UK Government

RAF012/2324: Evaluation of non-domestic energy affordability support schemes

Synthesis report

September 2025

Commissioned by the Department for Energy Security and Net Zero prior to the general election in the United Kingdom in July 2024. As such, any references to government policies, commitments, or initiatives may reflect the stance of the previous administration and were accurate at the time of fieldwork.

Contents

List of figures

List of tables

Glossary

Term	Meaning
Business deaths	Office for National Statistics (ONS) terminology referring to businesses that have ceased to trade (identified through de-registration of the administrative units). The rate of business deaths is calculated using the number of deaths as a proportion of the active businesses.
Consumer Price Index (CPI)	The price of a weighted average market basket of consumer goods and services purchased by households. Changes in measured CPI track changes in prices over time.
Energy Bill Relief Scheme (EBRS)	The Energy Bill Relief Scheme (EBRS) ran from 1 October 2022 to 31 March 2023 and provided discounts to the gas and electricity unit rates of organisations on a non-domestic contract. Discounts were automatically applied to energy bills by suppliers without the need for organisations to make an application. The size of the discount depended upon the rates organisations were paying and the type of contract they had with suppliers and were subject to a maximum discount. The government compensated suppliers for the reduction in energy unit prices that they passed on to non-domestic customers.
Energy Bills Discount Scheme (EBDS)	The Energy Bill Discount Scheme (EBDS) replaced the EBRS on 1 April 2023 and provided energy bill relief to Non-Domestic Organisations (NDOs) in Great Britain and Northern Ireland on a licenced energy supply until 31 March 2024. The scheme was designed to provide a lower level of support to NDOs in the 12 months after the closure of the EBRS, while continuing to limit exposure to volatile energy markets.
Energy Price Guarantee (EPG)	The Energy Price Guarantee (EPG) reduced the amount suppliers could charge for the unit price of electricity and gas for all households with a domestic gas and/or electricity contract. This brought a typical household energy bill, for dual fuel gas and electricity, down to around £2,500 per year in Great Britain from October 2022 until June 2023 and to around £3,000 per year from July 2023 to March 2024. However, from July 2023 onwards the Ofgem energy price cap fell below the EPG meaning the scheme was no longer active. The Government compensated suppliers for the difference between the energy price cap and the EPG. EPG was applied to bills automatically and did not require households to take any action to receive the support.

Term	Meaning
Energy and Trade Intensive Industries (ETIIs)	NDOs were classified as ETIIs if they operated in sectors above the 80th percentile for energy intensity and the 60th percentile for trade intensity across Great Britain and Northern Ireland. A full list of ETII sectors is available at: www.gov.uk/guidance/energy-bills-discount-scheme-energy-and-trade-intensive-industries-support#eligibility-for-etii-support
Heat Network Operators (HNOs)	Suppliers of heat networks (sometimes called district heating), where heating, cooling or hot water is generated at a central source and supplied by the operator to end-users through a network serving either multiple buildings or multiple occupants in a single building. For the purposes of this report, HNOs are analysed as a separate group compared to other NDOs.
Insolvency	A state of financial distress in which a business or organisation is unable to pay their bills.
Intermediaries	Individuals or organisations that hold an electricity or gas contract and pass on the costs of the energy supplied under this contract to end users
Non-Domestic Alternative Fuel Payment (NDAFP)	A scheme formed as part of the government's assistance package for non-domestic consumers over winter 2022 to 2023. It provides non-domestic users of alternative fuels with a £150 payment. NDOs with a mains electricity supplier did not need to apply for the payment. Those without a mains electricity supplier were required to apply.
Non-domestic organisations (NDOs)	Includes private sector businesses, public sector bodies, and voluntary sector / non-profit organisations.
Non-standard cases	These are cases that involve licence-exempt suppliers. The unlicensed nature of licence exemption meant that suppliers' risk profile was higher. Schemes in this case were based on reimbursement in arrears, following applications.
Pass-through	Any intermediary in the UK that will be or has been provided energy affordability support (e.g. from EPG, EBSS, AFP, NDAFP, EBRS or EBDS) must ensure they pass this support on, in a just and reasonable way, to end users.
Producer Price Index (PPI)	The Producer Price Index (PPI) measures the average change over time in the prices domestic producers receive for their output. It is a measure of inflation at the wholesale level that is compiled from thousands of indexes measuring producer prices by industry and product category.

Executive summary

Introduction

This report presents the findings from the evaluation of the non-domestic energy affordability support schemes, delivered in the UK between 2022 and 2024 to mitigate the impact of increased energy bills on Non-Domestic Organisations (NDOs). NDOs include private, public, and voluntary sector organisations. An evaluation of the domestic energy affordability support schemes was also conducted and is published separately.

Wholesale prices for electricity, gas and other fuels in the UK started increasing during the summer of 2021, before spiking in the winter of 2022. This was initially caused by international supply chains readjusting when economies reopened after COVID-19 and was further exacerbated by the effect Russia's invasion of Ukraine had on international energy markets.[1]

In response to this energy crisis, the government launched a series of energy affordability schemes for domestic consumers and NDOs. Three energy affordability schemes were designed and implemented specifically to support NDOs:

- **Energy Bill Relief Scheme (EBRS)** provided a discount on the unit price of electricity and gas between October 2022 and March 2023, using a volumetric mechanism comparable to the domestic Energy Price Guarantee (EPG). Discounts were applied automatically to energy bills for the majority of NDOs. Where discounts could not be applied automatically, NDOs were required to apply for the support to receive it. Under this scheme, discounts were applied to at least 2.9 million meters, amounting to a total value of £7.526 billion.
- **Non-Domestic Alternative Fuel Payments (NDAFP)** provided support to NDOs that used fuels other than electricity and gas between February and June 2023. The scheme did this through two mechanisms: a flat payment of £150 (issued automatically) and a top-up payment of between £750 to £5,800 for organisations with the highest usage of kerosene (organisations needed to apply for this support). Under this scheme, around 407,000 organisations received payments, amounting to £62 million.
- **Energy Bills Discount Scheme (EBDS)** replaced EBRS on 1 April 2023 and provided a discount on the unit price of electricity and gas until 31 March 2024. The scheme was designed to provide volumetric support to NDOs in the 12 months after the closure of the EBRS, but at a lower level. Discounts were applied automatically to energy bills for the majority of NDOs. Heat Network Operators (HNOs)[2] and Energy and Trade

[1] Gas and electricity prices during the 'energy crisis' and beyond - House of Commons Library

[2] Suppliers of heat networks (sometimes called district heating), where heating, cooling or hot water is generated at a central source and supplied by the operator to end-users through a network serving either multiple buildings or multiple occupants in a single building.

Intensive Industries (ETIIs)[3] were able to apply for higher levels of support. Under this scheme, discounts were applied to at least 335,000 meters, amounting to a total value of £405 million.

The Department for Energy Security and Net Zero (DESNZ) commissioned IFF Research, Technopolis, and Cambridge Econometrics to conduct a process, impact and economic evaluation of the schemes. The overarching aims of the evaluation were to:

- Understand how the interventions were implemented, including the effectiveness and consistency across recipient groups of the delivery mechanisms employed;
- Explore awareness, understanding, perceptions and experiences of the interventions among different recipient groups and suppliers;
- Assess the impacts of the interventions, including short-term changes made by organisations and indicators of longer-term changes; and
- Assess the value for money of the Non-Domestic Energy Affordability policies.

The evaluation used a mixed-method approach incorporating a theory-based approach (contribution analysis), large-scale quantitative surveys of non-domestic organisations, qualitative interviews, secondary data analysis and modelling, and a value for money analysis. The evaluation was conducted in two stages. Stage 1 of the research took place between September 2023 and March 2024 (with a focus on EBRS's short term impact), with Stage 2 of the research taking place between March 2024 and March 2025 (focusing on EBDS's impact as well as EBRS's longer term impact).

Key findings

Scheme Design and Implementation

The schemes were designed in the context of needing to provide emergency support quickly but equitably to a diverse range of organisations. They were also designed with gaps in pre-existing evidence and expertise within the department around the non-domestic energy customer landscape. As a result, DESNZ staff were required to find a balance between achieving an acceptable risk profile for the level of support, while getting support to as many organisations as possible and as quickly as possible. DESNZ staff reported that the business case for EBRS was developed in three weeks, when this would normally be expected to take around three months.

The unprecedented pace at which the support schemes needed to be delivered resulted in challenges for suppliers in the early stages of implementation. They reported large-scale internal resource allocation shifts and changes to operating systems being implemented at a high cost to their organisations. Once schemes were established, suppliers had mixed experiences of calculating baseline discounts for EBRS. Some felt that calculations were

[3] NDOs were classified as ETIIs if they operated in sectors above the 80th percentile for energy intensity and the 60th percentile for trade intensity across Great Britain and Northern Ireland.

straightforward and easy, while others encountered challenges due to the high level of variation in their customer base and the high level of variations in energy contracts.

Overall, the administrators (Elexon and Xoserve) responsible for processing electricity and gas reimbursement claims from suppliers felt the claim reimbursement processes for both EBRS and EBDS worked well. This was supported by suppliers, who reported that reimbursements for gas and electricity claims were generally processed accurately and on time.

Ofgem and UREGNI (the utilities regulator of Northern Ireland) reported only a few instances of non-compliance, where suppliers were potentially not meeting their obligations. These cases were successfully resolved without the need for enforcement action. Investigations revealed these suppliers had often misinterpreted scheme obligations or they did not have staff capacity or computer systems in place to manage obligation requests.

Suppliers experienced challenges with data reconciliation during the closure of schemes. For EBRS and EBDS, a key activity in scheme closure was calculating actualisation rates (i.e. the percentage of discounts based on actual meter readings versus estimated readings). Suppliers faced issues with this process due to data quality issues in previously submitted claims, for example, ‘orphan meters’ and ‘lost meters’. For EBDS schemes for ETIIs and HNOs, a key closure activity for DESNZ involved matching end user applications with meter numbers held by suppliers. In many cases, there were discrepancies between records and issues where customers had changed suppliers since making their initial application; this was ultimately resolved but required extra resource to address.

Awareness and Understanding

Under the automatically applied schemes (i.e. EBRS, the NDAFP flat payment and baseline EBDS) discounts and payments were applied to energy bills without the need for NDOs to make applications. Awareness and understanding of these schemes therefore had no bearing over the receipt of support. Despite this, awareness was still important as NDOs could react to the knowledge that they were to receive energy support and as a result, not make unnecessarily detrimental budgetary decisions, such as cutting back investment or making redundancies.

Suppliers and stakeholders issued communications about the schemes to NDOs through various channels, including website content, social media, and direct engagement via customer service teams. Suppliers and stakeholder communications often signposted non-domestic customers to relevant government guidance and resources. Additionally, the government issued communications to NDOs through the Notify Service.

Despite these activities, the awareness of support schemes was generally low, particularly around schemes that employed automatic delivery mechanisms (i.e. EBRS, baseline EBDS and the NDAFP flat payment). Amongst those deemed eligible, only a quarter (24%) of organisations were aware of the EBRS, fewer than a fifth (19%) were aware of the EBDS and just 14% were aware of the NDAFP flat payment. As noted above, limited awareness of these schemes may be attributed to their design; under the core components of the EBRS, EBDS

and NDAFP, discounts and payments were applied directly to energy bills without the need for an application or supporting evidence. Therefore, it is likely that eligible organisations received support without realising it or being aware of the source of the support. Furthermore, the length of time between scheme delivery and survey may have affected recall and so negatively bias reported awareness.

It was not possible to obtain an effective measure of awareness of application-based schemes as part of this evaluation (i.e. EBDS for HNOs, EBDS for ETII and NDAFP top-up payments). Targeted surveys were conducted with successful applicants for the EBDS for Energy and Trade Intensive Industries (ETIIs)[4] and NDAFP top-up payment schemes, but the evaluation did not capture awareness levels amongst eligible organisations that did not apply.

The proportion of NDOs who reported receiving support from the schemes varied depending on the scheme's delivery method, with automatic schemes showing lower reported uptake than application-based ones, likely due to direct engagement not being required for these schemes. Amongst NDOs who were eligible for and aware of the schemes, 38% reported receiving a discount from EBRS and 18% from baseline EBDS support, though many may have received help unknowingly. Successful applicants for the EBDS ETII and HNO schemes reported higher receipt levels (74% and 62% respectively), partly due to the research targeting successful applicants. Discrepancies between application success and reported support can be explained by factors such as not meeting eligibility thresholds despite successful application, recall issues at time of survey, or survey participation by staff who did not complete the application. The variance in reported receipt is important to note because questions about experiences and impacts of the schemes were only asked of those who confirmed they had received support.

The extent to which eligible organisations understood the schemes was mixed. Recipients of application-based schemes generally had a better understanding of how the support worked than those in receipt of schemes that used automatic delivery mechanisms. How discounts were applied was typically well understood, but there was less clarity regarding eligibility criteria and monetary value. Overall, HNOs demonstrated a greater understanding of the schemes than other NDOs.

Successful applicants for the EBDS for ETIIs and NDAFP top-up payment schemes demonstrated varying levels of understanding of the schemes. As with the automatically applied schemes, the levels of understanding of how discounts and payments were received were fairly high, with understanding of the monetary value being lower. However, understanding of eligibility requirements was higher than for automatic schemes, suggesting that engaging with the application process helped improve understanding in this regard.

Organisations' experience of support

Across all schemes, whether automatically applied or application-based, most NDOs received support without issue. Only around one in twenty recipients of EBRS (4%) or baseline EBDS

[4] NDOs were classified as ETIIs is the operated in sectors above the 80th percentile for energy intensity and the 60th percentile for trade intensity across Great Britain and Northern Ireland.

(6%) discounts reported difficulties receiving the discount,[5] for example, billing issues, lack of information and delays. Difficulties were similarly uncommon amongst applicants for NDAFP top-up payments (6%). Although still only experienced by a minority, difficulties were more common for the EBDS for ETII (20%) scheme. Specifically relating to application-based schemes, those that experienced difficulties often cited challenges in gathering the necessary data, navigating application instructions, and accessing guidance and support to assist with the application process.

A narrow majority of those who received support felt the timing of discounts and payments was appropriate. Around half of EBRS (53%), EBDS baseline (54%), and EBDS for ETII (56%) discount recipients felt the support was delivered at the right time. However, a substantial proportion of those in receipt of support suggested it was delivered too late: a quarter of those in receipt of EBRS (24%), a third of those in receipt of EBDS baseline (33%) and close to a third of those in receipt of EBDS for ETII (30%).

NDOs that received support had mixed views on the monetary value of it. Across all schemes, between two fifths and a half of NDOs felt that the monetary value was too low (46 to 52%), while around two fifths considered it to be appropriate (39% to 43%). HNOs perspectives on the monetary value of support varied significantly between the EBRS and EBDS schemes; around a third (36%) reported that the value of EBRS support was the right amount to meet their needs, while half (52%) reported that the value was too low. By contrast, HNOs viewed EBDS more favourably than other NDOs, with three fifths (58%) reporting that the value of EBDS support was appropriate and around a third (35%) reported that the value was too low.

For all schemes, intermediaries that received energy bill support were required to notify their end users within 30 days, and to pass on support in a ‘just and reasonable way’. This was known as the ‘pass-through’ requirement. The reported levels of pass-through of the support to end users were high amongst HNOs, and the limited evidence available for other types of intermediaries, suggests it was high amongst those too. Around seven in ten (71%) HNOs that received EBRS or baseline EBDS discounts reported passing on some or all of the discount, and more than nine in ten (92%) HNOs in receipt of EBDS higher support reported passing on some or all the discount. There is limited quantitative evidence on pass-through activities for intermediaries; however, qualitative interviews with this audience indicated that the support was highly likely to have been passed on due to the way intermediaries calculated bills for end users. End user costs were typically based on either individual metering and passed on directly or calculated from energy use as a portion of the total energy costs.

Impact of the support

The quantitative methods used to attribute the impacts of the schemes to different indicators of interest included: Input-Output (IO) modelling, time series analysis, and panel regression analysis. The analysis covered both first- and second-degree impacts.

[5] Note: Low base sizes – results are based on a small number of responses, so findings may not be representative of the wider population of recipients.

Analysis of UK wholesale electricity and gas price data revealed that the support schemes would have helped offset a portion of the increase in energy prices faced by NDOs from winter 2022. As a result, the support had a direct causal impact on Producer Price Indices (PPI). The Office for National Statistics (ONS) estimated that EBRS reduced the annual input inflation rate in October 2022 by 0.2 percentage points, with its influence noted in the PPI up to April 2023.

While there was strong evidence of a direct causal impact of energy prices on the PPI, evidence is less strong on the indirect impact of the schemes on overall rate of inflation (CPI). Survey and interview findings with various stakeholder groups triangulate to suggest that, for a minority of NDOs with certain characteristics, the schemes (EBRS in particular) had a reported impact on reducing the need to pass on energy costs to consumers through increased prices of goods and services. This was more likely to be reported by energy intensive industries, where energy bills account for a higher proportion of operating costs.

The rate of business insolvency declined after the schemes were introduced. While this alone does not establish direct attribution, when triangulated with insights from primary research, the evidence suggests that the schemes contributed to reducing the risk of insolvency for some types of NDOs. Smaller organisations, those operating in sectors with high energy usage, those with low profit margins, and charities were observed to be types of NDOs with reduced risk of insolvency.

Triangulation of findings across the analysis of redundancy rates, surveys and interviews with various stakeholder groups (including NDOs, trade bodies and energy suppliers), points to the schemes mitigating redundancies amongst some types of NDOs. While the majority of NDOs were able to adapt to higher energy bills without implementing redundancies, there is strong evidence that scheme support was a necessary contributing factor to mitigating redundancies amongst NDOs with energy costs that were a high proportion of their overall operating costs, and ETIIs in particular. IO modelling estimates that the non-domestic support schemes helped to protect up to 132,000 jobs, with around 125,000 attributed to EBRS and 7,000 attributed to EBDS.

The evaluation also explored the effect of the schemes on stabilising energy prices and reducing uncertainty.[6] As energy prices increased in late 2021, uncertainty and energy prices became more strongly correlated, particularly for short-term energy prices. However, following the introduction of support, the correlation between energy prices and uncertainty weakened. By stabilising energy costs and reducing the immediate pass-through of wholesale price fluctuations, the schemes helped protect NDOs from extreme price shocks. This provided a more predictable pricing environment, reducing market stress, and enhancing overall energy market stability. The observed decline in uncertainty suggests the support helped foster resilience and improve competitiveness in the energy market.

[6] In this context, 'uncertainty' refers to data from the Bank of England's Decision Maker Panel (DMP). The results are based on surveys and are representative of UK businesses. Further information is available at: Tracking the views of British businesses: evidence from the Decision Maker Panel | Bank of England

The provision of support was expected to improve the international competitiveness of UK NDOs, which may have been hampered by energy cost shocks. This was especially the case for the EBDS for ETII scheme, which directly targeted NDOs that were expected to be more at risk of overseas competition for their products and services. The perceived impact of EBDS for ETIIs on international competitiveness varied; around a third (35%) of recipients reported that, without it, their organisation would have experienced greater difficulty competing internationally, while three fifths (61%) said they would not have faced issues.

Based on IO modelling, the support schemes contributed to avoiding an under-consumption of energy. This is associated with an avoided loss of output of up to £21.6 billion compared to a counterfactual of no support. It also resulted in emissions being around 4.35 million tonnes of CO_2 higher than would have been expected in the absence of support. This does not mean that energy consumption increased compared to the pre-crisis level. Instead, it means that energy consumption did not decrease as much as we would have expected it to during the crisis in the absence of the schemes. In addition, primary research revealed that some NDOs had taken steps to reduce energy consumption and improve energy efficiency.

Findings from the surveys of NDOs reveal that between winter 2022-23 and winter 2023-, around two-thirds (63%) of NDOs maintained their product or service offering, a further fifth (19%) increased their offering and nine per cent reduced their product or service offering. Where the latter was the case, over half of these NDOs (53%) considered energy prices to be a factor.

Value for Money

The evaluation assessed the value for money of the schemes through a social cost-benefit analysis (CBA). The CBA provided strong evidence that the schemes generated social benefits in excess of their costs, with a net benefit of £19.69 billion and a benefit-cost ratio of 11.39 when considering wider economic and social effects. This benefit-cost ratio is high on account of excluding discounts disbursed because these are transfer payments, which were the majority of scheme costs, as well as benefits being calculated based on IO modelling which provides an upper-bound of benefit estimates. While uncertainties exist in any economic evaluation, the weight of evidence strongly supports the conclusion that these schemes represented good value for money. The discounted energy prices under the schemes allowed NDOs to maintain a higher level of energy consumption and associated economic activity, contributing positively to overall economic and social welfare.

1. Introduction

This report presents the findings from the evaluation of Non-Domestic Energy Affordability support schemes, delivered between 2022 and 2024 to mitigate the impact of increased energy bills on non-domestic organisations (NDOs). The evaluation assessed the effectiveness of scheme design and implementation, stakeholder awareness and perceptions, the impact of support upon recipients and the overall value for money of the interventions.

This report is structured into seven chapters. The Introduction chapter provides the background, evaluation objectives, and methodology. Background and overview of the schemes chapter details the intended processes, timelines, overall expenditure, and communications related to the schemes. The Scheme implementation chapter discusses key findings on scheme design, stakeholder roles, application processes, stakeholder involvement, promotion, implementation experiences, and scheme closure. The Awareness and understanding chapter focuses on the awareness of the schemes, receipt of support, understanding of the schemes, and pass-through requirements. The Organisations' experience of support chapter examines the experiences of receiving support, perceptions of the support, and reported pass-through activity. The Impact of support chapter analyses the mitigation of energy bill increases, financial resilience, reduction of insolvencies and redundancies, market stability, and secondary impacts. Finally, the Value for money chapter assesses the costs, benefits, conclusions on cost-benefit analysis, and limitations.

1.1. Background

Prices for electricity, gas and other fuels in the UK and Europe started increasing during the summer of 2021 before peaking in the winter of 2022. This was initially caused by international supply chains readjusting when economies reopened after COVID-19 and was further exacerbated by the effect Russia’s invasion of Ukraine had on international energy markets.

In response, the UK government launched a series of energy affordability schemes between 2022 and 2024 to mitigate the impact of increased energy bills on domestic consumers and Non-Domestic Organisations (NDOs). This report focuses solely on the schemes designed for NDOs, which include private sector businesses, public sector bodies and voluntary sector organisations. The domestic schemes are examined in a separate evaluation. Three energy affordability schemes were designed and implemented specifically to support NDOs.

- **Energy Bill Relief Scheme (EBRS)** provided a discount on the unit price of electricity and gas between October 2022 and March 2023, using a volumetric mechanism comparable to the domestic Energy Price Guarantee (EPG). Discounts were applied automatically to energy bills for the majority of NDOs. Where discounts could not be applied automatically, NDOs were required to apply for the support. Under this scheme, discounts were applied to at least 2.9 million meters, amounting to a total value of £7.526 billion.

- **Non-Domestic Alternative Fuel Payments (NDAFP)** provided support to NDOs that used fuels other than electricity and gas between February and June 2023. The scheme did this through two mechanisms: a flat payment of £150 (issued automatically) and a top-up payment of between £750 to £5,800 for organisations with the highest usage of kerosene (organisations needed to apply for this support). Under this scheme, 407,000 organisations received payments, amounting to £62 million.
- **Energy Bills Discount Scheme (EBDS)** replaced EBRS on 1 April 2023 and provided a discount on the unit price of electricity and gas until 31 March 2024. The scheme was designed to provide volumetric support to NDOs in the 12 months after the closure of the EBRS, but at a lower level. Discounts were applied automatically to energy bills for the majority of NDOs. Heat Network Operators (HNOs) and Energy and Trade Intensive Industries (ETIIs) were able to apply for higher levels of support. Under this scheme, discounts were applied to around 335,000 meters, amounting to a total value of £405 million.

Further detail on the context in which non-domestic energy affordability schemes were designed and their intended processes is available in Chapter 2.

1.2. Evaluation objectives

The Department for Energy Security and Net Zero (DESNZ) commissioned IFF Research, Technopolis and Cambridge Econometrics to evaluate the schemes. The overarching aims of the evaluation were to:

- Understand how the interventions were implemented, including the effectiveness and consistency across recipient groups of the delivery mechanisms employed.
- Explore awareness, understanding, perceptions and experiences of the interventions among different recipient groups and suppliers.
- Assess the impacts of the interventions, including short-term changes made by organisations and indicators of longer-term changes.
- Assess the value for money of the Non-Domestic Energy Affordability policies.

1.3. Methodology

Process, impact and economic evaluations were conducted using a mixed-method approach, incorporating theory-based analysis, quantitative surveys, qualitative interviews, quantitative modelling and secondary data analysis. A significant challenge of the evaluation was the lack of a natural counterfactual, which made it difficult to determine what would have happened in the absence of the interventions. In addition, there was a lack of suitable data and time series on which to develop a quasi-experimental methods approach. Therefore, the overarching evaluation method employed to understand the contribution of the schemes to impacts was contribution analysis.

The evaluation was conducted in two stages, beginning in September 2023 and concluding in March 2025. Stage 1 covered EBRS discounts which were applied between October 2022 and March 2023, as well as NDAFP discounts, which were applied between March 2023 and June 2023. Stage 2 focussed on EBDS discounts, which were applied between April 2023 and March 2024. IFF created a bespoke panel for the NDO surveys using a stratified random sampling approach. The sample was primarily sourced from the Inter-Departmental Business Register (IDBR) and supplemented with samples from commercially available and charity regulator databases The details of successful applicants for the EBDS higher rate discount for HNOs, the NDAFP flat payment and top up payment and the EBDS for EII scheme were used as the sample frames for these groups. A summary of the data collection and analysis methods employed is provided below. Further detail is available in the technical annex.

1.3.1. Theory-based evaluation approach

The evaluation used a theory-based evaluation approach to assess the outcomes and impacts of the schemes. Theories of Change (ToC) were developed for the portfolio of schemes. The ToC describes the causal pathways to impacts in the scheme logic models, and the main assumptions and external factors or risks that may affect the ability of the scheme portfolio to achieve intended impacts.

Contribution Analysis (CA) was undertaken to assess the contribution that the schemes have made to the impacts identified in the ToC. This approach provided a framework to support the triangulation of evidence across all primary and secondary data sources and to assess the strength of evidence regarding the extent to which the schemes contributed to their intended impacts. The CA has been used to form overall conclusions on the contribution of the schemes to each type of impact.

Detail on the contribution analysis and development and use of the Theory of Change is included in Annex C: Theory of Change and Contribution Analysis.

1.3.2. Quantitative surveys

A series of telephone surveys were conducted with NDOs over the course of the evaluation to provide insight into their perceptions and experiences of energy affordability schemes, including their reported impact. The surveys targeted respondents who were responsible for their business' energy usage and expenditure.

Tables 1.1 below provides an overview of the achieve sample sizes.

Table 1.1 Overview of Stage 1 and 2 survey samples achieved

	Stage 1 Sample issued	Stage 1 Completes	Stage 1 Response rate	Stage 2 Sample issued	Stage 2 Completes	Stage 2 Response rate	Longitudinal completes
NDOs	56,646	3,900	7%	50,452	3,900	8%	1,143
HNOs	555	155	28%	804	151	19%	48
NDAFP	322	108	34%	N/A	N/A	N/A	N/A
EBDS for ETIIs	N/A	N/A	N/A	1,756	218	12%	N/A

Table 1.2 Stage 1 and 2 quantitative survey timings

	Stage 1 Start date	Stage 1 End date	Stage 2 Start date	Stage 2 End date
NDOs	7 November 2023	22 January 2024	9 May 2024	13 September 2024
HNOs	15 November 2023	13 December 2023	22 July 2024	22 November 2024
NDAFP	2 February 2024	5 March 2024	N/A	N/A
EBDS for ETIIs	N/A	N/A	23 July 2024	22 November 2024

1.3.3 Qualitative interviews

Qualitative interviews were conducted with a wide range of stakeholders between January 2024 and January 2025. These interviews were undertaken to obtain in-depth insights into the perceptions and experiences of recipients and stakeholders involved in the design and implementation of support. In total, 407 qualitative interviews were conducted as part of the evaluation.

- 296 follow-up interviews were conducted with organisations that participated in the longitudinal survey of NDOs, NDAFP applicants and EBDS for ETII applicants (140 in Stage 1 and 156 in Stage 2).
- 83 interviews with stakeholders involved in the design and implementation of the schemes, including scheme administrators, regulators, energy suppliers and DESNZ staff (44 in Stage 1 and 39 in Stage 2).
- 20 follow-up interviews with HNOs that participated in the HNO surveys (9 in Stage 1 and 11 in Stage 2).
- Five interviews with trade bodies that supported raising awareness of the schemes in the heat network sector (Stage 1) and three interviews with trade bodies of ETII sectors (Stage 2).

Table 1.3 Stage 1 and 2 qualitative interview timings

	Stage 1 Start date	Stage 1 End date	Stage 2 Start date	Stage 2 End date
NDOs	16 November 2023	19 January 2024	11 July 2024	14 October 2024
Scheme delivery stakeholders	11 December 2023	31 January 2024	19 August 2024	23 January 2025
HNOs	11 December 2023	31 January 2024	19 August 2024	21 October 2024

1.3.4 Analysis and modelling of secondary data

A range of data sources were used to provide descriptive data on the scale of potential impacts as well as conducting modelling to assess the impacts of the schemes, where feasible. The data used is shown in Chapter 4 of this annex, and includes: ONS demographics data, Bank of England borrowing and uncertainty metrics and the Inter-Departmental Business Register (IDBR).

The modelling focused on two main channels by which the schemes were expected to mitigate the effect of increased energy bills on organisations and the economy:

Increased uncertainty

This analysis aimed to understand the extent to which the energy crisis and the introduction of the NDEA schemes translated into a change in economy-wide uncertainty. Uncertainty was expected to increase during the energy crisis as energy prices and volatility increased, and planning for costs became more challenging. The schemes aimed to provide relief to Non-Domestic Organisations (NDOs) against these price increases so, after their implementation, uncertainty was expected to stabilise and decrease.

The uncertainty analysis included econometric analysis linking variations in a set of uncertainty indicators with variations in wholesale energy prices. This analysis controlled for indicators that are correlated with uncertainty but not with wholesale energy prices. The analysis then examined whether variations in uncertainty induced by wholesale prices could explain variations in other key outcome variables such as employment, GDP, and financial health.

Time series analysis was also used to assess whether the schemes had any causal impact on uncertainty. Within this analysis, a combination of Autoregressive Integrated Moving Average (ARIMA) and Vector Autoregression (VAR) modelling was employed. To extract meaningful trends from the meter level data, panel regressions were fitted to the firm-level data to evaluate whether the schemes had a causal impact on financial health.

Impact of higher energy bills on the economy and organisations

This analysis aimed to understand at a macro-economic level, how the energy crisis and introduction of the NDEA schemes affected and spread through the economy. It drew insights on how the schemes' effect on energy prices translated into further economic impacts. This involved creating two scenarios a) one which simulated an energy crisis shock, and b) another which simulated an energy crisis shock coupled with the NDEA schemes' support. The results from these two scenarios were compared against each other to draw insights on the impacts of the schemes' introduction on the economy, including industrial output and GDP. This analysis included:

- **Input-Output (IO) modelling.** This method uses IO tables, which offer a snapshot of the economy's structure at a specific time to simulate external shocks to the economy. Specifically, IO tables map economic transactions across sectors through a matrix that illustrates how industries interact with one another through supply and demand. IO

modelling can be used to estimate economy-wide impacts and so is commonly used to estimate how an economic "shock" – such as the introduction of an energy support scheme – affects the broader economy in terms of total output and gross value added (GVA). Sector-specific labour productivity (defined as GVA per employment) in each sector was estimated by combining historical output and GVA data from the IO with employment data in full-time equivalents (FTE).

- **Meter-level analysis.** The third analysis was a quantitative analysis of firm-level data outlining the amount of discount received by individual NDOs and their financial health at the time. An econometric regression model was developed to estimate the relationship between the support from the schemes and changes to financial performance.

After reviewing all relevant secondary data sources and firm-level data available, data limitations led to the conclusion that quasi-experimental methods were not feasible for this evaluation. Several natural counterfactuals were explored, such as using other countries as counterfactuals, or comparing across changes of the schemes' support. However, due to similar interventions being implemented across Europe, and the lack of pre-scheme data, these options were deemed unsuitable. Therefore, final value for money analysis was based on IO modelling approach, rather than through these methods.

Further detail on the approach to the modelling and secondary data analysis is included in Annex B: Quantitative Impact Report.

1.3.5 Value for money approach

The evaluation included a value for money assessment of the schemes. The analysis conducted was based on a social cost-benefit analysis approach. Monetary values were assigned to both the costs (operational and administrative) and social benefits (including on the wider economy) of the schemes, allowing for the evaluation of the net benefit in monetary terms, compared to a counterfactual scenario in which the schemes were not introduced.

1.3.6 Limitations

As with any evaluation approach, there are some limitations with the methodological approach, which are summarised below:

Theory-based evaluation design

As an overarching approach the use of contribution analysis allowed for an assessment of the contribution of the portfolio of schemes to outcomes for organisations and the economy. However, the Contribution Analysis approach was less able to assess impacts when disaggregated by the NDAFP and HNO schemes. These schemes involved much smaller levels of support (e.g. payments of £150 for the baseline NDAFP) which was not likely to have made a material difference to organisations' risk of redundancy, insolvency, or passing on costs of energy to prices of goods and services. In addition, evidence on the impacts of the NDAFP and HNO schemes is relatively limited (in comparison to EBRS and EBDS). Findings are primarily based on self-reported survey and qualitative interview findings. However, these do provide useful insights on benefits of the schemes, as detailed in this report.

The primary and secondary data provided valuable insights into the implementation of support schemes, the experiences of recipients and suppliers, and their impacts. However, there were limitations in the secondary data used in the analysis and the primary evidence collected:

Primary data collection

- **Sub Scheme Base Sizes:** Sub-schemes with more niche target populations were more difficult to pick up in the broader NDO survey. To address this, additional targeted surveys were conducted, enhancing data representativeness and insights. However, base sizes remained low, particularly for those in receipt of non-standard case elements of EBRS and EBDS, as well as for NDAFP, limiting the generalisability of some of these findings.
- **Awareness and Understanding:** To be able to helpfully discuss the schemes, respondents needed to be aware of them. The surveys used routing to ensure only eligible NDOs who were aware of them were asked certain questions. Low awareness and understanding of support schemes resulted in small base sizes for some survey questions. This limited analysis as some base sizes are too low to be considered representative of the wider population of recipients.
- **Recall:** Stage 1 surveys were conducted a substantial time after EBRS and NDAFP stopped providing support to NDOs (these schemes ended in March 2023 whilst the surveys were conducted in late 2023 and early 2024, respectively). Therefore, respondents were asked survey questions about their experience of schemes several months after the schemes completed. In addition, the qualitative interviews were conducted even later and given the level of detail covered in the topic guides, this may have prompted more issues with recollection for some organisations, where respondents struggle to remember details of their experiences during the schemes. In Wave 2 surveys, there was a higher chance of knowledge loss as individuals involved in applying for or receiving schemes had sometimes left the organisation.
- **Non-Applicants and unsuccessful applicants:** Limited evidence was collected from organisations that were eligible for application-based support schemes but either did not apply for or were unsuccessful after applying for support. This was due to a low incidence of non- or unsuccessful applicants in the main surveys (which in itself was due to a low incidence in the general NDO population). This also affected numbers interviewed for the qualitative research, although there were some non-applicants included in this research. Limited evidence from these groups means the evaluation may not capture a full picture of the schemes, including potential barriers to accessing support or how the characteristics of that population varied from successful applicants.
- **Public Sector Survey Responses:** Although, difficulty securing sufficient responses due to sample churn and difficulty reaching contacts was a challenge across participant groups, it was particularly challenging with public sector organisations. Survey timing overlaps with the 2024 General Election added additional barriers. Despite these challenges, 381 public sector survey interviews were completed, providing a robust analysis base.

- **Estimates of the extent of pass-through to heat network consumers and other end users**: It was not part of the scope of this contract to conduct interviews with households or other domestic end users of non-domestic energy supply. Some of this evidence is included in the GB domestic energy affordability interim evaluation.[7] However, the domestic research was not able to provide a reliable estimate of pass-through to heat network consumers for several reasons.[8] This evaluation of the non-domestic schemes covered the Heat Network Operators' views of their pass-through to HN consumers.

Secondary data analysis and modelling

- **Meter Level Data:** The greatest issue presented by the data is that pre-scheme data was not available at meter level. For EBRS, there was no pre-scheme data available at meter level for counterfactual analysis. There was no robust method of estimation (backcasting) that could be used, given the properties of the EBRS meter data which cannot be used as a time series and lacks reliable estimates on discount provided and energy consumption. Beyond this, the EBRS and EBDS meter level data had serious limitations, including inconsistent indicators and missing data, which further made it unsuitable for quasi-experimental analysis
- **Data Frequency and Updates:** Secondary data sources vary in frequency and update schedules, with some indicators only available quarterly or yearly. Although data was last accessed in January 2025, some indicators had earlier last observations due to availability issues.
- **Input-Output (IO) Modelling:** The IO scenario modelling used the latest input-output tables from the ONS available from 2018-2020, which may not reflect the current economic structure. IO models are static, do not account for price changes or capacity constraints, and ignore international relations, potentially missing spillover effects. The limitations of IO modelling mean this approach can significantly overstate impacts, and therefore the impacts presented from the IO model should be considered an upper bound.

Value for money analysis

Detailed discussion of the limitations of the VfM methodology appear in Chapter 7 of this report, but key issues include:

- **Changes in overall economic output:** The primary benefit estimated in monetary terms – changes in overall economic output – was estimated using input-output (IO) modelling. As noted above and in the discussion of limitations in Chapter 4 of the technical annex on secondary data collection and analysis, there are various limitations of the IO analysis. The IO modelling is likely to have overestimated the impacts to a degree so are therefore reported as an upper bound as part of the CBA.
- **Benefits for schemes individually:** The limited ability to estimate benefits for schemes individually may obscure differences in the net benefit of each scheme.

[7] See Domestic energy affordability support schemes in Great Britain: interim evaluation
[8] See page 23 of the GB report.

- **No Exchequer value:** as benefits to the Exchequer cannot be calculated, exchequer value cannot be calculated. As a large majority of costs for the schemes consisted of discounts disbursed, which would be included in Exchequer costs but not in social cost, the view of the value for money of the schemes is limited.

2. Background and overview of the schemes

This chapter covers the design of non-domestic energy affordability support schemes. It begins by outlining the intended processes for each scheme, before presenting an overall scheme timeline, outlining the overall scheme expenditure, and the communications DESNZ published on the schemes.

2.1 Schemes' intended processes

The non-domestic energy affordability support schemes started to be launched in late 2022 to support UK non-domestic organisations (NDOs) (private sector businesses, public sector bodies and voluntary sector organisations) with rising energy costs during an extended period of higher energy prices and underlying inflation in the UK economy.

NDOs are not subject to a consumer energy price cap and typically hold bilateral negotiated contracts with suppliers and so were directly exposed to the volatility of the energy market. The government therefore introduced a range of schemes to support NDOs. These comprise the Energy Bill Relief Scheme (EBRS); Non-Domestic Alternative Fuel Payments (NDAFP) and the Energy Bills Discount Scheme (EBDS).

2.1.1 EBRS and EBDS

The **Energy Bill Relief Scheme (EBRS)** provided energy bill relief between 1 October 2022 and 31 March 2023 to NDOs in Great Britain and Northern Ireland on a licenced energy supply that met one or more of the following criteria:

- On existing fixed price contracts that were agreed on or after 1 December 2021
- Signing new fixed price contracts
- On deemed / out of contract or standard variable tariffs
- On flexible purchase (or similar) contracts
- On variable 'Day Ahead Index' (DAI) tariffs (Northern Ireland scheme only).

The main schemes (EBRS and EBDS) were delivered through licensed energy suppliers. This mirrored the approach taken for the domestic Energy Price Guarantee. Delivering through energy suppliers also enabled support to be delivered to organisations automatically. An automatic delivery approach avoided the need for applications, which maximised the chance that support would reach organisations, reduced the need for extensive awareness-raising activity, avoided the resource requirements involved in processing and assessing applications, and reduced fraud risk.

Table 2.1 EBRS: Government Support Price and maximum discount by energy source[9]

Energy source	Government supported price per MWh	Maximum discount per MWh
Electricity	£211.00	£345.00
Gas	£75.00	£91.00

The **Energy Bill Discount Scheme (EBDS)** replaced the EBRS on 1 April 2023 and provided energy bill relief to NDOs in Great Britain and Northern Ireland on a licenced energy supply until 31 March 2024. The scheme was designed to provide a lower level of support to NDOs in the 12 months after the closure of the EBRS, while continuing to limit exposure to volatile energy markets.

EBRS discounts were calculated by comparing the average expected wholesale price per unit of electricity and gas for the duration of the scheme (the Reference Wholesale Price (RWP)) to the wholesale price per unit of electricity and gas the government deemed to be 'affordable' (the Government Supported Price (GSP), with a maximum discount set (see Table 2.1). EBDS discounts were calculated by comparing the RWP to a price threshold, set with reference to the support provided for domestic consumers (see Table 2.2). Organisations experiencing energy costs below this level did not receive support. Eligible non-domestic customers received a per-unit discount, subject to a maximum discount (see Table 2.2).

Table 2.2 EBDS: Government price threshold and maximum discount by energy source[10]

Energy source	Government price threshold per MWh	Maximum discount per MWh
Electricity	£302.00	£19.61
Gas	£107.00	£6.97

To note, final unit prices paid by non-domestic customers in receipt of EBRS or EBDS are likely to have differed from each other due to other supplier charges (e.g. standing charges) that reflected variation in network charges, operating costs, etc.

The rationale for this approach to discount setting was to ensure that customers were only eligible for support if they were exposed to the volatility of rising energy prices in the market during the crisis. This meant that customers paying lower rates due to long-term fixed contracts would not receive the maximum discount and, in cases where they were paying less than the

[9] GOV.UK, "Energy Bills Discount Scheme." Last modified 24 July 2023

threshold price, no discount at all. This approach was intended to distribute funding to the organisations most impacted by the crisis.

DESNZ provided funding to suppliers up front, based on estimated consumption, such that discounts could be applied directly to customers' bills. This was intended to prevent suppliers from carrying the shortfall that would have occurred if payments were made in arrears. Should support payments have been overestimated, the licensing framework under Ofgem (or UREGNI in Northern Ireland) enabled DESNZ to clawback funds.

2.2.2 Non-standard (NS) cases

EBRS NS covered organisations that procured energy from licence-exempt suppliers. DESNZ staff reported, a key challenge with this sector was that the scale of the NS sector was unknown during initial stages. There was an understanding that the sector included energy supplies that originated in the gas and electricity grids, in addition to supplies that came from alternative sources such as energy-from-waste, biogas and biomass. However, it was unclear how many organisations fell within this category and so may have been impacted by being excluded from the main schemes.

EBDS similarly included an NS scheme, also based on applications with supporting evidence. However, to simplify applications under EBDS, eligibility checks under EBRS were carried forward into EBDS, to avoid organisations needing to resubmit evidence to confirm their eligibility for the scheme.

2.2.3 Alternative fuels (NDAFP)

Where NDOs were off the gas grid and used alternative fuels for heating (e.g. kerosene), they were left unsupported by EBRS for their heating costs. Therefore, an additional scheme for alternative fuel users was necessary. Again, this mirrored the approach taken by the domestic schemes, where a dedicated Alternative Fuel Payment (AFP) scheme was introduced.

In contrast to the main schemes, NDAFP was based on a flat payment of £150 per non-domestic property. Higher levels of support were available through a top-up scheme, where customers could provide evidence (through an application) that their property consumed more than 10,000 litres of kerosene per year. This higher support level was applied across four tiers based on consumption level, from £750 to £5,800 (with higher payments for the highest users).

NDAFP flat payment was typically delivered to organisations automatically, via their electricity supplier, for the same rationale detailed previously. Where customers were off the electricity grid, they could apply for the support.

As noted from DESNZ interviews, the diversity of this customer sector was high (including farms, schools, libraries and NHS trusts) and they were difficult to specifically identify and reach through direct communications. Ultimately, the approach taken was to use existing data for off-gas grid properties and work with electricity suppliers to validate eligibility. While this maximised the chance that alternative fuel users would receive automatic payments, it did

result in some NDAFP payments being made to off-gas grid consumers who used electricity for heat (e.g. heat pumps).

Suppliers were paid in advance, then had a timeframe to disburse funds to customers by 30th June 2023. A final reconciliation process was then added, with suppliers providing an end-of-scheme report by 31st July 2023. Following this, the Department fully reconciled actual payments against estimated allocations and wrote to suppliers to confirm any balancing figure for remittance or recovery. Any undisbursed funds were required to be returned by suppliers to the Department within five working days of receipt of a reconciliation notification[11].

2.2.4 EBDS for Energy and Trade Intensive Industries

DESNZ staff reported that a treasury-led review recognised that certain types of organisations may need higher levels of ongoing support following the closure of EBRS, including those that were in energy and trade intensive industries (ETIIs). Such organisations spanned a wide range of sectors, including mining, manufacturing, arts, entertainment and recreation.

DESNZ interviews highlighted that identifying and defining these organisations was initially challenging. HMT ultimately defined eligible organisations using UK Standard Industrial Classification of economic activities codes (SIC codes), which provide a standardised classification of organisations based on their activity. To be eligible for additional funding under this sub-scheme, organisations needed to be able to evidence that at least 50% of their annual revenue (or, for public sector organisations, 50% of their floorspace usage) fell under at least one of a list of eligible SIC codes. The nature of this eligibility criteria required that this scheme be application-based. An overview of application processes is provided in the next sub-section.

The use of SIC codes was felt by some DESNZ interviewees to be a problematic basis for eligibility, as these are not designed to be an accurate reflection of the energy or trade intensity of a business and are not required to be updated as businesses grow. Furthermore, there was some suggestion that the selection of eligible SIC codes led to outcomes where targeted funding did not always reach the businesses that needed it.

Organisations that proved their eligibility as ETIIs were entitled to higher discount levels than the baseline EBDS as follows:

- Electricity: £89 per MWh with a price threshold of £185 per MWh
- Gas: £40 per MWh with a price threshold of £99 per MWh

Payments were subsequently handled through suppliers or license-exempt energy providers.

2.2.5 EBDS for Heat Network Operators

While most domestic households benefited from schemes like the Energy Price Guarantee (EPG), customers using heat networks received support through their heat network operator

[11] GOV.UK, "Non-domestic Alternative Fuel Payment Scheme: guidance for Electricity Suppliers in Great Britain." Last modified 11 April 2024

(HNO),[12] who typically received automatic support under EBRS. As EBRS ended earlier than EPG, these households would have been left unprotected and therefore required further support. Although HNOs qualified for baseline EBDS support, this was insufficient to provide support comparable to domestic schemes. Therefore, higher support for HNOs supplying domestic customers was necessary to ensure these customers received equivalent aid.

DESNZ staff reported that a key challenge in the design process was that heat networks typically charge customers for heat delivered, not gas (or similar fuels) consumed. High variations in the efficiency of different heat networks can lead to high variation in the unit cost of heat paid by heat network consumers. This meant that ensuring an equitable level of support for customers on different networks was challenging. The way DESNZ overcame this challenge was to work out what efficiency a heat network would need to have to be comparable to a gas boiler, considering pre-crisis consumption and costs. This enabled a calculation of pre-crisis heat costs. From this, they were able to work backwards and calculate the level of discount required for each heat network. Discount levels were still based on wholesale prices, as with other schemes, and aimed to bring the retail energy price down to a target minimum supply price of £340 per MWh for electricity and £78.30 per MWh for gas.

Applications to this sub-scheme were required by law from all HNOs with domestic customers, even in cases where their current contract prevented them from receiving the discount. The rationale for this legal requirement was that HNOs may need to access support at a later date (for example, if their contract changed). HNOs were then required to pass a 'just and reasonable' amount of the discount through to their customers (covered in more detail in the 'Pass-through' section later in this chapter). DESNZ interviews highlighted that an alternative approach would have been to provide support directly to domestic heat network customers. However, this was deemed inefficient and unworkable due to the large number of domestic heat network customers involved (estimated over 470,000)[13] and the need to apply different discount rates for each heat network.

> *"Taking it down to the heat network level massively limits the number of interactions that you need to have. You get much more efficiency in terms of distributing that benefit, because it becomes the heat network's responsibility to distribute via the pass-through." (DESNZ Staff)*

The Heat Network Metering and Billing database held by government was insufficient as an evidence source by itself, due to outdated and incomplete data, so applicants were required to provide supporting evidence of their qualifying heat status as part of their application. DESNZ reported multiple cases of applicants struggling to provide the requested information due to confusion over what was being asked, and a lack of DESNZ understanding of what evidence was available to HNOs.

[12] These include landlords, subcontracted metering companies and dedicated energy service companies
[13] GOV.UK, "Heat Networks registered under the Heat Network (Metering and Billing) Regulations statistics: December 2022." Last modified 9 November 2023

A ‘workaround’ developed by DESNZ was a ‘commercial arrangements diagram’ that set out all the key entities in the HNO’s commercial structure – the energy supplier, the HNO and the customers – with requests for details against each entity. This was felt by DESNZ to be a simpler solution to providing evidence that an HNO qualified for the scheme. However, DESNZ reported that HNOs still found this diagram confusing, and many required additional support to understand what was needed from them, particularly for smaller HNOs with limited administrative capacity.

2.2 Scheme timeline

The timeline below shows the key dates in the implementation of the schemes:

2021

- **Summer 2021:** Energy prices began to rise as economies reopened post-COVID-19.

2022

- **February 2022:** Russia invaded Ukraine, exacerbating energy price rises.
- **Early 2022:** The government started designing support schemes to mitigate the impact of rising energy prices.
- **October 2022:** Start of the Energy Bill Relief Scheme (EBRS).

2023

- **February - March 2023:** Initial £150 payments under the Non-Domestic Alternative Fuel Payment (NDAFP).
- **March 2023:** End of the Energy Bill Relief Scheme (EBRS).
- **April 2023:** Start of the Energy Bills Discount Scheme (EBDS).
- **April - June 2023:** Top-up payments under NDAFP for large users of heating oil (kerosene) based on higher usage.

2024

- **March 2024:** End of the Energy Bills Discount Scheme (EBDS).

Table 2.3 Overall scheme expenditure

Scheme	Expenditure (£ million)	Scheme end date
EBRS	**7,526**	**31st March 2023**
NDAFP (flat payment)	61	30th June 2023
NDAFP (top-up payment)	1	30th June 2023
EBDS	**406**	**31st March 2024**
Baseline EBDS support (including non-standard cases)	116	31st March 2024
EBDS support for ETIIs	176	31st March 2024
EBDS support for HNOs	113	31st March 2024

2.3 Communications

Effective and timely communication was central to the delivery of the non-domestic energy affordability schemes. Initial communications about support came when EPG was announced in early September 2022.[14] It was made clear that that equivalent support for businesses and public sector organisations would also be made available, with EBRS commencing the following month.

Government communications about the non-domestic schemes were primarily focused on ensuring suppliers understood their obligations to apply discounts transparently and pass them on to eligible customers. Regular engagement sessions and direct correspondence helped clarify technical aspects of the schemes and supported consistent implementation across the sector. Guidance for EBRS[15], EBDS[16] and NDAFP[17] was available on GOV.UK for non-domestic organisations, covering eligibility criteria, how the schemes operated, and supplier obligations. Specific guidance for Northern Ireland and sub schemes was included where relevant.

Beyond the guidance and supplier engagement, DESNZ additionally carried out communications activities to encourage HNOs to apply for support before the EBDS scheme's closure date. Additionally, regulators promoted the schemes through various channels (discussed further in section 3.5.2).

[14] EPG Press Release (September 2022)
[15] Energy Bill Relief Scheme Guidance
[16] Energy Bill Discount Scheme Guidance
[17] Non-Domestic Alternative Fuel Payment Guidance

3. Scheme implementation

This chapter covers the implementation of Non-Domestic Energy Affordability support schemes. Specifically, it examines how suppliers and stakeholders navigated the implementation process and the perceptions and experiences of those that received support.

Key findings

- The unprecedented pace at which the schemes needed to be delivered resulted in **challenges for suppliers in the early stages of implementation**. They reported large-scale internal resource allocation shifts and changes to operating systems being implemented at a high cost to their organisations.
- Once schemes were established, suppliers had **mixed experiences of calculating baseline discounts for EBRS and EBDS**. Some felt that calculations were straightforward and easy, while others encountered challenges due to the high level of variation in their customer base and energy contracts.
- Overall, the administrators responsible for processing electricity and gas reimbursement claims from suppliers felt the **claim reimbursement processes for both EBRS and EBDS worked well**. This was supported by suppliers, who reported that reimbursements for gas and electricity claims were generally processed accurately and on time.
- **Scheme closure experienced challenges with data reconciliation**. For EBRS and EBDS, a key activity in scheme closure was calculating actualisation rates (i.e. the percentage of discounts based on actual meter readings versus estimated readings). Suppliers faced issues with this process due to ‘orphan meters’ and ‘lost meters’. For EBDS for ETIIs and HNOs, a key closure activity for DESNZ involved matching meter numbers in applications with meter numbers held by suppliers. In many cases there were discrepancies between records and issues where customers had changed suppliers since making their initial application.

3.1 Scheme design

The schemes were designed in the context of needing to provide emergency support quickly but equitably to a diverse range of organisations. When the schemes were being developed, there were gaps in pre-existing departmental evidence and expertise around the non-domestic energy customer landscape. As a result, DESNZ staff spoke about a need to find a balance between achieving an acceptable risk profile for the level of support, while getting support quickly to as many organisations as possible. This rapid pace of development and lack of pre-existing evidence and expertise was also reported by DESNZ to be behind the decision to make EBRS a universal scheme.

It was felt that a more targeted design would have been more complex and taken more time to develop than would have been acceptable in the context of the energy crisis. DESNZ staff reported that the business case for EBRS was developed in three weeks, when a process like this would normally be expected to take three months.

> *"If we were doing it again, if we were to do it differently, it's easy to say, 'oh yes, we would have done this or that' but the bottom line is this was a policy that needed to be delivered at pace and therefore, compromises had to be made in order to ensure that it was delivered at pace." (DESNZ staff)*

3.1.1 Lessons from previous government schemes

Scheme design took lessons from other government schemes. Elements of the domestic energy support schemes influenced the design of the non-domestic schemes (e.g. the government supported price under EBRS was based on the implied wholesale element of the EPG).[18] Also, learnings from the COVID-19 support schemes were influential to the DESNZ design teams, in terms of informing the need for robust assessment processes, clear governance and key specialist skills in the right places.

Both DESNZ staff and key stakeholders felt that, prior to the design stages of EBRS and NDAFP, departmental understanding of the non-domestic energy market landscape was low and there was a lack of relevant, existing data sources available to support policy design. Those responsible for designing the schemes had to carry out rapid background research and stakeholder engagement to build an evidence base and gather feedback to support scheme design.

> *"When we first came in, we didn't really know the scale of the problem or who was affected because we didn't have a list of people who were supplying energy in an [unlicensed] way, and Ofgem doesn't hold that list." (DESNZ Staff)*

Learnings from previous schemes helped identify coverage gaps in the proposed design of EBRS. This was particularly the case for non-standard cases (NS), where organisations were procuring their energy from license-exempt suppliers (that were excluded from the initial design of EBRS). This required further, NS-specific research to understand the scale and complexity of these cases.

The ambition to maximise coverage of support to different organisations also led to the need for the Non-Domestic Alternative Fuel Payment (NDAFP) scheme, to provide support for NDOs that used alternative heating fuels, such as kerosene. As above, a period of rapid research was needed to understand the profile of the sector and provide the basis for designing the scheme.

[18] GOV.UK, " Energy Bill Relief Scheme: help for businesses and other non-domestic customers." Last modified 20 March 2023.

3.1.2 Political context in Northern Ireland

Although Northern Irish energy policy is devolved, a lack of a sitting executive during the energy crisis risked Northern Irish organisations being left without support. It was therefore decided that the energy support schemes should be extended to Northern Ireland, to provide support that was equivalent to the schemes in Great Britain.

3.1.3 Context relevant to decisions taken throughout the intervention

As energy prices fell from their peak in early 2023 and forecasts predicted further cost reductions, a HM Treasury-led review concluded that extending EBRS was not appropriate. Instead, it was felt that a lower baseline-level of support, with targeted, enhanced support, would limit the exposure of public finances to future energy cost volatility, while ensuring that key groups were protected. The Energy Bills Discount Scheme (EBDS) was, therefore, introduced to provide a lower amount of ongoing support to the non-domestic sector, with targeted sub-schemes that provided comparatively higher levels of support to energy and trade intensive industries (ETIIs) and heat network operators (HNOs) that serve domestic customers.

According to interviews with DESNZ staff, the need for ETII-targeted support emerged from HM Treasury's concerns that certain UK-based, internationally trading businesses could be at a competitive disadvantage to foreign competitors, whose energy costs were less impacted by the war in Ukraine (e.g. USA) or otherwise whose own governments were providing their own support schemes (e.g. EU states). It was recognised that organisations with high dependence on both energy consumption and trade would likely be exposed to such disadvantages even with the support offered by the core EBDS scheme. This was referenced in the public announcement of the scheme, which stated that "these firms are often less able to pass through cost to their customers due to international competition."[19] DESNZ staff reported that HM Treasury took the lead in many design decisions for the ETII scheme, including the decision to base eligibility on Standard Industrial Classification (SIC) codes, which SIC codes were eligible and how much additional discount would be provided by this scheme. It was the role of DESNZ to action the decisions and manage the scheme.

Similarly, the targeted EBDS scheme for HNOs emerged from the HM Treasury's review recognising that domestic customers of non-domestic heat network operators were not protected by the ongoing domestic EPG. The HNO scheme within EBDS was, therefore, established to provide comparable support to EPG for these customers.

3.2 Overview of the role of different types of stakeholders by scheme

The process evaluation explored how the interventions were delivered, to understand what happened during implementation, and investigated how and to what extent the schemes'

[19] GOV.UK, "The government unveils new "Energy Bills Discount Scheme" for businesses." Last modified 9 January 2023

design and administration supported the delivery of their objectives. The evaluation determined what aspects of the delivery worked more or less well and why.

The process evaluation consulted different suppliers, stakeholders, and recipient groups on their awareness, experiences, and perceptions of the relevant schemes. These stakeholders are referenced throughout this paper. Table 3.1 provides an overview of key stakeholders and their roles.

Table 3.1 List of stakeholders and roles

Name	Role
Regulators	The regulators of the gas and electricity markets in Great Britain and Northern Ireland.
Office of Gas and Electricity Markets (Ofgem)	Support DESNZ in compliance in Great Britain, enforcement actions where an energy supplier could be in breach of scheme obligations, and fraud and miscalculation avoidance activities.
Utility Regulator Northern Ireland (UREGNI)	Supported DESNZ in compliance in Northern Ireland.
Administrators	Responsible for processing supplier reimbursement for gas and electricity claims through the schemes.
Xoserve	Processed supplier reimbursement claims for gas.
Elexon	Processed supplier reimbursement claims for electricity.
Third-party application administrators	Private contractors that supported the processing of applications for the schemes that used them. This includes Hinduja Global Solutions, which processed ETII and Heat Network applications for EBDS, and Arvato, which processed NDAFP top-up payments and edge cases.
Trade bodies	Trade bodies relevant to the schemes, including trade associations for the liquid fuel distribution industry, for Heat Networks, and for local authorities (which are likely to be operators for Heat Networks in their housing stock).

3.3 Processes involved in application-based schemes

Several schemes required applications by NDOs: EBRS NS and EBDS NS; NDAFP top-up; EBDS for ETIIs; and EBDS for HNOs.

DESNZ reported that considerable effort went into designing ‘friction-free’ application processes. Applications were managed through online portals and applications typically went through iterative testing, internally and externally, with stakeholders providing feedback to improve the user experience. DESNZ also set up dedicated helplines and case workers to

support applicants. In general, application processes were managed by third-party administrators appointed by DESNZ. Application guidance also set out what information applicants would need in advance, to minimise the need for applicants to have to stop and restart applications. Where possible, applications aimed to limit the burden on organisations by reducing the amount of evidence required from applicants. For example, for EBDS NS, by carrying through eligibility status from EBRS NS and for automatically verifying EBDS applications for HNOs where their details were already registered with DESNZ under the Heat Networks Metering and Billing Regulations.

In some cases, application processes were improved after implementation. Notably this included the addition of a 'bulk upload' feature for EBDS HNO applicants, to avoid them having to make multiple applications if they operated multiple heat networks. DESNZ staff noted that the addition of this feature resulted in a significant uptick of applications when it was made available. This surge in applications reportedly presented some administrative difficulties for the third-party administrator as resource to process applications had been concentrated at the start of the scheme, rather than mid-scheme when the bulk-upload process was added.

3.4 Stakeholder involvement in design processes

As previously noted, stakeholder involvement was critical to the scheme design process, particularly to support the departmental understanding and account for the lack of data available at the time of scheme design for the non-domestic energy supply sector. This section explores how different stakeholders supported the design process of the schemes.

3.4.1 Supplier involvement

DESNZ reported that when it was decided that energy suppliers would play a central role in the delivery of the schemes, it became critical to involve them in the design process. DESNZ felt that this was particularly important considering the need for EBRS to be developed quickly. Furthermore, it allowed DESNZ to make use of supplier experience to address departmental knowledge gaps related to the non-domestic energy supply landscape.

DESNZ recognised that the supplier market for non-domestic energy was more complex and diverse than for domestic energy, with a greater number of suppliers (around 100) ranging from micro-businesses up to major energy companies. Suppliers could also be licensed (and regulated by Ofgem and/or UREGNI) or license-exempt, with resultant implications on scheme design and delivery options. DESNZ, therefore, ensured that supplier engagement activities included licensed and license-exempt suppliers of varying sizes, to design schemes that would work across the spectrum of non-domestic energy suppliers.

One way suppliers were involved was through weekly sessions between suppliers and DESNZ during the design of EBRS. These typically focused on a specific theme (e.g. legislation, guidance, payment systems). These sessions allowed DESNZ to share draft documentation with suppliers to gain feedback and generate learning. Suppliers reported that they found

early-stage workshops, calls and Q&A sessions very positive, and some recognised that feedback provided was taken on board for scheme delivery.

> *"The speed at which the Government acted and the speed at which suppliers were able to respond and establish these schemes to provide essential support to businesses is an achievement." (Supplier)*

For NDAFP, DESNZ staff reported that supplier engagement at the design stage was particularly helpful around understanding the profile and number of eligible customers and billing variations.

> *"What we learned is that there was an incredible diversity of ways in which the energy providers were paying, and the billing timetable differed. Some were quarterly, some were monthly. Some had 18 eligible customers, some had thousands. And there were really quite significant discrepancies between them." (DESNZ Staff)*

Supplier feedback was also sought throughout the delivery stages of the schemes to address areas where scheme design could be improved. DESNZ reported that while supplier feedback was vital to the design process, they needed to ensure that input was balanced and reasonable. Therefore, DESNZ, used network operators Elexon and Xoserve, and regulators Ofgem and UREGNI, to verify and validate supplier feedback as part of their assurance processes.

> *"Also worth noting that we've had, I think, three different assurance reviews over the lifetime, and every time they've interviewed energy providers to get feedback on what is working and what isn't working. And we've taken those recommendations forward." (DESNZ Staff)*

In interviews, there was agreement amongst DESNZ and suppliers that supplier engagement was broadly deemed to have worked effectively during the design process. However, the following areas for improvement were suggested.

Suppliers and DESNZ staff both recognised that supplier engagement could have been more coordinated across schemes. As multiple energy affordability schemes (including domestic schemes) were seeking stakeholder feedback at the same time, this reportedly resulted in periods of increased burden on suppliers.

While the Q&A sessions were generally appreciated by suppliers, some suggested that smaller bilateral sessions would have been helpful in the design stages, as these calls were often attended by more than 100 people and interaction was not always possible. A named contact at DESNZ, rather than a shared email inbox, was one improvement suggested by suppliers. This was later actioned by DESNZ by establishing dedicated Supplier Engagement Leads for each supplier. It was also suggested that higher levels of bilateral engagement, between DESNZ and individual suppliers, during the design process could have better enabled suppliers to provide their input to scheme design. It was felt that this may have avoided the

need for DESNZ to introduce amendments after the schemes were launched, when suppliers found it difficult to make changes:

> *"There is a lack of appreciation from DESNZ on how complicated it is to make changes after we have already implemented a process." (Supplier)*

A concern was raised by suppliers and DESNZ interviewees that engagement activities may have favoured larger suppliers over smaller ones, as larger suppliers were seen to be better resourced to engage, or otherwise were more likely to be aware of engagement activities. While not intentionally excluded by the Department, smaller suppliers may therefore have felt underrepresented in scheme design activities:

> *"We always had a suspicion that some of the larger business suppliers were being consulted about scheme design, whereas some of the medium or smaller size suppliers, such as us, were not." (Supplier)*

Some suppliers felt that the design of schemes led to a tight timeline for delivery, which resulted in costs and negative consequences for suppliers and the relationships with their customers. For example, some reported having difficulties answering their customers' questions in a timely manner because they struggled to get timely answers from DESNZ.

Some stakeholder feedback suggested that, while EBRS was designed in collaboration with suppliers, EBDS did not experience the same level of supplier involvement at the design stage. DESNZ suggested that this may be due to a different, HM-Treasury-led approach to the core design of the ongoing support, with fewer opportunities for DESNZ to involve suppliers.

3.4.2 Regulator involvement

Regulators (Ofgem and UREGNI) reported being well engaged by DESNZ in the design of the schemes. They were invited to attend the supplier meetings mentioned above and had representation on the project board for each scheme.

> *"In terms of our involvement in the scheme, it was really great. There were lots of meetings and DESNZ did work in a very collaborative way with all the stakeholders to try and produce schemes that worked." (Regulator)*

When considering improvements to their involvement, the key theme emergent from interviews related to time and resource pressures. Regulators reported that working at pace to design the schemes was very resource intensive for them, at times attending two or three meetings per day. Timeframes to feedback on policy legislation were felt to be too short (one regulator reported that some draft legislation review timescales were less than 24 hours), which raised concerns by some regulators that potential flaws and gaps could be missed and impact their ability to enforce the schemes.

One regulator commented that having more time to plan and design the schemes could have led to a more holistic approach. This may have resulted in fewer schemes and workstreams

working in parallel, ultimately reducing the resource burden on all stakeholders involved in scheme delivery.

> *"A lot of the problems just came from the fact that everybody had to get this implemented in a very short period of time, and that meant that there were some limitations on how things could be designed and what could be done." (Regulator)*

3.4.3 Administrator involvement

A way in which scheme administrators were involved in the design process was to validate and verify feedback and input from energy suppliers to ensure schemes were designed fairly. Otherwise, scheme administrators reported not being heavily involved in key design stages for administrative elements of the schemes, including the Discount Recovery Claim portal and online application portals for EBDS ETII, EBDS HNOs and NDAFP top-up.

One administrator felt that if they had been more engaged by DESNZ in the design of the Discount Recovery Claim portal, they would have helped to identify and address issues earlier. For example, they suggested they would have recommended that DESNZ build in checks to ensure meter references were entered correctly by suppliers.

3.4.4 HNO trade body involvement

HNO trade bodies generally reported that DESNZ sought their input into scheme design but recognised that this input was limited by the urgency and fast pace of design. It was mentioned that DESNZ were responsive and "did all that they could" within this context. There was, however, some frustration expressed when some trade body suggestions were not incorporated because they were incompatible with government processes.

> *"Things were being decided very quickly, as it was a crisis, and there was not always time to fully consult with industry." (HNO Trade Body)*

> *"Sometimes DESNZ replies to our comments and suggestions that 'things have got to be done in a certain way because that is the way the Government works', which is quite frustrating." (HNO Trade Body)*

In general, the design of EBRS was felt to work better than EBDS for HNOs due to its straightforward implementation involving automatic payments through suppliers. EBDS was felt to be much more labour-intensive for HNOs, due to the requirement to complete applications with supporting evidence that was not always easy to source. Trade bodies added that this additional effort sometimes produced little-to-no benefit for HNOs (e.g. where the HNO had secured a low fuel price, below the discount threshold, but still was legally obligated to register for EBDS).

3.4.5 Northern Irish stakeholder involvement

As described in Chapter 1, Northern Irish energy policy is devolved, meaning that a detailed knowledge of NI energy sector was not initially in place within DESNZ. DESNZ interviewees

reported that establishing the support scheme in Northern Ireland was highly challenging. The team referred to needing to 'start from scratch' as they had no established relationships with key stakeholders in the region and very limited knowledge about the NI non-domestic energy supply landscape.

DESNZ reported that the lack of a functioning NI Executive at the start of scheme design presented challenges engaging directly with their NI counterparts. This meant that DESNZ had to engage with intermediaries, including the NI Department for Communities and UREGNI, who were able to pass communications back and forth during the design process.

To set up the schemes in NI, DESNZ carried out significant stakeholder engagement in a short period of time. DESNZ received feedback from NI stakeholders that this was, at times, uncoordinated and burdensome and that some stakeholders were having to take an entire day to respond to DESNZ requests for input. Aiming to mitigate this, DESNZ assigned dedicated resource to attempt to coordinate communication.

3.5 Stakeholder views of scheme promotion

3.5.1 Suppliers' experiences of communicating schemes to non-domestic customers

Suppliers reported that their communications to customers about the support schemes typically happened through their organisation's website content and through customer service teams. They tended to signpost non-domestic customers to relevant government webpages for guidance and documents. In some instances, suppliers created dedicated customer-facing roles, given that the complexity of the schemes resulted in a significant increase in customer queries.

Suppliers stated that the policy intent to provide support to customers was clear. However, many reported that their customers contacted them with queries regarding eligibility and how the discounts would be applied in practice. One supplier reported that customers on domestic tariffs that owned commercial businesses were uncertain about which schemes they were going to benefit from. In some cases, suppliers reported difficulties responding to customer queries as they were also unsure about operational details of the schemes. Suppliers also reported that DESNZ communications would sometimes get to them later than expected, which delayed the information being passed on to their customers.

> *"There was not really a huge amount of understanding from customers' perspective how the discount was applied." (Supplier)*

3.5.2 Regulators' views on scheme promotion

Regulators reported promoting the schemes through a variety of mechanisms, including directly engaging with NDOs, via industry trade bodies, social media and producing content on their websites with links to relevant government webpages.

A UK regulator highlighted that the Government Notify Service was an effective mechanism used by DESNZ to communicate with suppliers and stakeholders about scheme obligations by providing 'short and punchy' messages and links to detailed guidance. Additionally, promoting the schemes in the Moneysaving Expert newsletter (with over 8 million subscribers) was felt to be a good approach used by DESNZ to raise awareness to NDOs and of pass-through requirements.

In Northern Ireland, there were contextual factors that affected scheme design and stakeholder engagement. There are different companies supplying electricity and gas to commercial customers to those in Great Britain. In addition, at the time of the scheme design and engagement, the Northern Ireland Executive had been suspended, meaning there was no operational government in place to oversee scheme implementation and lead engagement with suppliers in Northern Ireland. DESNZ therefore collaborated with the Utility Regulator for Northern Ireland (UREGNI) to identify relevant energy supply and consumer stakeholder groups to target for scheme communications.

Given the additional contextual factors to consider, and the requirement to implement schemes at pace, some felt this resulted in scheme communications not being tailored as much as they could have been to suppliers and consumers in Northern Ireland. One regulatory stakeholder interviewed felt that DESNZ did not dedicate enough resource to develop timely scheme communications tailored to delivery in Northern Ireland, which resulted in many queries from NDOs in Northern Ireland about how the schemes would operate in practice:

> *"The lack of NI-specific comms led to a huge increase in customers ringing the supplier contact centres – which brought many of them almost to the point of collapse." (Regulator)*

3.5.3 Trade bodies' views on scheme promotion

HNO trade bodies emphasised that the HNO sector has traditionally been quite difficult to reach, as existing databases of HNOs are incomplete and unreliable. This view was validated in interviews with DESNZ officials who noted that, while they have a database of heat networks under the Heat Networks Metering and Billing Regulations, this database is incomplete and often out-of-date as HNOs only need to update their records every four years.

In this context, some HNO trade bodies felt that communication activities from DESNZ, whilst helpful in terms of content, were not targeted enough to reach all relevant HNOs. It was thought that this may have resulted in many HNOs not being aware of the schemes or their obligations, in particular awareness of the requirement to make an application for the higher EBDS rate.

HNO trade bodies expressed concerns that some HNOs were less likely to have received communications about the schemes. This concern was particularly for smaller HNOs that were not members of trade bodies, as they would miss communications trade bodies directed at their members about the schemes. Furthermore, HNO trade bodies suggested that some

housing associations may not have been aware of their HNO status and the corresponding obligations applied to them:

> *"Lots of housing associations don't even realise they've got heat networks because they don't call them that. They call them buildings with communal heating or something like that." (HNO trade body)*

3.6 Experience of implementation for suppliers and stakeholders

3.6.1 Supplier Experience of Delivering Schemes

The unprecedented pace at which the schemes needed to be delivered was challenging for many suppliers, but the majority of those interviewed acknowledged that this pace was necessary given the sudden onset of the energy crisis.

> *"The speed at which the government acted and the speed at which suppliers were able to respond and establish these schemes to provide essential support to businesses is an achievement: A big takeaway from this is actually what's possible" (Supplier)*

Many suppliers had to divert significant internal resources from their usual tasks to meet the demands of the schemes. Early activities focused on internal education activities and the design of customer communications. Additionally, suppliers had to modify their operating systems for pricing and billing to comply with scheme obligations. Some suppliers reported that implementing these activities incurred substantial costs as new operating systems for pricing and billing were needed to meet scheme obligations.

> *"We had a team of people working full-time around the clock for months. The amount of resourcing should not be underestimated." (Supplier)*

Communication with DESNZ during scheme delivery was challenging at times, particularly regarding the EBRS. Suppliers felt opportunities to communicate were limited, with many queries needing responses. High staff turnover within DESNZ and separate delivery teams for various schemes led to confusion about whom to contact. Suppliers suggested better internal coordination within DESNZ to avoid operating in siloes and minimise overlapping requests.

3.6.2 Supplier Experience of Calculating Discounts and Claims

Suppliers reported that the calculation of discounts for EBRS and EBDS was resource intensive, with many needing to allocate dedicated staff for the task. Some larger suppliers were able to implement automated platforms to calculate discounts, while other suppliers (both large and small) had to rely on manual approaches as it was not possible to automate processes in the delivery timeframe.

Suppliers had mixed responses in terms of their experiences of calculating baseline discounts for EBRS and EBDS. Some felt that calculations were straightforward and easy, especially once they had standardised the process. Suppliers that encountered challenges with the calculations mentioned difficulties due to the high level of variation in their customer base (different sizes and types of organisations) and the high level of variations in energy contracts (e.g. day/night rates, fixed term contracts, variable payment periods, muti-rate meters, etc.). One supplier mentioned creating a 'massive tree diagram' to account for the various permutations of the schemes in relation to calculations.

> *"There are so many varieties of business and contracts out there and designing something that works for all of them is tricky. Targeted support (e.g. ETIIs, Heat networks) added an extra level of complication with using different rates for calculations." (Supplier)*

At the beginning of EBRS, initially some suppliers felt that DESNZ was slow to provide worked examples of calculations and to respond to their queries on calculations. The perceived lack of clear and timely communications from DESNZ regarding discount calculation methods led to some suppliers feeling that they had to proceed at risk. Communication was noted to have improved over time.

3.6.3 Supplier Experience of Claim and Reimbursement Processes

Suppliers had mixed experiences with the claim and reimbursement processes. While some found the Discount Recovery Claim portal straightforward, others found it a difficult and time-consuming process to upload all the necessary information. The process improved over time for some suppliers as they streamlined their processes, but frequent changes in reporting requirements added complexity. Suppliers expressed frustration with the level of claim data requested by DESNZ, noting that some data seemed irrelevant. Reimbursements for gas and electric claims were generally processed reliably and on time, but some suppliers with a large number of ETII customers faced delays.

> *"We provide huge amounts of data. We are talking 300,000 rows of data. It takes a long time to pull together. And I never really heard anything on what they do with it." (Supplier)*

3.6.4 Administrator Experience of Supplier Claim Reimbursement

DESNZ oversaw pre-payment and post-payment checks of supplier claims for reimbursement under the EBRS and EBDS, supported by two administrators Elexon (who processed supplier claims for electricity reimbursement in Great Britain) and Xoserve (who processed supplier claims for gas reimbursement in Great Britain). The administrators confirmed that reimbursement payments were made on time to suppliers, and suppliers promptly repaid overpayments.

Overall, the administrators believed that the claim reimbursement processes for both EBRS and EBDS have worked well. However, they commented that, in early stages of EBRS implementation, there were numerous instances of overpayment made to suppliers. Some over

and under payments were expected given scheme funds were paid based on estimates and these were expected to be balanced later in the reconciliation process. DESNZ also put in a more robust pre-payment check process, which mitigated overpayments being made to suppliers

Administrators also reported that they felt there were some challenges in managing the claim reimbursement processes, claiming there was frequent personnel turnover within DESNZ, resulting in delays as new staff required training and time to familiarise themselves with processes. They also felt there were occasional delays from DESNZ in providing the list of supplier claims to be reimbursed, putting pressure on administrators to meet payment deadlines. The transition from EBRS to EBDS was reported to add to the workload of administrators, as they had to manage both the reconciliation process for EBRS and the claim reimbursement process for EBDS in parallel.

3.6.5 Regulator Experience of Enforcement of Supplier Obligations

Ofgem and UREGNI reported a few instances of non-compliance cases, referred to them by DESNZ, where suppliers were potentially not meeting their obligations. These cases were successfully resolved without the need for enforcement action. Investigations revealed these suppliers had often misinterpreted scheme obligations or they did not have staff capacity or computer systems in place to manage obligation requests. Some suppliers had to implement software updates or agree workarounds with DESNZ to meet their obligations.

Regulators overseeing the enforcement of supplier obligations also echoed suppliers' challenges related to personnel changes within DESNZ teams responsible for the various schemes. Additionally, some regulators faced challenges due to DESNZ having different points of contact for each scheme and DESNZ occasionally misunderstanding or misinterpreting the obligations with which suppliers needed to comply.

> *"At the start of EBRS, DESNZ would refer anything that was a potential compliance issue to Ofgem, so effectively Ofgem needed to do the compliance checks. Most of the time the referred cases turned out not to be an issue. Because of the pace of the scheme, even DESNZ staff were struggling to understand and interpret the obligations suppliers needed to comply with." (Regulator)*

3.6.6 Compliance and enforcement

Fraud and risk management were high priorities for DESNZ. All schemes included processes to avoid overpayment and had mechanisms for clawback if necessary. For the main schemes, compliance activities mainly revolved around suppliers meeting their obligations under the scheme. This typically related to ensuring that suppliers were claiming the correct amounts and then passing payments through to customers.

Interviews with regulators (Ofgem and UREGNI) confirmed that DESNZ would identify potential cases of supplier non-compliance and refer these on to the regulator to investigate and enforce

if necessary. Regulators noted that compliance processes for EBDS benefited from learning gained through the delivery of EBRS. For example, DESNZ implemented an 'acceptable buffer' RAG[20] system for suppliers who over- or under-claimed. This allowed suppliers to have some flexibility to recalibrate claims in following payment rounds to account for over- or under-claims in a current round. This system reportedly helped DESNZ to identify suppliers that may become non-compliant in future. Regulators also reported that advance warning of the scale of potential non-compliance referral cases supported their capacity planning.

EBDS added protections for domestic HNO customers by placing a legal duty upon all HNOs to apply for the higher level of support, under the EBDS Regulations 2023. DESNZ carried out communications activities to encourage HNOs to apply for support before the live scheme's closure date of March 2024. Whilst the exact number of HNOs operating in GB and NI is unknown, approximately 14,000 HNO applications were approved for EBDS support, in line with the rough estimations of expected HNO applicants to the scheme conducted by DESNZ in spring 2023. Cases of non-compliance with this obligation were ultimately referred to regulators (Energy Ombudsman) to investigate and enforce with the HNO. HNOs also had a duty to ensure the EBDS discount was passed through to their end customers in a just and reasonable manner. However, whilst the Department held some enforcement powers regarding the duty for HNOs to apply to EBDS, it lacked overall enforcement powers against HNOs, which currently sit with the Office for Product Safety and Standards (OPSS) and the Energy Ombudsman.

Interviews with DESNZ and HNO trade bodies highlighted the challenges in ensuring HNO compliance due to a lack of data that identified existing HNOs, since the Heat Networks Metering and Billing Regulations dataset is partially incomplete. Trade bodies also believed some organisations were not aware that they were classified as HNOs and therefore were not aware of their compliance obligations. This was suggested to be particularly prevalent among social housing landlords that manage heat networks. Feedback from regulators also highlighted that non-compliance cases were overwhelmingly related to awareness and understanding issues, which are discussed in more detail in Chapter 0.

3.7 Scheme closure and reconciliation

Following the end of the schemes in March 2024, DESNZ and administrators worked with suppliers to finalise claims and 'offboard' them from the scheme.

The key processes involved in scheme closure included:

- finalising the processing of applications;
- working with suppliers to reconcile estimated readings with actual readings, and to reconcile application data with supplier data;
- financial reconciliation;

[20] Red-Amber-Green, used to colour code according to indicate supplier status in the context of claims.

- completion of a series of compliance checks; and,
- ultimately, the offboarding of suppliers.

In the majority of cases, applications were received before the deadline. However, particularly for EBDS HNOs, a short, unadvertised grace period (two weeks) was established to allow for late submissions where applicants were struggling to provide the necessary information.

For EBRS and EBDS, the key metric involved in scheme closure activities was 'actualisation rates' – the percentage of discounts based on actual meter readings versus estimated readings. As previously noted, EBRS and EBDS enabled suppliers to pay out discounts on the basis of estimated readings. Once updated with actuals, additional claims could be made in the case of underestimates, or funds could be clawed back by DESNZ in the case of overestimates. To ensure that suppliers had paid out funds to an acceptable level of accuracy, DESNZ set actualisation rate thresholds of 95% for gas and 97% for electricity before suppliers could be offboarded from the schemes.

DESNZ reported suppliers demonstrating a range of issues related to insufficient actualisation rates. One example was 'orphan meters', where a supplier claimed for a meter earlier in the scheme and then did not claim for that meter at a later date, impacting the methodology for calculating actualisation rates. Another example was 'lost meters' where a meter was reported as an estimate but then a customer moved to a different supplier without providing a reading, meaning they will never be actualised. DESNZ reported adopting an approach of working with suppliers one-to-one to help understand and work through these issues to help them raise their actualisation rates and proceed to offboarding. DESNZ reported that increasing actualisation rates to the above thresholds has taken longer than expected and been highly challenging in some cases.

> *"[Suppliers have] just got really individual issues, depending on the supplier and there's such a range." (DESNZ Staff)*

For EBDS for ETIIs and HNOs, a key scheme closure activity involved matching meter numbers in applications with meter numbers held by suppliers. In many cases there were discrepancies between records and/or issues where customers had changed suppliers since making their initial application. This reportedly led to around 1,000 queries to be resolved between July and December 2024.

For EBRS and EBDS, compliance teams at DESNZ completed a series of testing rounds with suppliers, involving checking actualisation rates and compliance with other scheme requirements. Once the supplier passed all tests, they were awarded a 'compliance green light' and approved for offboarding.

Where possible, scheme closure processes for EBDS were intended to mirror EBRS – a point that was communicated to suppliers. For EBRS, the scheme closure window was 18 months, during which time, suppliers could continue to submit claims as they progressed through their billing cycles and increased their actualisation rates. However, for EBDS, the final claim window was planned to be February 2025, less than a year after the public closure of the

scheme. This reportedly concerned some suppliers, when the final claim window was announced in June 2024, who were also expecting 18 months to finalise their EBDS claims.

Feedback from DESNZ suggests that some scheme closure processes were not designed as part of other scheme design activities. Instead, many of these processes were developed during the post closure period following March 2024.

An aspect of scheme closure that reportedly worked well is the use of dedicated supplier engagement leads. Individuals in the team at DESNZ were assigned specific suppliers at the EBDS stage and at the end of the scheme, and were tasked to take them through the offboarding journey. These relationships were reportedly effective at helping resolve issues and support suppliers through the steps needed to proceed through scheme closure.

One reported issue with the offboarding process was a perceived concern from suppliers that the way the original legislation was structured left suppliers liable for future claims from customers and that offboarding would mean that they could not claim those funds back from government. In some instances, this was reported to result in suppliers refusing to complete the offboarding process. In response, DESNZ produced a statutory instrument to update the legislation in December 2024. This change confirmed that suppliers could not be held liable indefinitely for unclaimed funding. This change, which came into force on 13 March 2025, reportedly eased suppliers' concerns around limiting their liability. Suppliers are now only liable for paying out discount after offboarding (that cannot be reclaimed from the department) in scenarios in which they are at fault for the end user not having already received the discount.

For non-standard cases (license-exempt suppliers) it was reported by DESNZ that offboarding proceeded smoothly. This was attributed to the additional checks that were implemented to onboard these suppliers at the start of the scheme and the high level of trust built up between the suppliers and the Department.

4. Awareness and understanding of the schemes

This chapter assesses awareness and understanding of Non-Domestic Energy Affordability support schemes, focusing on eligibility requirements, delivery mechanisms, the value of discounts and payments, and pass-through requirements.

It is important that the findings presented in this chapter are considered in the context of the design of the schemes. Under the automatically applied schemes (i.e. EBRS, the NDAFP flat payment and EBDS), discounts and payments were applied to energy bills without the need for Non-Domestic Organisations (NDOs) to make applications. Awareness and understanding of these schemes therefore had no bearing over the receipt of support. Despite this, awareness was still important as NDOs could react to the knowledge that they were to receive energy support and as a result, not make unnecessarily detrimental budgetary decisions, such as cutting back investment or making redundancies.

Evidence on awareness and understanding was gathered primarily to guide the questioning in surveys and qualitative interviews, ensuring that only those aware of a scheme were asked about its suitability and impact. Although awareness would have little effect on automatically applied schemes, it was more relevant for the application-based support schemes (e.g. EBDS for ETIIs and NDAFP top-up payments), where poor understanding could have affected the delivery of support to intended recipients. Additionally, assessing the awareness and understanding of pass-through requirements among intermediaries was essential to the evaluation, as low awareness and poor understanding could have meant that end-users did not receive a just and reasonable level of support.

The findings in this chapter are primarily drawn from Stage 1 of the evaluation, conducted between November 2023 and March 2024. Fieldwork during Stage 1 was conducted several months after the EBRS and NDAFP ended. Given the timing of the operational periods of the EBRS (October 2022 to March 2023) and NDAFP (February to June 2023), reported awareness and understanding during Stage 2 (July to August 2024) is likely to be less reliable due to the significant time lapse, which may have resulted in diminished recall. Awareness figures from Stage 1 are also used for the EBDS scheme, except in the case of the EBDS for ETIIs scheme. In this case, awareness figures are taken from the targeted survey of successful applicants that was conducted during Stage 2.

Key findings

- **Suppliers and stakeholders issued communications about the schemes for NDOs**. These communications were made through a variety of channels, including website content, social media and direct engagement via customer service teams.

Communications often signposted non-domestic customers to relevant government guidance and resources.

- **The awareness of support schemes was generally low**, particularly for schemes that employed automatic delivery mechanisms. Amongst those deemed eligible, only a quarter (24%) of organisations were aware of the EBRS, fewer than a fifth (19%) were aware of the EBDS and just 14% were aware of the NDAFP 'flat payment'.
- The proportion of NDOs who reported receiving support from schemes was dependent on the delivery mechanism; **automatically applied schemes had a lower proportion of reported receipt than application-based schemes**. Among eligible NDOs aware of the automatically applied schemes, around two fifths (38%) reported receiving a discount from EBRS, around a fifth (18%) reported receiving a discount from EBDS and less than a third (29%) reported receiving the NDAFP flat payment. By comparison, around three quarters (74%) of EBDS for ETII applicants reported receiving the support and around two thirds (62%) of Heat Network Operators (HNOs) reported receiving support from the EBDS for HNO scheme.
- **The extent to which eligible organisations understood the schemes was mixed**. Recipients of application-based schemes generally had a better understanding of how the support worked than those in receipt of schemes that used automatic delivery mechanisms. How discounts were applied was typically well understood, but there was less clarity regarding eligibility criteria and monetary value. Overall, HNOs demonstrated a greater understanding of the schemes than other types of NDOs.
- **Successful applicants for the EBDS for ETIIs and NDAFP top-up payment schemes demonstrated varying levels of understanding of the schemes.** As with the automatically applied schemes, the levels of understanding of how discounts and payments were received were fairly high, but understanding of the monetary value was lower. However, understanding of eligibility requirements was higher, suggesting that engaging with the application process helped improve understanding in this regard.
- Only half (52%) of HNOs reported being aware of the pass-through notification form. **However, most HNOs reported passing on discounts to their energy customers**.

4.1 NDO awareness of the schemes

The awareness of support schemes amongst organisations was generally low, particularly in terms of the schemes that employed automatic delivery mechanisms. Amongst those deemed eligible,[21] only a quarter (24%) of organisations were aware of the EBRS, fewer than a fifth (19%) were aware of the EBDS and just 14% were aware of the NDAFP 'flat payment'.

Limited awareness of these schemes may be attributed to their design. Under the core components of the EBRS, EBDS and NDAFP, discounts and payments were applied directly to energy bills without the need for an application or supporting evidence. This approach was

[21] It was necessary to estimate eligibility for schemes in the survey of NDOs to tailor questioning. Detail on how eligibility was estimated is presented in Appendix A.

adopted because it maximised the chance that support would reach organisations, reduced the need for extensive awareness-raising activity and avoided the resource requirements involved in processing and assessing applications. It is therefore likely that some eligible organisations may have received support without realising it or being aware of the source of the support.

Across the EBRS, EBDS, and NDAFP flat-payment schemes, awareness was primarily driven by news coverage and energy supplier communications. For NDOs, news coverage was the most frequently cited source for both the EBRS (34%) and EBDS (32%), while energy suppliers were the second most common source for both schemes (26% and 28%, respectively). Awareness of the NDAFP flat payment followed a similar pattern, with 30% citing the news and 26% online sources. Other sources of information included professional networks, industry bodies, government letters, and GOV.UK, though these were less frequently reported, typically by 1 in 20 or fewer.

Some organisations aware of the schemes that used automatic delivery mechanisms reported in interviews that there was insufficient publicity of these schemes; as a result, they reported taking it upon themselves to research available support when their energy bills and inflationary pressures rose. For some organisations, awareness of the schemes came only after they noticed a discount or payment applied to their energy bills. While limited awareness did not prevent these organisations from receiving support, it did create uncertainty for them about whether they were receiving available assistance.

> *"Our energy supplier contacted us and made us aware, explained we would be eligible and automatically enrolled… trade press, national and general press were all mentioning it too." (NDO, England, Private sector, Small)*

> *"I think I found it on an invoice and thought 'hang on what's that? That's different'…then I looked it up on [Trade Association's] website."* (NDO, Wales, Private sector, Large)

It was not possible to obtain an effective measure of awareness of both application-based support schemes amongst NDOs and support schemes targeting HNOs as part of this evaluation. Far fewer NDOs were eligible for the application-based schemes compared with the main schemes, and as a result the primary survey of NDOs yielded a low base size with those deemed eligible. To address this, additional targeted surveys were conducted with successful applicants for the EBDS for ETII and NDAFP top-up payment schemes. Similarly, the surveys of HNOs were conducted exclusively with successful applicants of the EBDS for HNO scheme. These surveys offered insight into the understanding of these schemes, the application experience and their impacts, but do not capture the broader awareness levels of organisations that did not apply.

Qualitative interviews with relevant scheme delivery stakeholders provided valuable insights into organisations' awareness levels of application-based and HNO schemes. These interviews revealed that, while most organisations deemed eligible for application-based schemes were aware of them, there were some gaps in awareness among certain groups. During interviews with EBDS for ETII applicants, one participant shared that they nearly missed the application

deadline because they were unaware of their eligibility for the support, while another applicant revealed that they only learned about the scheme when approached by a consultant. This evaluation attempted to interview those who were eligible but did not apply, but faced challenges identifying and recruiting such organisations. These two reported instances suggest the problem could have been wider, but this cannot be confirmed given this gap in evidence. Similarly, one local authority eligible for the NDAFP top-up payment reported that they and some of their peers only became aware of the scheme after the application period had already closed. Additionally, qualitative interviews with HNOs indicated that smaller charities and managing agents displayed a lower level of awareness when compared to their larger counterparts.

> *"I spoke to quite a few other local authorities about making an application and nobody made an application because nobody knew it existed… I knew the alternative fuel scheme, but I was not aware of the top-up scheme until May which was too late as the application period had already closed. We worked out that we missed out on about £60,000." (NDO, Scotland, Public sector, Large)*

4.2 Reported receipt of support

Assessing the reported receipt of support was important to the evaluation because the intended impacts of the interventions, in part, relied on NDOs recognising the support and adjusting their decision-making accordingly.

Primary research revealed that the proportion of eligible NDOs who reported receiving support from a scheme was dependent on the delivery mechanism of the scheme, with automatically applied schemes having a lower proportion of reported receipt than application-based schemes. However, these results may be influenced by sample characteristics, as surveys for application-based schemes (EBDS for ETIIs and EBDS for HNOs) targeted only successful applicants.

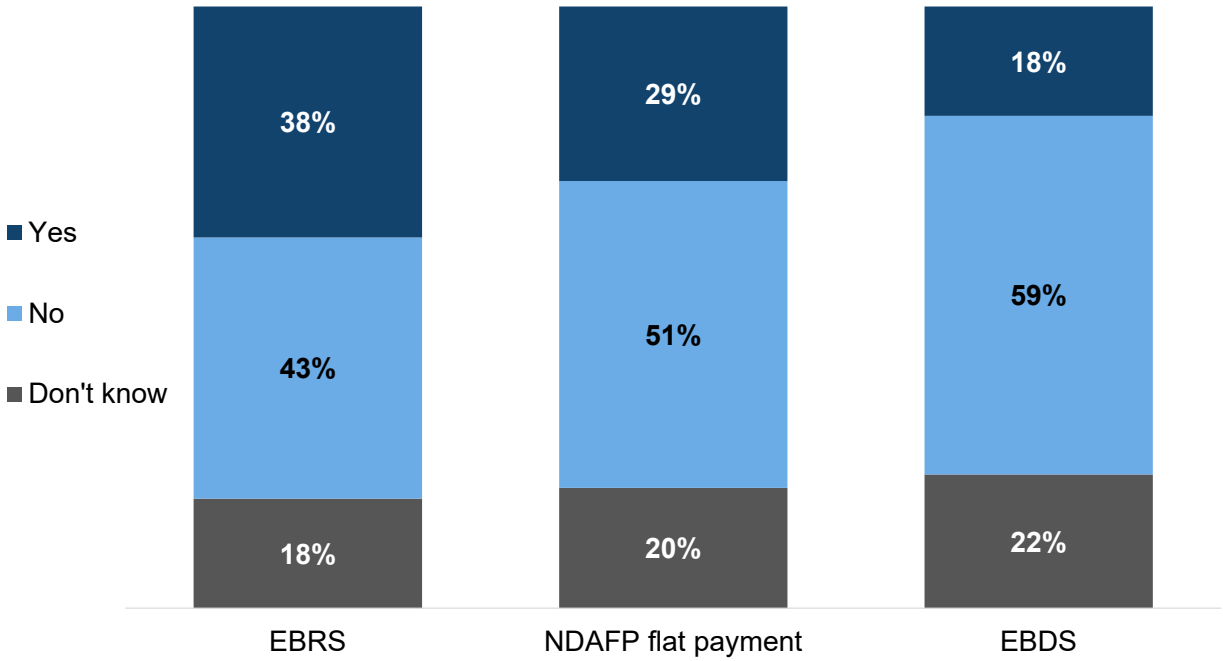
4.2.1 Automatically applied schemes

Awareness of support received through the schemes that used automatic delivery mechanisms (i.e. EBRS, baseline EBDS and the NDAFP flat payment) was generally low among NDOs. As presented in Figure 4.1, amongst eligible NDOs aware of the automatic schemes,[22] around two fifths (38%) reported receiving a discount on their energy bills from EBRS, equivalent to ten per cent of all NDOs surveyed. Around a fifth (18%) of those eligible for the EBDS discount reported receiving it, equivalent to four per cent of all NDOs surveyed. Less than a third (29%) reported receiving the NDAFP flat payment, equivalent to less than one per cent of all NDOs surveyed. The number of NDOs eligible for the NDAFP flat payment was around four and six

[22] It was necessary to estimate eligibility for schemes in the survey of NDOs to tailor questioning. Detail on how eligibility was estimated is presented in Appendix A.

times smaller than the number eligible for the EBRS and baseline EBDS, respectively, which may affect the comparability of these figures between schemes.

Figure 4.1 Reported receipt of support of automatically applied schemes



Stage 1 NDO Survey E1. Base: Responsible for energy decisions and aware of EBRS (395). E6. Base: Responsible for energy decisions and aware of NDAFP (66). E12. Base: Responsible for energy decisions and aware of EBDS (317).

NDOs based in Northern Ireland were more likely to be aware of receiving support from both EBRS (52%) and EBDS (13 out of 40), indicating that the stakeholder involvement and scheme communication challenges specific to Northern Ireland (discussed earlier in this section) did not negatively impact NDOs' awareness of receipt. NDOs that reported that 10% or more of their total costs were spent on energy in winter 2022-23 were more likely to report receiving the EBDS discount (29% compared to 10% among those with lower energy costs), potentially because the EBDS discount was more likely to apply in the case of higher energy costs.

Reported receipt of EBRS amongst HNOs was notably higher than among other NDOs, at 50%. Comparison of EBDS receipt between HNOs and other NDOs is not possible. The HNO surveys targeted only successful applicants for the EBDS for HNO scheme, so this figure is therefore not directly comparable to the rates of receipt reported by other types of NDOs.

The low level of reported receipt of support from automatic schemes is likely, in part, due to low awareness. Notably, around a fifth of NDOs eligible for automatically delivered schemes were unsure whether they had received a discount or payment (EBRS: 18%; EBDS: 22%; NDAFP flat payment: 20%). As detailed above, limited awareness of these schemes may be attributed to their design. It is likely that some eligible organisations received support without realising it or being aware of the source of the support.

Some organisations were recruited from the survey to take part in qualitative follow-up interviews on the basis of them being unaware of having received an EBRS or EBDS discount.

At the point of interview, many had subsequently checked historical energy bills and found that the discount had in fact been applied. This highlights that, once aware, receipt of support was generally clear and easy to identify.

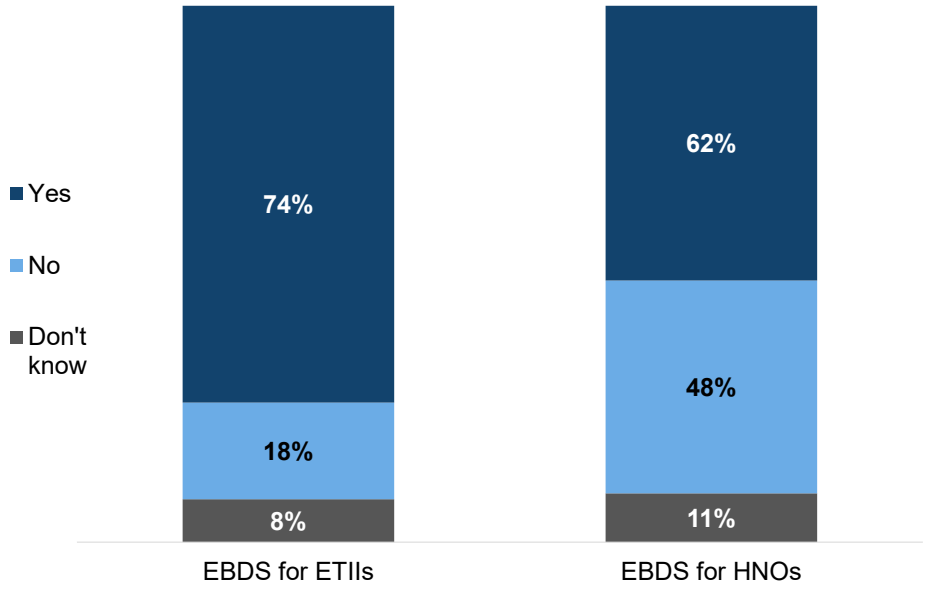
> *"It just happened. You could see on the bill where the discount applied."*
> *(NDO, England, Public sector, Small)*

4.2.2 Application-based schemes

Levels of reported receipt of support from application-based schemes (i.e. EBDS for HNOs and EBDS for ETII) were higher than for schemes that used automatic delivery mechanisms.[23] This is to be expected, as the HNO and EBDS for ETII surveys targeted successful applicants. However, despite this targeting, not all organisations reported receiving support.

As presented in Figure 4.2, around three quarters (74%) of ETIIs reported receiving the EBDS for ETII support. With regards to the EBDS for HNOs scheme, around two thirds (62%) of HNOs reported receiving support in the Wave 1 survey. This is higher than was later reported in the Wave 2 survey which showed less than a fifth (19%) of all HNOs reported receiving the additional support for HNOs with domestic end users. The discrepancy between the two survey waves is likely because the survey relies on self-reported information, which can be affected by recency bias. It may also be the result of understanding of the schemes diminishing over time, or individuals participating in the surveys who did not complete the scheme application, for example due to staffing changes. Scheme monitoring data indicates the proportion of successful applicants who went on to receive support was similar to the proportion self-reported in in the Wave 1 survey.

Figure 4.2 Reported receipt of support of application-based schemes



Stage 1 HNO Survey B3_3. Base: All (152). Stage 2 ETII survey E10a. Base: Successful in application for EBDS for ETIIs (184).

[23] NDOs were not asked whether they received the NDAFP top-up payment in the NDO and NDAFP survey so comparisons cannot be drawn to this scheme.

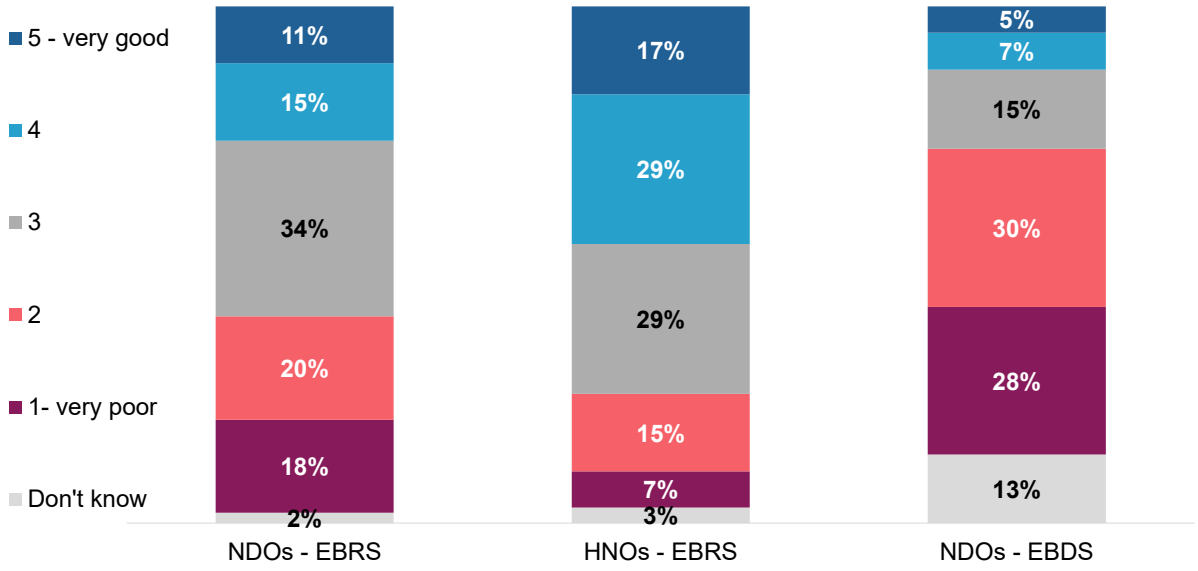
4.3 Understanding of the schemes

The extent to which eligible organisations understood the support schemes was mixed. Recipients of application-based schemes typically had a better understanding of how the support worked compared to those who received support automatically. Across both groups, eligibility criteria were typically well understood, but there was less clarity regarding the specifics of how discounts were applied and their monetary value. Overall, HNOs demonstrated a greater understanding of the schemes than other NDOs.

4.3.1 Understanding of automatically applied schemes

Understanding of the eligibility criteria for schemes that used automatic delivery mechanisms was generally low. As shown in Figure 4.3, there were differences in understanding between schemes. HNOs generally reported a greater understanding of EBRS eligibility criteria than other NDOs. Nearly half of HNOs (46%) reported a good (either 'good' or 'very good') understanding of EBRS eligibility, compared to just a quarter (26%) of other NDOs. The same proportion (26%) of NDOs reported a 'good' understanding of EBDS eligibility. Understanding of eligibility for the NDAFP flat payment was notably low, with only 9 out of 42 NDOs[24] reporting a 'good' understanding. This low awareness likely stems from the design of the schemes; most eligible organisations received payments automatically through their electricity supplier, bypassing an application process and the need to determine whether eligible.

Figure 4.3 Understanding of EBRS and EBDS eligibility



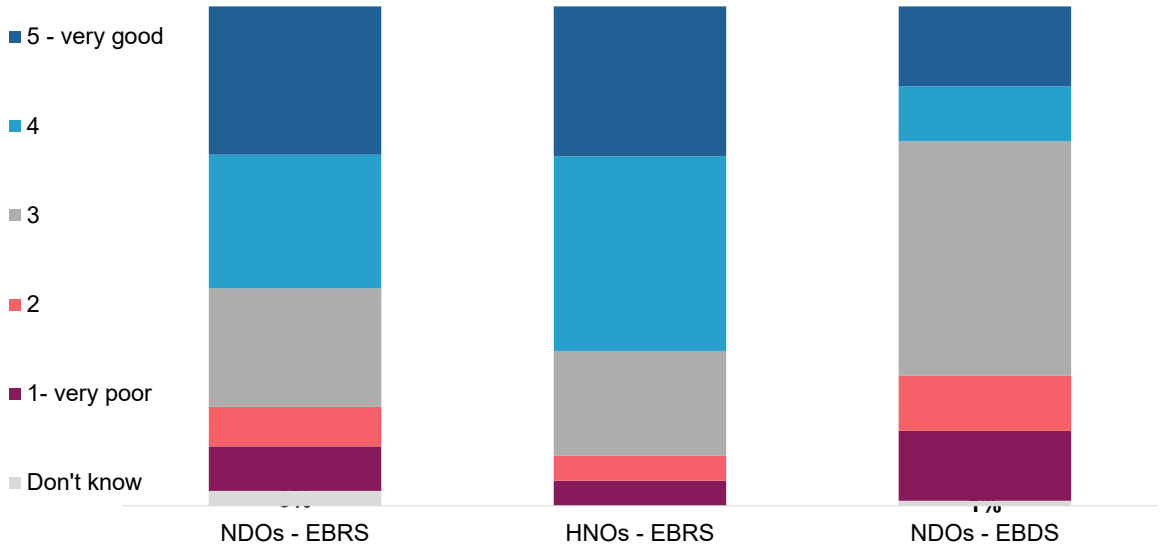
Stage 1 NDO survey E5_1 / HNO survey C2_2: Base: Those explicitly aware of receiving EBRS support (NDOs 261, HNOs 77). Stage 1 NDO survey E16_1: Base: Those explicitly aware of receiving EBDS support (NDOs 108)

Compared to eligibility requirements, organisations generally had a better understanding of how discounts were received under automatically applied schemes (Figure 4.4).

[24] Figure is reported as an integer due to low base size.

Understanding of how the EBRS discounts were received was higher amongst HNOs, with over two thirds (69%) of this subset rating their understanding as 'good' compared to around three fifths (57%) of other NDOs. Amongst the wider group of NDOs, understanding of how EBDS discounts were received was generally lower than for the EBRS; around a quarter (27%) reported a 'good' understanding. Understanding of how NDAFP flat payments were received was generally high, with 24 out of 42 reporting a 'good' understanding and 7 reporting a 'poor' understanding. As this question was asked to organisations who were explicitly aware of receiving a flat payment under the NDAFP scheme, a good understanding of this process is unsurprising.

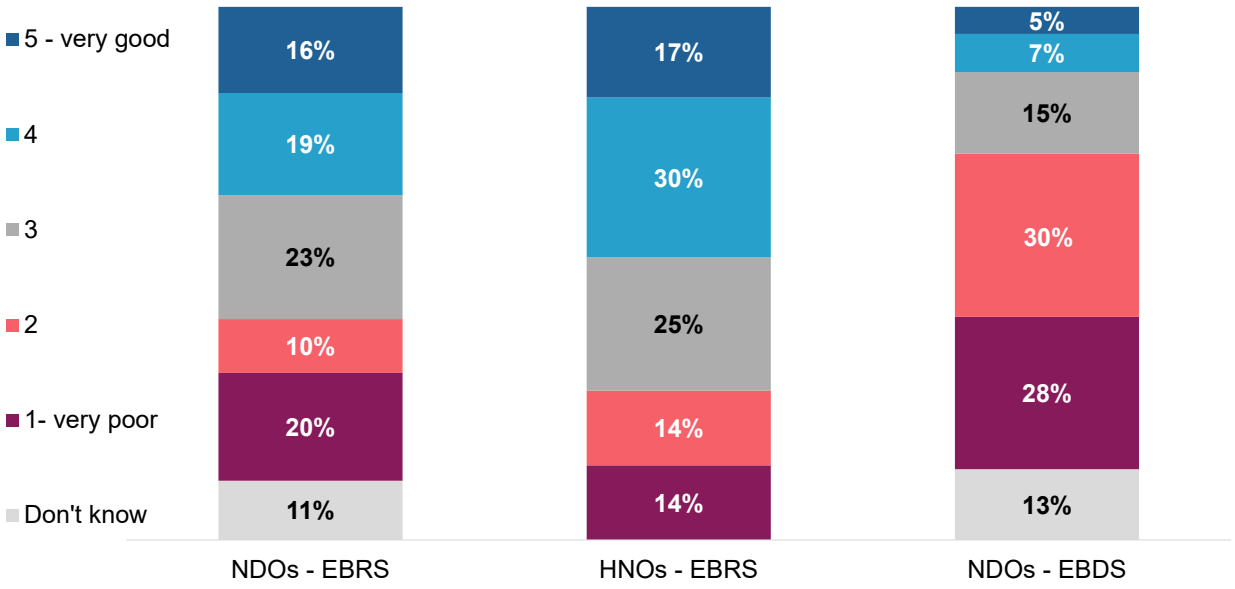
Figure 4.4 Understanding of how EBRS and EBDS discounts were received



Stage 1 NDO survey E5_2 / HNO survey C2_3: Base: Those explicitly aware of receiving EBRS support (NDOs 261, HNOs 77). Stage 1 NDO survey E16_2: Base: Those explicitly aware of receiving EBDS support (NDOs 108).

Understanding of the monetary value of discounts and payments made under automatically applied support schemes was varied, as presented in Figure 4.5. For EBRS, just over a third (35%) of general NDOs rated their understanding of the discount value as 'good', compared to nearly half (47%) of HNOs. For EBDS, 13% of NDOs reported a 'good' understanding of the discount value. Understanding of the monetary value of the NDAFP flat payment was notably lower than the understanding of the schemes eligibility criteria and how payments were received, with 19 out of 42 reporting a 'good' understanding.

Figure 4.5 Understanding of the monetary value of EBRS and EBDS discounts



Stage 1 NDO survey E5_3 / HNO survey C2_4: Base: Those explicitly aware of receiving EBRS support (NDOs 261, HNOs 77). Stage 1 NDO survey E16_3: Base: Those explicitly aware of receiving EBDS support (NDOs 108)

In qualitative interviews, some NDOs attributed gaps in their understanding of the EBRS and EBDS to barriers in accessing information and guidance. Some reported being unaware of where to find relevant information about the schemes and commented that the government and energy suppliers should have done more to educate organisations. Of those that were aware of information and guidance concerning the schemes, some reported having difficulties with interpretation while others said they lacked the time to be able to engage with it due to the need to focus their attention on business operations.

> *"It could have been done better, and more information could have been made available [about the EBRS]...you did have to dig a little bit." (NDO, Wales, Private sector, Large)*

> *"At the time [the EBDS] was coming in, things were moving so fast that you couldn't really stand still...taking the time to research it as one man running a business was not feasible" (NDO, Scotland, Private sector, Medium)*

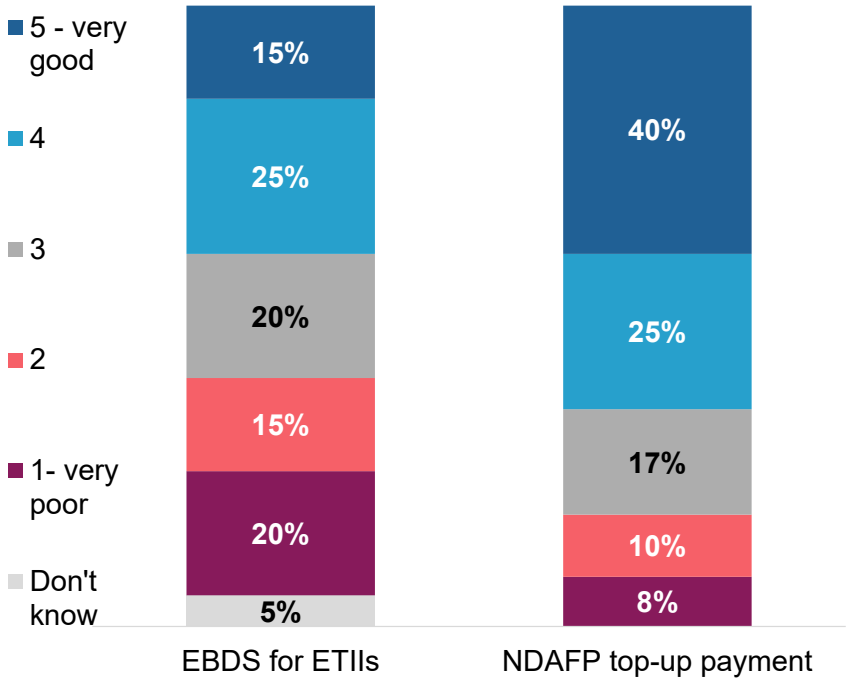
Qualitative interviews with HNOs and HNO trade bodies reflected the view that EBRS was easier to understand and had a better structure than EBDS. They noted however that larger operators generally had a better understanding of the schemes, even though they reported some issues with the clarity of certain requirements, such as how to apply the pass-through of the discount to their customers. Trade bodies felt that some large landlord organisations may be unaware that some buildings in their portfolio of hundreds of estates used a heat network.

4.3.2 Understanding of application-based schemes

Targeted surveys conducted with successful applicants for the EBDS for HNOs, EBDS for ETIIs and NDAFP top-up payment schemes revealed a mixed understanding of these schemes.

Understanding of how payments and discounts were received was moderate for application-based schemes, but notably higher than for the core EBDS and NDAFP schemes (see Figure 4.6). Two fifths (40%) of EBDS for ETIIs applicants and two thirds (64%) of NDAFP top-up payment applicants reported a 'good' understanding. EBDS for HNO applicants were not asked about their understanding of how the discount was received.

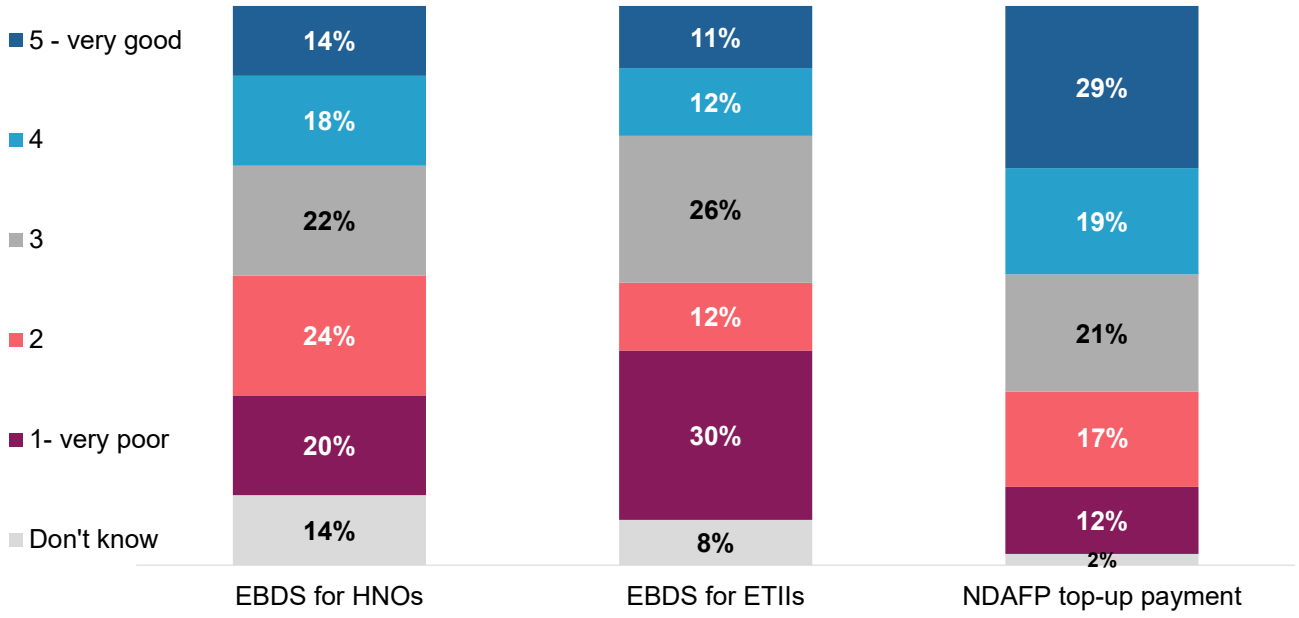
Figure 4.6 Understanding of how discounts and payments were received



Stage 2 EBDS for ETIIs survey D3_2: Base: all (219). Stage 1 NDAFP G3_2: Base: those eligible for the NDAFP top-up payment (52).

As with the automatically applied schemes, understanding of the monetary value of payments and discounts was low, with under a quarter (23%) of EBDS for ETII applicants, around a third (31%) of EBDS for HNO applicants and under half (49%) of NDAFP top-up payment applicants reporting a 'good' understanding (Figure 4.7).

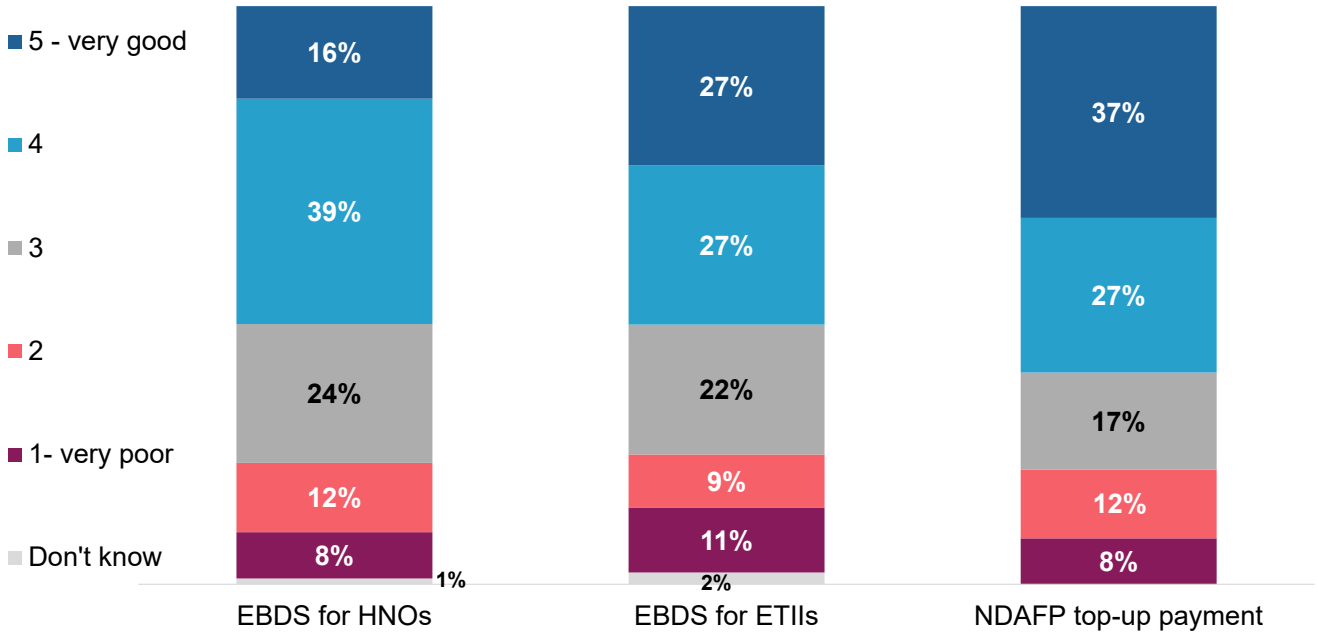
Figure 4.7 Understanding of value of discount and payments



Stage 1 HNO survey F2_4: Base: those aware of EBDS (148). Stage 2 EBDS for ETIIs survey D3_3: Base: all (219). Stage 1 NDAFP G3_3: Base: those eligible for the NDAFP top-up payment (52)

The proportion of applicants who reported a 'good' understanding of the eligibility requirements of the application-based schemes was generally higher than for automatically applied schemes. Over half of EBDS for HNO applicants (55%) and EBDS for ETII applicants (55%) reported a 'good' understanding of eligibility and over three fifths (64%) of NDAFP top-up payment applicants reported the same (see Figure 4.8)

Figure 4.8 Understanding of eligibility



Stage 1 HNO survey F2_2: Base: those aware of EBDS (148). Stage 2 EBDS for ETIIs survey D3_1: Base: all (219). Stage 1 NDAFP G3_1: Base: those eligible for the NDAFP top-up payment (52).

Levels of understanding of how discounts and payments were received, and their monetary value followed a similar pattern to automatically applied schemes, with NDOs reporting a greater understanding of receipt than monetary value. However, understanding of eligibility requirements was higher than for automatically applied schemes, suggesting that engaging with the application process led to an improved understanding.

During qualitative interviews, most organisations in receipt of NDAFP top-up payments displayed a comprehensive understanding of the support, including the eligibility requirements, application process and how the support received was banded based on the level of usage. Those with limited understanding mostly attributed this to them having forgotten the details of the scheme over time.

In contrast, interviews with EBDS for ETII applicants revealed varying levels of comprehension. While some participants felt confident in their knowledge of the scheme, others faced challenges, mainly around understanding of eligibility and how the discount was calculated.

4.4 Awareness and understanding of pass-through requirements

Under all non-domestic energy affordability schemes, intermediaries that received energy bill support were required to notify their end users within 30 days and to pass on support in a 'just and reasonable way'. This was known as the 'pass-through' requirement.[25]

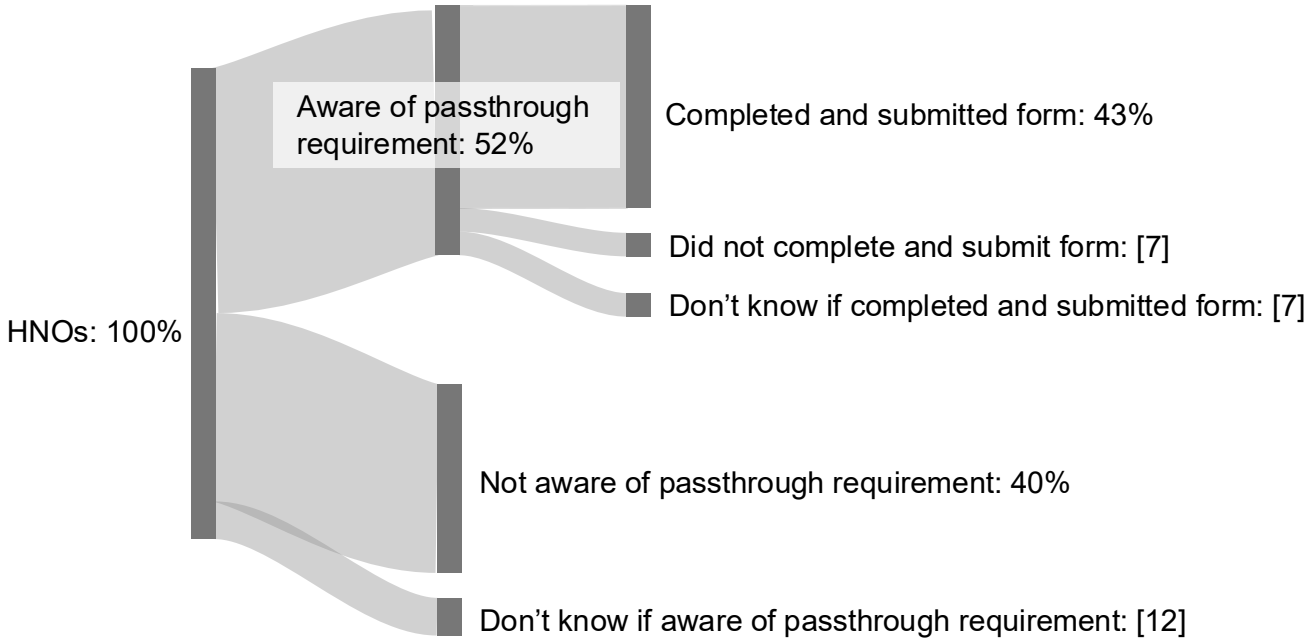
All intermediaries, whether in receipt of support or not, were required to submit their name, business address and contact details in a pass-through notification form. This information was used to support the delivery of the investigation and resolution of consumer complaints by the Energy Ombudsman and the General Consumer Council for Northern Ireland (CCNI).

As illustrated by the Sankey diagram in Figure 4.9, despite the requirement to complete the pass-through notification form, only half (52%) of all surveyed HNOs reported being aware of it. Of HNOs that were aware of the form, over four fifths (83%) said they had completed and submitted the form. This equates to 43% of all HNOs.

Reasons given by those who did not submit the form included that they had difficulty in completing the form (3 of 7) and that they did not think that it was compulsory (3 of 7).[26] This suggests that the requirement to complete the form could have been communicated to HNOs more effectively or potentially through a different channel. However, as detailed in Chapter 4, despite low awareness of pass-through notification forms, most HNOs reported passing on discounts to their energy customers.

[25] Intermediaries are organisations that hold gas or electricity contracts and pass on the costs of the energy supplied to other organisations, and include HNOs, landlords, property management companies and local authorities.
[26] Figure is reported as an integer due to low base size.

Figure 4.9 Passthrough requirement awareness and form submission (%)



Stage 1 HNO survey D1: Base: all (155). D2: Base: HNOs aware of EBRS and of the EBRS pass-through notification form (73). Where base sizes are too low to fairly present percentages, actual values are reported in square brackets.

Of the HNOs aware of the EBRS pass-through notification form, around half (51%) felt it was easy to understand how much financial support was to be passed on to their customers. Amongst those that had completed the form, over half (55%) said it was easy to provide the relevant information required.

5. Organisations' experience of support

This chapter covers the implementation of Non-Domestic Energy Affordability support schemes. Specifically, it examines how suppliers and stakeholders navigated the implementation process and the perceptions and experiences of those that received support.

Key findings

- The unprecedented pace at which the schemes needed to be delivered resulted in **challenges for suppliers in the early stages of implementation**. They reported large-scale internal resource allocation shifts and changes to operating systems being implemented at a high cost to their organisations.
- Once schemes were established, suppliers had **mixed experiences of calculating baseline discounts for EBRS and EBDS**. Some felt that calculations were straightforward and easy, while others encountered challenges due to the high level of variation in their customer base and energy contracts.
- Overall, the administrators responsible for processing electricity and gas reimbursement claims from suppliers felt the **claim reimbursement processes for both EBRS and EBDS worked well**. This was supported by suppliers, who reported that reimbursements for gas and electricity claims were generally processed accurately and on time.
- **Most NDOs received support without issue**. Only around one in twenty recipients of EBRS (4%) or baseline EBDS (6%) discounts reported difficulties. Challenges were similarly uncommon amongst applicants for NDAFP top-up payments (6%). Although still only experienced by a minority, challenges were more common for the EBDS for HNO (36%) and EBDS for ETII (21%) schemes. Those that experienced difficulties with application-based schemes often cited challenges in gathering the necessary data, navigating unclear or complex instructions, and a lack of adequate guidance during their applications.
- **A narrow majority of those who received support felt the timing of discounts and payments was appropriate**. Around half of EBRS (53%), EBDS baseline (54%), and EBDS for ETII (56%) discount recipients felt the support was delivered at the right time. However, a proportion of those in receipt of support suggested it came too late: a quarter of those in receipt of EBRS (24%), a third of those in receipt of EBDS baseline (33%), three in ten applicants for EBDS for ETII (30%).
- **NDOs in receipt of support had mixed views on the monetary value.** Across all schemes, between two fifths and a half of NDOs felt that the monetary value was too low (EBRS: 46%; baseline EBDS: 46%; EBDS for ETII: 49%; NDAFP top-up: 52%), while around two fifths considered it to be appropriate (EBRS: 39%; baseline EBDS: 43%; EBDS for ETII: 42%; NDAFP top-up: 40%). HNOs perspectives on the monetary

value of support varied significantly between the EBRS and EBDS schemes; around a third (36%) reported that the value of EBRS support was the right amount to meet their needs, while half (52%) reported that the value was too low. By contrast HNOs viewed EBDS more favourably than other NDOs, with three fifths (58%) reporting that the value of EBDS support was appropriate, while a third (35%) reported that the value was too low.

- **The reported levels of pass-through of support to end users were high among HNOs**. Around seven in ten (71%) HNOs that received EBRS or the baseline EBDS discounts and more than nine in ten (92%) HNOs in receipt of EBDS higher support reported passing on some or all the discount. There is limited quantitative evidence on pass-through activities for intermediaries, but qualitative interviews with this audience indicated that the support was highly likely to have been passed on.

5.1 Experience of receiving support

Most NDOs, whether receiving support through automatically applied or application-based schemes, encountered no issues with receiving support. However, challenges were more frequently reported under the EBDS for HNO and EBDS for ETII schemes. Amongst the minority that faced difficulties with automatically applied schemes, the main challenges stemmed from billing errors, poor communication, and a lack of awareness or understanding. Those who faced difficulties with application-based schemes often struggled with gathering the required data, navigating guidance, and accessing support.

5.1.1 Automatically applied schemes

Few NDOs encountered difficulties receiving the EBRS (4%) or baseline EBDS (6%) discounts.[27] Qualitative interviews highlighted that many NDOs valued the automatic delivery of both schemes, as it eliminated the administrative burden of applying and eased concerns during a challenging time. Additionally, several NDOs noted that having the payments automatically applied directly to bills each month made financial planning simpler and more predictable.

> *"It just came straight into our account and we thought great because that is going to save us a lot of money. It was positive in the sense we were not having to spend more per month on gas bills and that could be reallocated to other departments." (Northern Ireland, Public sector, Medium)*

Amongst the few organisations that experienced difficulties receiving support through EBRS or EBDS, the main difficulties were with billing issues or errors and with poor communication or a lack of information. Analysis of the qualitative interviews suggested that a lack of

[27] Data on the experience of receipt of the NDAFP flat payment from stage 1 is not available, due to the low reported rate of receipt.

understanding and awareness of the schemes was likely the basis for many of the difficulties referenced in receiving support.

> *"We had issues working out if the discount had been applied as energy suppliers had differences in the way they displayed it; some displayed it as a separate discount at end of bill, but some didn't display it at all, even if it was applied." (NDO, England, Private, Medium)*

5.1.2 Experience of EBRS being replaced by EBDS

From April 2023, support under the EBRS ended, and was replaced by the Energy Bills Discount Scheme (EBDS), which offered a lower level of support for eligible businesses until March 2024. EBDS provided a per-unit discount on energy bills, with additional support for energy-intensive industries and HNOs.

Just under half (46%) of NDOs (who were aware of receiving EBDS support) knew in advance that it was replacing EBRS. Amongst them, most felt that they had enough time to understand how the switch would affect their organisation (83%) and to put necessary measures in place (60%).

Despite most NDOs feeling they had sufficient time to prepare for the switch from EBRS to EBDS, overall understanding of the change was limited. Only a third (36%) felt they had a good understanding of the impacts of the change on their organisation, while a quarter (26%) reported a poor understanding and a third (35%) said their understanding was neither good nor poor.

It is worth noting that the surveys and qualitative research that informed these findings occurred in stage 2, over a year after EBRS was replaced with EBDS, and this could have had a notable impact on recall.

Amongst participants in the qualitative interviews who were aware of EBDS replacing EBRS, opinions on its impact varied. Some reported no noticeable effect on their business, while others said the reduction in the monetary value of support came as an unwelcome surprise. A few NDOs highlighted that they had not accounted for the reduction of support under EBDS, citing a lack of awareness of the changes, resulting in the business passing more of the cost of energy onto customers.

> *"We were affected by the transition. We'd absorbed increased costs for previous 6 months thanks to the EBRS scheme. Some costs we'd had to pass on but then we got onto better fixed energy rates. If the EBRS had continued, we would not have had to pass on so much." (*Scotland, Voluntary sector, Small)

5.1.3 Perceptions of application processes

For NDOs to benefit from targeted schemes, application processes needed to be easy to complete. If the process was too burdensome, there was a risk that it would deter NDOs from taking up the support or reduce the net value of the support if processing applications posed

too much administrative burden. This evaluation attempted to gather data on NDOs who were eligible but did not apply but the incidence rates in the survey were too low for analysis, and therefore the evaluation is unable to draw conclusions on whether such barriers prevented applications.

More than half of applicants for the EBDS for ETII (57%) and EBDS for HNO (51%) schemes found the process easy. However, a notable minority reported challenges. A fifth (21%) of EBDS for ETII applicants reported finding the application process difficult, while a third (36%) of HNOs that applied for the higher EBDS discount faced difficulties. Those applying for the NDAFP top-up payment typically encountered fewer challenges with the application process; almost three quarters reported that the process was fairly easy (40%) or very easy (33%).

Across all three schemes requiring an application, those that experienced difficulties often cited challenges in gathering the necessary data, navigating unclear or complex instructions, and a lack of adequate guidance. Qualitative interviews revealed that these issues tended to stem from a limited understanding of the schemes and the application process. A few NDOs reported having to enlist third-party services to manage the application on their behalf due to these challenges, citing the process as overly complicated and requiring expertise beyond their in-house capabilities.

> *"To be honest, I think the scheme* [EBDS for ETII] *is too complex for a firm like us to run the process on our own. I wouldn't have been able to access the scheme without the support of an external consultant." (England, Private Sector,* Medium*)*

Qualitative interviews with trade bodies highlighted that Housing Associations could have been provided with more specific guidance as the application process was found to be burdensome, time consuming and difficult. It was reported that many Housing Associations may not have realised that they fell under the definition of 'Heat Network Operator' or were unaware of older heat networks in their stock. This made communicating with them about the scheme challenging, particularly regarding input into scheme design, raising awareness, and ensuring they understood their obligations. Some Housing Associations have over 100 heat networks, with varying levels of data quality, billing processes and technical specifications that made the EBDS application highly challenging, especially before the bulk upload system was added to the application process.

Although some applicants encountered challenges during the application process, most found the collation of supporting evidence and the submission of applications to be straightforward and easy. They were able to complete the process in-house without difficulty and without assistance from third parties. A few NDOs that found the process simple noted that having the necessary information readily available on the application form was helpful. One also appreciated the ability to save their progress, allowing them to review details or consult an accountant as needed.

> *"Filling in the application itself was relatively easy. It took around an hour to complete it after we understood the scheme."* (England, Private sector, Small)

Across the three application-based schemes, most applicants were satisfied with the time it took to complete applications. NDAFP top-up applicants were most satisfied (77%), followed by EBDS for ETII (61%) and EBDS for HNO (57%) applicants.

HNOs reported that over half (55%) of EBDS for HNOs applications were completed within two working days. However, some organisations required more time: 15% took three to five working days, nine per cent took six to 10 working days, and 11% took over 20 working days. In contrast, ETII certificate applications tended to take less time, with 34% completed in less than half a day, 33% within half a day to two days, and only 10% taking more than five working days. The NDAFP top-up payment process was similarly efficient, with 37% completed in under half a working day and an additional 48% finished within half a day to two days.

Qualitative interviews revealed more information on the subset of HNOs that spent longer than intended on their applications. These were mainly Housing Associations with multiple heat networks that struggled to provide a lease agreement that confirmed that tenant's energy was supplied by a heat network, as their agreements did not mention the heat network. Recognising this, DESNZ instead requested alternative sources of evidence including diagrams or photographs to prove that a heat network was supplying domestic customers. However, HNOs still struggled to provide this evidence and it created a lot of 'back and forth' that added time to processing applications.

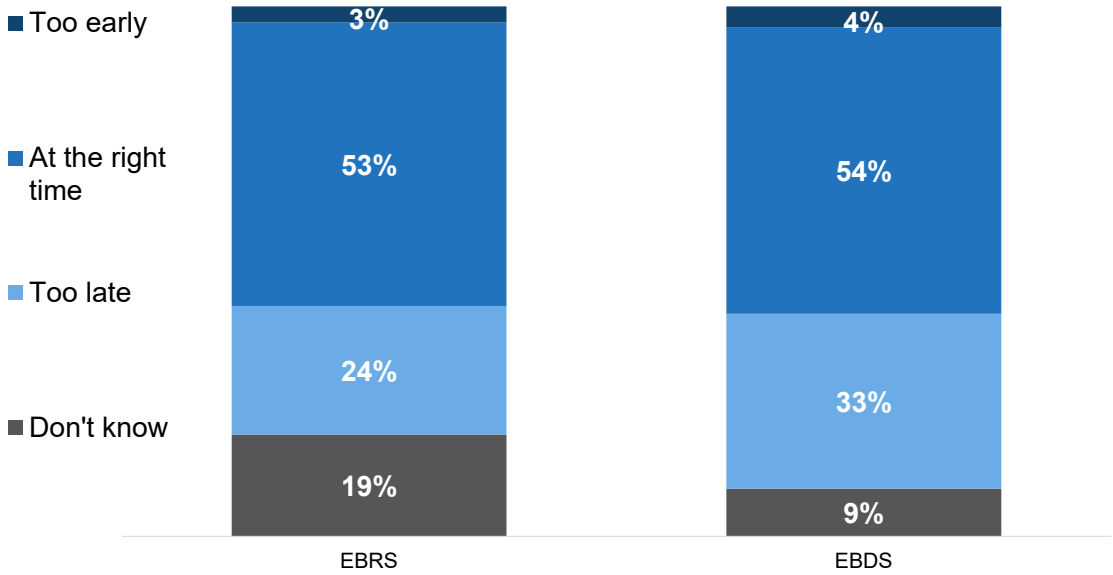
A quarter (25%) of application approvals for the higher level of EBDS support for HNOs were received within one week of submission, with a further 38% being approved between one to four weeks after submission. One quarter (26%) of NDOs that applied for an ETII certificate reported receiving a response within a week, while two fifths (41%) were unsure of how long it took to receive a response to their application.

5.2 Perceptions of support

5.2.1 Timing

As shown in Figure 5.1, around half of NDOs that received EBRS or baseline EBDS support felt the discounts were delivered at the right time (53% and 54% respectively).

Figure 5.1 Views on the timing of automatically applied schemes



Stage 1, NDO survey, G1, Base: NDOs received any form of EBRS support (616); Stage 2, NDO survey, K1, Base: NDOs who received EBDS support (315)

During qualitative interviews, those that thought the EBRS discount came at the right time often attributed this to the discounts coinciding with the peak of energy prices. For EBDS, NDOs often pointed to the support coming directly after EBRS, helping them manage ongoing operational costs more effectively.

> *"I think it followed relatively soon after the initial shock of a massive increase in prices." (NDO, England, Public sector, Small)*

> *"The timing was right in that it came right as the previous scheme ended." (NDO, England, Voluntary sector, Small).*

The views of applicants for the EBDS for ETII scheme were similar when this group was asked about ETII support, with over half (56%) reporting that the timing of the support was appropriate. Similarly, this was typically attributed to the support following immediately on from the closure of EBRS. Views on the timing of the NDAFP top-up payment were more positive. Almost three-quarters of those in receipt felt the payment they received was delivered at the right time (72%), while around a quarter reported they received the payment too late (24%).

While a narrow majority of NDOs were satisfied with the timing of the support, across all schemes, a proportion felt that discounts and payments were provided too late. For automatically applied schemes, a quarter (24%) of those in receipt of EBRS and a third (33%) of those in receipt of EBDS felt that it was received too late. With regards to application-based schemes, around a third (30%) of EBDS for ETII recipients and a quarter (24%) of NDAFP top-up recipients shared this perspective. Many reported that rising costs had already negatively impacted them before the introduction of EBRS, and as a result, all subsequent schemes were perceived as arriving too late.

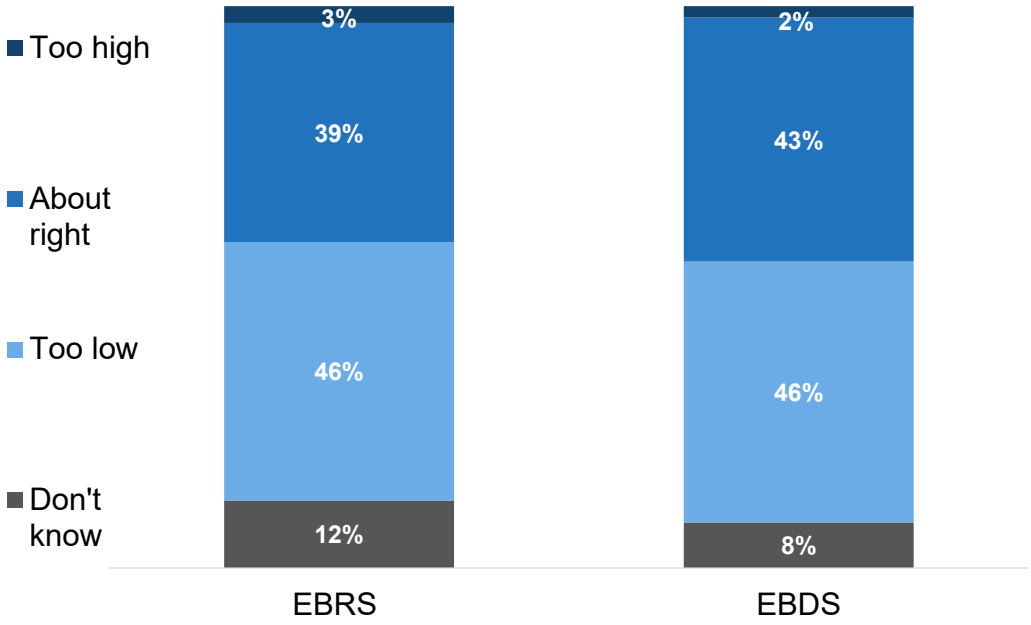
"It was a bit slow because the bills were being incurred before that" (NDO, England, Private Sector, Small)

"We started to see bills go up before we got the help…help would have been useful before then." (NDO, England, Private sector, Sole Trader)

5.2.2 Monetary value

NDOs in receipt of support had mixed views on the monetary value of discounts and payments. Some considered the value to be appropriate while others found it was too low. As shown in Figure 5.2, almost half of NDOs that received the EBRS and baseline EBDS discounts felt that the monetary value was too low (both 46%), while around two fifths considered it to have been about right (39% and 43% respectively).

Figure 5.2 Views on the value of discount on energy bills for automatically applied schemes



Stage 1, NDO survey, G2, Base: NDOs received any form of EBRS support (616); Stage 2 EBDS, K2, Base: Received EBRS support (161)

NDOs who spent more than 10% of their costs on energy between winter 2022 and winter 2023 were more likely to report the value of the EBRS payment was too low (61%) compared to those who spent less than 10% (37%). This trend was consistent for EBDS; NDOs who spent more than 10% of their costs on energy between winter 2023 and winter 2024 were more likely to comment that the value of EBDS was too low than those who spent less than 10% (59% and 30% respectively).

During qualitative interviews, many recipients of EBRS and EBDS support emphasised that, while the monetary value of the discounts were not high enough to have a substantive impact on their overheads, the support was welcome. The discounts were recognised as helpful in terms of mitigating the negative effects of increased energy prices on liquidity and profit

margins. For those that stated EBDS support was too low, there was a perception that the reduction in support was too abrupt, leaving organisations unable to adapt quickly enough for the support to be truly effective.

> *"The prices were increasing. That's a direct hit to our profit and any assistance with that is great. We'd have loved it to be higher but then we're probably going to have to pay that with a tax bill further down the line." (NDO, England, Voluntary sector, Small)*

> *"It was better than nothing! It was what it was, they didn't have to give us anything." (NDO, England, Private sector, Small)*

> *"It would have been better to be more like a stepping stone as it went from a good discount to one that was barely visible, making very little difference." (England, Private sector, Medium)*

The views of those who received the EBDS for ETII discount broadly reflected those in receipt of baseline EBDS support; almost half (49%) felt the value of the support was too low, while two-fifths (42%) considered it to have been about right. Perceptions of the monetary value of the support were slightly more negative amongst recipients of the NDAFP top-up payment. Over half (52%) of those who received the NDAFP top-up payment felt the monetary value was too low.

> *"It was not particularly noticeable at our level, but even saving a few pounds is ultimately useful in the in the long term." (England, Public sector, Small, EBDS for ETII)*

> *"In terms of our usage of £40k a year on kerosene it didn't make much difference." (England, Voluntary sector, Small, NDAFP top-up)*

While many recipients of application-based schemes considered the monetary value of the support to be too low, a strong majority of NDAFP top-up payment and EBDS for ETII recipients felt that the resources their organisation invested in the application process were appropriate given the value of the payment (88% for both).

HNO views on the adequacy of the monetary value of support varied between the EBRS and EBDS for HNO schemes. With regards to EBRS, around a third (36%) reported that the value of the support was the right amount to meet their needs, while half (52%) reported that the value was too low. By contrast, three fifths (58%) reported that the value of EBDS for HNO support was appropriate, while a third (35%) reported that the value was too low.

5.3 Reported pass-through activity

Pass-through requirements mandated intermediaries that administered the energy contracts of other organisations or households, such as heat network suppliers or landlords, to transfer the discounts and payments of the schemes directly to the end users.

There is limited quantitative evidence on pass-through activities for NDOs as the base size of intermediaries that were aware they had received the support was very low, restricting the representativeness of the findings. Additionally, there is limited independent verification of whether the discounts were fully or accurately passed through to end users, and the reliance on self-reported data from intermediaries introduces the potential for reporting bias.

An indication of the Heat Network consumer perspective comes from the number of complaints to the Energy Ombudsman, which could compel intermediaries and Heat Networks to pass on discounts if they had not done so; [28] such complaints were very rare, and investigations broadly found that the amounts passed on were justified. However, as many domestic customers of Heat Networks are unaware that they receive their energy from Heat Networks, it is possible that some customers who could have complained were not aware of the discount, and therefore did not do so.

Limitations aside, amongst the intermediaries that were aware they had received EBRS support, most said that they passed on some or all of the discount they received to the third parties they supply with electricity and gas (22 out of 37). Only 8 out of 37 said they did not pass it on. For EBDS support 13 out of 18 intermediaries confirmed they had passed through some or all of the discount to their end users.

Of the intermediaries in receipt of EBRS, 17 out of 37 knew that they were obliged to provide a just and reasonable amount of the discount to the energy consumers they supply. Of the 17 that knew of the obligation, 11 found the guidance on this clear (with 5 of those stating it was very clear). For EBDS, 12 out of 18 of those in receipt of EBDS were aware of the obligation.

Of 22 intermediaries who passed on EBRS, 10 reported spending less than one working day on administration relating to passing on the discount, while five took more than five working days. Of the intermediaries interviewed, awareness of the legal requirement to pass on the discount was low. Regardless of this, all these organisations reported passing on the discount to end users as they considered it the right thing to do.

> *"We did pass on the discount. We went to great lengths to tell tenants what we were doing. No tenants queried it. They seemed happy. We took the bill and if there were separate meter readings, we'd show the apportionment. We sent workings and everything by email." (NDO, Scotland, Voluntary sector, Small)*

Despite the limited awareness of receiving any of the discounts, qualitative evidence suggests intermediaries were highly likely to have passed on the support even in cases where they were

[28] Heat Networks affected by the Energy Prices Act… | Energy Ombudsman

unaware. This is due to the way intermediaries calculated the bills they charged end users. In qualitative interviews with intermediaries, it was reported that typically, either:

- The intermediary worked out the proportion of energy used by the end user from the overall energy used by all users. The intermediary then applied this proportion to the charge. If the intermediary had received the discount automatically, the end user's proportion of the discount would have been applied automatically too.
- The intermediary had requested that the supplier provide them separate bills for each meter and the intermediary passed on the relevant bill to the end users. It is likely that the supplier would have applied the discounts to these too.
- Some intermediaries charge their clients based on an estimate of their usage, and then adjust the payments based on actual usage at the next available payment. If the discount was applied to the intermediary, in this circumstance it would have been passed on, albeit a month later than intended. This arrangement was common for when energy was bundled into end user rental charges.

Amongst those that used intermediaries to source their energy, fewer than one in ten (7%) said they had been notified about a reduction in energy costs from a government energy support scheme since October 2022; echoing the low awareness of receipt of intermediaries. Four in five (80%) reported they had not been notified about a reduction in energy costs and 14% were unsure. It is possible that some NDOs were not notified because their intermediary had not received EBRS support as the threshold for the payments had not been met, but also as stated in the previous paragraph, it is likely many end users did actually receive the discount. As discussed earlier, the surveys and qualitative research occurred significantly after discounts were applied, and this could have had a notable impact on recall.

In qualitative interviews, intermediary customers reported they had not received notification of discounts, but assumed discounts would have been passed on to them anyway.

> "If I look at [our] bill, and it's made out to [intermediary], but there's a note on the bill to say which property it relates to, and I can see the meter readings. I can see everything, and the meter reading is provided by [us] to [intermediary]. So, all those savings [from EBDS and EBRS] were actually passed through in the invoicing. It was just automatically applied." *(NDO, Northern Ireland, Private, Small)*

The qualitative research also identified examples of relationships between NDOs and intermediaries where it is likely that the arrangement between the two parties meant discounts were not applicable. These were NDOs that paid a fixed fee for their energy to their intermediary every month which did not change during the energy crisis. Owing to the energy cost inflation, it is likely these NDOs actually benefited from their payment arrangements as their landlord did not change their fixed fee.

5.3.1 HNO pass-through activity

Amongst HNOs that applied for EBDS higher support, the awareness of the passthrough requirement was much higher than NDO intermediaries. Around half (52%) were aware of the pass-through notification form for EBRS. Of these, the majority (83%) had completed and submitted the pass-through notification form. This means that around two-fifths (43%) of HNOs surveyed had completed and submitted the pass-through form.

Of those that were aware of the pass-through notification form, over half (56%) found the guidance on needing to complete the form clear, with around a third (33%) stating it was unclear. A similar proportion (51%) found it easy to understand how much financial support was to be passed on, with around a quarter (27%) finding it difficult. Of those that completed the notification form, just over half (55%) found it easy to provide the relevant information required to complete the form, with just over a quarter (27%) finding it difficult.

Amongst HNOs that reported receiving support from EBRS, over two-thirds (71%) passed on some or all their discount. Of those that passed on the benefits, two-thirds (64%) found it easy to do so. For EBDS higher support, a strong majority (92%) of HNOs had passed on the discount. Of the six HNOs that had received support from EBDS but did not pass on the discount four suggested this was because they were already discounting the bills, and the remaining two were either already in the process of passing on the discount, or had never received the discount. All HNOs in the qualitative interviews that reported receiving the discount, had passed it on. They typically applied the discount to customer energy bills on a monthly or quarterly basis and did not have to change their processes to ensure it was passed on.

HNOs that participated in qualitative interviews typically reported that they had informed their customers of the applied discount and received no complaints of the pass-through process. There were, however, a few instances of issues; these varied in nature and were mainly owing to poor end user understanding of the schemes. One HNO which passed on 100% of their support said customers complained about not receiving enough support because they had expectations that the amount of support they would have received was higher and felt the HNO were not passing it on correctly. It is worth noting that in some instances HNOs could rightfully not pass on discount and this could have been misunderstood by users. For example, if a HNO had not raised energy bills in response to the energy crisis, they didn't legally have to pass on any discount to end users. This was a circumstance faced by some HNOs who participated in the evaluation. A HNO that was ineligible for support mentioned that they received customer complaints, some of which had been escalated to the energy ombudsman, as customers did not believe that the HNO had not received support. It was suggested that publicly disclosing the list of HNOs ineligible for support could have helped prevent customer complaints.

When asked how long it took to calculate the amount of discount for end users under EBDS and pass it on, the most common response was less than a full working day (28%). A fifth (19%) said it took between one and five working days, and a further fifth (20%) stated it took more than 10 days. Interviews with trade bodies demonstrated that those taking more than 10 days were likely to have been housing associations that had multiple heat networks. They were

disproportionately affected as the networks often varied in how their costs were applied to the resident's bills based on their tenure (e.g. general needs, supported living etc.), which increased administration in calculating the discount.

6. Impact of support

This chapter examines the extent to which the non-domestic energy affordability support schemes realised their expected impacts. The chapter focuses on assessing the impact of the support on mitigating energy bill inflation, maintaining the financial resilience of NDOs and reducing unnecessary insolvencies and redundancies.

Key findings

- Analysis of UK wholesale electricity and gas price data revealed that the support schemes helped offset a portion of the increase in energy prices faced by NDOs from winter 2022. As a result, **the support had a direct causal impact on Producer Price Indices (PPI)**. ONS data on inflation trends shows that, following the introduction of EBRS, there was some correlation with a downward trend in PPI. The ONS estimated that EBRS reduced the annual input inflation rate in October 2022 by 0.2 percentage points, with its influence noted in the PPI up to April 2023.
- While there is strong evidence of a direct causal impact of energy prices on the PPI, **evidence is less strong on the indirect impact of the schemes on overall rate of inflation (CPI).** Survey and interview findings with different stakeholder groups (NDOs and sector trade bodies) triangulate to suggest that, among a minority of NDOs within certain sectors, the schemes (EBRS in particular) contributed to reducing the need to pass on energy costs to consumers through increased prices of goods and services. This was more likely among energy intensive industries, where energy bills account for a higher proportion of operating costs.
- Analysis of secondary data suggests a **correlation between the introduction of the EBRS and subsequent EBDS and positive shifts in uncertainty and expectations regarding energy costs**. The schemes are also associated with **improvements in financial health**, as evidenced by a slowdown in employment decline and a significant improvement in turnover after their implementation. However, it should be noted that during primary research, NDOs often indicated that the positive effects support had on financial health were modest.
- Analysis of trends in the rate of business insolvency reflect a chronology that is consistent with the schemes having **contributed to mitigating insolvencies**. While this alone does not establish direct attribution, when triangulated with insights from primary research, the evidence suggests that the schemes contributed to reducing the risks of insolvency for some types of NDOs. The effect was stronger for smaller businesses, businesses operating in sectors with high energy usage and low profit margins, and charities.
- There is strong evidence that the scheme support was a necessary **contributing factor to mitigating redundancies** among some types of NDOs, particularly ETIIs. Triangulation of findings across the analysis of trends in redundancy rates, surveys and interviews with different stakeholder groups, point to this conclusion. Input-output (IO)

modelling estimates that the schemes helped to protect around 132,000 jobs, with around 125,000 attributed to EBRS and 7,000 to EBDS.

- As energy prices increased in late 2021, the correlation between uncertainty and energy prices increased, particularly for short-term price series. However, following the introduction of the support, this correlation weakened, suggesting that the schemes could have contributed to decoupling energy prices from uncertainties. By stabilising energy costs and reducing the immediate pass-through of wholesale price fluctuations, the schemes helped protect NDOs from extreme price shocks. This provided a more predictable pricing environment, reducing market stress and enhancing overall energy market stability. The observed decline in uncertainty suggests **support helped foster resilience and improve competitiveness in the energy market**.
- Evidence from surveys and qualitative interviews with NDOs show that international competitiveness was rarely considered a benefit of the support for all schemes, except those benefitting from the EBDS for ETIIs. **A third (35%) of NDOs in receipt of EBDS for ETIIs support reported that it helped them maintain international competitiveness**.
- Based on Input-Output (IO) modelling**, the support schemes contributed to mitigating the under-consumption of energy due to higher energy prices,** resulting in an additional 33,700 gigawatt-hours (GWh) of energy consumed compared to a counterfactual scenario in which NDOs would have experienced the effects of the energy crisis without support. As energy consumption is linked with economic activity, **the schemes contributed to avoiding a loss of up to £21.6 billion in economic output** compared to the counterfactual of no support. The higher energy consumption was associated with emissions being around 4.35 million tonnes of CO_2 higher than would have been expected in the absence of support. In addition, primary research revealed that some NDOs had taken steps to reduce energy consumption and improve energy efficiency.
- Findings from the primary survey of NDOs revealed that **most NDOs reported no difference in their product and service offering between winter 2022-23 and winter 2023-24 (while the schemes were in effect).** Around two thirds (63%) of NDOs were able to maintain their product or service offering between these two periods, with a further fifth (19%) increasing their offering. However, nine per cent of NDOs reported reducing their product or service offering during this period, of which, half (53%) considered energy prices to be a factor.

The remainder of this chapter evaluates the effectiveness of the support schemes in terms of mitigating energy bill inflation, maintaining the financial resilience of NDOs, and reducing unnecessary insolvencies and redundancies. Additionally, it explores a range of broader ‘secondary impacts’ stemming from these interventions. Each area of impact includes the relevant context, the anticipated impacts of the support measures, and the observed impact based on analysis and modelling of secondary data and primary research.

6.1 Mitigating energy bill increases

6.1.1 Context of the schemes in relation to mitigating energy bill increases

Prices for electricity, gas and other fuels in the UK and Europe started increasing during the summer of 2021 before spiking in the winter of 2022. This was initially caused by international supply chains readjusting when economies reopened after COVID-19 and was further exacerbated by the effect of Russia's invasion of Ukraine on international energy markets.[29]

Energy – particularly electricity and gas – is a crucial input for many Non-Domestic Organisations (NDOs). Higher energy prices generally lead to increased energy bills for NDOs which can lead to negative economic consequences, such as reduced business profitability, increased default risk, and higher inflation. Lower profitability can hinder NDOs from making new investments, as they lack the ability to divert profits into areas other than maintaining existing operations. Increased default risk makes taking out a loan more expensive, as lenders charge higher risk premiums to borrowers they perceive to be at higher risk of default.

The impact of rising energy prices extends to broader cost structures, as reflected in the input Producer Price Index (PPI), output PPI and energy input PPI. The input PPI measures overall production costs, with the energy input PPI specifically tracking energy-related costs such as fuel and electricity. As energy input prices rise, they likely increase production costs across industries, leading to a higher output PPI (the prices producers charge for finished goods and services). This effect amplifies inflationary pressures and increases consumer price index (CPI), to the extent that businesses pass increased costs onto consumers. However, reductions in energy consumption, energy intensity and reductions in profit margins (if possible) may mitigate these effects.

6.1.2 Expected impacts on energy bills

This section outlines the anticipated impacts of the schemes on energy bills based on the underlying theory of change. It explores the ways by which the schemes could have led to intended and unintended outcomes for organisations' energy bills.

The launch of the support schemes was expected to have a strong direct impact on the energy bills of NDOs. The EBRS was introduced during a period of steeply rising gas and electricity prices. Subsequently, the EBDS was delivered as prices began to decrease but remained well above the levels of the threshold government supported price.[30]

The schemes were expected to directly impact energy bills through two main channels:

- **Price**: The schemes' discounts were designed to reduce the electricity and gas tariffs faced by the NDOs from what they would have experienced without the support. They

[29] National Audit Office (2022) *Energy bills support*. Available at: *Energy bills support - NAO report* (Accessed: 21 February 2025).
[30] The government supported price is used to determine the discount provided to an NDO, by comparing it to the wholesale unit price faced.

provided support on the unit of wholesale price, and, therefore, energy bills were expected to be lower and more stable.

- **Consumption**: Before the introduction of support, high energy prices were expected to result in decreased energy consumption compared to the seasonal average, due to difficulties with affordability. While energy prices were reduced by the schemes, prices were still expected to remain higher than pre-crisis levels. As a result, energy consumption was expected to rebound towards (but not fully to) the seasonal average following the introduction of the schemes.

6.1.3 Observed impacts on energy bills

Impact on energy prices

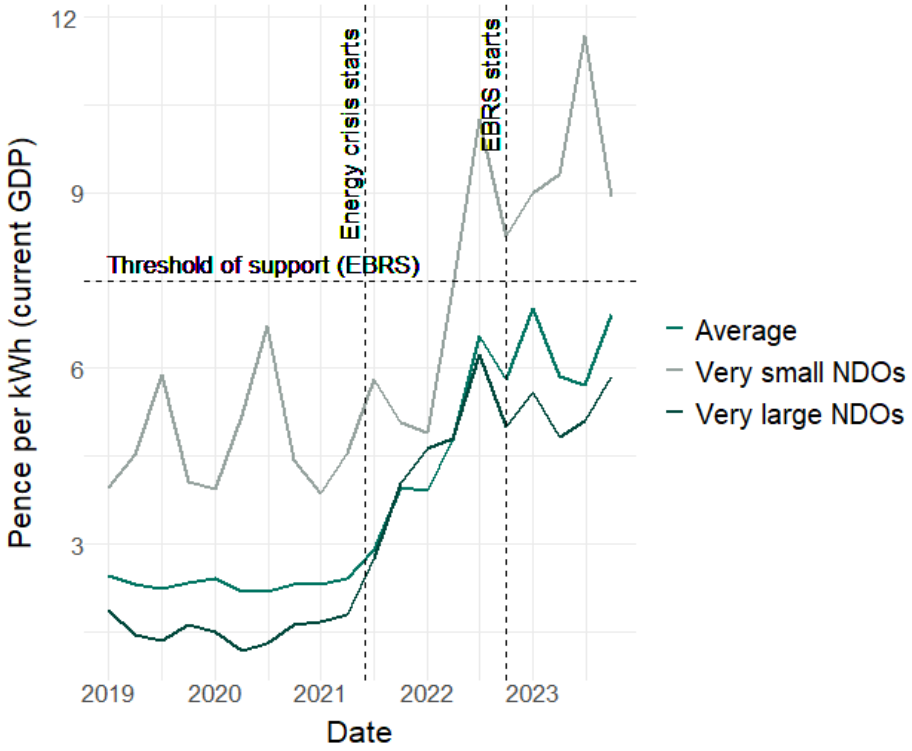
The timeline for the increases in energy prices and the implementation of energy affordability schemes show the level at which the EBRS supported different sizes of NDOs.

The extent to which the price of energy was reduced by the schemes varied depending on the size of NDOs, with ‘very small’ NDOs facing significantly higher retail energy prices than ‘very large’ NDOs (please refer to the figure notes for more details on this definition). For example, as presented in Figure 6.1, before the introduction of the schemes, the average gas prices for very small NDOs were well above 7.5 pence per kWh, while average gas prices faced by very large NDOs did not reach this level at any point.

NDOs of varying sizes are likely to encounter different energy prices due to multiple factors. Larger NDOs typically consume more energy, which may enable them to negotiate better rates and tariff options, including fixed or flexible tariffs, and time-of-use tariffs, which provide cheaper rates during off-peak hours. In contrast, smaller NDOs often lack similar negotiating leverage and may pay higher per-unit costs. Contract length also influences pricing, with longer contracts sometimes offering more favourable rates. Because larger NDOs face less uncertainty regarding the future of their business, they tend to commit to longer energy contracts than very small NDOs.

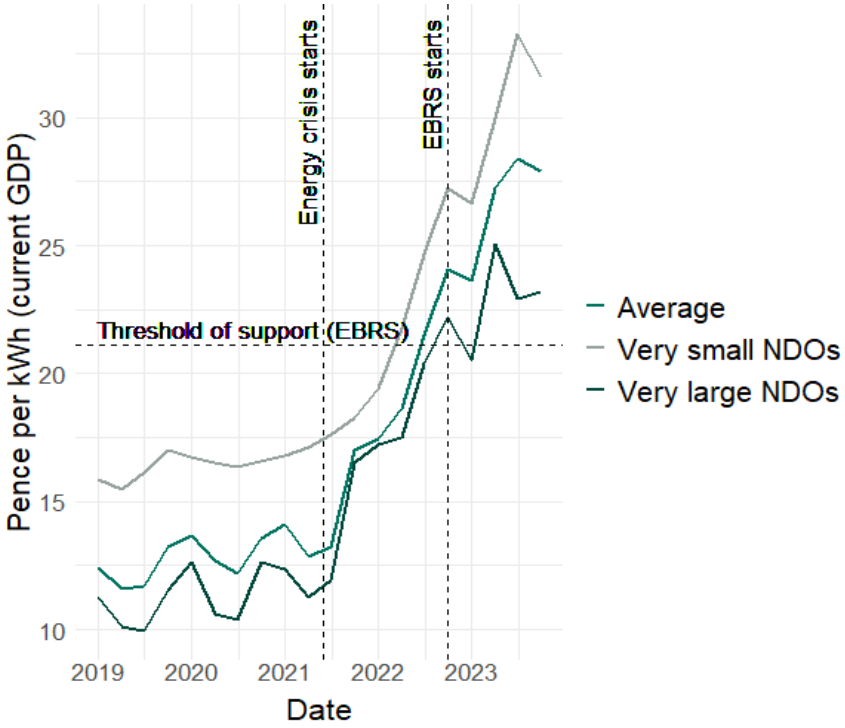
Figure 6.1 shows that only the average gas prices of very small NDOs were above the EBRS threshold price. Figure 6.2 shows that the average electricity prices for all sizes of NDOs were above the threshold price during the period of EBRS support. This suggests that the scheme would have helped offset many of the increases in energy prices from winter 2022, especially for very small NDOs.

Figure 6.1 Timeline of gas prices before and after the launch of the schemes



Source: Gas and electricity prices by NDO size from DESNZ[31]
Note: Very small NDOs refers to those whose annual gas consumptions is between 0-278 MWh. Very large NDOs refers to those whose annual gas consumption is above 277,778 MWh

Figure 6.2 Timeline of electricity prices before and after the launch of the schemes

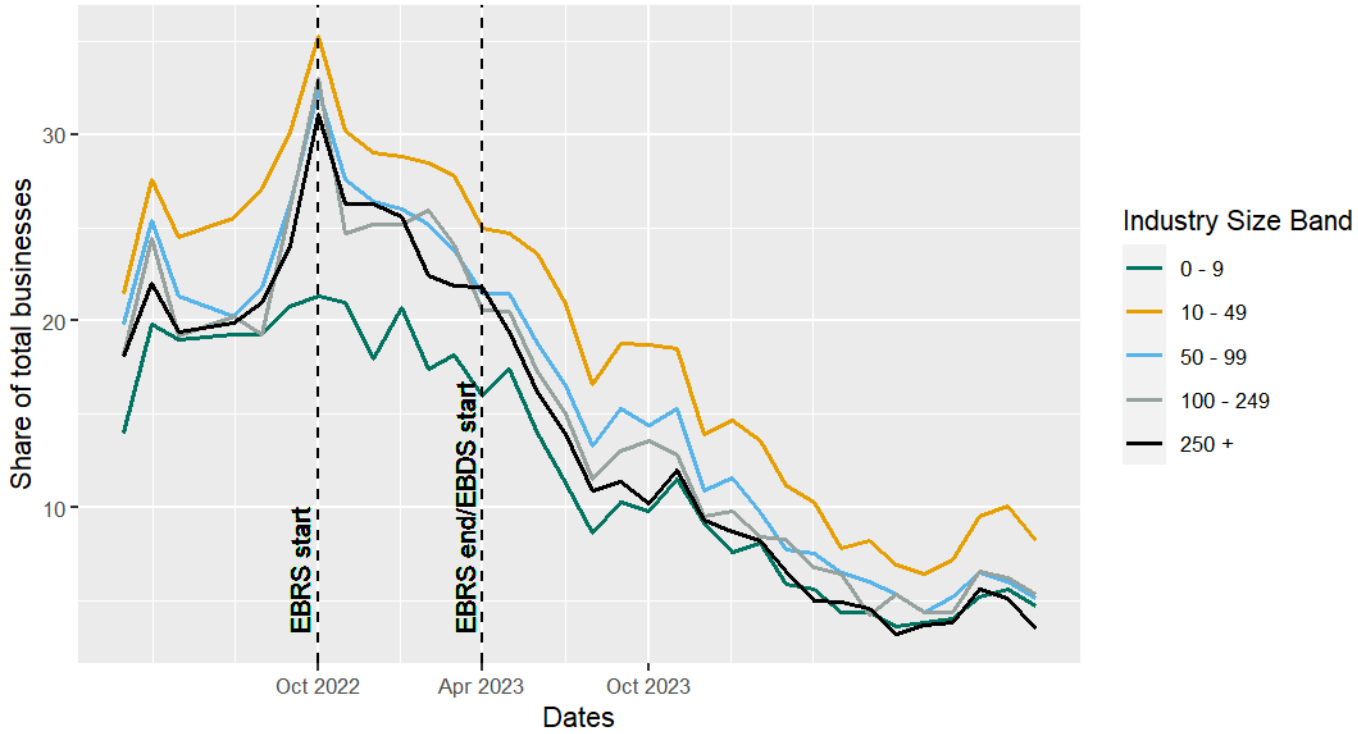


Source: Gas and electricity prices by NDO size from DESNZ[31]
Note: Very small NDOs are defined to those whose annual electricity consumption is below 0-20 MWh. Very large NDOs refers to those whose annual electricity consumption is above 150,000 MWh

[31] Gas and electricity prices in the non-domestic sector

The ONS Business Insights and Conditions Survey (BICS) contains a question on the main factors of concern for NDOs, figure 6.3 shows that references to energy prices increased up until the introduction of the EBRS, after which it decreased. Businesses with between 10 and 49 employees displayed the highest peak in energy prices being reported as their main concern.

Figure 6.3 Reporting of energy price as the main concern for businesses by size based on number of employees



Source: ONS, Business insight and conditions survey (BICS) (Business insights and impact on the UK economy - Office for National Statistics (ons.gov.uk)) Note: The starting date is 2022-01-01, and the ending date is 2023-12-01. Data gaps emerge in 2022-06-01, 2022-07-01, 2022-09-01, and 2022-10-01.

Energy bill impacts reported by NDOs

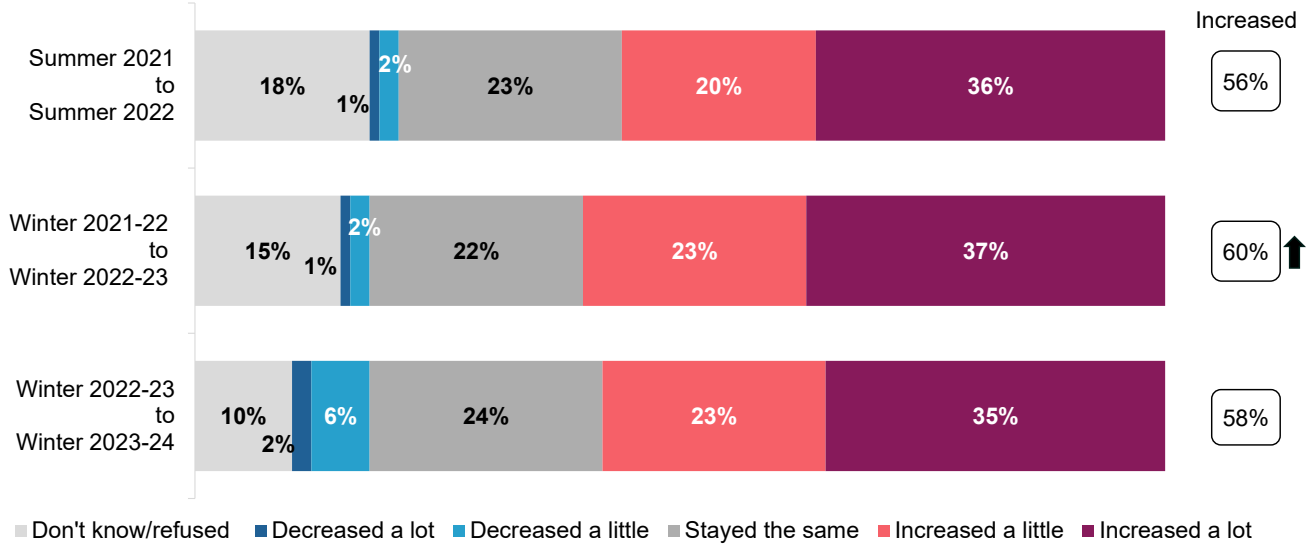
In primary research, NDOs reported that while energy bills rose throughout the period the schemes were in place, they helped mitigate the scale of the increases. At the time of the energy crisis, most NDOs were particularly vulnerable to energy cost impacts due to their existing contracts. The widespread use of fixed contracts among NDOs surveyed (69% of gas, 70% of electric, and 74% of dual fuel tariffs) meant that their exposure to energy price fluctuations depended on when they last secured their contracts. Only one in ten (10%) of all NDOs were on a fixed contract with prices locked in before December 2021, with the other nine in ten (90%) NDOs left more susceptible to rising energy costs and eligible for support schemes, either due to being on a higher fixed rate or due to being on a deemed, variable or flex contract.

As presented in Figure 6.4, three fifths (60%) of NDOs reported that their typical energy bills increased in the winter of 2022-23 (the winter EBRS was in place) compared to the previous winter 2021-22 (where no support was available). Around a fifth (22%) stated that their bills stayed the same, while a small minority (2%) reported a decrease. The mean reported change

in energy bills was a 36% increase. Increases were more commonly reported among NDOs in the accommodation and food sector (74%), those based in Northern Ireland (73%), large NDOs (72%) and intermediaries (71%).

Just under three fifths (58%) of NDOs reported an increase in their energy bills in the winter of 2023-24 (while EBDS was in place) compared to the previous winter of 2022-23. This is in line with the proportion that reported an energy price increase between winter 2021-22 and winter 2022-23. However, the mean reported change was significantly lower than the previous winter reference period, at an increase of 30%. Increases were more commonly reported among NDOs that identified themselves as intermediaries (70%). Small organisations had a higher mean reported change than average, at an increase of 38%.

Figure 6.4 Energy bill changes reported by NDOs from 2021 to 2024



Stage 1 NDO survey. C1. Base: All (3900). C2. Base: All whose energy bills changed in summer 2022 (3193) C10. Base: All (3900). C11. Base: All whose energy bills changed in winter 2022/23 (3304). Stage 2 NDO survey. C10. Base: All (3900). C11. Base: All whose energy bills changed in winter 2023/24 (3480). Arrows indicate where the percentage reporting an increase or the mean change are significantly higher/lower than the previous period.

NDOs were asked about the impacts of rising energy bills on their organisation. Some NDOs that experienced rising energy bills between 2021 and 2024 did not observe any notable impacts as a result. Among those whose energy prices increased between winter 2021-22 and winter 2022-23, a third (33%) reported that the increase had no impact. This proportion was even higher among those whose energy prices increased between winter 2022-23 and winter 2023-24, with around two-fifths (41%) reporting no impact.

Where impacts of increased energy bills were felt, reduced profits or cashflow were the impacts most commonly mentioned. Around a quarter (26%) of NDOs whose energy prices increased either between winter 2021-22 and winter 2022-23 or between winter 2022-23 and winter 2023-24 reported a decrease in profit or cashflow. For ETIIs whose energy prices increased between winter 2022-23 and winter 2023-24, the proportion was considerably higher at three fifths (60%).

"Our energy expenditure went up 40%... It's had an effect on our profitability and that's just something we've had to suck up really." (NDO, Scotland, Private sector, Medium)

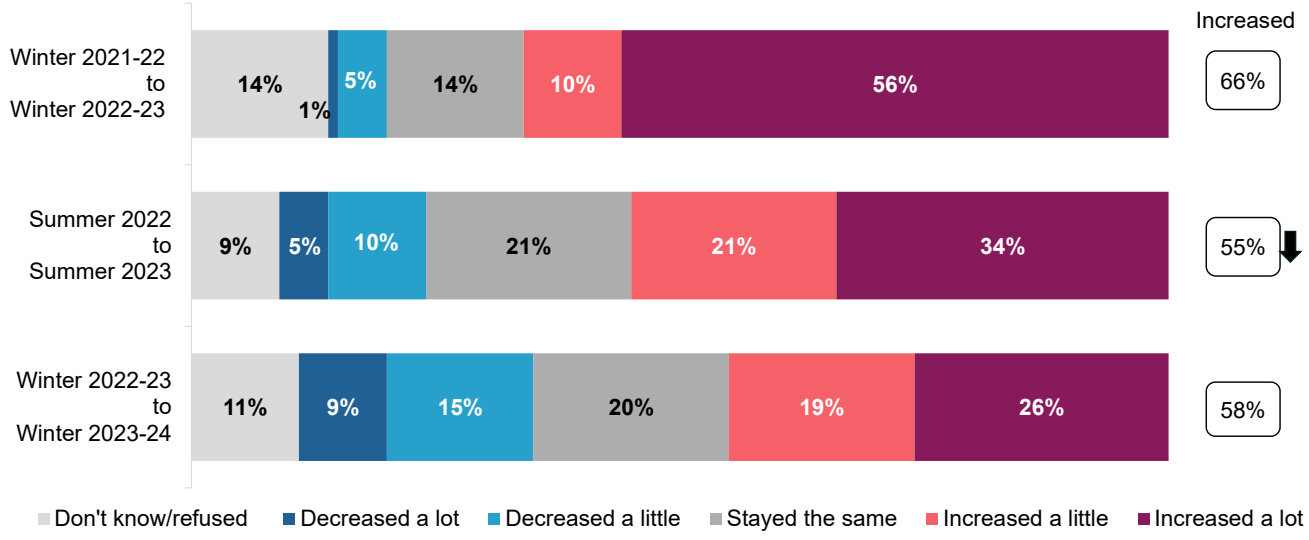
"Our bills tripled. It didn't put us out of business, but it reduced spare capital." (NDO, England, Private sector, Small)

Energy bill impacts reported by HNOs

Changes in energy bills between 2021 and 2024 were more marked for HNOs than for NDOs as a whole, particularly between winter 2021-22 and winter 2022-23. Two thirds (66%) of HNOs reported an increase in their energy bills in winter 2022-23 compared to the previous winter, while only five per cent reported a decrease (see Figure 6.5). The mean increase in energy bills reported was considerable, at 164%.

The proportion of HNOs reporting an increase in energy bills in winter 2023-24 (the winter following the introduction of the higher EBDS support for HNOs) compared to the previous winter of 2022-23 was similar to the proportion reporting an increase between winter 2021-22 and winter 2022-23, at 58%, while a larger proportion (20%) reported a decrease in this period. The mean increase reported between winter 2022-23 and winter 2023-24 was much lower than between winter 2021-22 and winter 2022-23, at 81%.

Figure 6.5 Energy bill changes reported by HNOs from 2021 to 2024



Stage 1 HNO survey. E1. Base: All (155). E2. Base: All whose energy bills increased in winter 2022/23 (103). G1. Base: All (148). G2. Base: All whose energy bills increased in summer 2023 (81). Stage 2 HNO survey. G1. Base: All (151). G2. Base: All whose energy bills increased in winter 2023/24 (87). Down arrows indicate where the figure is significantly lower than the previous period.

Impact on inflation

The schemes directly impacted Producer Price Indices (PPI) and may have had some indirect effect on the Consumer Price Index (CPI). ONS data on inflation shows that, following the introduction of EBRS, there is some correlation with subsequent decreases in PPI and the CPI

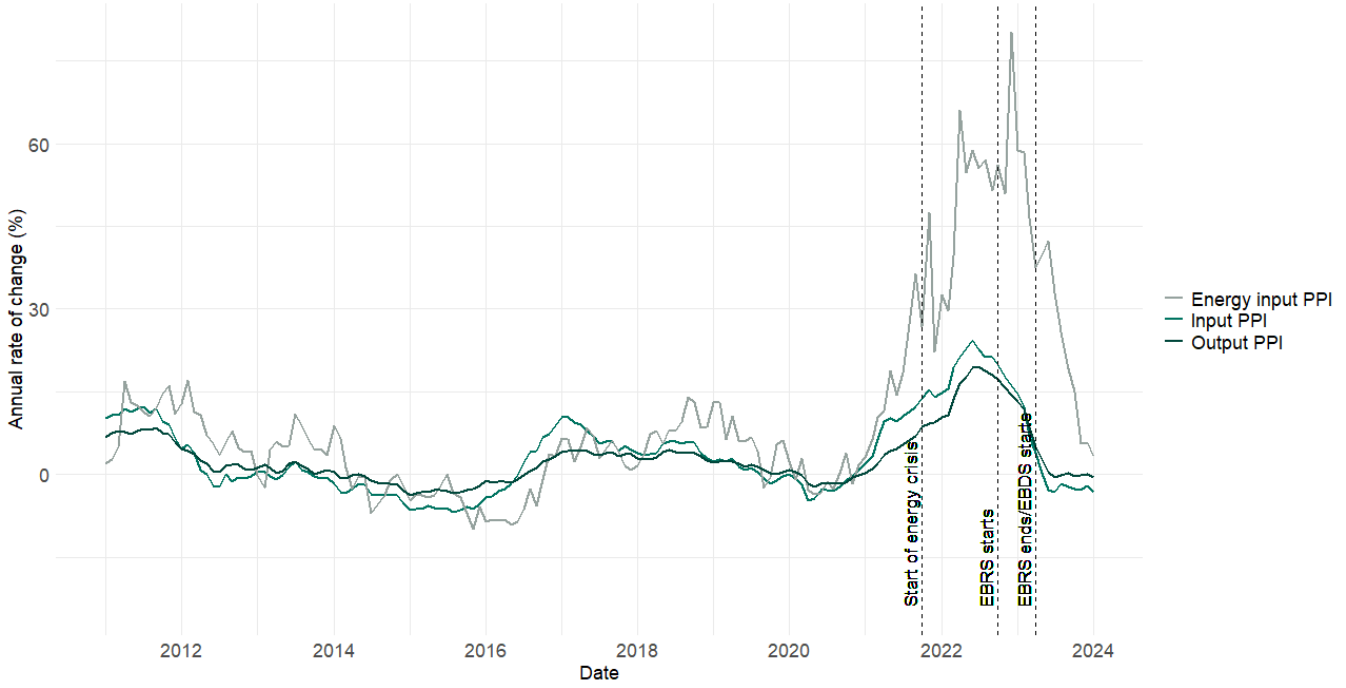
of goods. The ONS estimated that EBRS reduced the annual input inflation rate in October 2022 by 0.2 percentage points, with its influence noted in the PPI up to April 2023.[32]

Figure 6.6 shows the timeline of the input PPI, the energy input PPI, and the output PPI for the manufacturing sector.[33] The following key conclusions can be drawn from this graph:

- **The energy crisis led to a sharp increase in all indices, especially in the energy input PPI**. The timeline of the energy crisis can be clearly seen on the graph: energy input prices started to rise sharply in 2021. Their annual rate of change reached 80% at its peak. The input and output PPI show a similar pattern, but their rate of change is lower.
- **Around the introduction of EBRS, energy input PPI peaked, while the other indices started to fall**. Energy input PPI reached its peak after the introduction of EBRS before decreasing to pre-crisis levels during the period covered by EBDS. This suggests that the schemes contributed to reducing the cost of energy inputs back towards pre-crisis levels. However, it is difficult to disentangle the impact of EBRS from the overall decline in wholesale energy prices that took place during the delivery of the scheme. The peak in energy input PPI after the introduction of the support schemes can be explained by the fact that energy-related producer prices reflect the actual prices paid by users, as reported by energy suppliers, and incorporate both fixed and flexible price contracts. Many fixed-price contracts were agreed before or at the onset of the energy crisis and were only renewed after the introduction of the EBRS, meaning prices could still rise temporarily.
- **During the EBDS the indices stabilised close to zero**. As EBDS replaced EBRS, the energy input PPI briefly rose slightly, then fell sharply. The input and output PPIs stabilised around zero and reached a negative annual rate of change at the end of 2023 (i.e., input and output producer prices were slightly lower or at a similar level at the end of 2023 compared to the end of 2022). Similar to the impact attribution in the case of EBRS, EBDS and the decline in wholesale energy prices coincided, making it difficult to disentangle the impact of EBDS from the change in energy prices.

[32] www.ons.gov.uk/economy/inflationandpriceindices/bulletins/producerpriceinflation/october2022
[33] Input and output PPIs are produced for goods, primarily covering the manufacturing sector. The input PPI reflects changes in the prices of raw materials, energy, and other inputs used in production, while the output PPI measures changes in the selling prices of domestically produced goods.

Figure 6.6 Timeline of Producer Price Indices (input, energy and output) from 2011-2024

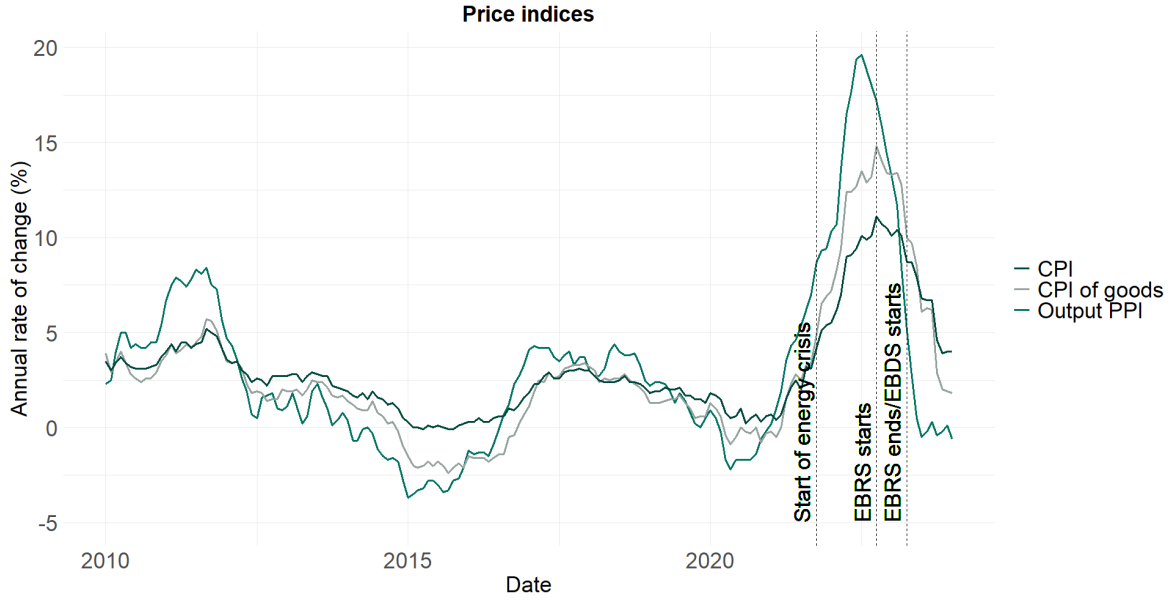


Source: Producer price indices from ONS (Growth rates of output and input producer price inflation (PPI))

While the schemes had a direct impact on producer prices (particularly on the energy input PPI as the schemes reduced the price NDOs paid for energy), evidence is more limited of their indirect impact on the overall rate of inflation (i.e., on the Consumer Price Index, CPI). The output price index has a direct impact on goods prices, as it reflects factory gate prices (the prices at which goods leave the factory, excluding retail and transportation costs). As a result, energy prices impact the CPI. However, multiple other factors also influence the prices of goods and services (changes in costs of raw materials, wages, competition, market prices etc).

Figure 6.7 compares the annual rate of price change for output producer prices, consumer prices and consumer prices for goods. Over the past 13 years, producer prices have exhibited greater fluctuations, in contrast to the CPI, which has maintained more stability. During the energy crisis, all indices increased, indicating increased inflationary pressure. Output PPI increased more than CPI and CPI of goods, which likely reflects that a portion of the production cost increases (from increased energy prices) was not passed through to consumers. After the schemes were introduced, the CPI and output PPI indices decreased, indicating that production costs were less volatile, which in turn allowed for more predictable consumer price movements and lower inflationary pressures. Output PPI decreased more rapidly than the other indices, again suggesting that changes in consumer prices were not as responsive.

Figure 6.7 Price index comparison



Source: Producer price and consumer price indices from ONS (Growth rates of output and input producer price inflation (PPI); Consumer price inflation time series - Office for National Statistics)

During primary research, NDOs were asked to assess how their prices had changed between two reference periods:

- the winter before the support was introduced (winter 2021-22) and the winter where EBRS support was active (winter 2022-23)
- the winter where EBRS support was active (winter 2022-23) compared to the winter where EBDS support was active (winter 2023-24)

During both periods, only a small minority of NDOs reported increasing the prices of their goods and services as a result of rising energy bills. Of the NDOs whose energy bills increased between the winter before the support was introduced and the winter where EBRS was active (winter 2021-22 and winter 2022-23), only 12% reported increasing their prices as a direct consequence of their increased energy bills. This was more frequently reported by NDOs in sectors with higher energy costs as a proportion of their overall expenditure, such as manufacturing, where one in five (21%) reported raising their prices, and the accommodation and food sectors, where 24% reported the same. Similarly, (10%) of NDOs that experienced increased energy bills between the EBRS winter (2022-23) and the EBDS winter (2023-24) reported increasing prices as a result; this was more common among the arts (22%) and manufacturing (19%) sectors and NDOs operating in ETII sectors (22%).[34]

During qualitative interviews, some NDOs mentioned increasing prices for goods and services to offset rising energy costs, but this was typically done in conjunction with absorbing costs in order to keep prices competitive.

[34] Refers to ETIIs who participated in the Stage 1 NDO survey, rather than the Stage 2 ETII survey.

> *"We absorbed part and passed on part in price rises. We were able to pass on about 50% to our customers and we absorbed the rest." (NDO, England, Private sector, Medium)*

> *"We had to re-look at our prices. Certain things went up by a penny, two pennies, but not too much because obviously with the cost-of-living crisis we kept certain things [the same]." (NDO, England, Private sector, Small)*

Some NDOs explained in interviews that they were unable to increase their prices because they needed to remain competitive and so were required to absorb all additional costs. Meanwhile, some NDOs (especially those in more energy intensive sectors) noted that by offsetting the effect of rising energy costs, the schemes helped them avoid needing to increase their prices for goods and services.

> *"In our area of kitchen manufacturing, we don't have much wriggle room to increase our prices, and we had already done so following increases from suppliers so we didn't have the option to put things up further." (NDO, England, Private sector, Micro)*

> *"EBRS played a really vital role in insulating the sector from collapse at a time when all operational costs and demand [for their services] was rising really rapidly." (organisation representing the charity sector)*

Energy bill impacts for HNO customers

It was not possible to make a comparison between the level of support provided to recipients of EPG and customers of heat networks as the population of customers on heat networks are difficult to identify, therefore the evaluation was unable to measure the financial support passed through to domestic heat network customers. As detailed in Chapter 4, the reported levels of pass-through of support to end users were high among HNOs, which helped to prevent rising energy bills for their domestic customers. In qualitative interviews, some HNOs noted that without support from the schemes, they would have been forced to pass on increased costs to consumers, many of whom would have likely struggled to afford the higher energy bills and fallen into energy debt. However, some expressed that, despite this support, it was still insufficient to fully offset the impact of rising energy costs.

6.1.4 Conclusion

Overall, through triangulating evidence across sources, contribution analysis suggests that there is strong evidence that the schemes had a direct impact on the Producer Price Indices (PPI), by reducing producer costs.[35] The ONS estimated that EBRS reduced the annual input inflation rate in October 2022 by 0.2 percentage points, with its influence noted in the PPI up to April 2023.[36] The schemes may have had some indirect effect on the Consumer Price Index (CPI), but evidence is more limited. The energy crisis led to a sharp increase in PPI indices,

[35] See Annex C Theory of Change and Contribution Analysis.
[36] www.ons.gov.uk/economy/inflationandpriceindices/bulletins/producerpriceinflation/october2022

especially in the energy input, with energy input prices starting to rise sharply in 2021. ONS data on inflation shows that, following the introduction of EBRS, there is some correlation with subsequent decreases in PPI and the CPI of goods.

Although the schemes had a direct impact on the energy input PPI (i.e., they reduced the price NDOs paid for energy), the contribution of the schemes to the reduction in the output PPI remained unclear as other factors, such as changes in the wholesale energy prices, could have also had a large impact. Furthermore, evidence is limited on the extent of indirect impact the schemes had on the overall rate of inflation (CPI). Survey and interview findings with different stakeholder groups (NDOs and sector trade bodies) triangulate to suggest that, among a minority of NDOs within certain sectors, the schemes (EBRS in particular) contributed to reducing the need to pass on energy costs to consumers through increased prices of goods and services. This was more likely among energy intensive industries, where energy bills account for a higher proportion of operating costs.

6.2 Maintaining financial resilience

6.2.1 Context before the introduction of the schemes in relation to maintaining financial resilience

Energy expenditure represents a significant portion of overall costs for many UK NDOs. For some energy intensive sectors, such as the electricity, gas, steam and air conditioning supply sector and the transportation and storage sector, energy costs make up over 20% of the total purchases. For “micro” businesses (0-9 employees), the Annual Business and Purchase surveys of 2019 found that they were more likely than large businesses to have a higher energy intensity of more than 20% of total purchases being spent on energy.[37] Therefore, changes in energy costs have the potential to directly impact profitability, investment decisions, and overall business sustainability.

The increase in energy prices in the UK since 2021 contributed to an increase in production and operation costs for NDOs. Subject to their capacity to pass these cost increases through to consumers via the prices of final goods and services, the rise in energy costs could lead to a deterioration of financial health of an organisation.

The impact of increased energy prices on financial health was expected to be more pronounced for organisations where:

- energy spending represents a larger proportion of total costs, leading to heightened cost pressures
- there is limited flexibility for operational or cost adjustments to alleviate these pressures

[37] Business energy spending intensity in the Office for National Statistics’ (ONS) Annual Business Survey 2019 and Annual Purchases Survey 2018, by industry, energy type, firm size and distribution. Available at: Business energy spending: experimental measures from the Office for National Statistics’ business surveys - Office for National Statistics

- organisations were already in a financially vulnerable position prior to the energy crisis.

In the short term, NDOs may seek to cover increased energy costs through additional borrowing.[38] However, the ability to secure this finance is not uniformly distributed across all NDOs. For well-established private sector (and often public sector) NDOs with robust credit histories and strong relationships with financial institutions, access to additional borrowing might be relatively unimpeded. These NDOs can leverage their assets, existing lines of credit, and reputation to negotiate favourable loan terms even in times of financial strain.

In contrast, smaller NDOs and those without established credit may face significant barriers to accessing finance. High energy prices exacerbate their vulnerability, as lenders may perceive them as high-risk borrowers given their tendency to be more energy intensive than larger NDOs.[39] Consequently, these NDOs may encounter higher interest rates, more stringent borrowing conditions, or may be altogether precluded from accessing the additional capital needed to manage their short-term liabilities. The discrepancy in borrowing power can lead to a divergence in financial resilience. Larger or more creditworthy NDOs may weather the storm of energy price increases through strategic borrowing, while less financially secure firms may be forced into making more drastic operational changes or face insolvency.[40]

6.2.2 Expected impacts of the schemes on financial resilience

This section outlines the anticipated impacts of the schemes on NDOs' financial resilience based on the underlying theory of change. It explores ways by which the schemes could have led to intended and unintended outcomes on NDOs' financial health.

The support schemes were expected to have a positive effect on short-term financial health, alleviating the negative effects of rising energy prices. Facilitated by the schemes, lower energy bills were expected to reduce uncertainty[41] and improve liquidity, leading to fewer redundancies, insolvencies and less need for extraordinary borrowing. In the long-term, financial health was also expected to improve as a consequence of the schemes. Stronger short-term financial footing can translate into improved ability to meet debt obligations, as well as providing an opportunity to increase investment (e.g. to boost productivity and output). All of which can help to improve long-term financial health. Additionally, the negative impact of rising energy prices on economy wide market expectations is expected to reverse as NDOs uncertainty diminishes. This improvement in market confidence can further enhance long-term

[38] Bank of England (BoE) (2022) Monetary Policy Report August 2022. Available at: www.bankofengland.co.uk/-/media/boe/files/monetary-policy-report/2022/august/monetary-policy-report-august-2022.pdf & Brown, J.R., Gustafson, M.T. and Ivanov, I.T. (2021) 'Weathering Cash Flow Shocks', Journal of Finance, pp. 1731-1771. Available at: https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/jofi.13024

[39] Business energy spending intensity in the Office for National Statistics' (ONS) Annual Business Survey 2019 and Annual Purchases Survey 2018, by industry, energy type, firm size and distribution. Available at: Business energy spending: experimental measures from the Office for National Statistics' business surveys - Office for National Statistics

[40] Ofgem (2019) *State of the Energy Market 2019 Report*. Available at: www.ofgem.gov.uk/sites/default/files/docs/2019/11/20191030_state_of_energy_market_revised.pdf

[41] Uncertainty in this section refers to data from the Bank of England's Decision Maker Panel (DMP). The results are based on surveys and are representative of UK businesses. Further information is available at: Tracking the views of British businesses: evidence from the Decision Maker Panel | Bank of England

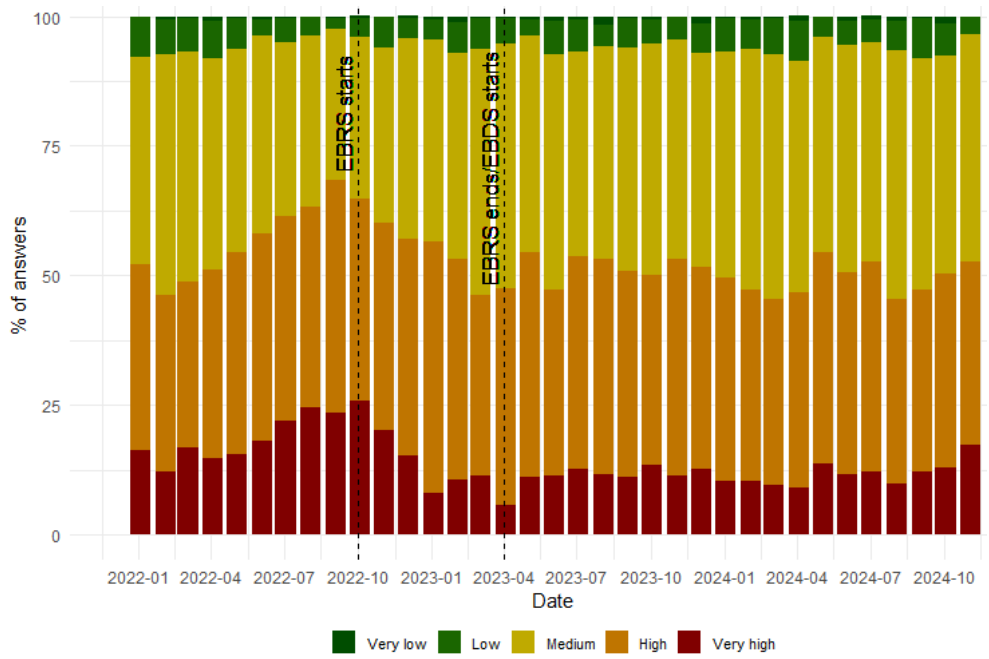
financial health by facilitating better access to financing, such as external investment and borrowing, while also lowering the cost of capital.

The impact of the schemes on financial health was expected to differ across sectors, depending on the sector-wide energy intensity and price elasticity of demand. Energy intensive sectors, which heavily rely on energy inputs for production, were expected to receive larger alleviations to cost pressures from the support schemes. Consequently, compared to a situation with no intervention, these sectors were expected to see improvements to cash flow and profits. Sectors which produce goods and services with relatively price elastic demand, and therefore less able to pass on increases in energy costs to consumers, were expected to experience larger reductions in cost pressure and improvements in financial health compared to a scenario without support.

6.2.3 Observed impacts on financial resilience

The energy crisis introduced a significant level of business uncertainty and concern over energy prices, which negatively impacted the financial health of NDOs and led to a deterioration in their long-term market expectations.[42] The implementation of the EBRS contributed to a reduction in uncertainty (as measured by the Bank of England in its Decision Maker Panel data) and concerns related to energy prices (as shown in Figure 6.8). Overall, private NDOs' uncertainty decreased marginally right after the implementation of the EBRS was operational. Two-thirds (65%) of businesses indicated that their overall uncertainty was 'high' or 'very high',[43] a decrease of four percentage points from September.

Figure 6.8 Overall uncertainty for own business (Private sector NDOs)

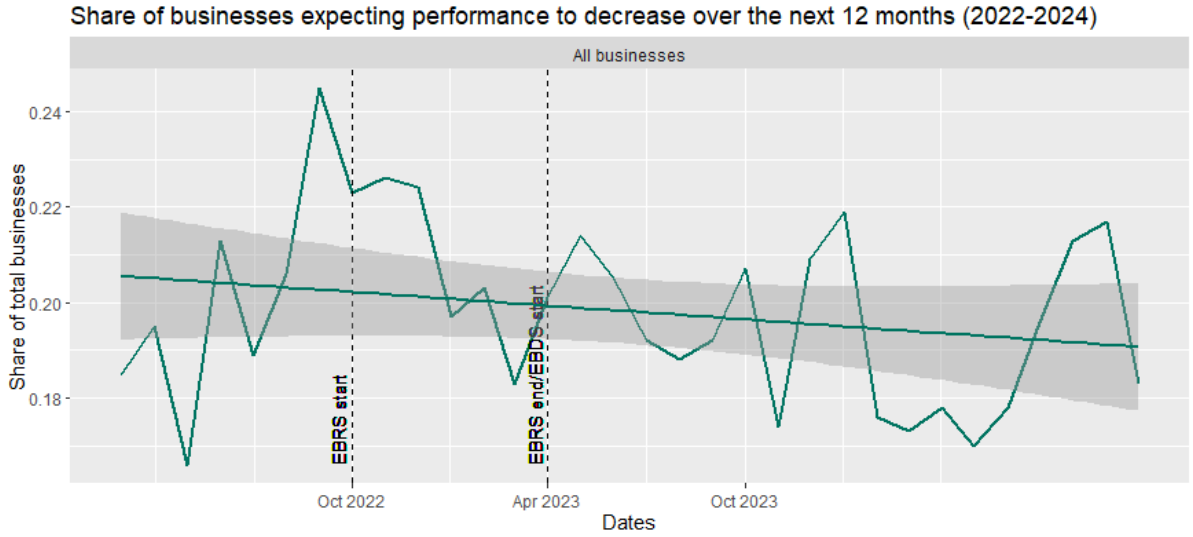


Source: Decision Maker Panel data from the Bank of England

[42] Further details on the analysis of the effect of the energy crisis and schemes on uncertainty is provided in the Quantitative Impact Report.
[43] Decision Maker Panel data from the Bank of England (Monthly Decision Maker Panel data – December 2024 | Bank of England

The shift in concerns about future performance was most pronounced amongst larger-sized NDOs, with no significant variations observed across sectors. As shown in Figure 6.9, in the period following the introduction of EBRS there was a notable reduction in the number of NDOs reporting an expected decrease in performance over the next 12 months, suggesting an improvement in expectations. This improvement does not continue after the end of EBRS and the introduction of EBDS, when the proportion of organisations anticipating a future decrease in performance rose by three percentage points. From then, volatility is observed, while the average fitted trend follows a slight decreasing trajectory.

Figure 6.9 Perception of business performance



Source: ONS, Business insight and conditions survey (BIC) (Business insights and impact on the UK economy - Office for National Statistics (ons.gov.uk)) Note: The straight line and shaded grey area represent the linear fitted trend and the standard deviation. This helps reduce the volatility of the figure, and understand the average behaviour across time.

Following the implementation of the schemes, a decrease in borrowing was also observed amongst large companies, indicating a potential easing of the pressures that had necessitated increased borrowing during the earlier stages of the energy crisis. It is important to note that this period coincided with substantial changes in the Bank of England's monetary policy. Regular increases in interest rates began in December 2022, rising from 3% to reach 5.25% by August 2023.[44] This increase in the interest rate and the associated increase in borrowing costs almost certainly account for most of the decrease in borrowing.

The financial health of NDOs showed signs of improvement following the introduction of energy support schemes, particularly EBRS. Turnover and employment trends were explored through analysis of matched meter-level data.[45]

[44] Bank of England (BoE), Official Bank Rate History database

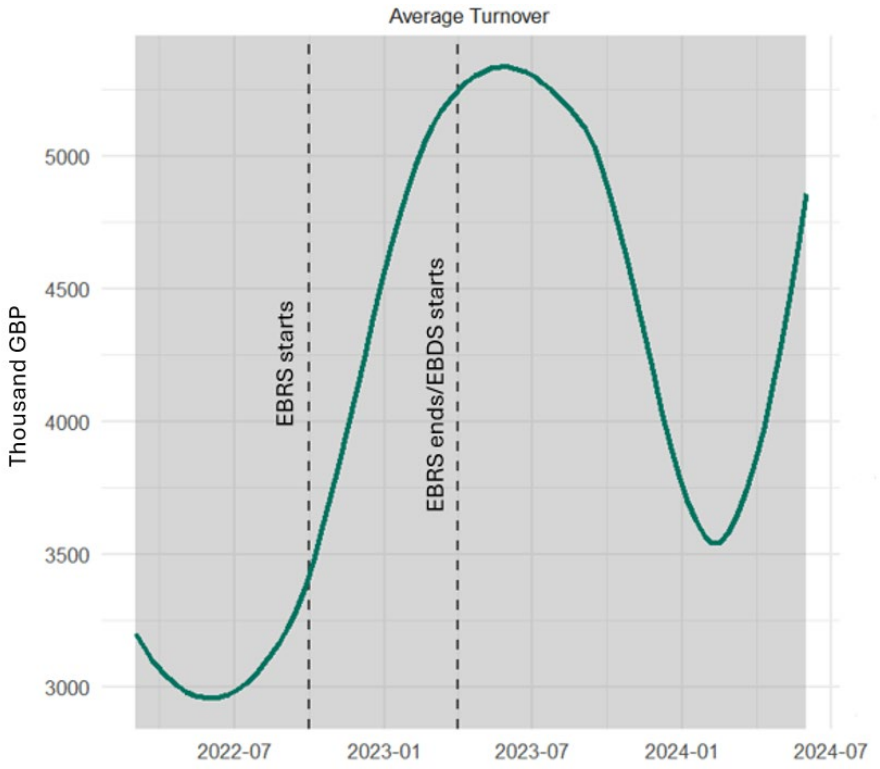
[45] Meter-level data (which includes scheme discounts, energy consumption, tariffs – *EBDS only*, and company identifiers), was matched with the Inter-Departmental Business Register (IDBR) to create an NDO-level dataset. This enabled analysis of financial health indicators such as turnover and employment, and regression techniques were used to assess correlations between scheme support and financial outcomes. Further detail on methods is available in the Quantitative Impact Report.

As shown in Figure 6.10, average turnover, which had been declining until Mid-2022, began rising sharply after EBRS was implemented, peaking shortly after the transition to EBDS. Although turnover then decreased while EBDS was in place, it began to recover in 2024 .

Employment trends, as shown in Figure 6.11 showed relative stabilisation, during EBRS and the early months of EBDS. While employment continued to decline, it was at a slower rate than before the introduction of the schemes. However, in the later months of EBDS, the rate of decline in employment began to increase again, suggesting that the initial stabilising effect of EBDS may have weakened over time.

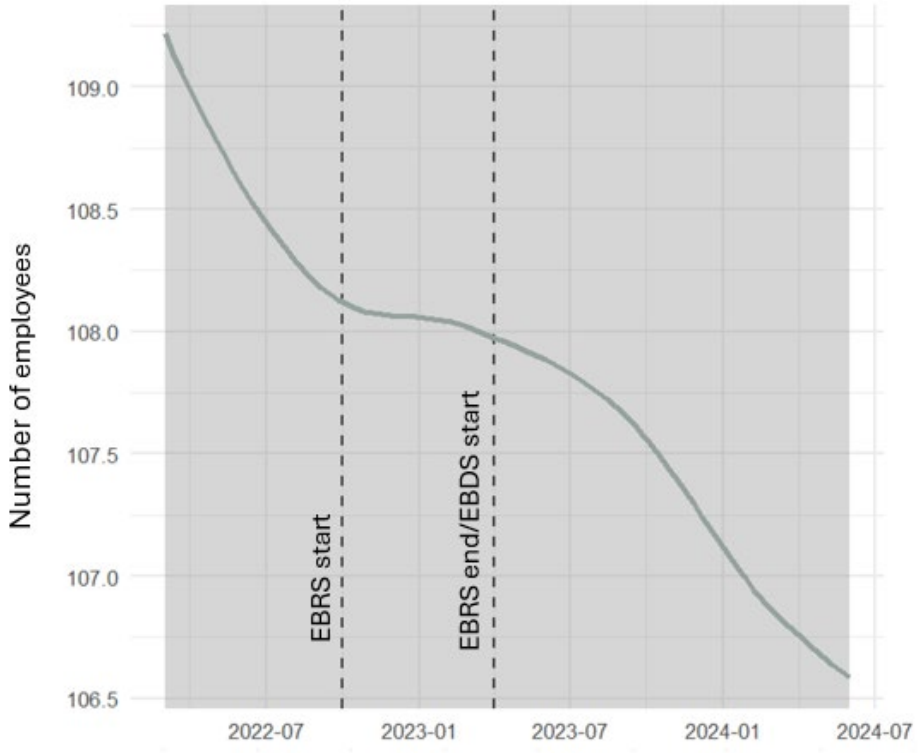
Whilst it is important to recognise that financial health is also shaped by broader factors such as market conditions and operational efficiency, these trends indicate that the schemes may have contributed to short-term improvements in financial health across NDOs. The decrease in performance following the transition to EBDS, likely reflects the lower levels of support offered compared with EBRS.

Figure 6.10 Average turnover across all NDOs



Source: DESNZ Meter Level data, ONS IDBR data, and aggregation across all NDOs. Note: The dotted lines represent introduction of EBRS and EBDS. The solid lines shown are linearly fitted lines.

Figure 6.11 Average employment across all NDOs



Source: DESNZ Meter Level data and ONS IDBR data. Note: The dotted lines represent introduction of EBRS and EBDS. The solid lines shown are linearly fitted lines.

A series of econometric multivariate linear regressions to isolate the correlation between financial health and the schemes' discounts was undertaken. Control variables, such as the tariff – defined as the unit cost faced by the NDO – and energy consumption were included to avoid omitted variable bias.[46] As a result, the parameter estimations control for the relationship between financial health and energy tariffs and consumption, isolating the effect of the discount. Further details on this regression analysis can be found in Annex B: Quantitative Impact report.

The amount of support received under the schemes' discount for electricity had a statistically significant relationship with employment at the 99% significance level. This indicates that the schemes were associated with avoided reductions in employment (compared to a counterfactual scenario in which the energy crisis occurred without support), with less than one per cent probability that this relationship occurred by chance. The econometric analysis shows that a £1 increase in the amount of electricity discount received by an NDO under EBDS is associated with an avoided reduction of 0.0074 full-time equivalent employees (i.e., a £1000 increase in the amount of electricity discount represents avoiding a reduction of 7.4 full-time equivalent employees). The effect of the electricity discount on turnover was not statistically significant.

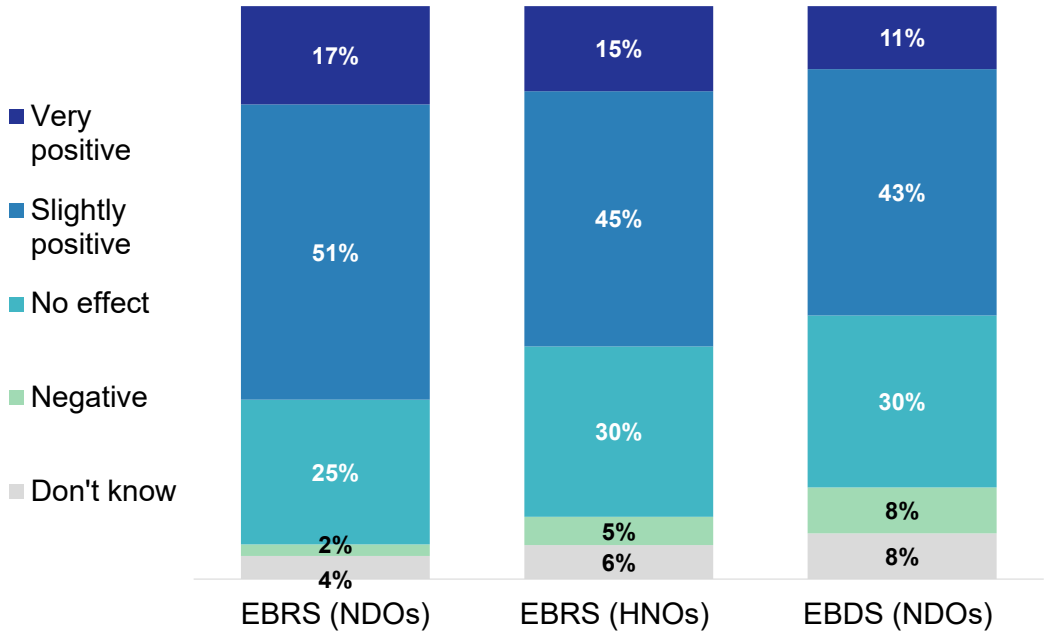
[46] Omitted variable bias occurs when relevant explanatory variables are excluded from a regression equation, which alters the estimated coefficients of the included variables. In this case the exclusion of the tariff is likely to generate a negative bias (given that it is positively correlated with the discount and negatively correlated with financial performance), and the exclusion of energy consumption is likely to create a positive bias (given that it is positively correlated with the discount and positively correlated with financial health).

The EBDS's discounts on gas bills also had a statistically significant effect on employment at the 95% level. This effect was larger in magnitude than the effect of the electricity discount, with a £1 increase in the amount of gas discount being associated with avoiding the reduction of 0.03 full-time employees (i.e., a £100 increase in the amount of gas discount represents avoiding a reduction of 3 full-time equivalent employees). A statistically significant relationship between gas discounts and turnover was not observed; this is likely due to the smaller size of the gas discount. As the data available for EBRS is less extensive, the relationship could not be statistically analysed; as the amount of discount disbursed was larger under EBRS, it would be reasonable to expect that a similar relationship exists for that scheme.

Overall perceptions of support impact

Primary research revealed that most NDOs in receipt of support from automatically applied schemes felt that it had a positive impact on their organisation (see Figure 6.12). Amongst those that reported receiving EBRS discounts, 68% of NDOs and 60% of HNOs reported a positive effect. For EBDS, a slightly lower percentage of recipients (54%) reported a positive impact as a result of the baseline support than did so for EBRS.

Figure 6.12 Overall perceived effect of automatically applied schemes



Stage 1 NDO survey. F1. Received EBRS support (616). Stage 1 HNO survey. E7. Base: If aware of EBRS (124). Stage 2 NDO Survey. J1. Base: If received EBDS support (315).

The widespread perception that EBRS and EBDS baseline discounts had a positive effect largely stemmed from the view that they helped to stabilise financial conditions for recipients, which mitigated the impact on liquidity and profit margins.

> *"If we didn't have the discount then we would have been further in debt and all the issues would have been a lot worse." (England, Private sector, Micro)*

Where support was felt to have little or no effect, this was typically perceived to be due to discounts being too low to make a material difference to the organisation. This perspective was particularly pronounced among recipients of EBDS baseline discount. Many NDOs that received EBDS baseline discounts said that, while welcomed, the monetary value of the support was insufficient to have a material impact on their overheads.

> *"The amount that was knocked off the bill was less than £10 a month. We knew it was going to be less [than EBRS] but we didn't know that it was going to be that much less." (England, Private sector, Small)*

> *"The energy bill discount was only £64 of an over £1,300 bill. So, it's not really a lot." (England, Public sector, Medium)*

> *"The discount was something, but in my view, it was not enough," (Northern Ireland, Voluntary sector, Micro)*

For HNOs, the primary benefit of EBRS was limiting increases in energy prices charged to customers and maintaining profit levels. These findings were reflected in qualitative interviews with HNOs, where it was also noted that the support was particularly beneficial for vulnerable customers, where it helped to prevent residential customers falling into energy debt. Other benefits were noted for heat network operators of non-domestic properties in the public and voluntary sectors, such as schools, swimming pools, and community spaces, as it helped reduce their energy operating costs and allowed for more resource to be allocated to service provision. One HNO remarked:

> *"Sourcing electricity and gas can be quite contentious, especially when you're a resident on a heating network, you don't get the choice of your energy provider. Being able to demonstrate that we're doing everything we can to give residents the cheapest energy that we can is very useful." (HNO representative)*

Some HNOs felt that the level of support provided was not enough to offset rising energy costs. However, one HNO said that in the absence of support, they would have had to pass on the increased cost of energy to their customers, many of whom would have struggled to afford the increase.

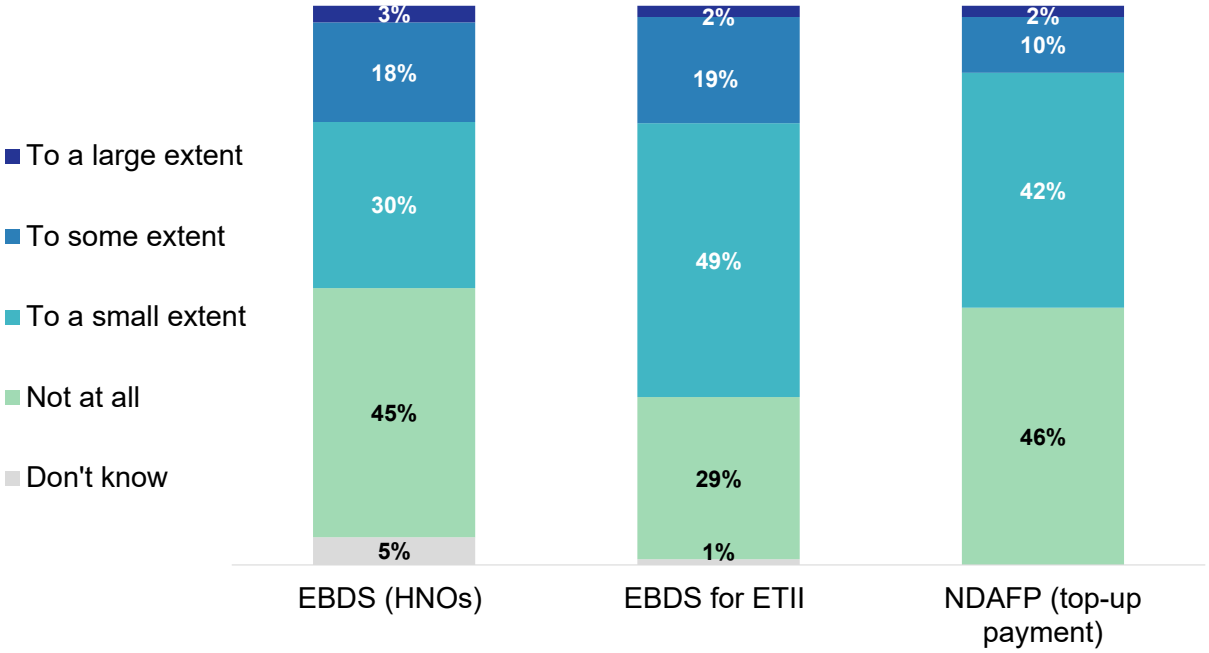
Reports that support had a positive effect on organisations were slightly higher amongst those who received an enhanced discount from application-based schemes. Four fifths of EBDS for ETII recipients (80%), a similar proportion of NDAFP top-up payment recipients (78%) and three quarters of EBDS for HNO recipients (73%) reported positive effects. Similar to automatically applied schemes, the reported positive effects typically involved mitigating the negative impact of rising energy costs on liquidity and profit margins.

Impact on long-term financial resilience

During primary research, many NDOs receiving support from automatically applied schemes reported that the assistance had strengthened their long-term financial resilience, though typically to a modest degree. As shown in Figure 6.13, nearly two thirds (62%) of NDOs

receiving EBRS reported some improvement in financial resilience, but for most, this improvement was small (42%). HNOs that received EBRS were less likely than other NDOs to report an improvement in their long-term financial resilience; 40% said it had made a difference to any extent, while 55% said it had no impact. Similarly, NDOs that received the baseline EBDS discount were less likely than EBRS recipients to report an improvement in long-term financial resilience, with half (50%) noting some improvement, including 38% who described it as small.

Figure 6.13 Impact of automatically applied schemes on long-term financial resilience



Stage 1 NDO survey. F10. Received EBRS support (616). Stage 1 HNO survey. E17. Base: If aware of EBRS (124). Stage 2 NDO survey. J10. Base: All who received EBDS support (215).

The reported impact of support on long-term financial resilience was more pronounced for organisations that received enhanced discounts for application-based schemes, particularly the EBDS for ETII scheme. Seven in ten EBDS for ETII recipients (71%), 54% of those that received NDAFP top-up payments and 50% EBDS for HNO recipients reported an improvement in their long-term financial resilience.

During qualitative interviews, some organisations that received a discount under the EBDS for ETII scheme noted that, while the discount was helpful in the short term, they did not expect it to significantly impact their long-term financial health or resilience, as they felt the payment amount was too low. Similarly, some recipients of the NDAFP top-up payment expressed that the discount was too small to drive lasting changes within their organisations.

> *"It will have a small lasting impact; it'll just mean that we reduce our debt a little bit quicker, but I don't think it's going to sort of fundamentally change the size of the business or anything." (England, Private sector, Small)*

6.2.4 Conclusions

Analysis of secondary data suggests a correlation between the introduction of the EBRS and subsequent EBDS and positive shifts in NDO-level uncertainty and expectations regarding energy costs. The introduction of EBRS may have also contributed to improvements in financial health, as shown by a slowdown in employment decline and an improvement in turnover after their implementation. However, when EBDS replaced EBRS, the financial health indicators deteriorated again, suggesting that EBDS may not have supported NDOs to the same extent as EBRS. While the introduction of the schemes coincided with a stabilisation in borrowing patterns, particularly among larger firms, the extent to which this observed decrease in borrowing was due to the schemes' effect on easing the financial pressures faced during the energy crisis rather than broader Bank of England monetary policy is unclear. However, smaller enterprises continued to struggle with securing necessary funds, indicating a disproportionate impact of the energy crisis on their financial health relative to larger NDOs.

Primary research indicated that most NDOs that received support experienced improvements in financial health, particularly those in receipt of EBRS support and enhanced discounts and payments under the EBDS for ETII, EBDS for HNO, and NDAFP top-up schemes. Many NDOs perceived the support as helpful in stabilising financial conditions and mitigating potential negative impacts of increased energy prices on liquidity, cash reserves and profit margins. However, while many reported positive effects, the extent of these effects were often indicated to be modest.

6.3 Reducing unnecessary insolvencies and redundancies

6.3.1 Context in relation to unnecessary insolvencies and redundancies before the introduction of the schemes

As discussed in the context of maintaining financial resilience, energy expenditure represents a significant share of overall costs for many UK NDOs. Therefore, changes in energy costs have the potential to directly impact profitability, investment decisions, and overall financial health. The impact of increased energy prices on financial health was expected to be particularly pronounced for organisations where:

- energy spending represents a larger proportion of total costs, leading to heightened cost pressures
- there is limited flexibility for operational or cost adjustments to alleviate these pressures
- organisations were already in a financially vulnerable position prior to the energy crisis.

Financial health pressures may prompt NDOs to reduce their workforce to cut costs and maintain competitiveness. Additionally, issues with rising operational and production costs can intensify and translate into reduced cashflow, liquidity crises, and resulting difficulties in meeting debt obligations. Insolvencies would therefore also be expected to increase as a result of energy price increases.

The effect of rising energy prices on redundancies was expected to be different across sectors, NDOs of different sizes, and types of NDO (i.e. private, public, voluntary). Increases in redundancies throughout the energy crisis were expected to occur to a greater extent in the private sector, in energy intensive industries, and amongst smaller NDOs. For small organisations, cost pressures from facing relatively higher energy prices and barriers to borrowing and investor funding increase their risk of needing to implement redundancies.

6.3.2 Expected impacts of the schemes on insolvencies and redundancies

This section outlines the anticipated impacts of the schemes on insolvencies and redundancies based on the underlying theory of change. It explores ways by which the scheme could have led to intended and unintended outcomes for organisation's employment and insolvencies.

The support schemes were anticipated to positively impact short and long-term financial health of NDOs, resulting in a decrease in the number of redundancies and insolvencies compared to a scenario in which no support was provided.

The reduction in energy bills, facilitated by the support schemes, was expected to decrease operational costs for NDOs and, in turn, reduce uncertainty relating to survival. As a result, this was expected to reduce general market uncertainty and strengthen liquidity, resulting in improved short-term financial health. A stronger short-term financial footing can translate into an improved ability to meet debt obligations and increased reinvestment, helping to improve financial health in the long-term. As short-term and long-term financial health improved, NDOs were expected to be less likely to make redundancies and less likely to face insolvency.

Insolvencies and redundancies were expected to be subject to a lag in their reaction to changes in costs, especially with regards to EBDS. It is also important to consider that borrowing under precarious conditions, such as during periods of high energy prices and high interest rates, can increase the risk of insolvencies and redundancies when debt repayments are due in the future.

6.3.3 Observed impacts of the schemes on insolvencies and redundancies

6.3.3.1 Reduced risk of redundancies for NDOs and HNOs

As part of this evaluation, an Input-Output (IO) analysis was conducted. This analysis uses IO tables[47,48] – matrices of industries' production (supply) and inputs (demand) – to map economic transactions across sectors. Because IO modelling captures the interconnections between sectors, it can be used to analyse how changes (or 'shocks') in one sector ripple through the economy.

[47] Input-output analytical tables - Office for National Statistics

[48] These tables are constructed using the Annual National Account data, meaning they are in line with other economy wide statistics. The most current IO table at the time of this analysis was for 2020. However, given the presence of COVID-19 during 2020, the 2019 IO table was used for the IO analysis. See the Quantitative Impact report for further details.

IO modelling was used to analyse the economic impacts of both the energy crisis and the disbursements of the schemes at sectoral level. Two scenarios were conducted: one in which the energy shock was introduced by translating changes in energy prices to changes in demand using sector-specific elasticities, and a second scenario where the schemes were distributed across the economy. For each of these scenarios, the impact on overall economic output, employment, and gross value added (GVA) was estimated across the sectors in the economy.

It is worth noting that this methodology contains certain limitations. For example, IO tables are static: they provide a snapshot of the economy at a single time period, and do not account for how the structure of the economy might change after a shock. This limits the ability of the IO model to consider the dynamic adjustments that industries or consumers might make in response to increasing energy prices or the disbursements of the schemes, such as changes to hiring and retention decisions. Instead, the energy crisis and schemes are both modelled as one-off shocks to the current structure of the economy. IO estimates should be treated as an upper bound estimate of impacts, as this lack of dynamism can lead to overestimation. Additionally, IO analysis relies on the assumption that the effects of interventions (such as the schemes) are proportional to the average structure of the economy, as reflected in the IO tables and other data. To the extent that actual effects differ from these average trends, IO modelling may provide a general sense of magnitudes of effects, rather than a precise estimate. However, these limitations notwithstanding, IO modelling provides the best approximation of the overall economic impacts of the schemes. Further details on the IO methodology are provided in Annex B: Quantitative Impact Report.

The IO modelling estimated that around 132,000 Full-Time Equivalent (FTE) jobs were supported by the introduction of the schemes. For context, this is equivalent to roughly 0.5% of total employment.[49] The energy crisis – absent any support schemes – would have led to a total decrease in employment of 213,000 FTE jobs. The support provided by the schemes sustained up to 132,000 FTE jobs. The net effect of the energy crisis, with the support schemes, was a reduction of 81,000 in FTE jobs across the economy. Based on the IO analysis, the schemes prevented up to 62% of the expected impacts of the energy crisis on employment.

Disaggregating this impact by scheme, 125,000 of the protected FTE jobs are attributed to EBRS, and 7,000 to EBDS. Comparing the impacts of the energy crisis shock with the impacts of the discount shock, disaggregated between EBRS and EBDS, it was found that EBRS prevented 67% of the shock during the period it covered, while EBDS prevented 27% of its shock. EBRS' impact was greater in both absolute and relative terms.

High-energy intensity sectors such as manufacture of electricity and gas, retail trade, and construction, were amongst the most affected sectors in the scenario where there was no

[49] For the purpose of contextualising findings, a Full-Time Equivalent for total employment was estimated by converting the mean total actual weekly hours worked from October 2022 to March 2024 (the period covered by EBRS and EBDS) from the Labour Market Statistics (LMS) time series to FTE.

government support. Out of the total decrease in FTE jobs, 17% (around 36,000) were in the manufacture of electricity and gas sector.

6.3.3.2 Reported effects of the schemes on redundancies

Organisations that received support were asked to consider how likely they would have been to make redundancies in the absence of government support. Across all audiences, there was an indication that support had a moderate impact on the prevention of staff redundancies borne out of higher energy costs.

Around one in six NDOs that received EBRS discounts (17%) and one in eight that received EBDS baseline discounts (13%) said they would likely have been required to make staff redundancies in the absence of support. Of the NDOs that expected redundancies in the absence of support, the majority anticipated they would have made between one and two redundancies (68% in the absence of EBRS, 74% in the absence of EBDS).

Small organisations that received baseline discounts under EBRS or EBDS were more likely than average to report that redundancies would have been made in the absence of support. Without EBRS, 32% of small organisations predicted redundancies, compared to 17% overall, and 23% of small organisations expected redundancies without EBDS, versus 13% overall.

When considering application-based schemes, a third (33%) of organisations that received the higher level of EBDS support for ETIIs reported that, without this assistance, they would likely have needed to make staff redundancies. This compared to 13% amongst recipients of baseline EBDS discounts. Meanwhile, only three out of 74 HNOs predicted redundancies in the absence of the higher level of support available under EBDS.

During qualitative interviews, a few NDOs stated that the support prevented them from having to consider the next cost-cutting step of reducing their staff headcount. One organisation explained that, without the support they received, they would have had to look at reducing the number of support and administrative staff, caveating that they would need to balance redundancy payments against potential savings.

> *“The discount was bit of cushion, it probably saved one (support) member of staff. The impact would have been on the children and teacher who get less support in the classrooms. We are still at risk of redundancies in the future.” (NDO, Public Sector, Medium)*

> *“[Without it] we would have had to consider balancing redundancy payments against potential savings. There are a lot of anomalies that have to be looked at and projections made.” (NDO, Northern Ireland, Voluntary sector, Small)*

Some NDOs noted that the support either arrived too late or was not of sufficient monetary value to have an impact on avoiding redundancies. Some reported that they already had to make redundancies despite receiving the support, but that introduction of support prevented further from taking place. Others had already developed a cost-cutting strategy that potentially involved staff redundancies by the time the support had arrived and could not change course.

A few NDOs also highlighted that they would have had to find other ways to cut costs as they were already understaffed or part of a small team and so could not lose any more team members.

> *"The wheels were already in motion [by the time the discount arrived] to come up with what the strategic response would be, whether that's redundancies or something else." (NDO, Wales, Public sector, Large)*

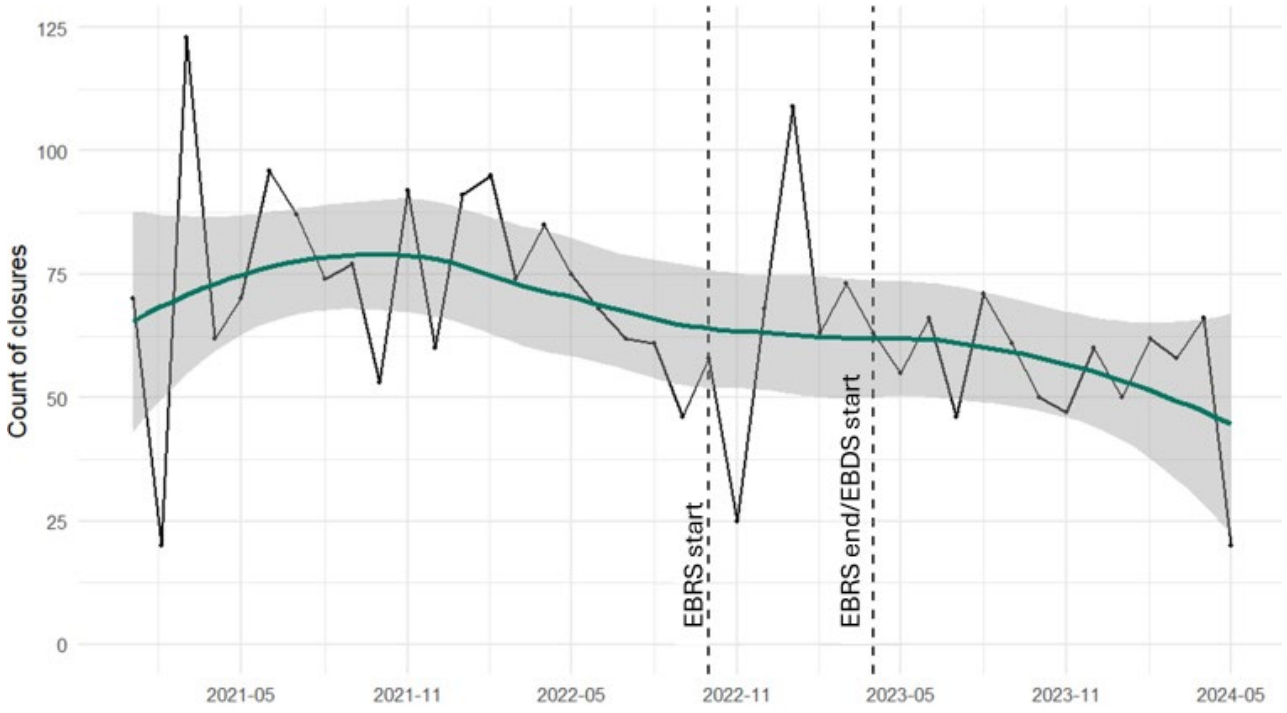
> *"It was just part of overall cost cutting, because suddenly this became an overhead that hadn't been an issue before, and we had to cut costs in any way we could. Cutting down on energy was one thing, and getting rid of a couple of people was another." (NDO, England, Private sector, Micro)*

6.3.3.3 Effects of the schemes on the risk of insolvency for NDOs and HNOs

The period between July of 2022 and March of 2023 was identified as a high-risk period for insolvencies based on previous analysis of energy price trends, shown in section 6.1.3 of observed impacts on energy bills. This was particularly true for smaller NDOs who faced higher energy prices. Despite high energy prices in July 2022, there was no substantial increase in insolvencies until the end of 2022. Private sector NDO deaths (i.e. the complete closure of business operations) are more severe than insolvencies, the latter occurring when businesses are unable to meet the financial obligations but do not necessarily need to close down. From October to December of 2022, private sector NDO deaths surged by 24%.

After the start of EBDS, there appears to be a slight reduction in the number of insolvencies, as shown by the fitted line in Figure 6.14. While this observation coincides with the period when the effects of the energy crisis and earlier EBRS support could plausibly have influenced business outcomes (chronologically, the reduction in closure of NDOs followed the introduction of schemes), the data do not provide strong evidence of a causal relationship. While the schemes may have contributed to reducing insolvencies, this analysis provides only suggestive evidence of a weak effect (if any).

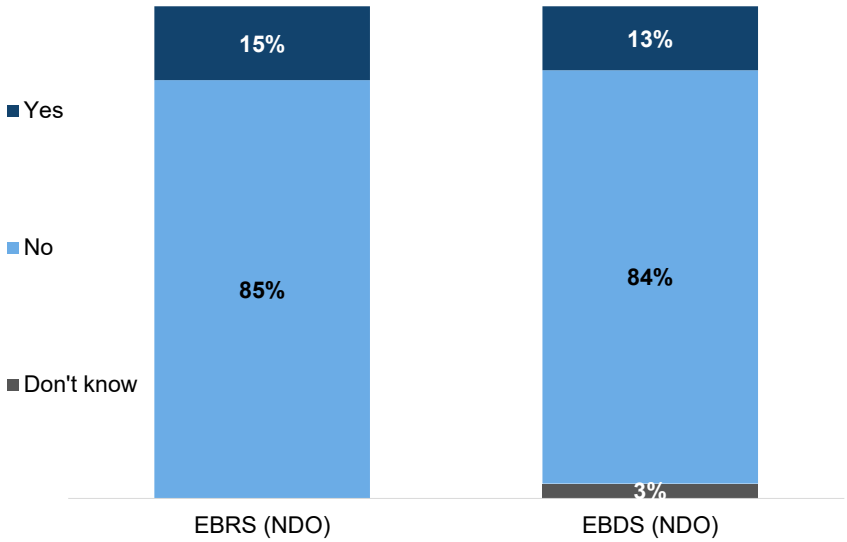
Figure 6.14 Closure of NDOs



Source: DESNZ Meter-Level data and ONS IDBR data. Note: The green solid line shown is a linearly fitted line. The grey area shows the confidence internal of the fitted line. The dotted lines represent introduction of EBRS and EBDS respectively.

When asked to speculate on what their experiences would have been without government support, most NDOs did not believe they would have faced an increased risk of insolvency. As shown in Figure 6.15, 15% of NDOs that received the EBRS discount and 13% of NDOs that received the EBDS baseline discount said they would likely have experienced a heightened risk of insolvency in the absence of this support. Similarly, nine per cent of HNOs that received the EBRS discount said they would likely have experienced increased risk of insolvency without the support. Consistent with the forecasted level of redundancies, small NDOs were more likely to say the risk of insolvency would have increased in the absence of support under either scheme (36% of small NDOs in receipt of EBRS; 30% of small NDOs in receipt of EBDS).

Figure 6.15 Proportion of recipients of automatically applied schemes that would have experienced an increased risk of insolvency without support



Stage 1 NDO survey. F4.2. NDOs that received EBRS support (616) Stage 2 NDO survey. J4.2 NDOs that received EBDS support (315)

Regarding application-based schemes, 18% of ETIIs that received the higher level of EBDS support reported that, without it, they would have faced a greater risk of insolvency. Few HNOs felt that they would have risked insolvency during the period in the absence of the higher level of support available under EBDS (7%).

There was limited testimony of the support preventing insolvency all together during qualitative interviews, but some NDOs explained that the support acted as a buffer during difficult times, and while they felt they had the reserves to prevent forced closure, the discount on their bills went some way to prevent businesses having to dig deeper into their reserves.

> *"It helped, as there was always a risk…Energy would be our second largest bill so the fact that was capped was a relief for us and life would have been a lot harder without it. I think we could have gone without it. We had some reserves at that point and could have eaten into them." (NDO, Scotland, Voluntary Sector, Micro)*

> *"[Without the support] We would have made a lot more losses and gone into our cash reserves a lot further." (NDO, England, Private sector, Small)*

One NDO explained that the support helped to get them through a difficult period, during which insolvency was almost inevitable, but that they were not yet out of the woods.

> "*[Without the support] all 15 staff would have been made redundant as the business would have closed down without the relief we received. It helped us survive, but business is not picking up.*" *(NDO, England, Private Sector, Small)*

6.3.3.4 Effects of the schemes on the risk of insolvency for energy suppliers

In qualitative interviews with energy suppliers, some reported that the schemes helped reduce their risk of insolvency. This was particularly pronounced among smaller suppliers that served only non-domestic customers or had a high proportion of ETII customers. A few suppliers emphasised that the reduced risk of them going insolvent was a consequence of schemes reducing the risk of their non-domestic customers going insolvent. Larger suppliers with both commercial and domestic customers, as well as those owned by parent companies with diversified revenue streams beyond non-domestic energy supply, stated that they would not have been at risk of insolvency.

Average employment and turnover across energy suppliers showed a decreasing trend before the implementation of the schemes, potentially linked to the negative impact of the energy crisis. After the introduction of EBRS, both employment and turnover started to increase. Although this change was not statistically significant, as the number of energy suppliers in the UK is low, the bar for statistical significance is relatively high. The highest level of significance was seen for the increase in turnover for medium and large energy suppliers.

6.3.4 Conclusions

Trends in the rate of business insolvency reflect a chronology that is consistent with the schemes having contributed to mitigating insolvencies (business closures declined after the schemes were introduced). Whilst this does not provide evidence of attribution, there is triangulated evidence across surveys and qualitative interviews with a range of stakeholder groups to suggest that, for certain types of businesses (and charities), the energy bill support contributed to reduced risks of insolvency.

Whilst the schemes did not have a substantive impact on reducing risks of insolvency for the majority of the wider population of organisations, for some types of NDOs and sectors it was a key contributing factor for mitigation. The Contribution Analysis (See Annex C) concludes there is strong evidence to suggest that the schemes (EBRS and support for ETIIs in particular) were one key contributing factor in mitigating the risk of insolvency for some types of NDOs. These included smaller businesses, businesses with high energy usage and low profit margins, and charities. High-energy intensity sectors such as manufacture of electricity and gas, retail trade, and construction, are amongst the sectors estimated to have benefited most from the schemes.

Amongst the wider population of NDOs, the schemes did not have a substantive impact on reducing risks of insolvency for most organisations, particularly where energy bills represented a low proportion of operating costs. The majority of NDOs were able to take other actions in response to the rise in energy bills to maintain their financial viability before being at risk of insolvency. These included adopting energy efficiency measures, using cash reserves to pay higher energy bills or lowering operating costs through other means.

The IO modelling estimates that the schemes helped to protect up to 132,000 jobs – with around 125,000 attributed to EBRS, and 7,000 to EBDS. Triangulation of findings across the

analysis of trends in redundancy rates, surveys and interviews with different stakeholder groups, support the conclusion that schemes helped protect jobs for some types of NDO. While the majority of NDOs were able to adapt to higher energy bills without implementing redundancies, there is strong evidence that the scheme support was one necessary contributing factor to mitigating implementation of redundancies; the evidence was strongest for energy intensive industries.

6.4 Stable energy market

6.4.1 Context of the schemes in relation to the energy markets

A stable energy market facilitates a predictable pricing environment while simultaneously ensuring that the supply of energy is sufficient to meet demand across various sectors. This balance is vital for economic planning and investment, reducing the risks associated with energy costs, and fostering a secure and dependable energy supply chain that supports economic growth and development.

An energy market is defined as stable if supply can meet demand and price volatility is limited to predictable values. The following features help to inform overall energy market stability:

- **Wholesale energy price volatility**: High volatility means that wholesale energy prices fluctuate significantly in a short amount of time, making it difficult for NDOs and consumers to predict costs. This is expected to have similar effects to general economic uncertainty, such as economic slowdown due to delayed spending decisions (primarily investment).[50]
- **Retail energy price volatility and energy cost volatility**: Unlike wholesale energy prices, retail energy prices also include the changes in other costs (e.g., system usage costs) and are therefore affected by consumers' contracts with different suppliers. Volatility in wholesale prices can lead to changes in retail prices, though often with a delay. Because energy suppliers purchase energy on the wholesale market to sell to consumers, if wholesale prices increase substantially, suppliers may eventually pass these costs on, leading to higher retail prices. In the UK, the energy market is regulated by Ofgem, which can influence how quickly and to what extent wholesale price changes affect retail prices. Furthermore, the presence of fixed-term energy contracts and strategies such as hedging can delay the transmission of wholesale price changes to retail.
- **Energy cost affordability**: A market that maintains energy cost affordability ensures that energy expenses do not become a disproportionate burden on the economy or on individual NDOs, promoting equitable access to energy resources.
- **Energy consumption**: Observing changes, both with respect to prices and quantities, in the amount of energy used by NDOs within a particular period will help better understand energy cost changes.

[50] Bloom, N. (2014) 'Fluctuations in Uncertainty', Journal of Economic Perspectives, 28(2), pp. 153-76. Available at: www.aeaweb.org/articles?id=10.1257/jep.28.2.153

The energy crisis was expected to have an adverse effect on market stability through rising wholesale energy prices. As rising wholesale prices were gradually passed on to retail energy prices, it could be expected that other market stability indicators would show similar signs of market stress, starting with energy cost and energy cost affordability.

6.4.2 Expected impacts on energy markets

This section outlines the anticipated impacts of the schemes on energy market stability based on the underlying theory of change. It explores ways by which the scheme could have led to intended and unintended outcomes for the non-domestic energy market.

The schemes were expected to contribute to energy market stability through effects on both NDOs and energy suppliers.

1. **Supporting energy costs:** By providing a decrease in energy prices for NDOs, the schemes improve energy affordability and reduce the adverse impacts of increased energy price volatility. NDOs receiving this support are therefore less likely to face risks of redundancies, insolvencies, or other adverse impacts to their operations. This improvement to NDO financial health in turn helps improve the predictability of revenue for energy suppliers – particularly for suppliers with smaller, less diversified NDO portfolios – as the risk of NDOs underpaying or defaulting on their energy bills is decreased.

2. **Reducing market stress and uncertainty:** By improving the predictability of revenue for energy suppliers, their overall financial health improves. This ensures more reliable energy access for NDOs and translates into lower levels of uncertainty in the energy market, which in turn promotes more predictable and stable market performance.

6.4.3 Observed impacts on energy markets

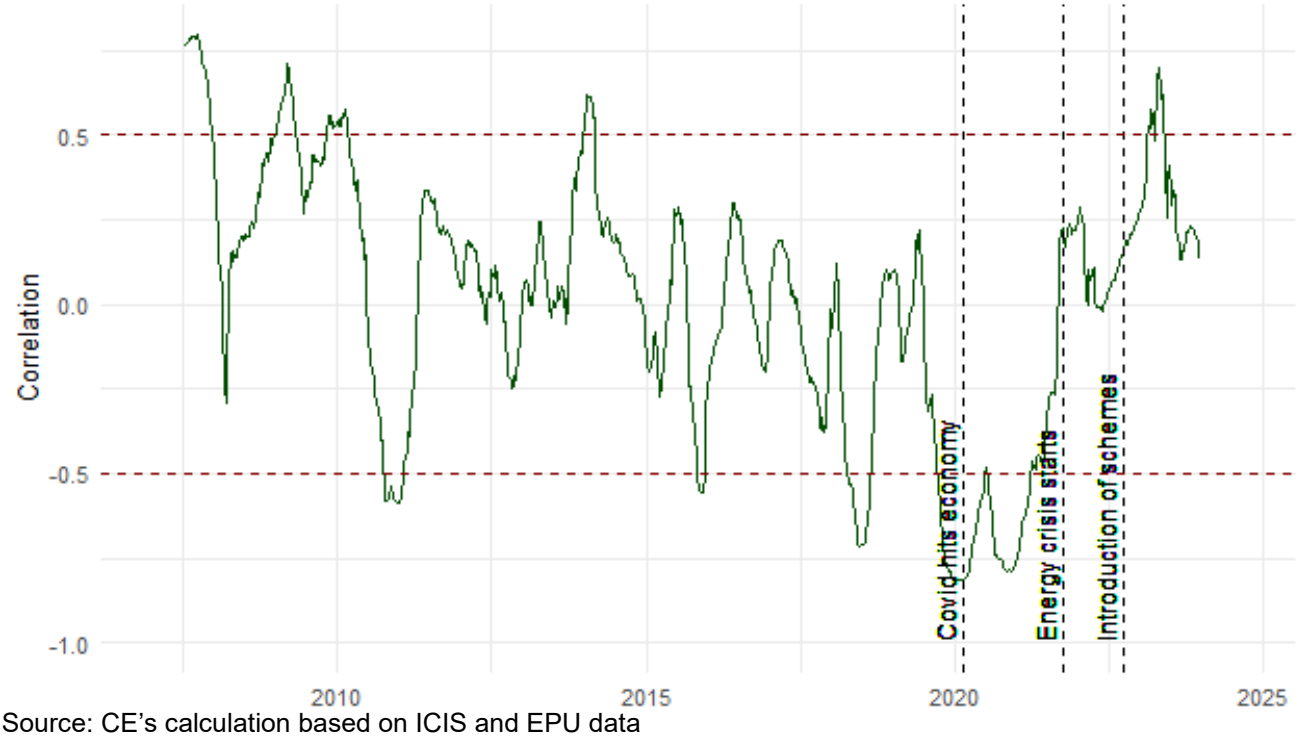
During the energy crisis in late 2021, changes in the prices of gas and electricity became significant drivers of economic uncertainty. Following the introduction of the support, however, the relationship between energy prices and uncertainty weakened, indicating that the schemes were able to reduce uncertainty in the energy market.

To establish the relationship between the schemes and uncertainty, the rolling correlation between wholesale fixed-price gas and electricity contracts and uncertainty was analysed.[51] Uncertainty is reflected by the Economic Policy Uncertainty (EPU) index, a publicly available

[51] Wholesale energy prices for fixed-price contracts reflect the cost of energy agreed upon for future delivery. Different fixed-price contracts refer to contracts with different delivery periods – short-term covering near-term delivery (e.g., this and the following months), medium-term typically less or around a year, and long-term extending a year (or multiple years). These contracts help energy suppliers and large consumers manage price risks and budget predictability, but non-domestic organisations face differing energy prices depending on the conditions under which they contract with the supplier.

daily index created based on an analysis of the sentiment of newspaper coverage.[52] The EPU index captures concerns about economic policy decisions, their timing, and effects, including "non-economic" policy matters like military actions. Further information on the analysis of the effect of the schemes on economic uncertainty and energy market stability is available in the Quantitative Impact Report.

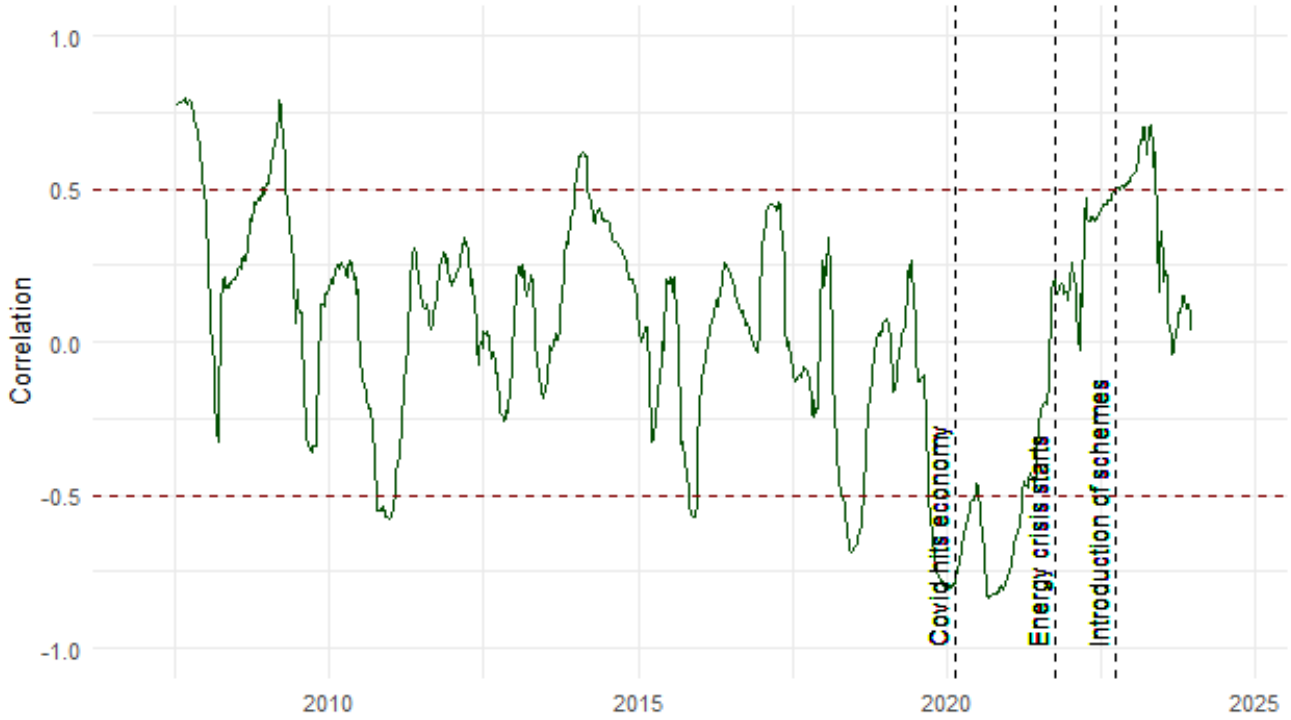
Figure 6.16 Rolling correlation between uncertainty and short-term fixed gas prices



Source: CE's calculation based on ICIS and EPU data

[52] Scott R. Baker, Nicholas Bloom, Steven J. Davis, Measuring Economic Policy Uncertainty, *The Quarterly Journal of Economics*, Volume 131, Issue 4, November 2016, Pages 1593–1636, https://doi.org/10.1093/qje/qjw024
In this analysis, the UK-specific index was used, which is created based on the Times of London and the Financial Times.

Figure 6.17 Rolling correlation between uncertainty and short-term fixed electricity prices



Source: CE's calculation based on ICIS and EPU data

As seen in **Error! Reference source not found.**16 and **Error! Reference source not found.**17, uncertainty and energy prices were positively correlated from late 2021, with the relationship between the two becoming stronger. The strongest correlation between these variables was observed in short-term price series, which respond more rapidly to economic and policy changes. The rolling correlation between uncertainty and different fixed-price energy contracts peaked above 0.5 a few months after the introduction of the schemes in October 2022, reflecting the point at which energy prices began to decrease in winter 22/23. As energy prices decreased and EBDS replaced EBRS, the correlation between uncertainty and energy prices weakened (i.e., moved closer to 0). This change suggests that the support may have had an impact on decoupling energy prices from uncertainty, as the schemes increased the predictability of energy costs and improved overall market conditions (i.e., the financial health of NDOs and energy suppliers).

The analysis indicates that by protecting non-domestic organisations from extreme price fluctuations, the introduction of the support may have contributed to decoupling energy prices from uncertainty – which in turn helped to enhance overall market stability.

The analysis suggests that the schemes contributed to reducing the volatility of energy prices faced by NDOs. As a result, the relationship between uncertainty and energy prices weakened compared to the energy crisis period, when the correlation between uncertainty and energy prices became positive and increased (i.e., they became relatively coupled). The reduction in correlation between prices and uncertainty was particularly noticeable for medium- and long-term energy prices, further reinforcing the role of the support in providing market stability and enhancing resilience.

6.4.4 Conclusions

The analysis presented above highlights the role of the support schemes in reducing the impacts of energy price volatility and reducing uncertainty in the market during the energy crisis. As energy prices increased in late 2021 due to the energy crisis, the correlation between uncertainty and energy prices increased, particularly for short-term prices. However, following the introduction of the schemes, this correlation weakened, suggesting that the schemes could have contributed to decoupling energy prices from uncertainty.

By stabilising energy costs and reducing the immediate pass-through of wholesale price fluctuations, the schemes helped protect NDOs from extreme price shocks. This provided a more predictable pricing environment, reducing market stress and enhancing overall energy market stability. The observed decline in uncertainty, particularly in medium- and long-term energy prices, reinforced the role of the schemes in fostering resilience and improving competitiveness in the energy market.

6.5 Secondary impacts

This section examines the anticipated secondary impacts of the support schemes on NDOs by analysing changes in competitiveness, energy efficiency, energy consumption, product or service offering, and levels of reinvestment.

6.5.1 International competitiveness

When energy prices first began to increase in 2021 and 2022, it was expected some NDOs would need to pass these increased costs onto customers, particularly if they lacked the capital or credit access to absorb the increased costs. Consequently, this could have undermined their competitive position in the market.

The provision of support was expected to improve the international competitiveness of UK NDOs which may have been hampered by energy cost shocks. This was especially the case for the EBDS for ETIIs scheme which directly targeted NDOs that were expected to be more at risk of competition for their products and services, as their international competitors may have been less affected by the energy price crisis.

The perceived impact of EBDS for ETII support on international competitiveness varied among recipients. Around a third (35%) of recipients reported that, without it, their organisation would have experienced greater difficulty competing internationally. Three fifths (61%) of recipients said they would not have faced issues with international competitiveness without the support.

During qualitative interviews, some NDOs in receipt of EBDS for ETIIs expressed the view that the support enabled them to compete more effectively with rivals in countries like Germany, Spain, France, and Italy, where they perceived energy costs stabilised more quickly. Without this assistance, these companies would have struggled to remain competitive and could have faced the risk of ceasing operations.

> *"We were able to operate more in line with our competitors in Italy, it has just levelled the playing field a little bit." (NDO, England, Private, Micro)*

> *"Ultimately, if we can't operate cost effectively, it would probably affect the ongoing viability of the of the business. It's a difficult business to downscale. It's either viable or it's not. It's a fairly fixed cost base. So yeah, if the production costs aren't competitive, then the operation would probably close rather than rather than downsize." (NDO, England, Private, Medium)*

Surveys and qualitative interviews with other NDOs indicate that international competitiveness was rarely considered a benefit of other schemes. Fewer than one per cent of recipients of EBRS, NDAFP, and EBDS (not including ETII recipients) raised improved international competitiveness as a benefit of support. This is somewhat expected as only 10% of UK businesses are involved in exporting goods or services to other markets.[53]

6.5.2 Energy consumption and efficiency

At the onset of rising energy prices, it was expected that NDOs would be likely to reduce their energy consumption as they cut back on expenditures to manage increased costs. The introduction of the schemes aimed to facilitate NDOs to consume energy at levels necessary for their normal operations. The impact of the support on energy consumption was expected to vary depending on factors such as the extent of supplier cost pass-through (i.e. the share of the wholesale price in an NDO's energy tariff), the speed of adjustment of retail price to changes in wholesale prices and the responsiveness of energy demand to price changes (electricity and gas price demand elasticity).

The impacts on the schemes on energy consumption were calculated using input-output (IO) modelling. The impacts from the IO model can be classified into:

- Direct impacts, which reflect the immediate impact of the schemes on sectors (i.e., the effect of reduced energy bills).
- Indirect impacts, which also capture the secondary impact on related businesses that supply and demand inputs to the affected sectors.
- Induced impacts, which also account for the changes in household spending resulting from income adjustments in impacted sectors.

The combined impacts provided are the sum of the direct, indirect and induced impacts, which were used to estimate the impact of the schemes. This considers the immediate direct effect of price changes on firms, the indirect effects upstream and downstream in their supply chains, and the induced effects via consumer spending.

Based on input-output (IO) modelling, the support schemes contributed to mitigating under-consumption of energy due to higher energy prices, resulting in 33,700 gigawatt-hours (GWh)

[53] www.gov.uk/government/statistics/uk-trade-in-numbers/uk-trade-in-numbers-web-version

[54,55] of additional energy consumed compared to a counterfactual scenario in which NDOs would have experienced the effects of the energy crisis without support. As energy consumption is linked with economic activity, the schemes contributed to avoiding a loss of £21.6 billion of economic output, compared to a counterfactual scenario without support (see **Error! Reference source not found.**), equivalent to approximately 0.6% of total economic output.[5657] It is important to note that this analysis assumes the relationship between energy use and output in the economy remained unchanged during the energy crisis and after the schemes' implementation. Because IO modelling assumes constant returns to scale, it will not account for any dynamic relationships or feedback loops between energy use and output, it can tend towards overestimating impacts, particularly in the longer-term. As a result, it acts as an upper-bound estimate.

Table 6.1 Net impacts of the Energy and Discount shocks on Gross Output by scheme (billions)

	EBRS Energy shock	EBRS Discount shock	EBRS Net shock	EBDS Energy shock	EBDS Discount shock	EBDS Net shock
Direct impacts	-£14.6	£7.5	-£7.1	-£2.0	£0.4	-£1.5
Indirect impacts	-£19.0	£5.5	-£13.6	-£2.4	£0.3	-£2.1
Induced impacts	-£11.5	£7.5	-£4.1	-£1.6	£0.4	-£1.1
Combined impacts*	-£45.2	£20.4	-£24.8	-£6.0	£1.2	-£4.8

Source: IO modelling analysis based on 2019 UK IO table.[58] *Combined impacts may not equal the sum of direct, indirect and induced impacts due to rounding.

The majority of the impact on output can be associated with EBRS. Specifically, £20.4 billion of the total avoided output loss can be attributed to this scheme. As a result, from the total reduction in energy underconsumption, 31,900 GWh can be attributed to EBRS, and 1700 GWh can be attributed to EBDS.

Evidence from the surveys shows the schemes were successful in helping NDOs maintain their levels of energy consumption. Almost three quarters (73%) of NDOs in receipt of EBRS support stated that their energy consumption stayed the same whilst in receipt of support, with

[54] While EBRS and EBDS spanned multiple years, as a point of reference, this is equivalent to 1.65% of the UK's energy consumption in 2022, including energy use on consumption expenditures (e.g., road transport).
[55] It is important to note the input-output modelling could not reveal how consumption expenditures changed (i.e., the consumption of fuels and other products by individuals in the UK), therefore the impact on it is not included in this analysis (e.g., consumer expenditures on the fuel consumption of road transport).
[56] Total economic output estimated based on 2019 UK IO table to align with IO modelling analysis.
[57] Further details on the calculation of changes in energy demand can be found in the Quantitative Impact report.
[58] The most current IO table at the time of this analysis was for 2020. However, given the presence of COVID-19 during 2020, the 2019 IO table was used for the IO analysis. Employment data for 2019 was used to align to the IO table. See the Quantitative Impact report for further details.

around one in six (16%) stating it decreased and less than one in ten (8%) stating it increased. Of those that reported that it decreased; the majority (92%) stated that they could still consume energy at the rate required to maintain operations. For recipients of the EBDS baseline discount, four fifths (80%) reported stable energy consumption, and fewer than one in ten each saw a decrease, or an increase (both 8%).

Qualitative interviews with NDOs supported these findings, with several highlighting that the support allowed them to maintain their operations and energy consumption at pre-price rise levels. NDOs emphasised that, without the support, they would have been forced to reduce energy usage to cope with rising costs, but the schemes helped them avoid these adjustments. Suppliers also noted that the schemes helped their customers, particularly ETIIs, sustain their energy consumption, but cautioned that attributing this solely to the schemes was challenging, as NDOs may have implemented other measures to reduce usage.

6.5.3 Investment in energy efficiency and low-carbon technologies

Survey evidence revealed that some NDOs adopted new energy efficiency measures, either in the form of new technology or decarbonisation efforts, since the schemes came into effect in October 2022. Around a third (30%) of NDOs had introduced new technology to limit their energy consumption since October 2022. This usually involved upgrading equipment or machinery (55%), switching off electrical equipment when not in use (33%) and introducing new energy management systems (10%). Most NDOs that invested in energy efficient technology reported that the support schemes had no influence on their decision to make these investments (59%). However, although not an intended outcome of the schemes, a third said their investment in energy efficient technology was influenced by the schemes (36%), including six per cent that said they were influenced to a large extent. Additionally, three per cent of NDOs reported switching to low-carbon heat sources since October 2022.

Compared to NDOs in general, a greater percentage of HNOs reported introducing new energy efficiency measures. Around half (46%) of HNOs introduced new technology to limit their energy consumption since October 2022. Like NDOs, this typically involved upgrading equipment or machinery (74%) and introducing or upgrading energy management systems (60%), as well as conducting energy audits (54%). Most HNOs that invested in energy efficient technology reported that the support schemes had no influence on their decision to make these investments (71%), while a fifth said their investment in energy efficient technology was influenced by the schemes (20%). Additionally, 12% of HNOs reported switching to low-carbon heat sources since October 2022.

During qualitative interviews with NDOs and HNOs, reducing operational costs and general environmental considerations were identified as the primary drivers behind the adoption of new energy efficiency measures. Some NDOs also reported environmental accreditation requirements as a motivating factor.

> *“[Price rises] was one of the factors, and it was about carbon footprint. But as part of our 14001 accreditation, we have to constantly try to reduce our energy consumption, so it was based on that really.” (NDO, England, Private, Micro)*

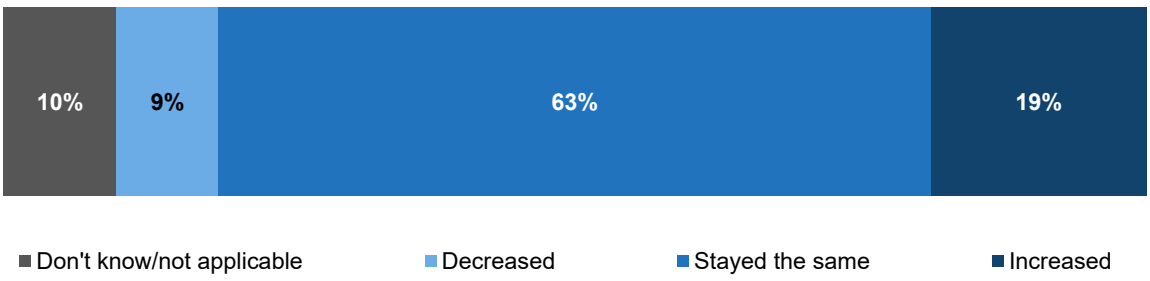
"We invested in new energy-efficient fridges with back up motors…where we had six compressors running everything, now we've only got three...it's a lot more efficient… it was also to be environmentally friendly to show the community that we are doing things to help the environment. " (NDO, Wales, Private, Small)

6.5.4 Product and service offering

To manage increased energy cost expenses, NDOs could have reduced their product or service offerings, focusing on their fundamental or most profitable activities. Additionally, supply chain disruptions - which would be common during an energy crisis due to higher transportation and manufacturing costs - could have made sourcing raw materials challenging. NDOs might have better managed these disruptions by narrowing their product or service offering. The introduction of the schemes was expected to reduce instances of NDOs reducing their product or service offering. Lower energy bills were anticipated to reduce uncertainty and improve liquidity, which, in turn, would offset the need for NDOs to take this measure.

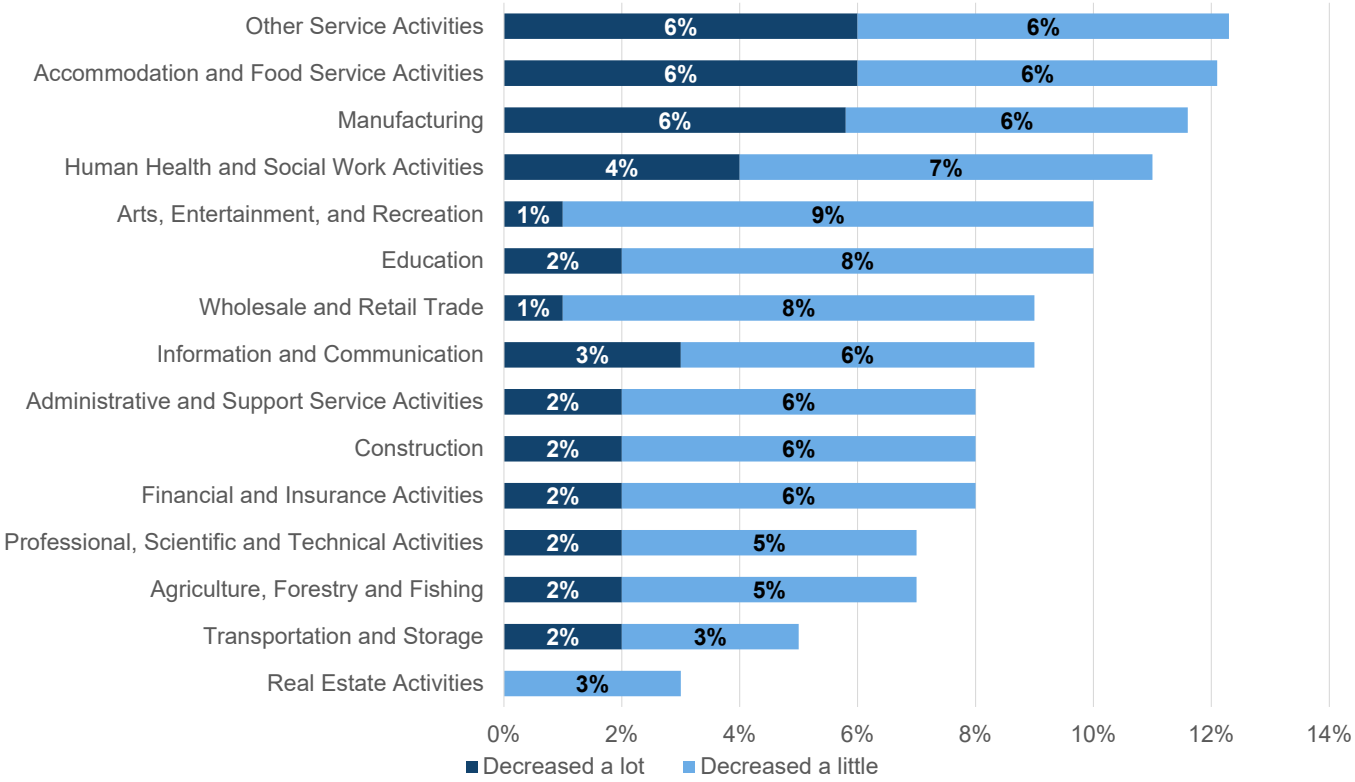
Despite the risks outlined above, most NDOs reported no difference in product and service offering between winter 2022-23 and winter 2023-24 (see Figure 6.18). Around two thirds (63%) of NDOs maintained their product service offering between these two periods, with a further fifth (19%) increasing their offering. However, nine per cent of NDOs reported reducing their product or service offering during this period. The types of NDOs that were most likely to report reducing their offering were NDOs in the other service activities, accommodation and food service activities and manufacturing sectors (all 12%), the North East (12%), and those with more than 10% of their total costs spent on energy (13%). Those least likely to be affected were those in the public sector with just four per cent stating they had reduced their service offering in this period.

Figure 6.18 Change in product or service offering between winter 22-23 and winter 23-24



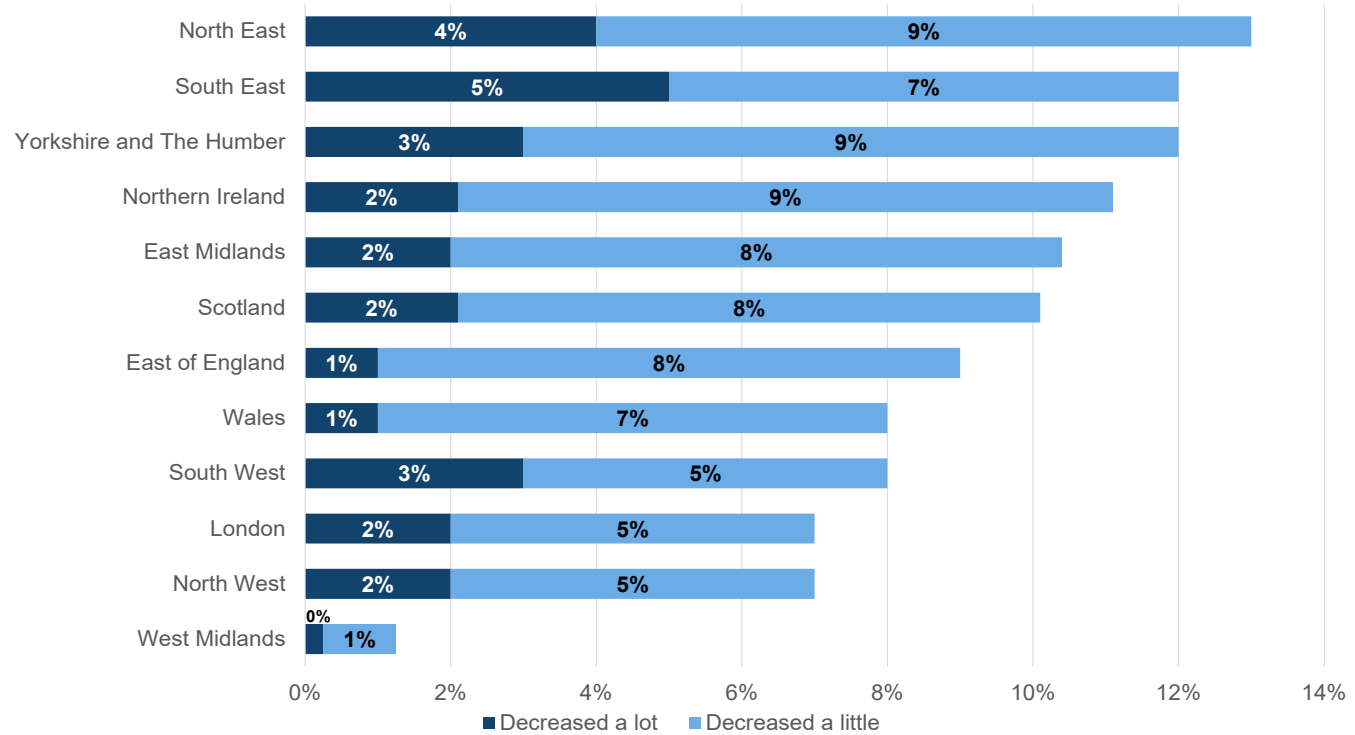
NDO survey, Stage 2. C20_1. Base: All: 3900.

Figure 6.19 Percentage of NDOs reporting a decrease in product or service offering between winter 22-23 and winter 23-24 by sector



NDO survey, Stage 2. C20_1. Base: All: 3900.

Figure 6.20 Percentage of NDOs reporting a decrease in product or service offering between winter 22-23 and winter 23-24 by region



NDO survey, Stage 2. C20_1. Base: All: 3900.

Around half (53%) of NDOs that reported a decrease in their product or service offering between winter 2022-23 and winter 2023-24 considered energy price increases to have been a contributing factor, including a fifth that considered the price increases to be a main factor (21%).

During qualitative interviews, many NDOs said that they maintained their product or service offering by absorbing increased energy costs between winter 2022-23 and winter 2023-24, accepting lower profit margins and reduced cash flow. Some implemented other cost-saving measures to mitigate rising expenses, such as workforce reductions and adopting more energy-efficient practices. Where product or service offerings were reduced, this was typically achieved through a reduction in operating hours, such as closing an extra day or two each week. A few NDOs reported streamlining their product lines or service activities.

> *"We started closing Monday to Wednesday, and only open Thursday, Friday, Saturday, and Sunday, because the cost to run the energy through the whole week was so expensive." (NDO, Northern Ireland, Private, Small)*

> *“Our spending on stock reduced and we carried less stock, meaning customers had less choice, or went to competitors.” (NDO, Scotland, Private, Small)*

> *“We had the money to pay the bills, but the more that was spent on energy the less they [the organisation] had to spend on the work we do. We reduced the number of events and training sessions.” (NDO, Wales, Voluntary, Small)*

6.5.5 Reinvestment

NDOs could potentially have responded to the energy crisis by scaling back their investment into activities that aim to increase the value of the organisation, such as purchasing new technology to improve efficiency or new infrastructure to scale up production. This is because the escalation in costs could have eroded profit margins and cash reserves, making reinvestment challenging. Moreover, high energy costs could have reduced consumers' disposable incomes, leading to reduced demand for goods and services and further eroding profit margins and cash reserves which, in turn, would diminish investment potential. Additionally, the uncertainty surrounding future energy prices was expected to create a volatile economic environment. NDOs typically seek stable and predictable conditions before implementing long-term investments. The fluctuating energy prices could have introduced a level of risk that investors found unacceptable. The schemes were expected to contribute to mitigating these potential adverse effects on reinvestment by alleviating the negative effects of rising energy prices. Lower energy bills were expected to reduce uncertainty and improve liquidity, which would then encourage NDOs to sustain investment activities.

When NDOs were asked about the effects of increased energy prices between winter 2022-23 and winter 2023-24, a reduction in reinvestment was rarely mentioned as an unprompted impact. However, while not a foremost impact, it was clear from qualitative interviews that some NDOs were required to pause or scale back planned reinvestment to balance their operating budgets in difficult times. These organisations acknowledged energy costs as a

contributing factor but also emphasised other influences, such as rising raw material costs and staff salaries.

> *"At the end of last year and the beginning of this year we have had to pull-on cash reserves quite a bit… And so, we've just put on hold regeneration of sites, things which we were hoping to develop." (NDO, England, Voluntary, Large)*

> *"It's [energy price rises] have meant that we've had to be tighter in other areas of the setting. So, where we would normally invest in additional things and resources to support the children's learning, we've had to be a little bit more careful with that." (NDO, England, Private, Small)*

While some NDOs were required to pause or scale back planned inward investment, others reported accelerating investment in new energy efficient technology between winter 2022-23 and winter 2023-24. Such investments were typically driven by efforts to reduce operational costs and address environmental considerations.

> *"There has been a lot of investment going on in the last couple of years just to update all [energy systems]. As part of that process, we're replacing a 50–60-year-old steam boilers with modern equivalents. Obviously, there's energy savings coming out of all that. And we are currently in the process of changing all the lighting in the factory to LED lighting. That's obviously going be more energy efficient." (NDO, England, Private, Micro).*

7. Value for money

This chapter presents an analysis of the value for money (VfM) of the schemes, assessing the extent to which the measurable benefits of the schemes delivered energy cost reductions which represented good value for money.

7.1 VfM approach

The VfM analysis conducted as part of this evaluation is based on a social cost-benefit analysis (CBA) approach. A CBA assigns monetary values to both the costs and benefits of an intervention, allowing for the evaluation of the net benefit of the intervention in monetary terms, relative to a counterfactual in which the intervention did not occur. The CBA considers the costs and benefits of the schemes to society and calculates the net benefit (or cost), and a benefit to cost ratio (BCR) of these programmes.

In the case of this CBA, the counterfactual is defined as a scenario in which the energy crisis occurred, but the support schemes were not implemented. Benefits are positive social outcomes from the financial support or from increased energy usage. Costs include additional environmental damages resulting from increased energy use, as energy usage is expected to be higher with scheme support compared to an unsupported crisis when high energy prices mean organisations would try to reduce their energy usage.

Benefits are measured using the impact evaluation methodology (see Chapter 6) and are converted to monetary value as part of the CBA. Costs are based on recorded spend and modelling of the environmental costs from the schemes effect on maintaining economic production.

In this CBA, the estimated costs and benefits of the schemes were compared to a counterfactual scenario in which the energy crisis occurred, but the schemes were not implemented. Benefits are aggregated over the period during which the schemes were active (i.e. October 2022 to March 2024), while costs were aggregated over the period during which costs were incurred (from FY 2023 to 2025). Monetary results are presented in nominal pounds corresponding to the year in which costs or benefits were incurred.

CBAs often use constant monetary values that adjust for inflation and discounting, to align the timing of costs (which are often incurred in the present or near term) and benefits (which often only begin to be realised in the future). In this case, two factors led to the use of nominal monetary values. First, the cost data – and benefits calculated from this data using IO analysis – did not distinguish when during the applicable period(s) these costs and benefits were incurred. Second, as this analysis assumes that the benefits of the schemes were realised in the same period as the costs were incurred, the effect of inflation on the overall cost-benefit conclusions is minimal, and a conversion from nominal to real terms would be apply equally (in

a proportional sense) to both costs and benefits. While the specific cost and benefit figures may therefore differ slightly if presented in real terms, the key findings would be unaffected.

With the intention of providing a full picture of the value of the schemes, two CBA approaches were explored:

- **An exchequer value approach**: This method reflects the value to government, in the context of the effect on public finance. Exchequer costs consider the total costs to government, including payments disbursed, and administrative costs. Exchequer benefits only reflect financial benefits directly to government, such as increased tax payments or savings from reduced government support.
- **A social value approach**: This method considers the value of the schemes to society. Social CBAs are able to consider non-market impacts and externalities, as well as the monetisation of intangible impacts for society. Social benefits can include a wide range of impacts, but specifically for this evaluation, only social benefits that would be expected to impact the economy are explored. Social costs in this analysis include environmental costs such as carbon, fraud and gaming, and administrative costs to government of operating the schemes. The costs of payments disbursed are not considered as part of a social CBA, this is explained further below.

In developing this methodology, it was determined that Exchequer benefits could not be accurately estimated, and therefore the Exchequer value of the scheme has not been included in the CBA. Exchequer benefits come in the form of reduced benefits expenditure and higher taxes paid, such as Corporation Tax, PAYE and VAT, which it is highly likely would have been a benefit of the schemes. As the IO modelling impacts do not allow these taxes to be accurately estimated, no BCR is provided for the Exchequer value. It is not uncommon for Exchequer values to be negative while social net present values are positive, and so a high Exchequer cost would not indicate poor value for money of the schemes, nor is it a foregone conclusion that the Exchequer value would be negative given the positive effects of the schemes. Nonetheless, the inability to calculate an Exchequer value, limits understanding of the impacts of the scheme.

NDAFP was not included in the IO modelling of the schemes ‘scenario’, due to lack of information about the sectoral distribution of the baseline element of the scheme; as a result, the benefits of NDAFP are not explicitly represented in the CBA. However, given the IO results are an upper bound and NDAFP was associated with less than one per cent of the total discount disbursed, it is unlikely the results would have changed substantially had it been included. The administrative and operational costs of NDAFP are included in the CBA to provide an accurate representation of all programme costs.

EBRS and EBDS have benefits that are strongly interrelated due to the consecutive nature of the schemes. Due to the difficulty of fully disentangling these, separate EBRS and EBDS benefits are not provided in every context. Where these are provided, the sum of EBRS and EBDS may not add to the total, due to these overlaps.

Further detail is available in Annex A: Technical Report.

7.2 Costs

7.2.1 Government spend

Costs for the schemes consist primarily of the discount disbursed and operational costs. The operational costs of the EBRS, EBDS, and NDAFP schemes for financial years 2022/23, 2023/24, and 2024/25 were provided by DESNZ, and are summarised in Table 7.1. In total, over these three years, the schemes cost approximately £8.1 billion.[59]

Table 7.1 Total government spend for the schemes (millions)

Costs	EBRS	EBDS	NDAFP	Total
Total discount disbursed	£7,525.79	£405.68	£62.00	£7,993.47
Staff costs and contractors	£3.82	£6.70	£0.63	£10.98
Other operational costs	£26.83	£14.73	£1.15	£42.72
Total	**£7,556.44**	**£427.12**	**£63.79**	**£8,047.35**

Source: Internal DESNZ financial monitoring information. Note: Allocation of costs between scheme budgets is accurate wherever possible, however for some expenses, resources were shared (for example, some staff working across both schemes) so the scheme splits are estimated. 'Other operational costs' covers a range of expenses, including audit costs, consultancy costs, legal costs, digital costs and Ofgem administration costs.

It is important to note that most of the support schemes' cost is in the discounts disbursed. As these costs are the transfer of resources between people and do not involve the consumption of resources, they are considered transfer payments.[60] In line with Green Book guidance, transfer payments should not be included in overall estimates of Net Present Social Value, so are not included in this social CBA. Consequently, the BCR produced by this analysis is likely to appear high.

7.2.2 Environmental costs

A sizeable societal cost of the schemes is their environmental impact, given that they enabled the maintenance of economic production. Higher energy use from avoiding an underconsumption of energy would lead to greater carbon emissions than if the schemes had not been introduced. Higher carbon emissions contribute to long-term climate change, and results in higher emissions of air pollutants, which degrade local air quality and have lasting negative health effects.

It can be argued that these schemes merely sustained economic production at a level comparable to if the energy crisis had not occurred. The environmental impacts (carbon

[59] These costs are presented in nominal, undiscounted terms. The effect of discounting over such a short period is minimal and does not affect the conclusions of the VfM analysis.
[60] The Green Book (2022) - Section 6.3 Economic transfers

emissions and air pollution) analysed in comparison to an 'energy crisis without schemes' scenario would be substantially lower if assessed against a 'no energy crisis' counterfactual.

Despite this, environmental impacts are assessed relative to a scenario with high energy prices but no support schemes, to ensure methodological consistency with the wider evaluation. Therefore, while the costs presented below are included in the cost-benefit analysis to most accurately calculate the schemes' social impacts, it is worth noting that carbon and air pollution costs would still have been below levels in a no-crisis scenario.

The surveys of NDOs conducted as part of this evaluation indicate that the support provided allowed organisations to maintain pre-crisis levels of energy consumption, rather than reducing energy consumption in response to higher energy costs. Estimating the carbon cost of this marginal energy consumption,[61] the £21.6 billion increase in overall economic activity as a result of the schemes (discussed further in the benefits section) was estimated to result in additional emissions of 4.35 million tonnes of CO_2 equivalent (tCO_2e), equivalent to 1.1% of total UK emissions in 2022.[62][63] Based on UK government's carbon valuation,[64] the carbon cost of emissions was valued at £265 per tCO_2.[65] As a result, **the monetised impact of additional carbon emissions, which would not have occurred without the schemes, is £1.154 billion.**

Other relevant environmental impacts include the potential effects of the schemes on air pollution and, consequently, on human health, productivity, well-being, and the environment. However, assessing these impacts is significantly more complex than measuring carbon emissions. The IO method does not indicate where the additional sectoral energy consumption physically occurs within the UK (i.e. in a densely populated area, a rural one, or at sea), which is a crucial limitation since air pollutants have strong local effects but more moderate overall impacts.

The environmental cost assessment of air pollutants followed Defra's air quality appraisal methodology,[66] which employs a damage cost approach designed to assess relatively small air quality impacts. The damage of five main air pollutants was assessed, resulting in a total **monetised damage of £631 million**, of which nitrogen oxides (NOx) accounts for £342 million. The water transport sector drove 74% (£464 million) of these damages. However, these damages do not account for location, or apply a different monetisation based on sector. As water transport and shipping typically occurs far from population centres, it is likely that the

[61] I.e., the difference between actual energy consumption and the energy consumption that *would have* occurred in the absence of the schemes.
[62] As the impact of the programmes was spread over several years, the comparison to 2022 emissions is provided for a general sense of magnitude.
[63] In 2022, UK territorial emissions were 405 million CO_2e. See: Measuring UK greenhouse gas emissions - Office for National Statistics
[64] See: Carbon valuation - GOV.UK and DECC report
[65] See: data-tables-1-19.xlsx – Table 3, central value in 2023.
[66] Air quality appraisal: damage cost guidance - GOV.UK

actual damages are lower.[67] **These results should therefore be used with caution and as an upper-bound estimate of the potential damage from air pollutants.**

Potential cost in fraud and gaming

Government spending has a risk of fraud and error. This is especially relevant for application-based schemes, given the higher level of complexity compared to universal schemes. DESNZ estimated that across the broader energy affordability portfolio (including domestic schemes) 0.7%[68] of the scheme payments were either claimed fraudulently or paid in error.[69] This would represent £56 million across the three non-domestic schemes. This level of fraud and error is considered relatively low compared to previous implemented government schemes of similar scale as described in the NAO report.

7.2.3 Other costs not quantifiable

Beyond the costs described above, there are additional societal costs that were not quantified in this analysis. These costs include reduced incentives for innovation, "deadweight loss" from inefficiencies in programme implementation and costs to suppliers, delivery partners and beneficiaries.

Reduced incentives for innovation

The support schemes provided relief during a time of very high energy prices for NDOs. It was possible that receiving the energy support reduced price-induced innovation effects. This could therefore have included lessening the incentive to install energy efficiency measures, or to change to less carbon-intensive fuel sources. However, the survey findings show that 30% of NDOs had introduced new technology to limit their energy consumption since October 2022; with most (59%) of those that invested in energy efficient technology reporting that the schemes had no influence on their decision to do so and 36% saying their investment was influenced by the schemes.

Deadweight loss

The support schemes provided energy cost relief to a broad spectrum of organisations, including some which may not have required the support to realise the benefits described below (e.g., NDOs which would not have experienced any negative effects of the energy costs crisis). Payments made to these NDOs may therefore constitute a "deadweight loss" – i.e., an economic inefficiency in which the cost to society (program payments to these NDOs) does not equal the benefit (because these NDOs would not have been substantially adversely impacted by the energy crisis). This impact is not quantified due to lack of data available to perform this

[67] The monetisation applied uses Defra's damage costs from Table 8 of Air quality appraisal: damage cost guidance - GOV.UK. Tables 10 and 12 provide separate damage costs for certain sectors' NOx and PM2.5 emissions. The ships sector damage costs are substantially lower than the general costs (less than half of general NOx costs and less than a third of general PM2.5 costs). This separate damage cost was not applied, as the sector classifications vary from those used for the modelling.
[68] The portfolio-level fraud and error rate has been applied across the non-domestic schemes for consistency. A slightly higher estimate for EBRS is currently available for EBRS (0.78%) but individual estimates are not available for EBDS and NDAFP at the time of the writing of this report.
[69] National Audit Office (2024) Energy bills support: an update

quantification (i.e., firm-level counterfactual analysis), but is recognised as an additional cost of the schemes.

Survey data gathered as part of this evaluation provides self-reported perceptions of risks around the most serious potential impacts of the energy crisis on NDOs. When asked about insolvency, 15% of EBRS recipients said their organisation would have experienced an increased risk without the support, while 85% said they would not have (see section 6.3.3.3). For redundancies, 17% said they would have experienced an increased risk without support, while 81% said they would not (see section 6.3.3.2). It is, however, important to note that redundancies and insolvency are extreme circumstances, and the negative effects of the energy crisis are broader than these impacts, so this does not necessarily represent deadweight. Where NDOs that received EBRS said it had no effect (25%), this was largely said to be due to low amounts of support received, rather than because they said they did not need the support. It is likely that NDOs who said support had no effect received a relatively small proportion of the overall discount disbursed.

There is an additional category of deadweight specifically linked to EBDS for HNOs. This scheme aimed to provided support for domestic heat network customers. Where HNOs served both domestic and non-domestic customers, it is possible that non-domestic customers received this support despite not being the target of the scheme. The customer profile of heat networks is not known, and so the exact scale of any deadweight cannot be estimated. Almost a quarter (23%) of HNOs surveyed supplied both residential and non-residential properties.[70] While it is not possible to estimate the number of non-residential properties who received support in this way, it is likely to be a minority of the beneficiaries of EBDS for HNOs, especially as 88% of buildings and 94% of final customers served by heat networks are residential.[71]

Costs to suppliers and beneficiaries

Aside from the costs displayed in table 7.1, the schemes resulted in additional costs for some NDOs and for energy suppliers. This includes the time taken for energy suppliers to process the scheme information, address NDO claims, process payments, and fill-out necessary forms. Insights into the resource costs for suppliers of implementing the schemes were collected qualitatively (see chapter 3). However, there is uncertainty over the total costs to suppliers, so this cost could not be accurately monetised and is therefore not included in the CBA. This is a difference from the equivalent evaluation of the domestic schemes. However, it is expected that these costs would have been a small proportion of scheme costs, as was the case for the domestic schemes.

Additionally, for those schemes that were application based (such as the EBDS for ETIIs and ND AFP), NDOs incurred additional costs in applying to the scheme. Although information was collected on the number of working days taken to complete applications, it is not possible to quantify these costs. As such, these costs are excluded from the CBA, but they are expected

[70] HNOs are operators of multiple sites and may oversee some residential only heat networks alongside sites which serve non-residential too.
[71] Heat Networks registered under the Heat Network (Metering and Billing) Regulations statistics: December 2022

to represent a relatively small percentage of total costs: for example, 67% of ETII applicants spent two working days or less on the application for the schemes.

7.3 Benefits

This section presents an estimate of the total benefits of the schemes. The schemes were designed to mitigate the effects of high energy bills by providing non-domestic organisations (NDOs) with discounts on their energy bills. A key outcome of these schemes was allowing NDOs to sustain their existing energy use and hence production level, thereby maintaining overall economic productivity and avoiding negative impacts to business operations, including insolvencies, redundancies, and other associated impacts. The societal benefits of continued operation can therefore largely be reflected in macroeconomic terms – e.g., on the effect of gross output, employment, and output.

The main source for quantifying these benefits is the IO modelling results (as discussed in Chapter 1, section 1.3.4 Analysis and modelling of secondary data; and Chapter 0, section 6.5 Secondary impacts: 6.5.2 Energy consumption and efficiency), which provide an estimate of the total monetary benefits in the economy after simulating the energy crisis and the schemes. This method leverages IO tables, which offer a snapshot of the economy's structure at a specific time to simulate external shocks to the economy. Specifically, IO tables map economic transactions across sectors through a matrix that illustrates how industries interact with one another through supply and demand.

As IO modelling reflects the overall impact of the schemes within the economy, many distinct but related benefits are encompassed in the estimated effect of the schemes on total economic output. In order to avoid double-counting, the impact of reduced energy expenditures on increased economic activity is the sole benefit quantified and included in the BCR. Other benefits, such as the number of redundancies prevented and improved financial health, are estimated to provide additional contextual information on the magnitude of these benefits. From a monetary perspective, however, these benefits are reflected in the change in economic output attributable to the schemes; as such, they are not included as separate line items in the CBA. Other benefits are not estimated quantitatively and/or monetised, but are similarly reflected in the schemes' effect on overall economic output.

As discussed in section 1.3.6 on methodological limitations, there are a number of caveats related to the IO methodology from which the benefits in the CBA are drawn. These include the static nature of IO analysis, reliance on older data, assumptions of fixed prices and constant returns to scale, lack of dynamic responses to shocks, and exclusion of international spillover effects—all of which can lead to overstated impact estimates.

7.3.1 Primary modelled benefits

The benefits modelled for the VfM analysis are based on the IO modelling and include reduced energy costs increased economic activity and improved productivity. The primary direct benefit of the schemes was in reducing energy costs, which mitigated the effect of the energy crisis on

organisations' operations. When surveyed, 33%% of NDOs reported that EBRS reduced costs or helped to maintain cash flow or profitability, while 22% reported the same effect for EBDS. Economic modelling and data analysis shows more pronounced impacts: IO modelling demonstrates that close to half of the negative impacts on overall economic output and employment caused by higher energy prices were mitigated by the schemes. Analysis of meter-level data found that energy bill reduction had a positive impact on employment.[72] The total impact of the schemes on output was quantified and monetised using IO analysis, as described in Chapter 0, section 6.5 Secondary impacts: 6.5.2 Energy consumption and efficiency. As shown in Table 7.2, the schemes were associated with a total avoided loss of economic output of £21.6 billion.[73] Of this total, £20.4 billion (94.6%) was associated with EBRS, while £1.2 billion was associated with EBDS.

Table 7.2 Overview of CBA results (billions)

Impact category	EBRS	EBDS	Total*
Direct impacts	£7.5	£0.4	£7.9
Indirect impacts	£5.5	£0.3	£5.8
Induced impacts	£7.5	£0.4	£7.9
Combined impacts*	£20.4	£1.2	£21.6

*Figures in the total column may not equal the sum of EBRS and EBDS. Combined impacts may not equal the sum of direct, indirect and induced impacts due to rounding.

Due to the induced household consumption effects in the input-output model, the combined impact of EBRS and EBDS is not equal to the sum of their individual impacts, as the reported impacts are captured jointly when modelled together. As the policies were implemented consecutively without a gap, it is realistic to assume their effects interacted and should be assessed jointly. As discussed earlier, NDAFP is not included in the modelling of the total benefits due to lack of data availability. As NDAFP represented less than one per cent of overall spend, it would not be expected to substantially affect the total figure.

7.3.2 Other quantifiable benefits

As the IO modelling takes a whole-economy approach, some other benefits of the schemes are accounted for within the IO results as indirect or induced impacts. To prevent double-

[72] Results from the meter level were not always significant for gas support. See the Quantitative Impact report for further details.

[73] Note that these estimates are based on the 2019 input-output table, and do not consider structural changes in the economy between 2019 and the schemes, or the time lag between the energy crisis and the deployment of the schemes. For example, changes in energy efficiency and the economic relationships between industry sectors between 2019 and the schemes' implementation may affect the impact of energy costs on overall economic output. To the extent energy efficiency increases, the economy as a whole may become less adversely impacted by increases in energy prices.

counting, these benefits have not been included as separate lines in the CBA, but to provide context and a sense of scale, have been separately estimated below.

Prevented redundancies and avoided losses in employment.

A benefit of the schemes was in preventing redundancies and losses in employment due to higher energy costs. Based on IO modelling, as described above, the schemes led to the avoidance of around 132,000 full-time employee (FTE) redundancies. EBRS was associated with the avoidance of around 125,000 FTE redundancies, and EBDS with the avoidance of around 7,000 FTE redundancies.

As an indication of the monetary value of avoided redundancies, the total prevented loss of employment (by sector) was multiplied by the weighted average median wage during 2023 for the affected sectors (calculated at £34,236).[74,75] The resulting figure of £4.5 billion provides an indicative estimate of the monetary value of avoided redundancies, separate from the broader economic benefits discussed in the preceding section. This benefit is accounted for in the IO results because increased wages paid are included in the estimate of economic impacts from reduced energy expenditures (i.e., the effect of the schemes on overall economic output).

It is important to note that the value of avoided redundancies estimated above does not account for additional social benefits from prevented unemployment. This is discussed further in Section 7.3.4.

Prevented insolvencies

As described in chapter 6: Impact of support, analysis of meter-level data provides evidence that the schemes contributed to improved financial health of NDOs through reduced energy bills, mitigated employment losses, and increased turnover. Additionally, NDO closures increased in 2021 to 2022, as the energy crisis started, but decreased after the implementation of EBRS and EBDS. However, available data on NDO closures was not sufficient to establish a causal link between the schemes and avoided insolvencies, despite trends suggesting that there may be a relationship.

The monetary benefit of avoided insolvencies was not separately quantified for the purposes of the CBA. Due to the schemes, organisations continued to operate and thus contributed to the indirect and induced benefits observed in the IO modelling. Therefore, it was not required to isolate the impacts of prevented insolvencies from the broader economic benefits of the schemes.

7.3.3 Other benefits not quantifiable or attributable

In addition to the benefits above, there were several benefits that can be attributed to the schemes but cannot be estimated quantitatively due to data limitations, or can be quantified

[74] Earnings and hours worked, UK region by industry by two-digit SIC: ASHE Table 5. Available at www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/regionbyindustry2digitsicashetable5.
[75] For reference, the median average wage in the UK was £35,464. ONS: Employee earnings in the UK: 2023. Available at: Employee earnings in the UK - Office for National Statistics

but not conclusively attributed. These benefits include the social benefits of reduced unemployment beyond the effects on overall economic output, such as avoided payment of unemployment benefits, improved mental and physical health, and improved social cohesion; benefits of reduced insolvencies such as avoided costs of legal proceedings and effects on energy market stability; effects on inflation; and effects on reducing gaming and fraud. The directionality of these benefits is likely to be positive, so if they were able to be included in the CBA, their inclusion would likely strengthen the findings presented above.

Reduced uncertainty

Decision Maker Panel data[76] indicated that self-reported uncertainty decreased after the introduction of EBRS and EBDS, with the percentage of NDOs reporting energy prices as their main concern decreasing after the introduction of the schemes. Despite energy prices being a concern for NDOs, primary evidence demonstrated that whilst they were aware of their overall energy expenditure, they often did not routinely examine their bills to understand the breakdown in total energy costs. As such, most NDOs were unaware of the support received, apart from those which examined their bills in more detail. NDOs were generally aware that increases in total energy bills were slowing over the period of the support, but often did not know the schemes were the main cause for this decrease.

As shown by the uncertainty analysis, after the introduction of EBRS and EBDS, changes in uncertainty were decoupled from changes in energy prices. The analysis does not provide definitive evidence that the schemes caused the observed reduction in uncertainty so cannot be monetised in the CBA model; however, it is possible that the schemes could have led to reduced uncertainty via more stable energy prices.

Improved financial health

Survey responses and analysis of meter-level data provide evidence that the schemes contributed to improvements in NDOs' financial health. The analysis of the effect of the discounts on turnover (see Section 6.2.3) were not statistically significant. This means that these impacts cannot be attributed to the schemes and so have not been factored into the CBA. However, where genuine impacts do exist, it is likely these have been accounted for in the IO results.

The magnitude of these non-significant impacts have been estimated and are presented here only to provide a sense of scale and should be taken as indicative. Broadly, the direction of findings indicate that the schemes contributed to mitigating the decreases in turnover that would have been experienced in the energy crisis. An upper bound estimate based on regression analysis of meter level data suggested that for every £1 discount in electricity expenditures, turnover increased by £1.50.

[76] Decision Maker Panel data from the Bank of England (Monthly Decision Maker Panel data – December 2024 | Bank of England

Reduced inflation

A high inflation rate – or unanticipated increases in inflation – can hinder economic growth, lead to the deprecation of households' savings, and lead to reduced household purchasing power. As a result, reduced inflationary pressure can mitigate cost-of-living pressures, keep households' living standards stable, and moderate the increase of social inequalities, as low-income households usually suffer more when inflation is high.[77] Reducing high inflation rates can also mitigate potential negative effects on workers' performance and productivity, which have been found to decline as living standards deteriorate.[78] Furthermore, literature suggests that unstable inflation rates have a direct negative impact on people's subjective well-being.[79] If the schemes had an impact not only on inflation while the schemes were active, but also on expectations regarding future inflation (not measured and quantified in this report), they could have reduced future uncertainty and provided improved information for businesses to make market and economic decisions.[80]

Survey responses indicate that rising energy prices had contributed to some organisations needing to increase the prices of their goods and/or services; though it is of note that other factors, such as operating costs, were reported to have increased across a number of areas.

A quantitative analysis of inflation rates (presented in Chapter 0) shows that inflation – as measured by the consumer price index (CPI) and producer price index (PPI) – both peaked around the introduction of EBRS and decreased consistently thereafter. While there is strong evidence that the schemes had a causal effect on energy bills, financial health, and the energy input PPI, as noted above, there is limited evidence that the schemes directly led to mitigating CPI inflationary pressure. Other factors, in particular the decline in wholesale energy prices, coincided with the introduction of the schemes, making it difficult to estimate the impact of the schemes on inflation. A minority of EBRS recipients surveyed (7%) stated that the support allowed them to avoid passing on price increases. Similarly, few EBDS recipients surveyed indicated that the support prevented price increases, with less than one per cent of EBDS recipients surveyed indicating that the support prevented short-term price increases, and only two per cent of recipients surveyed indicating that the support prevented long-term price increases.[81] Without the ability to quantitatively estimate the contribution of the schemes to changes in inflation, this impact is not quantified in monetary terms.

[77] Harms, Philipp; Beck, Günter; Hussain, Muzammil; Ruszel, Mark (2024): Antipoor and anti-rich: product-downgrading and the distributional effects of UK inflation in the wake of the Brexit vote, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2024: Upcoming Labor Market Challenges, ZBW - Leibniz Information Centre for Economics, Kiel, Hamburg. www.econstor.eu/bitstream/10419/302365/1/vfs-2024-pid-106706.pdf.
[78] Martins, Ezek. Impact of Inflation on Work Performance. Research Invention Journal of Current Research in Humanities and Social Sciences 3(1):14-19, 2024. https://kiu.ac.ug/assets/publications/1716_impact-of-inflation-on-work-performance.pdf.
[79] Prati, Alberto (2023). The well-being cost of inflation inequalities. The Review of Income and Wealth. https://doi.org/10.1111/roiw.12631.
[80] Coibion, O., Gorodnichenko, Y., Kumar, S., & Pedemonte, M. (2020). Inflation expectations as a policy tool?. *Journal of International Economics*, *124*, 103297.,
[81] Over half (54%) of EBDS recipients surveyed stated that the support had a positive short-term impact on their organisation; of these, one per cent stated that this support prevented short-term increases in prices of goods and

Improved energy market stability

There are long-term benefits of improved energy market stability – for example, more suppliers can create a more competitive market, leading to lower energy prices in the long term, which benefits all members of society. Regulators noted that the schemes may have helped to reduce the risk of insolvency for small energy suppliers, which would contribute to this benefit. Quantitative analysis of IDBR data does not provide evidence of a causal relationship between the schemes and energy market stability but also does not contradict the qualitative evidence from survey responses. Given neither the effect of the schemes on energy supplier insolvency nor the effect of avoided insolvency on energy market stability can be accurately estimated, this benefit was not quantified in this report.

Enhanced international competitiveness

The schemes may have also contributed to enhancing the international competitiveness of participating organisations. Export-intensive UK industries may have benefitted from the schemes to the extent that non-domestic organisations were able to avoid passing on higher energy costs in products they export, while international companies may have been forced to raise prices.

At a high level, total exports are included in the estimates of economic output, derived from input-output modelling, as described above. However, the impact of differential energy prices compared to other countries on international competitiveness cannot be quantitatively assessed within this modelling framework. This impact is especially relevant for EBDS, given that additional support was provided to ETIIs. Due to lack of data (from all workflows of this project) and suitable modelling tools to capture this effect, the full extent of this impact cannot be captured.

Effects of unemployment

Literature supports the narrative of a strong positive relationship between unemployment and mental health, emphasising the central role of work in shaping an individual's identity and social interactions.[82] While difficult to quantify, these factors are essential when assessing the full impact of unemployment.[83] For instance, unemployment has been linked to a higher risk of anxiety and depression[84] and may also contribute to an increase in crime rates.[85] Reducing

services. Therefore, approximately 0.5% of EBDS recipients surveyed stated that the support prevented short-term price increases (54% × 1% = 0.54%).
Looking at the long-term impact, around a third (35%) of the EBDS recipients surveyed reported the scheme had a lasting effect on their organisation, of which 6% reported this support prevented long-term increased in prices of goods and services. Therefore, approximately 2% of EBDS recipients surveyed stated that the support prevented long-term price increases (35% × 6% = 2.1%).

[82] Taris, T.W. (2002). Unemployment and Mental Health: A Longitudinal Perspective. International Journal of Stress Management, 9, 43-57. https://doi.org/10.1023/A:1013067101217

[83] Berkman, Lisa (2014). Commentary: The hidden and not so hidden benefits of work: identity, income and interaction. International Journal of Epidemiology, Volume 43, Issue 5, October 2014, Pages 1517–1519, https://doi.org/10.1093/ije/dyu110.

[84] Paul, Karsten and Moser, Klaus (2009). Unemployment impairs mental health: Meta-analyses. Journal of Vocational Behavior, Volume 74, Issue 3, 2009, Pages 264-282, https://doi.org/10.1016/j.jvb.2009.01.001.

[85] Edmark, Karin (2005). Unemployment and Crime: Is There a Connection? The Scandinavian Journal of Economics, Volume 107, Issue 2, June 2005, Pages 353-373, https://doi.org/10.1111/j.1467-9442.2005.00412.x.

unemployment can therefore mitigate the need for broader government support and intervention, as these potential adverse effects are lessened. Moreover, increased job market turbulence can heighten job insecurity, leading individuals to save more and spend less as a precaution against potential unemployment. This precautionary behaviour, however, can negatively impact the economy by reducing consumption, potentially deepening the effects of economic downturns. Additionally, higher levels of unemployment are also linked with lower innovation and productivity in the economy, including a lower ability to retain knowledge and skills within the country. The total social benefits of avoided unemployment are therefore likely to be higher than estimated in this analysis.

7.4 VfM findings

The CBA conducted for this evaluation indicates that the schemes generated social benefits in excess of their costs, suggesting good value for money from a social welfare perspective. Table 7.3 summarizes the total costs, benefits, net benefit, and BCR of the schemes.

Table 7.3 Overview of CBA results

Measure	Social Cost	Benefit
Costs		
Staff costs and contractors	£11,160,000	–
Other operational costs	£42,720,000	–
Fraud and gaming cost	£56,954,000	
Greenhouse gas emissions	£1,153,986,000	
Air pollution cost	630,934,000	
Benefits		
Reduced energy expenditures, increased economic activity, and improved productivity*	–	£21,580,205,000
Total	**£1,895,756,000**	**£21,580,205,000**
Net Benefit		**£19,685,449,000**
Benefit-Cost Ratio		**11.39**

Notes: *As noted above, this benefit is estimated as a change in overall economic output, and as such includes other distinct but related benefits such as prevented redundancies and insolvencies.

The CBA provides strong evidence that the schemes represented good value for money, with a net benefit of £19.7 billion and a BCR of 11.39. These findings indicate that the schemes generated benefits substantially greater than their costs when considering wider economic and social effects.

The method used to quantify the benefits of the schemes includes the direct benefits of the schemes to NDOs, as well as indirect and induced effects as the impacts to NDOs ripple throughout the economy.[86] This method aims to provide a holistic estimate of the effects of the schemes, and will provide benefit estimates that are larger than methods which examine direct benefits only. Additionally, as noted above, most of the schemes' cost consists of discounts disbursed, which may be viewed as transfer payments to the recipient organisations. In accordance with Green Book guidance, these transfer payments are not included in this CBA.

While uncertainties exist in any economic evaluation, the weight of evidence strongly supports the conclusion that these schemes represented good value for money. The discounted energy prices under the schemes allowed NDOs to maintain a higher level of energy consumption and associated economic activity, contributing positively to overall economic and social welfare.

[86] Direct effects refer to the immediate economic impact of a change in demand, such as increased production and employment in an industry. Indirect effects capture the ripple effects on suppliers and related industries, as businesses purchase goods and services to support the initial change. Induced effects arise from the increased household spending due to wages earned in both the directly and indirectly affected sectors.

Appendix

NDO survey scheme eligibility definitions

Scheme	Definition
EBRS/EBDS for GB	Located in Great Britain, on a non-domestic contract, uses a licenced energy supplier and not on a fixed contract signed before Dec 2021. NB: There was a scripting error that meant that organisations on any fixed contracts signed before Dec 2021 were deemed to not be eligible (even if they had an eligible contract type for another energy source. This impacted 43 respondents in total.
EBRS/EBDS for NI	Located in Northern Ireland, on a non-domestic contract, uses a licenced energy supplier and not on a fixed contract signed before Dec 2021. NB: There was a scripting error that meant that organisations on any fixed contracts signed before Dec 2021 were deemed to not be eligible (even if they had an eligible contract type for another energy source. This impacted 43 respondents in total.
EBRS/EBDS for non- standard cases	On a non-domestic contract, used a licence-exempt energy supplier and not on a fixed contract signed before Dec 2021. NB: There was a scripting error that meant that organisations on any fixed contracts signed before Dec 2021 were deemed to not be eligible (even if they had an eligible contract type for another energy source. This impacted 43 respondents in total.
EBDS for ETII	On a non-domestic contract, used a licenced energy supplier, not on a fixed contract signed before Dec 2021 and operating in ETII eligible sector (determined by sample variable four-digit Standard Industrial Classification (SIC) codes sourced from IDBR). NB: to access EBDS for ETII fundings organisations needed to be able to evidence that at least 50% of their UK-based annual revenue (or, for public sector organisations, 50% of their floorspace usage) fell under at least one of a list of eligible SIC codes. It was not possible to assess this in the survey of NDOs and so the number of eligible NDOs may have been overestimated in the survey.
NDAFP flat payment (needed to meet the criteria of only one of the bullets)	Located in Great Britain, off-gas grid, on a non-domestic contract and use mains electricity. Located in Great Britain, off-gas grid, not on mains electricity and use alternative fuels. Located in Northern Ireland, on a non-domestic contract and on mains electricity NB: There was a scripting error that meant that NI organisations off both gas and electricity grids were not included in the routing for NDAFP. This impacted one respondent

Scheme	Definition
NDAFP top-up	Eligible for NDAFP flat payment and used more than 10,000 litres of kerosene per year
Domestic schemes	On a domestic contract

This publication is available from: www.gov.uk/desnz

If you need a version of this document in a more accessible format, please email alt.formats@energysecurity.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.