BUS 'error rate'²⁰. The value of payments made in error during 2022-23 under the Boiler Upgrade Scheme is estimated at £1.7 million (3.3% of total payments) within a 95% confidence interval of £0.8 million to £2.5 million²¹. Please note the error rate includes a forecast of expected outcomes for the remaining open audits and compliance investigations.

5.8. Details of the non-compliances identified through our statistical audit programme are shown in **Figure 5.2** below. There were 15 non-compliances identified, the top three of which accounted for over 80% of the total.

²⁰ 'Error rate' is the estimated level of non-compliance with the scheme rules (expressed as a percentage of payments made) across the scheme population.

²¹ A 95% confidence interval means that we are 95% confident that the actual value of payments made in error will fall between the upper and lower values of £0.8 million and £2.5 million.

Figure 5.2: Statistical audit non-compliances – Scheme Year 1

Non-compliance	Number of non-compliances	Percentage of non-compliances
No evidence of plant on site or ineligible for scheme	4	26.7%
Plant cannot meet eligible property space and water heating needs	4	26.7%
Incorrect EPC provided	4	26.7%
Building where heat is used does not comply with definition of a building as described in the BUS regulations	2	13.3%
Ineligible biomass	1	6.7%
Total	15	100%

5.9. Additionally, 470 targeted audits were conducted on installations identified as having a potential increased risk of non-compliance. The compliance rate in this group was slightly lower than the statistical group at 93.3%.

5.10. It should be noted that the compliance rate shown in **Figure 5.1** includes all potential non-compliances identified through audit. Where the initial audit indicates a weak rating, a compliance investigation is conducted to confirm if a non-compliance has occurred. Therefore, the compliance rate can only be confirmed following completion of the compliance investigation.

BUS compliance

5.11. When we suspect an applicant has not complied with the scheme rules, for instance after completion of an audit or during the application process, we may open a compliance investigation. During an investigation, we have the power to withhold payment pending the outcome. If a non-compliance affecting eligibility has occurred, in most cases we will take compliance action by rejecting the ineligible application or revoking the voucher - thereby protecting the public purse.

5.12. We closed 153 compliance investigations during the year of which 53 were found to be non-compliant. The compliance action we took in Year 1 resulted in almost £270,000 of public funds being protected or recoverable - all of which (where applicable) has now been recovered. Further details can be found in **Figure 5.3** below.

Figure 5.3: Summary of compliance cases – Scheme Year 1

Referral source	Cases closed	Cases non-compliant	Value of public funds protected or recoverable
Audit ²²	14	4	£20,000
Operational	137	49	£247,000
Counter fraud/ External investigation	2	0	£0
Total	153	53	£267,000

5.13. To provide further information on the nature of the material non-compliances being identified, we have included information on the five most common in **Figure 5.4**. The most common reason for material non-compliance was 'Existing system was not fossil fuel or electric', accounting for 50.9% of all material non-compliances. Where this issue has been identified the installer has been unable to provide evidence that the BUS installation will be replacing an existing fossil fuel or electric heat source.

Figure 5.4: Most common non-compliances – Scheme Year 1

Non-compliance	Number of non-compliances	Percentage of non-compliances
Existing system was not fossil fuel or electric	28	50.9%
Incorrect address	12	21.8%
Installation does not heat the whole property	3	5.5%
Installation first commissioned prior to 01/04/22	3	5.5%
No heating system installed at the property	3	5.5%
Total	49	89.2%

5.14. To maintain and further reduce the low levels of non-compliance on the scheme, we continue to analyse the causes behind the non-compliances identified. We use this information to look for ways to strengthen our procedures and apply preventative measures to reduce the likelihood of non-compliances happening. We share our non-compliance findings with DESNZ, the Microgeneration Certification Scheme (MCS) (who carry out checks on the quality of the BUS funded installations) and relevant consumer codes²³ as appropriate, to ensure that all parties can respond accordingly.

²² At the time of writing there are 17 ongoing audit investigations in relation to the 2022-23 audit programme.

²³ Consumer codes are consumer organisations that set out the levels of customer service and consumer protection that MCS installers must provide.

6. Our administration

Section Summary

This chapter provides additional detail on our administration of the BUS during Scheme Year 1.

- 6.1. As administrators of the BUS, Ofgem performs a number of functions, including:
- Publishing scheme guidance for installers and property owners
 - Processing voucher and redemption applications
 - Making payments to installers following a successful voucher redemption
 - Monitoring and enforcing compliance with the BUS regulations
 - Publishing reports on the BUS.
- 6.2. This chapter provides information on certain aspects of our administration not covered elsewhere in this report.

Voucher processing

- 6.3. A key aspect of our administration is the processing of voucher applications from installers. It is important that these applications are processed as efficiently as possible to ensure that this does not delay deployment unnecessarily. Some highlights outlining our work on voucher processing follow.
- 6.4. To support installers we allowed those that commissioned systems between 1 April 2022 and scheme launch on 23 May 2022²⁴ to submit grant applications and voucher redemption applications in parallel. We received 197 of these of which 91% were paid within the first 3 months.
- 6.5. Once a voucher application has been received, the property owner is contacted to provide their consent before we can deem the application has been properly made. Within Scheme Year 1, over 92% of ASHP applications had property owner consent requests issued by us within 10 working days of the grant application being made.

²⁴ Although the BUS launched on 23 May 2022, systems first commissioned from 1 April 2022 were eligible for support.

6.6. Across Scheme Year 1, 94% of applications for voucher redemptions were processed and paid within 12 working days of the redemption application being made. This demonstrates the high quality of documents provided by BUS installers in support of redemption applications.

Digital delivery

6.7. A key enabler of running the BUS scheme efficiently and securely is the digital service. This service allows installers to make applications to the scheme and property owners to provide their consent online.

6.8. We launched our digital service to coincide with scheme launch and made significant releases later in the year to enhance system functionality:

- Our initial digital service went live in May 2022, enabling property owners to provide consent for their installer’s application. Having this capability at launch ensured that we supported consumers by providing a simple and secure method to verify their consent online.
- In November 2022, our update enabled installers to securely make their initial voucher applications online, as well as allowing them to view the status of their account and previously submitted applications. This additional functionality significantly reduced Ofgem’s operational load and contributed to an improved user experience for applicants.
- In May 2023, further improvements were made to the digital service enabling all stages of the application process to be made by installers digitally. We also made internal improvements that pave the way for automated payments in the subsequent release.

6.9. In November 2022 our digital service passed its Government Digital Standards beta assessment. This validates our efforts to put the people using the service at its heart, with a design that is both user focused and accessible to all. This has been achieved through our user research and a series of co-design sessions with installers and property owners, who provided valuable input into the service design.

6.10. Furthermore, our customer satisfaction rating (a measure of how satisfied users of the service are) was 96.5% to April 2023²⁵. This reflects an extremely high satisfaction rate amongst installers and property owners.

²⁵ Customer Satisfaction Score (CSAT) survey over the period 13th January 2023 – 17th April 2023.

Stakeholder engagement

- 6.11. Ensuring that scheme participants and potential applicants are aware of the scheme rules, our administrative approach, the published guidance, changes to the digital service and other scheme updates has been vital to the effective and robust operation of the BUS. To help achieve this, we have kept in close contact with our colleagues at DESNZ to ensure consistency of messaging surrounding the BUS.
- 6.12. As appointed administrators our objective was, and still is, to target installers to ensure understanding of the scheme design and the application processes. It should be noted that public awareness and promotion, including to property owners, sits outside of Ofgem’s remit as an independent administrator: this is the responsibility of DESNZ as the policy owner.
- 6.13. However, recognising the public need for information about the scheme, and that Ofgem would likely be seen as a key source of this information, we have produced targeted content on our website, as well as managing a dedicated phone number for enquiries.

Launch

- 6.14. To support the launch of the scheme, we engaged closely with industry and stakeholders. This helped inform how we designed our administration of the scheme. We did this principally through our consultation²⁶, which sought views on our administrative approach for BUS, and then through publishing our draft guidance for comment. We also took steps to build stakeholder knowledge of the scheme through launch events, where we set out the design of the scheme and our administrative approach; so stakeholders knew what to expect.
- 6.15. Online webinars supported the phased launch²⁷ of the BUS. These sessions were open to the public, installers and wider industry and were promoted on our website and via our social media platforms. As a follow up to the webinars, we issued a question-and-answer document to all attendees.

²⁶ [Consultation on administration of the BUS scheme](https://www.ofgem.gov.uk/publications/decision-administration-boiler-upgrade-scheme-bus): <<https://www.ofgem.gov.uk/publications/decision-administration-boiler-upgrade-scheme-bus>>

²⁷ Key digital services and processes were prioritised for the launch of BUS, with additional features released after the scheme had opened for applications.

6.16. Since the launch of the scheme, we've engaged with stakeholders in a variety of ways to maximise the feedback we receive. We value the intelligence this provides and regularly make improvements based on the feedback we receive.

Forums

6.17. Since June 2022 we've hosted monthly BUS forums with trade associations, relevant industry stakeholders and other interested parties.

6.18. The forums have been an opportunity for stakeholders to share their feedback, giving us valuable information and allowing us to continually improve the service. We've also used the forums to share key messages, updates and feedback, including highlighting common issues that could prevent application approval or eligibility.

Digital update - soft launch

6.19. Before the digital voucher application update was released, forum members had the chance to be part of a 'soft launch'. This allowed us to identify any issues before it went live. We've also used Scheme Year 1 to listen to users of the digital service and feed this into our digital delivery roadmap.

Document publications

6.20. As administrators of BUS, we publish guidance for both installers²⁸ and property owners²⁹.

6.21. These guidance documents are periodically updated to reflect scheme developments and improved using feedback we receive from stakeholders. At the time of writing the most recent update was published on 26 June 2023. A full list of the changes made in each new edition is published alongside the guidance on our webpage.

6.22. If you have any suggestions for additions or clarifications to future versions of the guidance, please get in touch with us directly at: future.heatpolicy@ofgem.gov.uk.

²⁸ [BUS guidance for installers](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers): <<https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers>>

²⁹ [BUS guidance for property owners](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-property-owners): <<https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-property-owners>>

7. Looking forward

Section Summary

This chapter provides information on changes due to take place on the scheme, alongside other information affecting the broader policy landscape.

- 7.1. After a successful first year of operation, the Government announced their intent to extend the BUS until 2028. This three-year extension was announced as part of the 'Powering Up Britain: Net Zero Growth Plan' on 30 March 2023. This illustrates the important role BUS will continue to play in helping to achieve the target of deploying 600,000 heat pumps per year by 2028³⁰. This target will also be supported by government help for industry to develop heat pump supply chains and plans to end new gas grid connections by 2025.
- 7.2. With the scheme fully underway we anticipate another busy year ahead. To support this, we are continuing our programme of improvements to systems and processes.
- 7.3. In relation to our forums, we will work with stakeholders to determine an appropriate frequency and format going forward. It may be beneficial to invite guest speakers from amongst the stakeholders in attendance to share their knowledge and experiences, allowing the forum to become an effective platform for the cross sharing of information.

³⁰ [Powering up Britain](https://www.gov.uk/government/publications/powering-up-britain): <<https://www.gov.uk/government/publications/powering-up-britain>>

Appendix 1: Associated links

- Applications for the BUS are made online on the gov.uk website:
[Apply for the BUS](https://www.gov.uk/apply-boiler-upgrade-scheme)
<https://www.gov.uk/apply-boiler-upgrade-scheme>
- Guidance documents on the BUS for installers can be viewed on the Ofgem website:
[Ofgem's BUS guidance for installers:](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers)
<https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-installers>
- Guidance documents on the BUS for property owners can be viewed on the Ofgem website:
[Ofgem's BUS guidance for property owners:](https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-property-owners)
<https://www.ofgem.gov.uk/publications/boiler-upgrade-scheme-guidance-property-owners>
- More information on the BUS can be found on the Ofgem website:
[Information about the BUS scheme:](https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus)
<https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus>
- The Boiler Upgrade Scheme (BUS) Regulations 2022 can be viewed on the legislation.gov.uk website:
[Boiler Upgrade Scheme \(England and Wales\) Regulations 2022:](https://www.legislation.gov.uk/ukxi/2022/565/contents/made)
<https://www.legislation.gov.uk/ukxi/2022/565/contents/made>
- The consultation documents detailing the BUS policy can be found here: (Future support for low carbon heat).
[Consultation: Future support for low carbon heat:](https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat)
<https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat>
- Government plans to strengthen Britain's long-term energy security and independence including extension of the BUS scheme to 2028 set out in 'Powering up Britain'.
[Powering up Britain:](https://www.gov.uk/government/publications/powering-up-britain)
<https://www.gov.uk/government/publications/powering-up-britain>

Appendix 2: Scheme glossary³¹

A

Air source heat pump (ASHP) – A low carbon heating technology that transfers heat from the ambient air outside a property to a liquid heating system. This provides hot water via a water cylinder and heating via radiators.

B

Biomass boiler – A boiler designed to burn solid biomass (other than fossil fuel or peat) to deliver heat via a liquid heating system.

Boiler Upgrade Scheme (BUS) voucher – A BUS voucher is issued after a voucher application is properly made, has been assessed and we are satisfied that all the relevant eligibility requirements have been met. Vouchers can be redeemed within the validity period for the relevant grant amount once an installation is commissioned, and all evidence required for redemption is provided to us.

C

Custom-build – Custom build refers to properties created by a builder who is contracted by an individual. This type of building is considered to be a “self-build”. For further information, please refer to “self-build” below.

D

The Department for Energy Security & Net Zero (DESNZ) - DESNZ are responsible for BUS policy in Great Britain, the scheme regulations, scheme budget and any promotion of the scheme.

G

Ground source heat pump (GSHP) - A low carbon heating technology that absorbs heat from the ground around a property using a ground loop, to provide hot water via a water cylinder and heating via radiators.

³¹ 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.

M

Microgeneration Certification Scheme (MCS) – The MCS (Microgeneration Certification Scheme) is a certification scheme for microgeneration installation companies and products. It defines and maintains consistent standards, providing confidence to consumers who wish to invest in small-scale technologies that produce electricity and heat from renewable sources.

S

Self-build – Eligible self-builds are new build properties which were built using either the resources or labour of an individual. This includes buildings where a builder is contracted by an individual to create a 'custom-built' property or where a private individual builds it as a DIY 'self-build' project. Both of these types of properties are treated as self-builds. Eligible self-builds cannot have been owned wholly or partly by a person who is not an individual. The date the building was first occupied must be on or after the first commissioning date of the heat pump.

Shared ground loop GSHP – A GSHP system where the ground loop is shared by two or more properties.