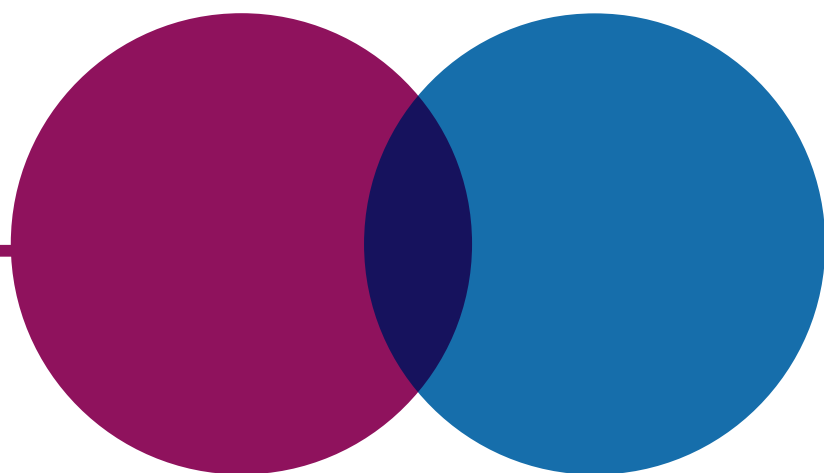




National Audit Office



Green Homes Grant Voucher Scheme

The Department for Business, Energy
& Industrial Strategy

REPORT

by the Comptroller
and Auditor General

SESSION 2021-22
8 SEPTEMBER 2021
HC 302



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National Audit Office

Green Homes Grant Voucher Scheme

**The Department for Business, Energy
& Industrial Strategy**

Report by the Comptroller and Auditor General

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Gareth Davies
Comptroller and Auditor General
National Audit Office

3 September 2021



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Key facts

£256m

anticipated total spend on vouchers out of an initial £1.5 billion available funding for the Green Homes Grant Voucher Scheme (the Scheme)

169,012

number of voucher applications received in 2020-21

47,500

estimate of homes that will be supported compared to an initial expectation of 600,000 for the duration of the Scheme

12 weeks

from Scheme announcement to Scheme launch – this includes the time taken to design the Scheme, consult with stakeholders and procure a grant administrator

137 days

average time to issue a voucher to homeowners who applied in October 2020, the first full month the Scheme was in operation

248 and 1,008

number of installers registered to the Scheme by 6 November 2020 (248) and by the completion of our fieldwork (1,008)

£313.8 million

expected total spend on the Scheme (including programme management, skills training for installers, administrative costs, and vouchers issued)

£50.5 million

Expected spend on programme management and administration of the Scheme (16% of total spend)

Summary

Background

- 1 The government aims to achieve net zero carbon emissions by 2050. Reducing emissions to achieve net zero will require wide-ranging changes to the UK economy, including further investment in renewable electricity generation, as well as changing the way people travel, how land is used and how buildings are heated. Buildings account for around 19% of all UK greenhouse gas emissions. To reduce emissions from homes the government wants consumers to use less energy, make greater use of green heating systems (alternatives to gas and fossil fuels) and for home heating to be more efficient.
- 2 The Department for Business, Energy & Industrial Strategy (the Department) has overall responsibility across government for achieving net zero. In July 2020, as part of the government's 'green recovery' from the pandemic, the Chancellor of the Exchequer announced the Department's Green Homes Grant Voucher Scheme (the Scheme) with funding of £1.5 billion made available. The Scheme offered homeowners the opportunity to apply for up to £5,000 funding (£10,000 for low income households) to install energy efficiency improvements and low carbon heat measures in their homes. Homeowners were expected to identify a certified installer and apply for vouchers with the installer receiving the grant funding once they had fitted the measure. The Department expected the Scheme to run between September 2020 and March 2021, support up to 82,500 jobs over six months and enable up to 600,000 households to save up to £600 on their energy bills.
- 3 At the same time as introducing the Scheme, the Department also launched three other energy efficiency schemes in England:
 - **Green Homes Grant Local Authority Delivery Scheme** – £0.5 billion in 2020-21 for which local authorities could bid to make energy efficiency improvements to housing. This scheme was focused on housing that was the least efficient or housed the people that were at risk of fuel poverty.
 - **Public Sector Decarbonisation Scheme** – A total of £1 billion made available across 2020-21 and 2021-22 in the form of grants for public sector bodies to fund energy efficiency and heat decarbonisation measures in non-domestic public sector buildings such as council offices, schools and hospitals.
 - **Social Housing Decarbonisation Fund Demonstrator** – An initial pilot grant scheme of £0.06 billion in 2020-21 with an expected spend of £3.8 billion in future years if demonstrated to be effective. The scheme provides grants to local authorities to upgrade the least efficient social housing.

The Department worked at pace to set up the four schemes throughout summer 2020, launching the Voucher Scheme to be ready for the expected end of fiscal support for employers (furlough scheme) at the end of October 2020. During this period the Department was also delivering work on EU Exit, setting up the vaccine taskforce and undertaking other work to support industry.

4 The Department was responsible for implementing the Scheme. It designed the Scheme and then contracted out the grant administration to ICF Consulting Services Ltd (ICF). The supplier was responsible for dealing with homeowners and installers. In designing the Scheme, the Department aimed to make sure that applications were legitimate and that the work was carried out by certified installers to defined quality standards.

5 The Scheme opened to voucher applications from the public in September 2020. In November 2020, the Department announced that the Scheme would be extended from March 2021 to March 2022. At about this time, however, evidence began to emerge that the Scheme was not issuing as many vouchers as expected and that homeowners and installers were starting to raise concerns. Some homeowners complained that it was difficult to find an installer; that the application process was not easy to use; and that there were delays in approving and issuing vouchers. Installers complained that there were significant hold-ups in the system causing delays to their payments. In March 2021, the Department announced it would close the Scheme to applicants as originally planned at the end of March 2021.

6 This report examines the performance, implementation, procurement and management of the Scheme. The report aims to identify lessons for future schemes against a backdrop of previous problematic attempts by government to implement domestic energy efficiency schemes. We have previously reported on the Green Deal and Energy Company Obligation in 2016 and the Warm Front scheme in 2009.¹

¹ Comptroller and Auditor General, *Green Deal and Energy Company Obligation*, Session 2015-16, HC 607, National Audit Office, April 2016; Comptroller and Auditor General, *The Warm Front Scheme*, Session 2008-09, HC 126, February 2009.

Key findings

Scheme performance

7 The Scheme did not deliver the expected number of home energy efficiency installations or support the expected number of jobs. The Department forecast that the Scheme would deliver energy efficiency measures in 600,000 homes and support up to 82,500 jobs over six months. For the period to 31 March 2021, the date of Scheme closure, the Department paid out vouchers totalling £35.9 million of the £1.5 billion funding available and expects it will pay out £256 million in total once all work is fully completed. In total, the Department estimates that it will spend £314 million, of which £50.5 million is on programme management and administration. The Department has forecast that the Scheme will eventually support efficiency measures in 47,500 homes. Its economic modelling also estimated that this level of activity will support up to 5,600 jobs over 12 months. We have not audited the robustness of its estimate for the number of jobs supported (paragraphs 2.5, 2.6 and 2.16).

8 There was a high level of interest in the Green Homes Grant but many homeowners and installers had a poor experience of using the Scheme.

The Department encouraged homeowners to access the Simple Energy Advice website for advice on the Scheme. Between 1 August 2020 and 31 March 2021 there were 557,417 unique page views of the Simple Energy Advice Green Homes Grant Voucher Scheme web page. By 31 March 2021, the Department had received 169,012 voucher applications to the Scheme, corresponding to 113,738 homes, compared with its modelled figure of 600,000 homes with installations. The rate at which applications were made to the Scheme peaked just before it closed. From October 2020 to April 2021, however, homeowners and installers made more than 3,000 complaints about the Scheme. The complaints covered (paragraphs 2.3 to 2.5, 2.7 to 2.12):

- Delays in issuing and paying vouchers:** The Department's Scheme design required the homeowner to fulfil various requirements for a voucher application to be approved, including using only certified installers and providing installation quotes which would be checked to ensure they were appropriately priced. Installers also had to provide documentation and verifications once compliant works had been completed. These requirements were complicated and difficult for the homeowner and installers to get right first time. This led to homeowners and installers being asked for further information, which took time and caused frustration. By 6 August 2021, of those voucher applications where a decision had been reached, 52% had been either withdrawn by the homeowner or rejected by the administrator after addressing outstanding queries with applicants. The need for aspects of the Scheme's requirements to be refined such as guidance on the appropriate price for particular measures, also delayed the processing of some voucher applications.

- **Difficulties in finding certified installers:** The Department aimed to ensure quality workmanship and consumer protection by only allowing installers who were both registered with TrustMark and certified to work to Publicly Available Standards (PAS) or the Microgeneration Certification Scheme to participate in the Scheme. The Department recognised, however, that some installers were reluctant to invest in gaining such accreditation in the expected six-month timescale of the Scheme. By 30 September 2020, there were 880 potential installers registered with TrustMark, but by 6 November 2020 only 248 of these had registered to participate in the Scheme. This meant it was difficult for some homeowners to participate in the Scheme.

9 While the Scheme has faced difficulties, the Department has fully allocated its funding for the three other building decarbonisation schemes. The Department delivered its initial funding of £1.56 billion through the Public Sector Decarbonisation Scheme, the Local Authority Delivery Scheme, and the demonstrator project for the Social Housing Decarbonisation Fund. All three schemes had been in planning since 2019. Delivery of schemes is currently ongoing, and the Department expects that this funding will support 42,000 jobs in the 12 months following their implementation. These figures are based on economic modelling from academic research which estimates the number of jobs supported by the amount spent – we have not audited the assumptions in this model. The Department anticipates that the initial Local Authority Delivery Scheme and Social Housing Decarbonisation Fund Demonstrator will install 109,000 measures in 57,000 homes. The Department is currently delivering further phases of funding through these schemes (paragraphs 1.11 and 1.12).

Scheme design

10 The deadlines set by HM Treasury for the Department to implement the Scheme constrained the time available for design, procurement and launch.

In June 2020, HM Treasury asked the Department for proposals for programmes that could provide an economic stimulus following the early stages of the COVID-19 pandemic. After further discussion between the Department and HM Treasury, the Chancellor of the Exchequer announced the scheme in July 2020. HM Treasury set a September launch to coincide with the expected end of fiscal support for employers (furlough scheme) and maximise the number of installations that could be carried out before winter. It also set the initial end date of March 2021 to incentivise homeowners and installers to make use of the Scheme as quickly as possible, in line with the Scheme's objective as a short-term economic stimulus. These dates created, in our view, an overambitious 12-week timescale for the Department to design the scheme, consult with stakeholders, procure an administrator and launch the scheme (paragraphs 1.7 and 3.2 to 3.4 and Figure 10).

11 The Department did not fully reconcile the tension between creating jobs quickly, as part of a short-term economic stimulus package, and its aim of delivering a long-term carbon impact. The Scheme focused on measures that would provide the biggest impact in terms of reducing carbon through primary measures, such as insulation and low-carbon heat installations. It gave less priority to secondary measures such as installing energy-efficient doors or windows. The Department argued that focusing on primary measures would have the biggest carbon impact and reduce the potential for paying, for example, for doors and windows that people would choose to install themselves without support. There was a risk, however, that the market for many primary measures would take some time to adapt as companies took on and trained new staff. Measures with established, larger-scale supply chains that required less specialist skills, such as window and door installation might have been expected to scale-up and create jobs more quickly. The original plan had been a two-year scheme which would have helped balance the carbon reduction and job creation priorities, but this was initially rejected by HM Treasury because of its priority to deliver jobs through a short-term stimulus to the economy (paragraphs 1.9, 2.17 and Figure 2).

12 The Department did not sufficiently understand the challenges facing installers before the Scheme was announced, failing to learn from previous schemes. One of the lessons from previous energy schemes was that schemes should be designed following a robust evaluation of stakeholders' views. The Scheme was announced in July 2020 as part of a wider government plan for supporting jobs. The Department only consulted with installers after the government had announced the Scheme. Installers subsequently reported frustrations about the complexity of the Scheme and the requirement for participating traders to meet both the registration requirements and also certification for associated quality standards, which were designed to help reduce the risk of fraud and attracting rogue traders. The costs of certification and the short duration of the Scheme when it was announced, expected to be six months, deterred some installers from participating (paragraphs 2.10 to 2.15).

Procurement, implementation and management of the scheme

13 The Department accepted that the Scheme posed a high delivery risk but felt urgency was required to stimulate the economy. The 12-week timetable to finalise the Scheme design, procure a supplier and launch the Scheme strained the Department's already limited resources, particularly the availability of specialist disciplines such as project delivery. It came at a time when it was delivering the other building decarbonisation schemes, alongside supporting the COVID-19 Taskforce on vaccine procurement and working on activities related to EU Exit. The high level of risk was recognised throughout the Scheme's development, both internally and externally by the Infrastructure and Projects Authority. Nonetheless, the Department judged that the need to support businesses in the wake of the COVID-19 pandemic justified the pace of delivery (paragraphs 3.2 to 3.4 and Figure 10).

14 The Department's Accounting Officer approved the launch of the Scheme although the Department's Investment Committee had rejected the business case.

The Department's Projects and Investment Committee rejected the Scheme's full business case on 28 September, citing concerns that the digital system for the Scheme had not yet been fully developed and tested, and that spending the full £1.5 billion funding available by March 2021 might not be feasible. The Department's Accounting Officer, however, approved the Scheme's launch, noting that the scheme was intended to play a key part in the government's response to mitigating the pandemic's economic impacts. The Accounting Officer recognised the risks that the Committee raised, and in response referred to the Department's assessment that the Scheme's low fixed costs meant it would provide value for money even if its funding was not fully spent, and that HM Treasury had indicated it would consider extending funding for the Scheme into the next financial year. The Accounting Officer also noted assurance received by the Department on 28 September from the Government Digital Service (GDS) regarding ICF's system. However, while GDS did indeed state that ICF's system was adequately secure and reliable, it could only examine the system functionality that ICF had been contracted to deliver by that point, with elements of the system yet to be developed (paragraphs 3.14 and 3.15).

15 The Department used a standard government contract to enable it to meet the Scheme's timetable, but this limited the Department's commercial options, and the timescale limited its ability to fully develop the requirements of the contract.

The Department judged that the use of a Crown Commercial Services Framework, a standard government contract with pre-assessed suppliers, was the only way to procure a supplier within the timescales needed for the Scheme, while also minimising the risk of legal challenge and high costs. This meant, however, that the Department could only procure from the limited pool of framework suppliers and it chose to adopt the framework's standard contract terms. These standard terms included the contract's cost-plus pricing model, which did not provide financial incentives for the timely processing of voucher applications. Since the Department was still developing the Scheme at the time of the procurement, it had not fully developed its requirements. This added complexity to the procurement, and made it more difficult to set out clear contractual obligations – with some terms needing to be agreed after the contract was awarded. Ultimately, the Department selected as the winning bidder ICF, who scored highest overall and on the cost elements of the evaluation (paragraphs 3.7 to 3.10 and Figure 11).

16 The Department chose to proceed to its timetable even though no bidder thought it was possible to fully implement the required digital voucher application system by the Scheme's launch. The complexity of the Department's requirements, such as the need to carry out checks with many third parties, meant that bidders thought that the three weeks between the intended contract start and Scheme launch would not be enough. In response, the Department allowed bidders to deliver elements of the application system in stages with the use of some manual processing in the interim. While other bidders anticipated that at least fifteen weeks would be required to fully implement a system, with greater amounts of manual processing in the interim, ICF stated it could rapidly adapt its existing grant administration software in six and a half weeks at lower cost. The Department proceeded with the launch and attempted to mitigate the risk of the system not being fully implemented by varying ICF's contract to allow for full manual processing of a limited number of applications until implementation could be completed. While further digital elements were added as the Scheme progressed, the system anticipated by the Department was not in place by the time the Scheme closed. This meant that much more manual processing was required to process applications than envisaged, contributing to the backlog (paragraphs 2.9, 3.11, 3.12, 3.17 and Figure 6).

17 The Department worked hard to improve the Scheme's performance but ultimately chose to close it in March 2021. From the Scheme's launch, the Department engaged technical experts to undertake security and accessibility testing of ICF's system, to help ensure it met its requirements. The Department did not accept the system ICF delivered in early November as meeting its requirements and began to use its contractual levers to try to improve the performance of the contractor, including instructing it to implement a rectification plan. ICF informed us that, in its view, the Department's requirements for the system were complex, not sufficiently clear, and in some instances changed from the procurement stage, which hindered its ability to develop a solution and process applications in a timely manner. In early 2021, the Department decided to close the Scheme, reasoning that ICF's performance had not shown enough improvement against the rectification plan, and that existing voucher applications would fully use the £320 million provided by HM Treasury for the next financial year. The Department is currently negotiating with ICF to determine how it will ensure the remaining voucher applications are processed and to reach a commercial settlement for its performance (paragraphs 3.16 to 3.18).

Conclusion

18 The government has identified decarbonising home heating as a key part of its plan to deliver net zero by 2050. In establishing the Green Homes Grant Voucher Scheme, the Department worked at an ambitious pace to deliver a scheme which would contribute to this long-term aim while delivering a short-term economic boost. However, the tension between these two key aims and the short delivery time was never properly reconciled leading to an overly complex scheme that could not be delivered to a satisfactory level of performance in the time available. Should all current applications be processed, the Scheme will have upgraded an expected 47,500 homes, at a cost to the taxpayer of about £314 million. £50.5 million of this cost is for programme management and administrative expenses, amounting to more than £1,000 per home upgraded. Despite the Department's considerable efforts, the rushed delivery and implementation of the Scheme has significantly reduced the benefits that might have been achieved, caused frustration for homeowners and installers, and had limited impact on job creation for the longer term.

19 The Department and external assurance highlighted several risks of proceeding quickly, but the Department accepted these risks. The fast pace constrained its procurement options, and its engagement with the installer market and, coupled with the short duration of the Scheme, made it hard for energy efficiency installers to mobilise to meet demand. While we recognise the desire to act quickly in the interests of delivering an economic stimulus, the government should be prepared to limit or delay the launch of a programme if the evidence suggests it is not ready. Previous government attempts to deliver energy efficiency schemes, such as for the Green Deal, have amply illustrated the difficulties of achieving successful delivery in this area. It is important that the Department and HM Treasury heed the lessons from this, and previous schemes, for any future domestic decarbonisation programme.

Recommendations

20 The Department should:

- a** set out by the end of 2021 how its various home energy efficiency schemes fit with its overall plans for decarbonisation, setting out timescales in a more detailed and longer-term plan. This will help to promote interest in future schemes from consumers and installers.

For future energy schemes the Department should:

- b** ensure the different policy objectives of a scheme are reconciled and translated into clear targets as part of the scheme design, with an agreed understanding of which objectives should be prioritised should trade-offs need to be made; and
- c** engage with the installer market on the proposed design of any future scheme and base its planning on a realistic assessment of how long it will take the different segments of the market to mobilise the skills and capacity to meet demand across all parts of the country.
- d** In designing a scheme, the Department should:
 - test from the start what is being expected of householders and installers. The aim should be to simplify processes, enabling all parties to complete stages right first time as far as possible; and
 - consider what risk appetite is appropriate to balance making the scheme accessible and efficient with managing the risk of poor quality workmanship and fraud.
- e** take a staged approach to launch to ensure the processes and systems are working efficiently and effectively and can scale up.
- f** ensure that the Department deploys, alongside policy makers, people with technical, delivery and commercial experience to provide input at the earliest stages in the conception of new schemes.

Part One

The Green Homes Grant Voucher Scheme

1.1 This Part introduces the government's domestic energy efficiency schemes, aimed at supporting economic recovery from the COVID-19 pandemic, including the Green Homes Grant Voucher Scheme (the Scheme).

Domestic energy efficiency and net zero

1.2 The UK is committed to achieving net zero carbon emissions by 2050. Meeting this target requires action across all sectors of the UK economy that are responsible for emissions. We reported previously on government's ambitions to meet this target in *Achieving net zero*.² The Department for Business, Energy & Industrial Strategy (the Department) is responsible for energy policy and ensuring the UK meets its legal target for reducing emissions.

1.3 Buildings are the third largest carbon-emitting source in the UK, after transport and industry. In 2019, they accounted for around 19% of UK greenhouse gas emissions – 87 million tonnes of carbon dioxide equivalent (MtCO₂e).³ Buildings in the UK are also among the oldest and least energy efficient in Europe.

1.4 Successive governments have launched programmes to improve the energy efficiency of UK housing. In 2017, the government launched its *Clean Growth Strategy* which set out its ambition to improve home energy efficiency. This would be achieved with £3.6 billion of investment to upgrade around a million homes through the existing Energy Company Obligation (ECO) scheme. The ECO scheme helps people on low incomes reduce their heating costs through energy efficiency measures such as free cavity wall insulation or a subsidised gas boiler replacement. It set out an ambition to improve the energy efficiency rating of fuel-poor homes and develop a long-term trajectory to improve the energy performance standards of privately rented homes.

² Comptroller and Auditor General, *Achieving net zero*, Session 2019-2021, HC 1035, National Audit Office, December 2020.

³ Direct emissions exclude emissions from electricity consumption. The figures are from the Department for Business, Energy & Industrial Strategy's analysis of the UK's 1990-2019 Greenhouse Gas Inventory.

Energy efficiency schemes announced in July 2020

The Green Homes Grant Voucher Scheme

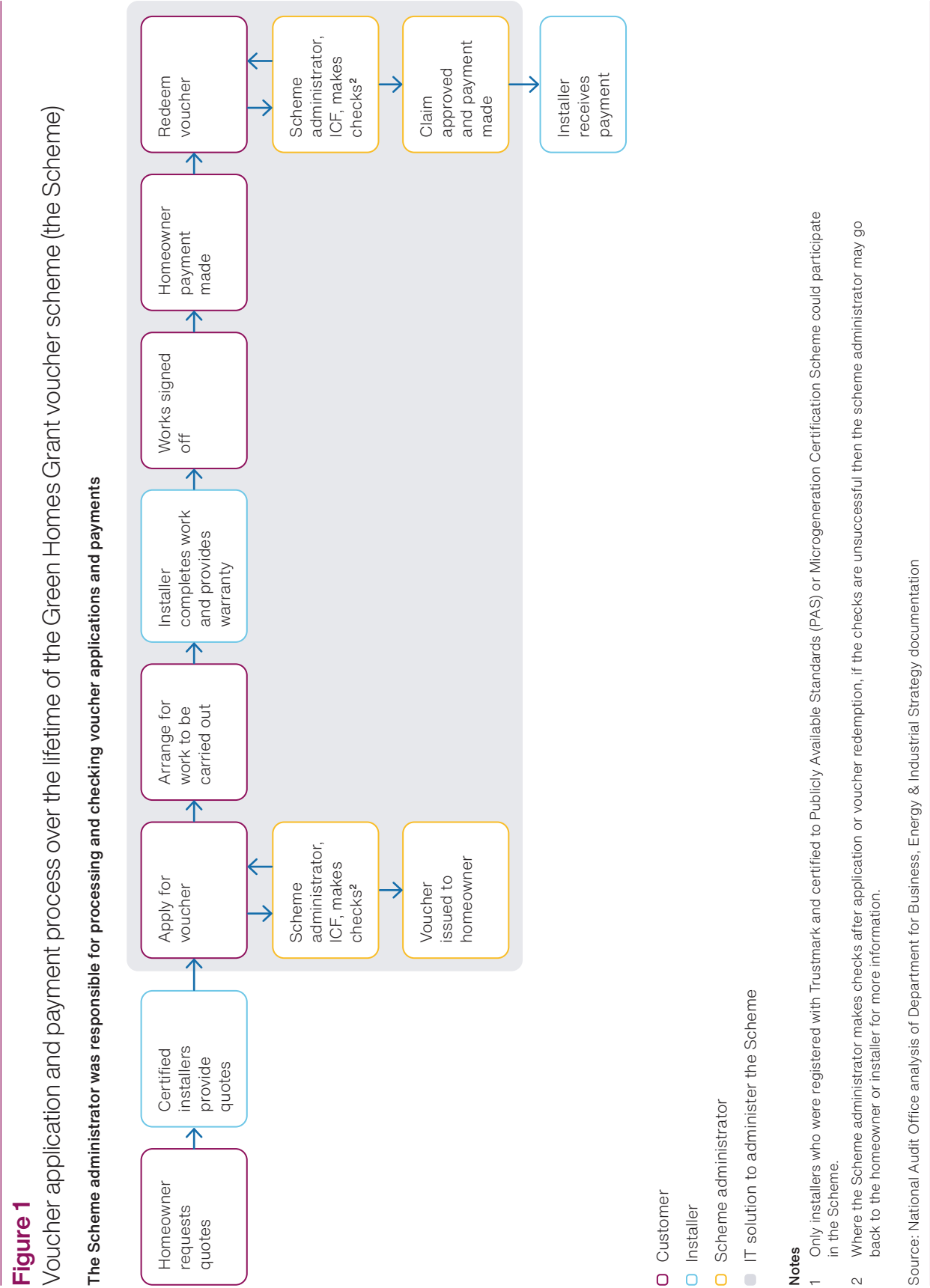
1.5 As part of the government's plans for a green recovery after the pandemic, in June 2020, HM Treasury asked the Department for initiatives that could be available in September 2020 to stimulate the economy. The Department considered expanding existing schemes, including ECO. Instead, it proposed the Green Homes Grant Voucher Scheme as a new measure. The Scheme, worth £1.5 billion, would allow homeowners to apply for a grant to support home improvements to improve the energy efficiency of their homes. In doing so, it would create work for builders and insulation installers who would then employ more people. The specific aims of the Scheme were to:

- improve the energy performance of 600,000 homes with more efficient heating;
- secure employment and support up to 82,500 jobs;
- upskill the supply chain, including installers of insulation and green heating systems; and
- improve standards and accelerate the certification of installers.

1.6 The Scheme would enable homeowners to apply for vouchers for up to £5,000 (£10,000 if eligible for certain benefits) to pay for measures that would help improve their homes energy efficiency. Installers of the measures had to meet industry certification requirements for the work to be completed to the required standards.

1.7 The Scheme opened on 30 September 2020 and ran until the end of March 2021. HM Treasury set the opening date of the Scheme to coincide with the expected end date of fiscal COVID-19 support for employers (furlough scheme), as well as to maximise the number of installations that could be carried out before winter. It set the end of March 2021 to incentivise homeowners and installers to make use of the Scheme as quickly as possible, in line with the Scheme's objective as a short-term economic stimulus.

1.8 The Department was responsible for designing the Scheme, managing the Scheme administrator and providing the policy direction of the Scheme. The Scheme administrator, a contractor appointed by the Department, was responsible for issuing vouchers after checking the status of applicants and verifying the work against quality standards (**Figure 1** overleaf). It was also responsible for registering installers who met the Scheme's requirements, handling complaints and running a call centre. In order to do this, the scheme administrator was contracted to deliver a digital platform which could support the processing of applications, from homeowner and installer registration through to voucher application, redemption and payment.



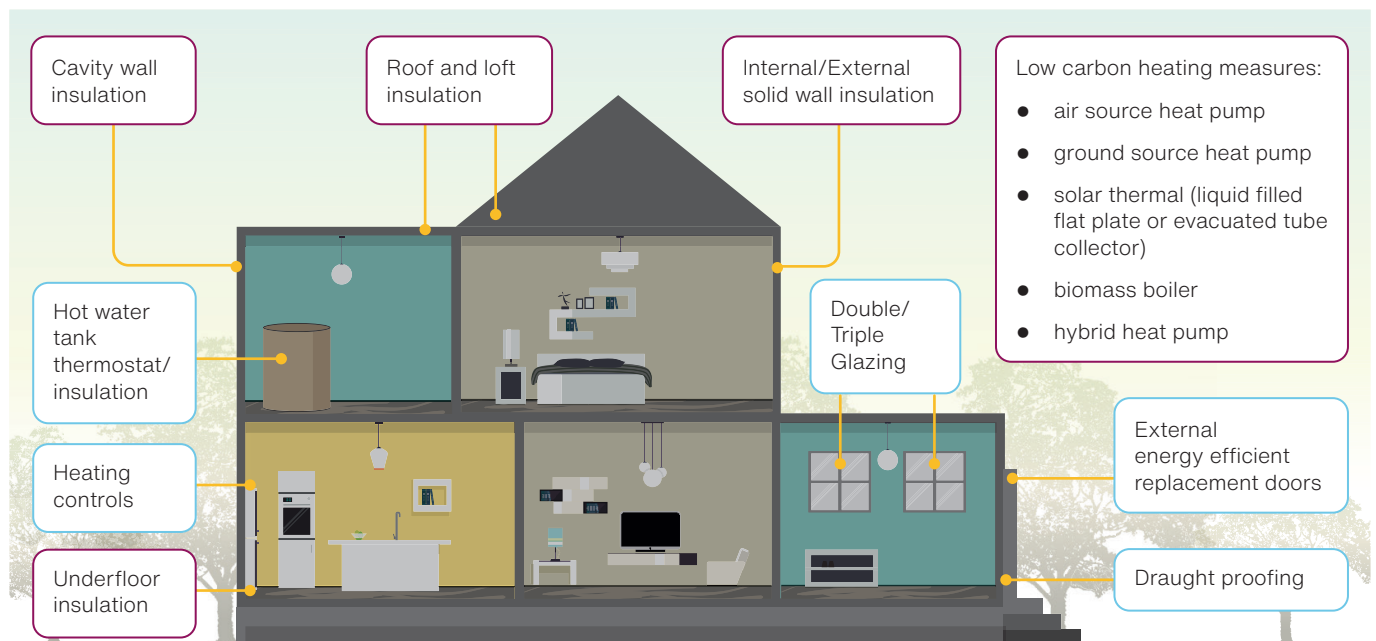
1.9 The Scheme required homeowners to choose measures that were most likely to improve the energy efficiency of their homes. The Department separated the types of energy improvements available under the Scheme into primary and secondary measures:

- primary measures included insulation and low carbon heat installations; and
- secondary measures included windows, doors, and heating controls (**Figure 2**).

Figure 2

Energy improvements in the Green Homes Grant Voucher Scheme

Homeowners had a variety of primary or secondary measures to choose from



- Primary
- Secondary

Notes

- 1 The measures available under the Green Homes Grant Voucher Scheme were split into primary and secondary measures. Homeowners were required to install at least one primary measure before installing a secondary measure.
- 2 Park home insulation was also available under the Scheme as a primary measure.

Source: National Audit Office analysis of Department for Business, Energy & Industrial Strategy documentation

Homeowners were required to install at least one primary measure before installing a secondary measure. This was to encourage homeowners to select the measures which are the most cost-effective and are less likely to be installed without government funding. The Department made this decision based on lessons drawn from the previous Green Deal Home Improvement Fund, which showed that it was important to achieve the right mix of measures to maximise carbon savings. To participate in the Scheme, installers were required to be registered for TrustMark and also certified to Publicly Available Standards (PAS) or the Microgeneration Certification Scheme. This was to help ensure that the installers were undertaking work to high-quality standards and to limit fraud.

Closure of the Scheme

1.10 The Department changed its plans for how long the Scheme would remain open. The Department initially planned for the Scheme to run from September 2020 to March 2021, but extended it in November 2020 to run until March 2022. On 2 February 2021, however, the Department stated that the £1.5 billion of funding for the Scheme was only available for 2020-21 and only £320 million would be available for 2021-22. On 27 March 2021 it announced that it was closing the Scheme to all new applicants by 31 March 2021. At the same time, the government allocated an additional £300 million to the Local Authority Delivery Scheme and the Social Housing Decarbonisation Fund.

Three other energy efficiency schemes announced alongside the Voucher Scheme

1.11 Alongside the Scheme, the Chancellor of the Exchequer announced three other schemes in July 2020 in England to the total value of £1.56 billion, which would act as short-term economic stimulus and support the ambition of government to improve the energy efficiency of buildings in the UK. These schemes were part of the government's 2019 manifesto commitment to invest £9.2 billion over 10 years into the energy efficiency of homes, schools and hospitals. These included:

- **Public Sector Decarbonisation Scheme (£1 billion):** A grant for energy efficiency and heat decarbonisation projects within non-domestic public sector buildings such as local authorities, schools and hospitals. Grants are administered by Salix Finance, a non-departmental public body sponsored by the Department, and awarded after application by the relevant body. Applications for Phase 1 of the scheme ran between September 2020 and January 2021, with £1 billion of funding being awarded for projects to be delivered to September 2021. A second phase of £75 million opened in April and closed six days later after applications exceeded the amount of funding available, and funds have been awarded for project delivery by 31 March 2022.

- **Green Homes Grant Local Authority Delivery Scheme (£500 million):**
Grant funding for local authorities to make energy efficiency improvements to housing. A total of £500 million was awarded in three phases between September 2020 and March 2021. Phase 1a and 1b awarded £200 million to different local authorities, with Phase 2 awarding the remaining £300 million to five regional energy hubs. This money focused on housing that was least efficient or housed people that were at risk of fuel poverty.
- **Social Housing Decarbonisation Fund (SHDF) Demonstrator (£62 million):**
A grant for whole-house retrofit of social housing properties at scale. Grants are administered by the Department and awarded after application by local authorities. Government intends to spend £3.8 billion through the SHDF, of which the Department started with an intended £50 million demonstrator fund to develop knowledge on how to upgrade homes and develop the capacity of both local authorities and builders. Applications for this demonstrator fund opened in autumn 2020 and in early 2021 the Department announced funding for project delivery by December 2021. Evaluation of bids identified additional projects suitable for funding, and a total of £62 million was approved for award.

1.12 The Department expects that these schemes will support up to 42,000 jobs in the 12 months following their implementation. These figures are based on economic modelling from academic research which estimates the number of jobs supported by the amount spent⁴ – we have not audited the assumptions in this model. The Department anticipates that the Local Authority Delivery Scheme and Social Housing Decarbonisation Fund will install 109,000 measures in 57,000 homes. The Department is currently delivering further phases of funding through these schemes.

Previous initiatives aimed at improving energy efficiency

1.13 The Scheme was not the first government scheme aimed at delivering energy efficiency improvements in domestic properties. We have reported on previous schemes aimed at improving energy efficiency in homes, including on the Green Deal and the Energy Company Obligation in 2016 and the Warm Front Scheme in 2009.

⁴ R Janssen and D Staniaszek, 'How Many Jobs? A Survey of the Employment Effects of Investment in Energy Efficiency of Buildings', The Energy Efficiency Industrial Forum, 2012.

1.14 Domestic energy efficiency schemes are often complex, requiring co-ordinated activity between homeowners, tradespeople, delivery bodies and government, creating challenges in their implementation. Appendix Three outlines previous recommendations for these schemes, including:

- the need for stakeholder engagement;
- developing the supply chain with the necessary skills to install energy efficiency measures;
- the Department being prepared to pull back on plans if it is clear they are unlikely to be successful and risk taxpayers' money;
- understanding homeowners' attitudes and their needs; and
- forecasting demand accurately.

1.15 This report draws lessons to be learned from this Scheme as the government develops its longer-term plan to meet its net zero target.

- Part Two reviews the performance of the Scheme and the experience of homeowners and installers in the supply chain.
- Part Three reviews the Department's implementation of the Scheme and its procurement and management of the Scheme administrator.

Part Two

Scheme performance

2.1 This Part covers:

- the demand for the vouchers;
- homeowner and installer experiences of the Green Homes Grant Voucher Scheme (the Scheme), including voucher payment times and access to certified installers; and
- the impact on jobs.

Demand for vouchers

2.2 The government has an aspiration to get most homes in the UK to Energy Performance Certificate (EPC) level C – a system of measuring energy efficiency (where A is the most efficient and G least efficient). As of August 2020, around 17 million homes in the UK did not meet level C. The Scheme was expected to help improve the energy efficiency of homes in England. The Department for Business, Energy & Industrial Strategy (the Department) estimated that the Scheme's £1.5 billion available funding would fund energy efficiency improvements or installation of low carbon heating into around 600,000 homes.

2.3 There was a high level of public interest in the Scheme. When the Scheme launched, the Department encouraged homeowners to access the Simple Energy Advice website for advice. Between 1 August 2020 and 31 March 2021 there were 557,417 unique page views of the Simple Energy Advice Green Homes Grant Voucher Scheme web page.

2.4 When the Scheme was opened for applications there was an initial level of interest in the Scheme with 40,737 vouchers applied for in October 2020, associated with 26,688 homes (each household can apply for more than one voucher) (**Figure 3**). The number of applications then fell to the lowest level in January 2021, with just 16,021 vouchers applied for. This coincided with the reintroduction of movement restrictions because of the COVID-19 pandemic and the emergence of negative media stories about the Scheme. This negative feedback may have subsequently dented confidence and deterred householders coming forward. In March 2021, however, the final month of the Scheme, there was a rush of applications with 43,729 voucher applications, the highest of any month. Almost half of these applications were submitted after the announcement of Scheme closure on 27 March 2021 and before the Scheme closed on 31 March 2021.

2.5 By 31 March 2021, when the Scheme closed to new applications, homeowners had applied for 169,012 vouchers. The Department estimated that these applications would lead to 47,500 homes being upgraded, significantly lower than the 600,000 the Department initially expected. By 6 August, of the 169,012 voucher applications, 85,569 applications (51%) were either rejected as they had been judged to not meet the criteria of the Scheme or withdrawn. Of the remaining 83,443 applications:

- 5,256 applications (3%) were still being processed by the administrator;
- 78,187 vouchers (46%) had been issued to homeowners, of which 31,938 (19%) vouchers had measures which had been installed; and
- of the vouchers where a measure had been installed, 28,084 (17%) vouchers had been paid out.

Scheme spending

2.6 The Department estimates that it will spend a total of £313.8 million on the Scheme, which includes £50.5 million on administration and programme costs (16% of the total spend) (**Figure 4** on page 24). The Department expects it will pay out a total of £255.9 million on issued vouchers. By the end of March 2021, £22.5 million had been paid out to installers and £13.4 million had been allocated for work completed.⁵ As of August 2021, £82.7 million was paid out to installers in 2021-22, with the Department estimating a further £137.3 million will be spent during 2021-22 as more vouchers are redeemed. These amounts are significantly below the Scheme's initial available funding of £1.5 billion.

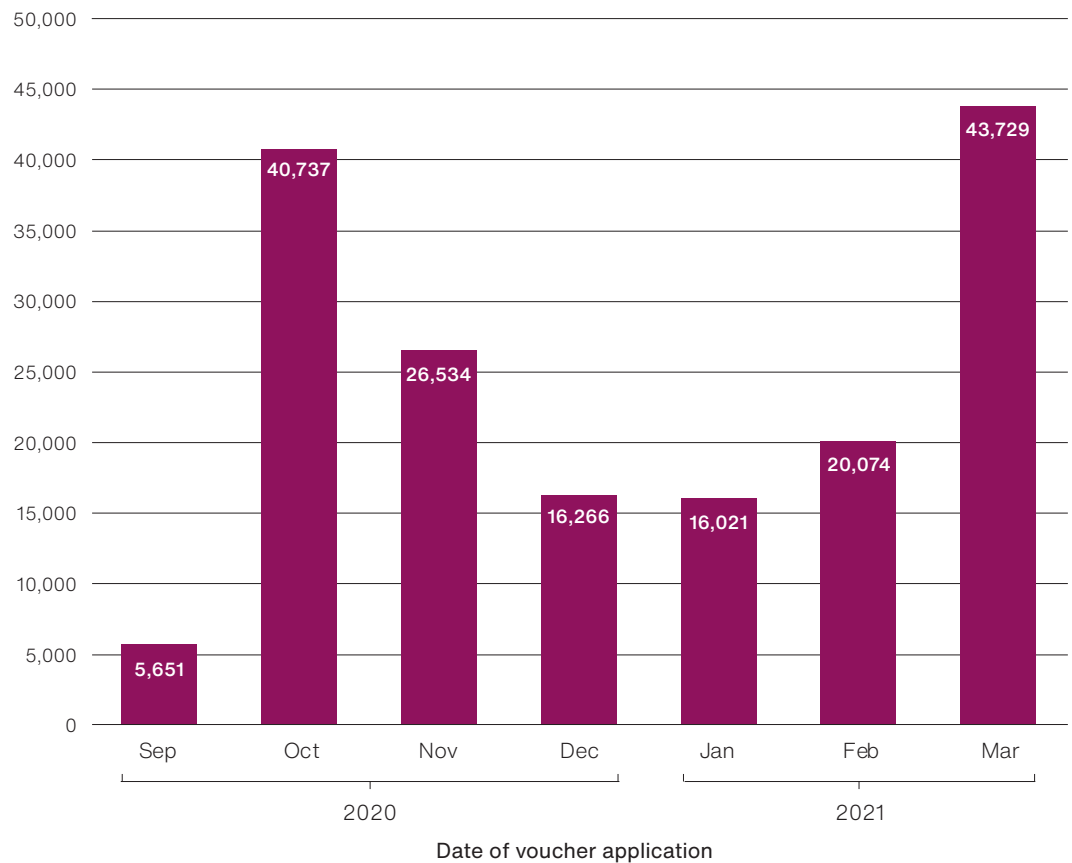
⁵ Figures quoted include the financial value of measures installed and vouchers paid out in the first 6 days of April – as per Departmental Statistics: www.gov.uk/government/statistics/green-homes-grant-voucher-release-april-2021

Figure 3

Number of voucher applications for the Green Homes Grant Voucher Scheme, 30 September 2020 to 31 March 2021

The number of applications peaked in the final month before the Scheme closed on 31 March 2021

Number of live voucher applications

**Notes**

- 1 Application month is based on the date that an application was submitted to ICF, the scheme administrator.
- 2 Applications for the month of September 2020 only include those submitted on the 30 September as this was when the scheme was launched.
- 3 The figure covers all voucher applications up to 31 March 2021.

Source: National Audit Office Analysis of published data (19 August 2021) by the Department for Business, Energy & Industrial Strategy

Figure 4

Spending on the Green Homes Grant voucher Scheme (the Scheme), 2020-21 to 2021-22

The Department for Business, Energy & Industrial Strategy (the Department) expects to spend over £50.5 million on administrative and programme costs for the Scheme over two years

	Spend 2020-21	Spend 2021-22
	£m	£m
Programme costs including Scheme administrator, legal, training, monitoring and communication costs	26.6	17.5
Skills training for installers ¹	7.5	0
Administrative costs, including staff	3.0	3.4
Subtotal – administrative and programme costs	37.1	20.9
Vouchers paid out to installers ^{2,3}	35.9	82.7
Vouchers to be paid out ³	0	137.3
Subtotal – capital spend (on vouchers)	35.9	220.0
TOTAL	73.0	240.8

Notes

- 1 For more information see paragraph 2.15.
- 2 For 2020-21, £22.5 million in cash has been paid out, with a further £13.4 million spending accrued where measures had been installed before financial year end, but the voucher cash payment was paid after year end. Figures quoted include the financial value of measures installed and vouchers paid out in the first 6 days of April – as per Departmental Statistics.
- 3 As of 6 August 2021, £82.7 million was paid out in vouchers in 2021-22. £220.0 million is the Department's best estimate of what it expects to spend on vouchers in 2021-22, with the £137.3 million being the balancing figure. The Department's full projected range for 2021-22 voucher spend is £200 million–£250 million as of 6 August 2021.
- 4 Administrative and programme costs figures, and the current projection of vouchers to be paid out in 2021-22 were provided by the Department and have not been audited. Skills training costs were reconciled to grant approval documentation. Other figures have been reconciled to published statistics. This information was produced prior to the certification of the Department's accounts and may differ from financial information presented elsewhere.
- 5 Totals may not sum due to rounding.

Source: National Audit Office analysis of Department of Business, Energy & Industrial Strategy data

Homeowner and installer experiences of the Scheme

2.7 Different homeowners had different experiences of the Scheme. However, in the period from October 2020 to April 2021, homeowners and installers made more than 3,000 complaints to the Department and ICF Consulting Services Ltd (ICF) about the Scheme. Homeowners made most of these complaints (1,762, 57%), and installers made one quarter of the total complaints (815, 26%). A further 441 (14%) of complaints were from MPs on behalf of constituents. The main issues raised included:

- delays to approving, issuing and paying vouchers;
- communication issues with ICF; and
- a lack of available installers.

Time taken to issue and pay for redeemed vouchers

2.8 Homeowners and installers waited a long time between applying to the Scheme through to the work being completed and payment being made to the installer. The delays affected those homeowners who applied earlier in the Scheme the most. For those who applied on 30 September 2020, it took on average 138 days to receive a voucher, but the time to process applications improved over time. For applications made in March 2021, it took on average 50 days to receive a voucher (**Figure 5** overleaf). The Department set targets for certain parts of the approval process, including the time taken to action an application (that is, to issue a voucher, reject the application or request more information). However, there was no overall target for how long it should take from between when a homeowner applied for a voucher and final payment of the voucher for work completed.

2.9 The Department designed a Scheme that required the homeowner and installers to fulfil various requirements and eligibility criteria for a voucher application to be approved. If not met, the Scheme administrator followed up with the homeowner or installer, often involving various iterations of communication between the two. This complexity contributed to a large backlog in applications being processed (**Figure 6** on page 27). Each of the requirements required the householder or installer to provide the right information and correct pieces of evidence. It proved difficult for many applicants to get their application right first time. By 6 August 2021 52% of voucher applications, where a decision had been reached, had been either withdrawn by the homeowner or rejected by the administrator after having given applicants opportunities to address outstanding queries. The need for aspects of the Scheme's requirements to be refined as it progressed, such as guidance on the appropriate price for particular measures, also delayed the processing of some voucher applications. Some examples of requirements included:

- applicants had to be eligible and be verified that they were the owners of the property;
- the price to install the measure needed to be within the threshold of the expected price or require a case to be made;
- the quote needed to include adequate information to allow checks against fraud; and
- the installers had to be certified to undertake the specific measures and registered for the Scheme.

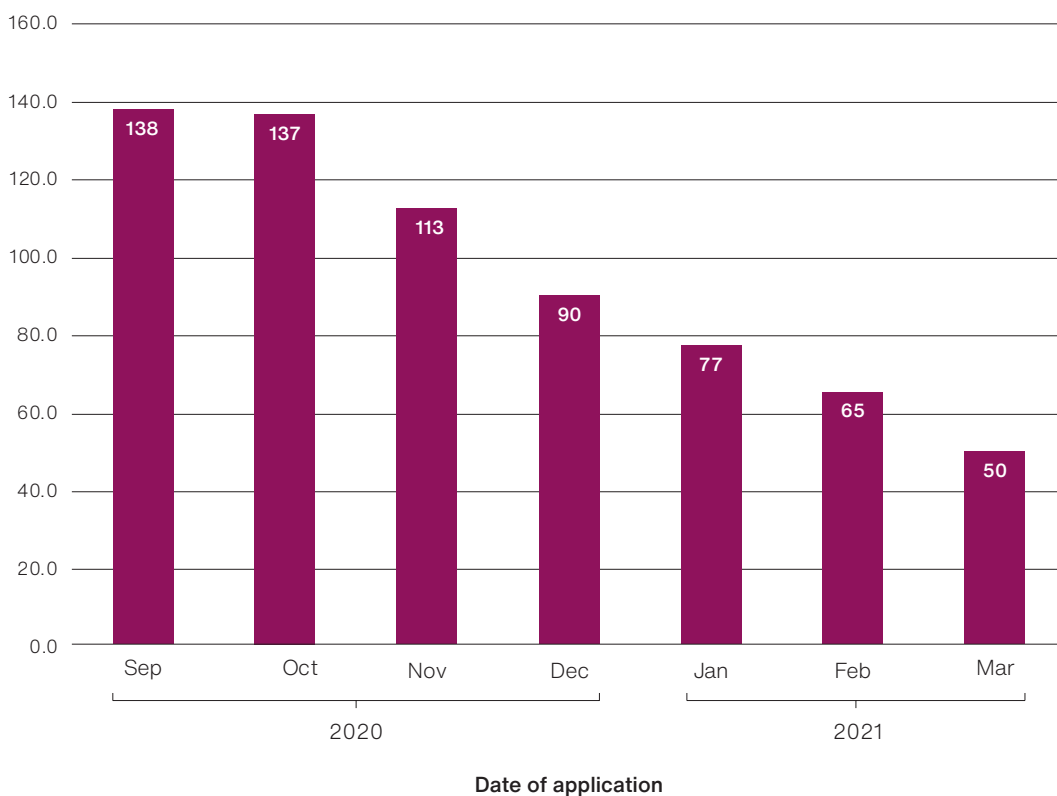
There were also difficulties implementing the digital voucher application system for the scheme, contributing to the backlog of applications, which we discuss in Part Three.

Figure 5

Average days to issue a voucher from the date of application,
September 2020 to March 2021

It took 138 days on average to issue a voucher to those homeowners who applied in September, but the time taken to issue vouchers reduced over time reaching 50 days in March

Average days from application to issuing voucher

**Notes**

- 1 The figure is based on the mean number of days it took to issue a voucher from the date that the application was submitted. This includes the time taken for the scheme administrator to complete checks including for compliance with the scheme rules, consumer protection, and to detect malpractice. Where further checks were required, or there was an issue with the price submitted, additional investigations were made.
- 2 Homeowners were able to apply for multiple vouchers, one for each different measure, within one household application. In this analysis, we have included all the individual measure voucher applications and compare this to the date that the measure voucher was subsequently issued.
- 3 Applications for the month of September 2020 only include those on the 30 September, as this was when the scheme was launched. From 30 September to 8 November, only a limited number of applications could be processed through a manual processing facility, until further elements of the digital voucher application system could be introduced. This is discussed in Part Three.
- 4 The figure is based on vouchers which were issued by 17 August 2021. Applications were still being processed after this date (less than 4% of the total voucher applications) so the average numbers may increase. This may affect the more recent months the most as less time has passed between application date and the cut-off date for including vouchers issued in the analysis (17 August 2021).

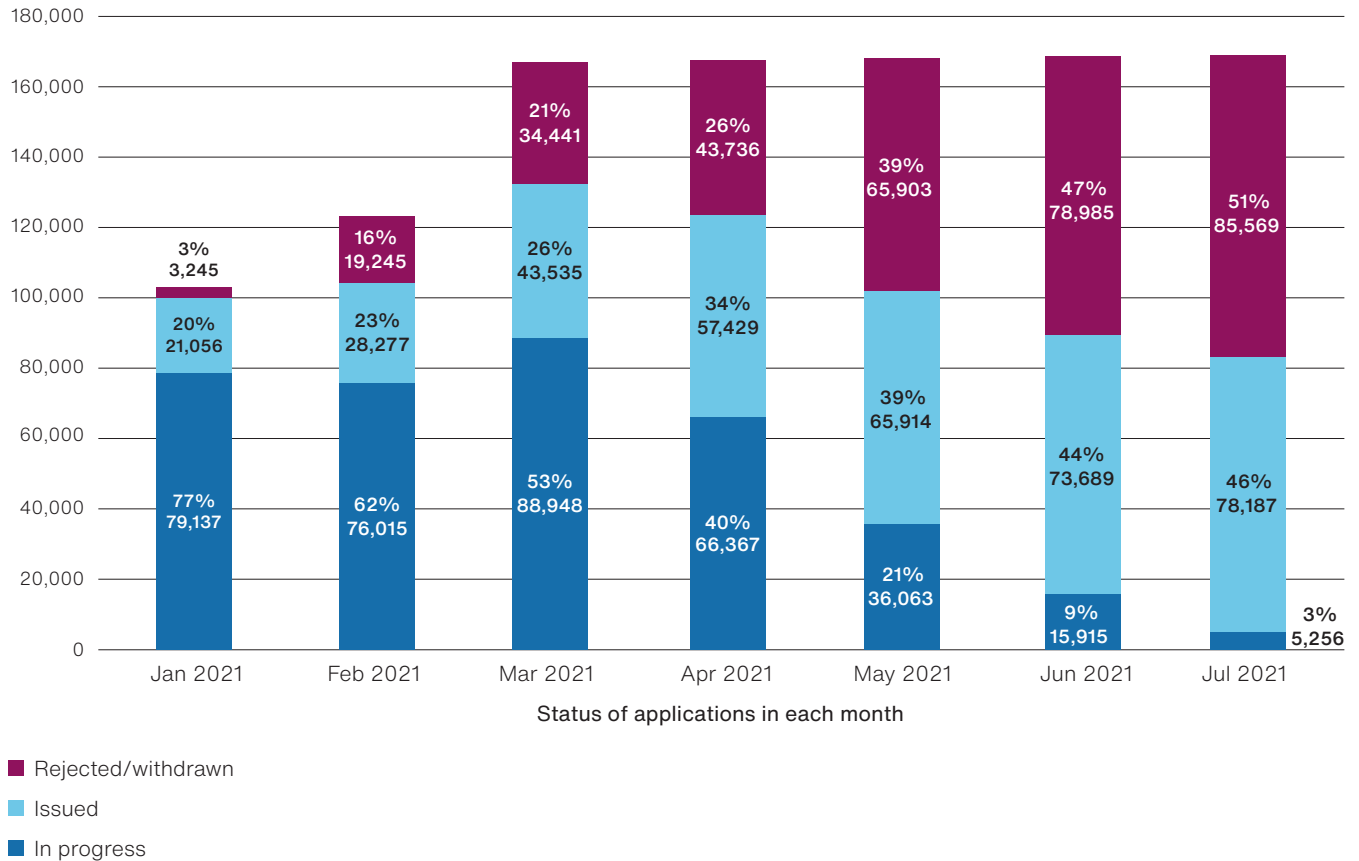
Source: National Audit Office analysis of Department of Business, Energy & Industrial Strategy data

Figure 6

The status of voucher applications, January to July 2021

There was a large backlog of vouchers to be processed from January

Number of voucher applications

**Notes**

- The scheme was closed for new applications from 31 March 2021, but the total number of vouchers has still slightly increased since March 2021. This increase is due to the way applications are processed if there are duplicate household applications from the same homeowner; the household applications are first consolidated and then later split into the separate voucher applications for different measures.
- Data for each month shows vouchers that were applied for by the end of the month, but subsequently issued, installed or paid from a few days up to a week after the end of each month, depending on the month. Please see the published statistics for further information: www.gov.uk/government/collections/green-home-grant-statistics.

Source: National Audit Office analysis of Department for Business, Energy & Industrial Strategy data

Homeowner access to certified installers

2.10 It was often challenging for homeowners to find installers, as only TrustMark and Publicly Available Standards (PAS) or Microgeneration Certification Scheme registered installers could participate in the Scheme. Approval for the Scheme involved multiple eligibility checks to ensure installers met quality requirements, including PAS 2030 certification and TrustMark registration, and to reduce a risk of cold-callers posing as installers. It took around a month on average for installers to be registered for the Scheme, but up to five months in some cases. Some consumer bodies, including Citizens Advice and the Energy Saving Trust, told us that homeowners could not find an eligible installer to complete the work. Few individual installers were likely to be offering the full range of services supported by the Scheme. In some cases, including insulation, the ratio of live applications to registered installers for a measure was more than 100 (**Figure 7**).

2.11 By 30 September 2020, there were 880 potential installers registered with TrustMark but by 6 November 2020 only 248 of these had registered to participate in the Scheme. By 6 August 2021, 1,880 installers had applied to the Scheme, of which:

- 1,008 (54%) had successfully registered; and
- 867 (46%) of the applications had failed or were cancelled (**Figure 8** on page 30).

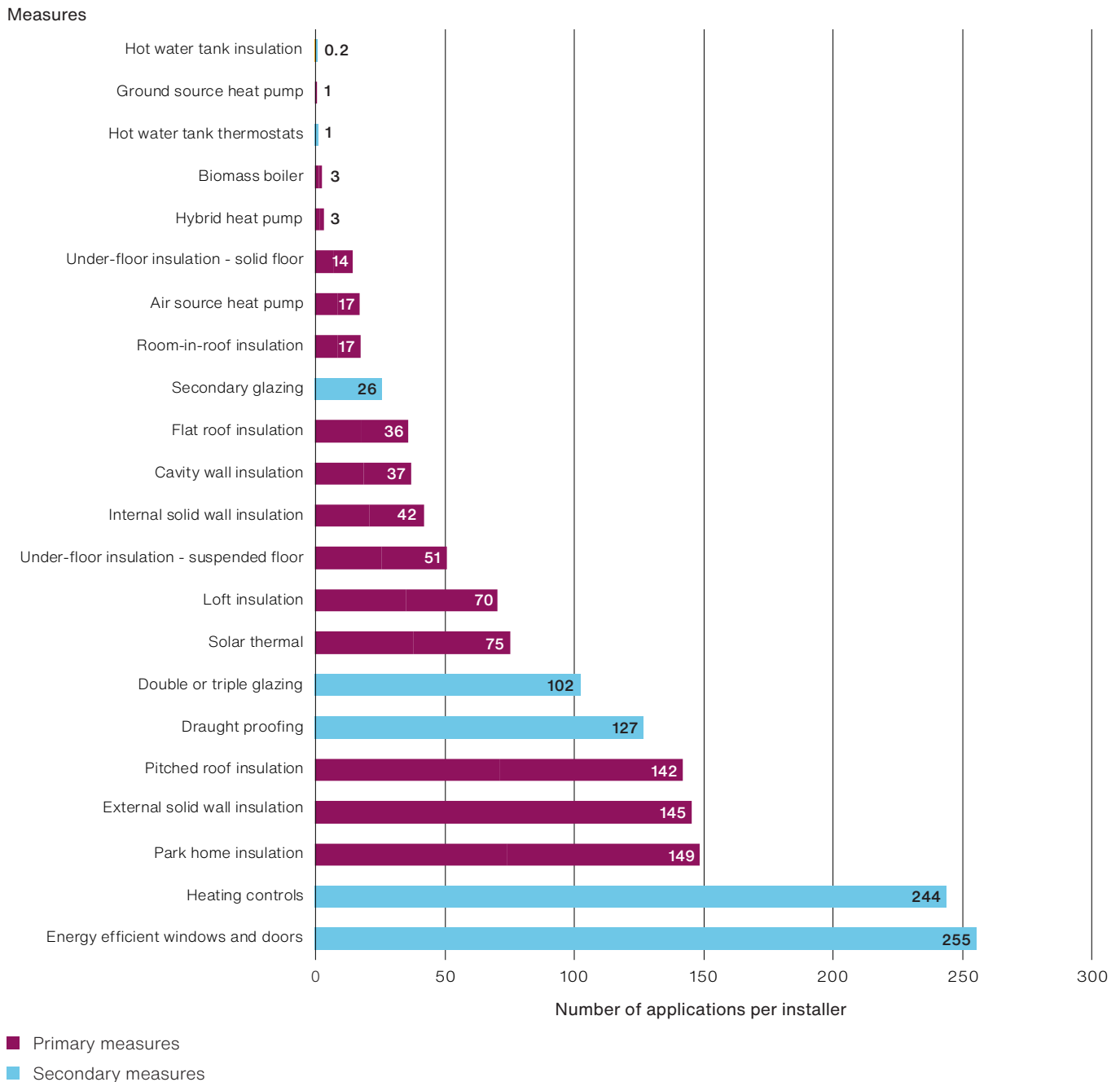
2.12 Some installer representative bodies, including the British Energy Efficiency Federation through its survey of 102 installers, reported frustrations about the additional administration and costs for accreditation. Others reported that the initial six-month timescale for the Scheme had deterred its members from investing time and resources in training.

2.13 To achieve its objectives, the Department needed to ensure that installers had the capacity and skills to provide energy efficiency improvements. It also needed to ensure that the Scheme was attractive to homeowners. Previous energy efficiency schemes have also demonstrated a need to develop the supply chain and understand homeowner attitudes to forecast demand accurately (Appendix Three). The Committee of Public Accounts recommended in 2016, for example, that the Department must make policy decisions based on a robust evaluation of stakeholders' views. Gaining such an understanding of challenges can be especially critical to increasing acceptance and delivering a scheme quickly.

Figure 7

Ratio of live applications per registered installer for each measure, September 2020 to March 2021

For seven measures, there were over 100 live applications per installer registered for each measure



Notes

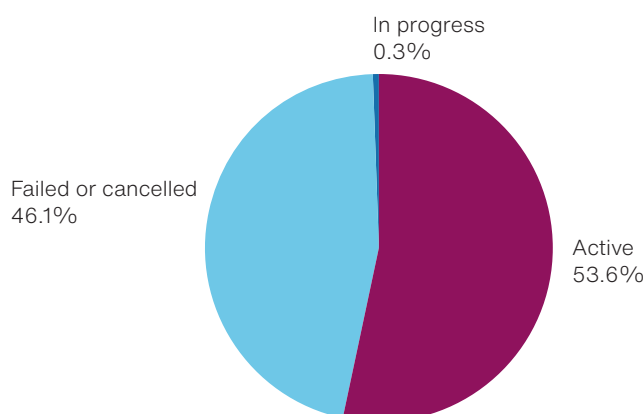
- 1 The Figure shows the number of live applications for each measure as at 31 March 2021, divided by the number of installers who were registered for each measure as of 17 March 2021.
- 2 The measures available under the Green Homes Grant Voucher Scheme were split into primary and secondary measures. Homeowners were required to install at least one primary measure before installing a secondary measure.

Source: National Audit Office analysis of Department for Business, Energy & Industrial Strategy data

Figure 8

Status of installers that applied to be part of the Green Homes Grant Voucher Scheme (the Scheme) as at 6 August 2021

Just over half of the installers who applied registered for the Scheme successfully

**Notes**

- 1 Active installers are those which have been approved and are able to install measures under the Scheme.
- 2 A total of 1,880 installers registered for the Scheme.

Source: National Audit Office analysis of published data by the Department for Business, Energy & Industrial Strategy

2.14 The Department formally tested installers' appetite for the Scheme after it was announced in July 2020. Between July to September, the Department engaged with a number of representative organisations, and completed an installer survey. The Department based its design of the Scheme on this engagement and lessons from previous similar schemes. It also modelled the number of installers it required based on figures from the previous year. It assumed that the industry had sufficient labour to meet demand at the end of the furlough scheme, with industry representatives telling the Department that installers were not operating at full capacity. In addition, it drew from experience on a previous scheme which, according to the Department, showed that the growth of jobs under the Scheme was achievable.

2.15 Despite this, the Department did recognise a risk that the industry might be unable to meet demand and initiated a range of measures to mitigate this. In August 2020, the Department identified several constraints, including the capability to train the workforce over the six months of the Scheme, with bottlenecks around measures that require more certification. In September 2020 it provided £7.5 million to run a competition for relevant training providers to develop proposals to support installers to either gain the required accreditation or receive training in low-carbon heating or energy efficiency measures. Training was provided from early 2021 to September 2021, depending on the provider.

Impact on jobs

2.16 There is no reliable data on the impact of the Scheme on jobs created or supported, and the Department has reduced its estimates significantly since the start of the Scheme. Prior to the Scheme, the Department estimated that it would be able to support up to 82,500 jobs over six months, based on a spend of £1.5 billion over this period. Based on economic modelling from academic research⁶ which estimates number of jobs supported by the amount spent, the Department now estimates that the Scheme would support 5,600 jobs over a period of 12 months. We have not audited the robustness of these estimates and the Department does not have any definitive evidence on the total numbers of jobs retained, created or lost, as a result of the Scheme.

2.17 The Department argued that focusing on primary measures would have the biggest carbon impact and reduce the potential for paying for doors and windows that people would choose to install themselves. However, the Scheme's primary aim was intended to be an economic stimulus to support jobs. The Department recognised that for many of the primary measures the capacity of the supply chain would need time to build up. In contrast, the Department deprioritised measures which have established, larger-scale supply chains, and often require less specialist skills, such as window and door installation, and hence easier to scale up quickly in terms of jobs supported. Over the short timescale over which the Scheme was intended to operate there was a trade-off to be made between delivering a larger carbon impact and the rapid creation of jobs. The original plan had been a two-year scheme, which would have helped balance the carbon reduction and job creation priorities, but this was initially rejected by HM Treasury because of its priority to deliver jobs through a short-term stimulus to the economy. This trade-off was not explicitly considered in the planning documents examined by us.

⁶ R Janssen and D Staniaszek, *How Many Jobs? A Survey of the Employment Effects of Investment in Energy Efficiency of Buildings*, The Energy Efficiency Industrial Forum, 2012.

Part Three

Scheme implementation

3.1 This part covers:

- the Department for Business, Energy & Industrial Strategy's (the Department's) implementation and closure of the Green Homes Grant Voucher Scheme (the Scheme); and
- the Department's procurement and subsequent management of the Scheme administrator.

The implementation of the Scheme

Scheme timescale and resources

3.2 Following the announcement of the Scheme by the Chancellor of the Exchequer in July 2020, HM Treasury requested that the Department set up the Scheme by the end of September 2020. This meant that the Department had 12 weeks to finalise the design of the policy, undertake consultation with homeowners and industry and procure a grant administrator to develop a digital application system and launch the Scheme.

3.3 The Department and HM Treasury recognised that this timescale was high risk, a view shared by the Infrastructure and Projects Authority (the IPA) when they reviewed the Scheme in August 2020, but they both accepted the level of risk, judging that the Scheme was needed to stimulate the economy in the wake of the COVID-19 pandemic. When it announced the Scheme, the Department attempted to mitigate these risks by requesting some flexibility from HM Treasury to roll over the Scheme's funding beyond 31 March 2021 into the next financial year. HM Treasury stated that it would be willing to review this as part of the Spending Review process due that autumn, should these delivery risks materialise.

3.4 The pace at which the Department set up the Scheme, alongside its other priorities, placed strains on its capacity. As well as the other building decarbonisation schemes announced in July 2020, the Department was also delivering the procurement of COVID-19 vaccines and work related to EU Exit. Both the Department and the IPA recognised a risk of insufficient resource; the Department told us there were 31 vacancies out of an estimated 43 posts needed in its project team when the Scheme was announced; and it had a limited availability of specialist disciplines such as project delivery. The Department steadily recruited as the Scheme progressed, reaching its target by the Scheme's launch.

Procurement of the scheme administrator

3.5 In implementing the Scheme, the Department decided to procure a grant administrator, who would be responsible for services such as issuing and validating vouchers, payment processing, monitoring fraud and compliance, providing call centre facilities and in-home checks. The administrator would develop a digital platform to process information submitted by homeowners and installers.

3.6 In determining how to procure a supplier, the Department tried to balance its need to meet the timescales of the Scheme, mitigate the legal risks of a procurement challenge and achieve value for money. The Department assessed that there was a high likelihood of challenge to a directly awarded contract and negotiating with a single supplier would potentially result in high costs. It also judged that while an open procurement would allow broad access to the marketplace with a low risk of legal challenge, it would not meet the required timescale of the Scheme, and any attempt to accelerate this would incur high costs.

3.7 The Department chose to procure under a Crown Commercial Service contract framework for Grants and Programme Services, assessing that it provided a low risk of legal challenge, the best option for value for money, and a medium likelihood of meeting the Scheme timescales. While the Department regarded this as the most viable route to market, it had consequences for the procurement and the resulting contract. The Department was restricted to procuring from the 13 suppliers on the framework which had been pre-assessed by the Crown Commercial Service. Given the size of the Scheme, smaller suppliers were not necessarily capable of meeting the Department's needs, and only four framework suppliers expressed interest.

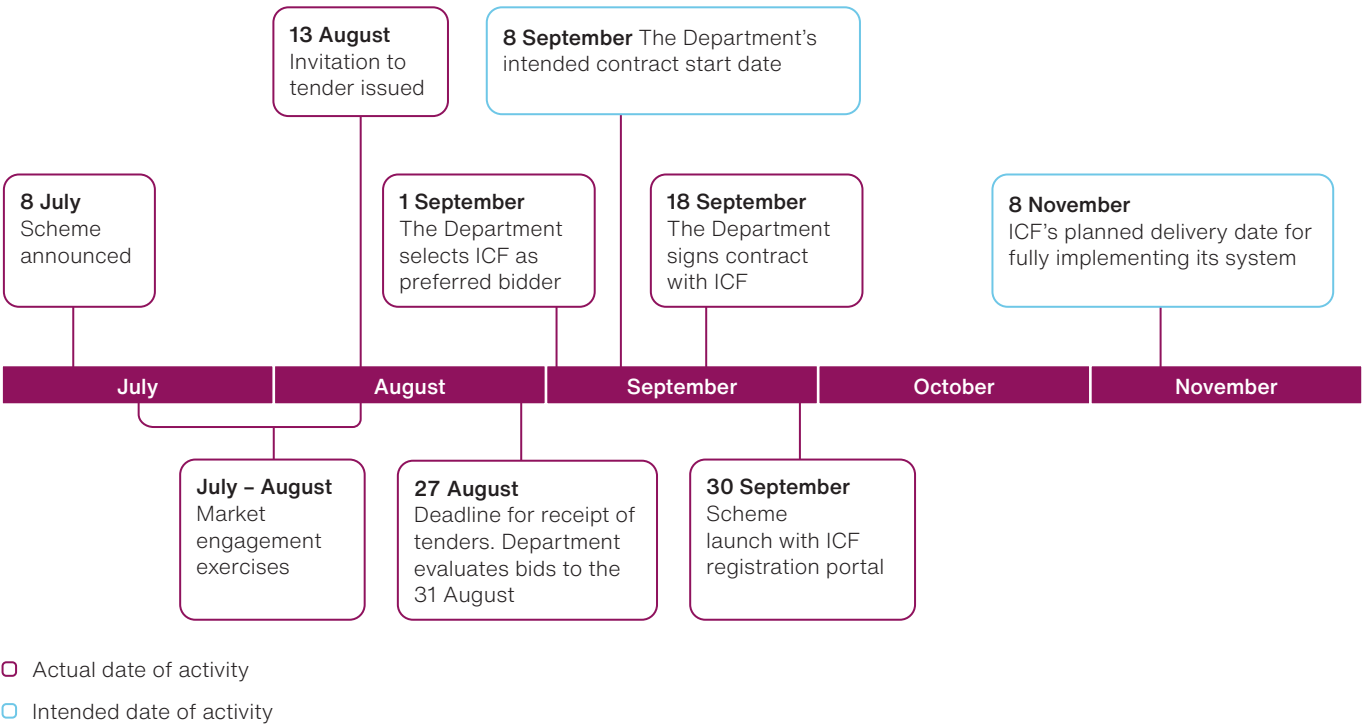
3.8 The Department also chose to adopt the framework's standard contract terms. This included the adoption of the framework's cost-plus pricing model for the contract, which the Department chose as it did not have certainty on how many vouchers would be issued, and did not focus financial incentives on the timely processing of applications. The use of the standardised terms also placed limits on how the Department structured the procurement.

3.9 The procurement itself was carried out at speed to meet the 30 September service launch date, (**Figure 9**) giving bidders two weeks to respond to the invitation to tender, and four days for the Department to evaluate the bids before then selecting a preferred supplier. The Department ultimately received three bids, from Capita, PwC and ICF Consulting Services Ltd (ICF). To mitigate the rapid timescale, the Department undertook market engagement with potential suppliers to ascertain the interest and capability of the market and to provide information on the Scheme. Despite the timescale, bidders told us that, in the main, they felt the procurement was well run.

3.10 The speed of the Scheme’s development, however, meant that the Department was still developing the Scheme’s requirements as the procurement progressed. This added complexity to the procurement, delaying its progress and limiting the likelihood of clear contractual obligations, with some terms needing to be agreed after it was awarded, such as the Key Performance Indicators. The contract was signed on 18 September, 10 days later than its intended start, putting further pressure on the time needed to implement a digital solution.

Figure 9
Timetable for the procurement and implementation of the Green Homes Grant Voucher Scheme (the Scheme), July to November 2020

The Department for Business, Energy & Industrial Strategy (the Department) carried out procurement activities and signed a contract in just over two months from the Scheme’s announcement



Source: National Audit Office analysis of Department for Business, Energy & Industrial Strategy data

Implementing a digital solution

3.11 During pre-market engagement, the Department received feedback from bidders that the three weeks between the intended contract start and Scheme launch would not be enough to develop the required digital voucher application system. This was as a result of the technical complexity of the system's need to interface with many third parties for verification checks, for example credit agencies, TrustMark registration, and the Department for Work & Pensions for income status. In response, the Department allowed bidders to steadily deliver parts of the application process in stages from the launch, with the use of some manual processing in the interim.

3.12 None of the submitted bids anticipated fully implementing the required digital voucher application system by the launch date. While the other bidders anticipated that at least 15 weeks would be required, with greater amounts of manual processing of applications in the interim, ICF stated it could rapidly adapt its existing grant administration software in six and a half weeks at lower cost. In support of its bid, it provided evidence of how it had adapted its software for use in other grant administration contracts. The Department signed the contract with ICF on 18 September 2020, agreeing a plan which would allow homeowners and installers to register for the Scheme on 30 September, with other elements being incrementally delivered until the system anticipated by the Department was implemented by 8 November. However, recognising the risks of a fully implemented system not being in place, the Department nonetheless decided to vary ICF's contract after award to allow full manual processing of a limited number of applications until a digital system could be fully implemented.

3.13 The Department asked commercial contract specialists in the Cabinet Office to undertake a low-cost bid review prior to awarding the contract to ICF. ICF's proposed costs for the development of the digital solution were less than half that of the second cheapest bidder, triggering the need for a review under government contracting guidance. The Cabinet Office review concluded there was not enough information within the bids to understand specific costs, and thus whether any adjustment should be made for a low bid. As a result, it recommended that the Department seek a more granular understanding of ICF's technical solution. The Department did not undertake this further analysis, as it regarded that the proposed speed of ICF's implementation, and the lack of manual processing, explained its lower cost.

Launching the Scheme

3.14 Following contract signature on 18 September, the Department worked to finalise its development of the Scheme, while ICF developed its digital solution for the Scheme launch date. Following these efforts, the Department presented the Scheme's full business case to its Project and Investment Committee on the 28 September, ahead of the Scheme's final approval for launch on 30 September. The Committee decided not to approve the full business case, raising concerns that the digital systems for the Scheme were not yet fully developed and tested (as ICF was not due to deliver the complete application system until early November), and that spending the full £1.5 billion funding available by March 2021 might not be feasible (**Figure 10**).

3.15 The Department's Accounting Officer decided to proceed with the Scheme's launch on 30 September. In her assessment supporting the decision, the Accounting Officer noted that the Scheme was intended to play a key part of government's response to mitigating the COVID-19 pandemic's economic impacts. The Accounting Officer recognised the risks that the Committee raised, and in response referred to the Department's assessment that due to the Scheme's low fixed costs, it would provide value for money in delivering benefits to homeowners and the economy even if the full £1.5 billion was not spent.⁷ The Accounting Officer also noted HM Treasury's assurances that it would consider extending some of the available funding into the next financial year at the expected Spending Review, should delivery by March 2021 not be feasible. Against the Committee's concerns regarding digital systems, the Accounting Officer referred to assurance the Department had received on 28 September from the Government Digital Service (GDS) with regard to ICF's digital solution. However, while GDS's service assessment stated that ICF's system was adequately secure and reliable, it could only examine the system functionality that ICF had been contracted to deliver by that point, with elements of the system yet to be developed.

⁷ An Accounting Officer assessment provides a written analysis of whether actions meet the four accounting officer standards of regularity, propriety, value for money and feasibility. It is good practice to prepare one for each novel or contentious proposal. HM Treasury asks departments for such analyses before clearing them to proceed. See HM Treasury, Accounting officer assessments guidance, September 2017, para 1.11.

Figure 10

Key dates for launching the Green Homes Grant Voucher Scheme (the Scheme), June 2020 to 31 March 2021

From announcement, the Scheme was set up at pace within 12 weeks, with the intention of being in place to meet the end of the Coronavirus Job Retention Scheme

Event	Who responsible	When
Scheme dates		
Discussions on policy proposals between HM Treasury and the Department	HM Treasury and The Department for Business, Energy & Industrial Strategy (The Department)	From early June 2020
Scheme announced	Chancellor of the Exchequer	8 July 2020
Outline business case approved	The Department for Business, Energy & Industrial Strategy (The Department) – Investment Committee	8 September 2020 ¹
Scheme administrator hired: contract signed with ICF	The Department	18 September 2020
Full business case rejected	The Department – Investment Committee	28 September 2020
Accounting Officer decision to proceed	The Department – Accounting Officer (via an Accounting Officer assessment)	29 September 2020
Scheme launched: voucher applications begin	The Department	30 September 2020
Scheme ends	The Department/HM Treasury	31 March 2021
Employment support scheme dates		
Coronavirus Job Retention Scheme planned end date	HM Treasury	31 October 2020
Announcement of Coronavirus Job Retention Scheme extension to December 2020	HM Treasury	31 October 2020
Announcement of Coronavirus Job Retention Scheme extension to 31 March 2021	HM Treasury	5 November 2020

Note

- 1 The Department's Investment Committee approved the outline business case on the condition that the Accounting Officer approved the Scheme before contract signature.

Source: National Audit Office analysis of Department for Business, Energy & Industrial Strategy documentation

The Department's management of the Scheme administrator

3.16 The contract agreed between the Department and ICF is detailed in **Figure 11 on** pages 39 and 40. ICF faced challenges with the initial implementation of the system, and the Department ultimately did not accept ICF's digital system as meeting its requirements in early November, or the remainder of the contract. ICF informed us that, in its view, the Department's requirements for the system were complex, not sufficiently clear, and in some instances changed from the procurement. For example, ICF stated that some of the third-party checks changed from those set out in the procurement; pricing guidance to assess supplier quotes was not in place from the start of the Scheme; and the intended customer journey through the application process was not sufficiently clear. ICF stated that collectively these issues hindered its ability to develop a solution as well as process applications in a timely manner.

3.17 From the Scheme launch, the Department engaged technical experts to undertake security and accessibility testing of ICF's system, to help ensure it met its requirements. After early November, the Department began to use its contractual levers to try to improve ICF's performance. These included delay payments and instructing ICF to implement a rectification plan to deliver an updated system and process applications. While further digital elements were added as the Scheme progressed, the system anticipated by the Department was not implemented by the Scheme's closure. This meant that a greater amount of manual processing was required to process applications than was envisaged, contributing to the backlog of voucher applications which grew as more homeowners applied to the Scheme. Since the Department judged that ICF's issues could be rectified, it concluded that it could not terminate the contract outright, and set ICF a final deadline to deliver its updated system by 24 March 2021, which in the event the Department judged ICF did not meet.

Scheme closure

3.18 The Department decided to close the Scheme to new applicants on 31 March 2021. After ICF did not meet the 24 March 2021 rectification plan deadline, it judged that the Scheme's performance was unlikely to improve further. It also wanted to focus on clearing the backlog of vouchers applications, which it forecast would use the £320 million of funding that HM Treasury had by that point made available for the Scheme in the financial year 2021-22. As a result, the Department judged it was best to close the Scheme and negotiate with ICF to determine how to process the remaining vouchers, while also reaching a commercial settlement for its performance under the contract. The Department is currently undertaking an exercise to understand what lessons can be learned from the design and implementation of the Scheme.

Figure 11

Summary of the Department for Business, Energy & Industrial Strategy's (the Department's) contract with ICF to administer the Green Homes Grant Voucher Scheme

The Department contracted with ICF in a contract worth up to £88.25 million

Overview	Contract description	Contract for a digital voucher application solution and the administration of voucher applications.
Parties	Contracting authority	Department for Business, Energy & Industrial Strategy (the Department).
	Supplier	ICF Consulting Ltd. Subcontractor, Arvarto, delivered the call centre – no direct contractual agreement between the Department and subcontractor.
Term	Contract term	September 2020 to 28 February 2022. Options for up to two six-month extensions from February 2022.
	Contract signature	18 September 2020.
Financials	Total contract value	£88.25 million maximum value up to February 2023.
Contract procurement	Market engagement	All 13 framework suppliers approached, with four providers engaged in market engagement exercises through July and August 2020.
	Procurement route	Crown Commercial Service contract framework for Grants and Programme Services (Rm 949).
	Provider selection	Three bids submitted. ICF selected as scored highest overall and on cost criteria.
Contract management	Contract transparency	Published on UK Contracts Finder on 17 March 2021.
	Performance measurement	Monthly self-reporting by ICF of any failures against 10 measures, with compliance checks by the Department.
	Examples	Application processing timeliness. Availability of online voucher application platform.

Figure 11 *continued*
Summary of the Department for Business, Energy & Industrial Strategy’s (the Department’s) contract with ICF to administer the Green Homes Grant Voucher Scheme

Contract management	Key risks	Implementation risk – tight deadline between contract signature and delivering a system could lead to non-delivery or poor delivery. Risk of platform not being of sufficient quality to handle applications. Fraud and compliance risks arising from nature of grant Scheme.
	Payment mechanism	Cost-plus for voucher administration. Cost-plus up to a capped amount for digital system implementation.

Source: National Audit Office analysis of Department for Business, Energy & Industrial Strategy documentation

Appendix One

Our audit approach

1 **Figure 12** is overleaf.

Figure 12

Our audit approach

The objective of government

The Department for Business, Energy & Industrial Strategy (the Department) has overall responsibility across government for achieving net zero. Buildings account for around 19% of all UK greenhouse gas emissions. To reduce emissions from homes will require consumers to use less energy, use green heating systems (alternatives to gas and fossil fuels) and for home heating to be more efficient.

How this will be achieved

In July 2020, as part of the Government's 'green recovery' from the pandemic, the Department set up four energy efficiency schemes. These aimed to create jobs and reduce carbon emissions from current heating systems. One of the schemes was the Green Homes Grant Voucher Scheme (the Scheme) which aimed to support up to 82,500 jobs in green construction and provide improvements to 600,000 homes over the six-month period from September 2020 to March 2021.

Our study

This study examines the performance, procurement and management of the Scheme. We report on the performance of the Scheme and evaluate the Scheme against its objectives. We comment on the other schemes developed by the Department in 2020 to help decarbonisation but we have not assessed their effectiveness.

Our key question

- 1 How has the department delivered against the Scheme objectives?
- 2 To what extent did the Scheme design aide implementation?
- 3 How well did the department manage the Scheme?

Our evidence

See Appendix Two.

Our conclusions

The Government has identified decarbonising home heating as a key part of its plan to deliver net zero by 2050. In establishing the Green Homes Grant Voucher Scheme, the Department worked at an ambitious pace to deliver a scheme which would contribute to this long-term aim whilst delivering a short-term economic boost. However, the tension between its two key aims and the short delivery time was never properly reconciled leading to an overly complex scheme that could not be delivered to a satisfactory performance in the time available. Should all current applications be processed, the Scheme will have upgraded an expected 47,500 homes, at a cost to the taxpayer of about £314 million. £50.5 million of this cost is for programme management and administrative expenses, amounting to more than £1,000 per home upgraded. Despite the significant efforts made, the rushed delivery and implementation of the Scheme has significantly reduced the benefits that might have been achieved, caused frustration for homeowners and installers, and had limited impact on job creation for the longer term.

The Department and external assurance highlighted several risks of proceeding at pace, but the Department accepted these risks. This constrained its procurement options, its engagement with the installer market and, coupled with the short duration of the scheme, the ability of energy efficiency installers to mobilise to meet demand. Whilst we recognise the desire to act quickly in the interests of delivering an economic stimulus, the government should be prepared to limit or delay the launch of a programme if the evidence suggests it is not ready. Previous government attempts to deliver energy efficiency schemes, such as for the Green Deal, have amply illustrated the difficulties of achieving successful delivery in this area. It is important that the Department and HM Treasury heed the lessons from this, and previous schemes, for any future domestic decarbonisation programme.

Appendix Two

Our evidence base

1 We reached our independent conclusions on the design, procurement and management of the Green Homes Grant Voucher Scheme (the Scheme) after analysing evidence collected between January and August 2021. Our audit approach is outlined in Appendix One.

2 In designing and carrying out our work, we took account of previous relevant National Audit Office (NAO) reports including our 2020 report *Achieving net zero*⁸ and our reports on previously developed and implemented initiatives to assist homeowners in improving the energy efficiency of their homes, including on *The Green Deal and the Energy Company Obligation* (2016),⁹ *The Renewable Heat Incentive* (2018),¹⁰ and *The Warm Front Scheme* (2009).¹¹

3 We interviewed officials from the Department for Business, Energy & Industrial Strategy (the Department), HM Treasury, the Government Digital Service (GDS) and the Infrastructure and Projects Authority (IPA). Those we interviewed included:

- representatives from the Department's senior staff who have formal decision-making powers for and oversight of the Scheme;
- members of the Department's policy, commercial and delivery teams responsible for the design and delivery of the Scheme;
- members of the Complex Transaction Unit and the Department's Implementation Unit involved in negotiations with the grant administration supplier and determining the future strategy for the Scheme;
- leads of the three other economic recovery schemes announced in July 2020: the Green Homes Grant Local Authority Delivery Scheme, the Public Sector Decarbonisation Fund and the Social Housing Decarbonisation Fund;
- officials in HM Treasury responsible for oversight and decision-making relevant to the Scheme;

⁸ Comptroller and Auditor General, *Achieving net zero*, Session 2019–2021, HC 1035, National Audit Office, December 2020.

⁹ Comptroller and Auditor General, *Green Deal and Energy Company Obligation*, Session 2015–16, HC 607, National Audit Office, April 2016

¹⁰ Comptroller and Auditor General, *Low carbon heating of homes and businesses and the Renewable Heat Incentive*, Session 2017–2019, HC 779, National Audit Office, February 2018

¹¹ Comptroller and Auditor General, *The Warm Front Scheme*, Session 2008–09, HC 126, National Audit Office, February 2009.

- representatives from the GDS responsible for reviewing government digital projects and ensuring they align with government standards; and
- representatives from the IPA responsible for assessing progress and monitoring the Scheme.
- Crown Commercial Service, who owned the RM949 commercial framework for Grants and Programme Services.

4 We interviewed external stakeholders, including:

- consumer bodies representing homeowners and trade bodies representing installers (including TrustMark);
- a representative from academia in the energy and climate change policy area;
- representatives from the Scheme administrator, ICF Consulting Services Ltd (ICF); and
- representatives from PwC and Capita who had also bid for the Scheme administration contract.

5 We spoke to a staff member of the House of Commons Environmental Audit Committee who had recently produced a report on *The Energy Efficiency of Existing Homes*¹² and had also undertaken a survey on the Green Homes Grant Scheme.

6 We reviewed relevant documents including:

- business cases for the Scheme, the Green Homes Grant Local Authority Delivery Scheme, the Public Sector Decarbonisation Scheme and the Social Housing Decarbonisation Fund;
- IPA reviews of the Scheme;
- GDS reviews of the digital system for administering the Scheme;
- procurement documentation, including the invitation to tender and the resulting bids;
- the contract with the Scheme administrator, ICF, and relevant contract management documents and meeting minutes;
- minutes and documents from the Green Homes Grant Programme Board meetings;
- key ministerial submissions and interactions between the Department and HM Treasury;
- documents relating to the closure of the Scheme; and

¹² Environmental Audit Committee, *Energy Efficiency of Existing Homes*, Session 2019–21, HC346, March 2021.

- documents provided by the British Energy Efficiency Federation including results from a survey with installers, correspondence from HM Treasury and minutes of monthly meetings between trade bodies and the Department.

7 We reviewed the Department's data including:

- spending on the Scheme and estimates on the expected number of homes and jobs supported by the Scheme;
- complaints from homeowners about the Scheme;
- published monthly updates on the numbers of applications and processing and payment times at each stage of the voucher application and payment process, the type of measures applied for and the location of applications; and
- location and number of installers.

8 In reaching our independent conclusions we are aware of the following limitations to our study:

- The data collected by the Scheme administrator and the Department are not complete for the whole period of the Scheme. In the first few months of the Scheme, there are incomplete data on the progress of applications and the performance of the Scheme administrator against the Key Performance indicators. This limited our ability to show how the Scheme progressed over time.
- The Department was not able to provide direct evidence of the number of jobs supported and carbon savings. The figures given in the report are based on academic modelling used by the Department, related to the expected spend and measures installed.

Appendix Three

Recommendations on previous energy schemes

Figure 13
Committee of Public Accounts recommendations for energy efficiency schemes

The Committee of Public Accounts has made recommendations to the government on previous energy efficiency schemes

Theme	Scheme(s)	Recommendation
1 Performance and progress	Green Deal and Energy Company Obligation (ECO)	The Department for Energy and Climate Change ² should measure progress towards each of its objectives , particularly on those aimed at improving circumstances for vulnerable people and those living in fuel poverty.
2 Scheme design	Green Deal and ECO	The Department for Energy & Climate Change must ensure that policy decisions are thoroughly tested and based on accurate evidence that includes a robust evaluation of stakeholders' views . The Department for Energy & Climate Change should be prepared to pull back on plans if it is clear they are unlikely to be successful and risk taxpayers' money.
	Levy Control Framework	In reporting the results of the review the Treasury should set out in detail how the future Levy Control Framework or its successor will operate. It should also demonstrate how stakeholders' concerns were identified and addressed in the new arrangements, including regarding the way costs are measured.
	Warm Front Scheme	Between June 2005 and March 2008, £34 million was paid to households whose properties were already energy efficient. In reviewing the eligibility criteria in 2009, the Department should consider excluding those households where a property is already energy efficient, and determine if there is scope to improve targeting to enable more of those in fuel poverty to be reached by the Scheme .
	Warm Front Scheme	The failure by the Department for Environment, Food and Rural Affairs to put in place adequate contract procurement and management processes from the start of the contract with eaga plc led to a lack of clarity over some key terms in the contract which took some two years to resolve. The Department should put in place experienced procurement staff to negotiate and manage future contracts for the Scheme and other major projects.

Figure 13 *continued*

Committee of Public Accounts recommendations for energy efficiency schemes

3	Scheme set-up	Green Deal and ECO	The forecasted demand for Green Deal loans in its 2012 Impact Assessment was so wildly optimistic it gave a completely misleading picture of the scheme's prospects to Parliament and other stakeholders. The Department for Energy & Climate Change should ensure forecasts laid before Parliament in impact assessments are based on the most accurate and best available evidence , and are clear about the degree of certainty that applies to the numbers used and the likely outcome.
		Levy Control Framework	The Department for Business, Energy & Industrial Strategy must ensure it has access to the right expertise and intelligence to ensure its forecasts are based on the best available evidence . It should review its market intelligence capability regularly to ensure it is doing enough to mitigate the risk of further forecasting failures.
4	Scheme management	Green Deal and ECO	The Department for Energy & Climate Change must ensure that appropriate arrangements are in place to monitor and provide assurance that public funds provided to other bodies are spent with due regard to regularity and value for money.
		Levy Control Framework	The Department for Business, Energy & Industrial Strategy and HM Treasury should review the governance arrangements for all consumer-funded energy schemes , and write to us with the outcome of the review. Governance arrangements should ensure boards responsible for the schemes meet regularly and include sufficiently senior officials from both departments .
5	Supply chain	Warm Front Scheme	The Department should determine the feasibility of allowing customers who are required to make a contribution to the work, the scope to obtain quotations from certified companies in their area as a check on the prices quoted by the Scheme's contractors.

Notes

- 1 The Committee of Public Accounts recommendations and findings are taken from three reports:
- Warm Front Scheme: Levy Control Framework scheme: Committee of Public Accounts, Thirty-Ninth Report of Session 2008-09, *The Warm Front Scheme*, HC 350, July 2009;
 - Green Deal and ECO schemes: Committee of Public Accounts, Eleventh Report of Session 2016-17, *Household energy efficiency measures*, HC 125, July 2016; and
 - Levy Control Framework scheme: Committee of Public Accounts, Thirty-ninth Report of Session 2016-17, *Consumer-funded energy policies*, HC 773, February 2017.
- 2 The Department for Energy & Climate Change became part of the Department for Business, Energy & Industrial Strategy in July 2016.

Source: National Audit Office analysis of Committee of Public Accounts reports

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