UK Government

Domestic NEED 2026 Annex A: What is Domestic NEED?

11 June 2026 **Accredited Official Statistics**

This document provides an overview of the Domestic National Energy Efficiency Data-Framework (NEED). This includes details of what information is contained within NEED, what it is used for and how the data is produced.

What is Domestic NEED?

NEED is a framework in which property level data from existing sources (administrative and commercial) are used to provide insights into energy use and the impact of energy efficiency measures on gas and electricity consumption in residential properties.

Why is Domestic NEED important?

Domestic NEED provides the largest source of data available for analysis of energy consumption.

NEED forms an important element of the Department for Energy Security and Net Zero's (DESNZ's) evidence base and plays a key role in the development and evaluation of departmental policies on energy efficiency.

What information is included?

Consumption data

- Electricity consumption 2005-2024
- Gas consumption 2005-2024
- Electricity meter profile class 2005-2024

Property characteristics

- Property size (m^2)
- Number of bedrooms
- Property type (e.g. Semi-detached)
- Property age

Household characteristics

- Number of adults living in the household
- Household income
- Tenure (e.g. owner occupied)

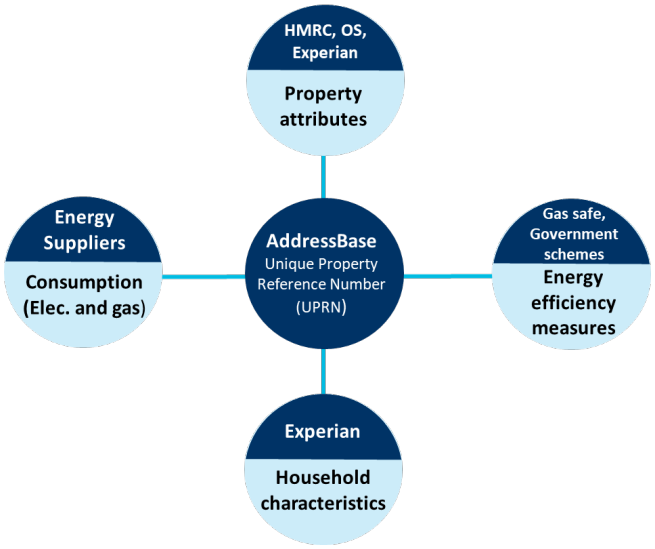
Energy efficiency measures

- Type of measure installed (e.g. loft insulation)
- Date of installation

What is within scope?

In Scope	Out of Scope
Domestic (residential) properties	Non-domestic properties (e.g. commercial, public sector)
Great Britain	Northern Ireland
Metered gas and electricity	Non-metered fuels (e.g. oil, coal, on-site generation)
Energy Efficiency Measures installed through government schemes	DIY measures and other measures not installed through government schemes

How is it produced?



The address information in each dataset is used to retrieve the unique property reference number (UPRN) for each record which then enables matching.

Published alongside this are the following tables and documents:

- **NEED report: Summary of analysis 2026** – analysis of key trends in energy consumption and the impact of installing different energy efficiency measures.
- **Consumption data tables** – gas and electricity consumption estimates for different property attributes and household characteristics.
- **Impact of measures data tables** – estimated consumption savings arising from installation of different energy efficiency measures.
- **Annex B: Overview of data tables** – a list of all the published tables and their contents.
- **Annex C: Comparisons with other Sources** – a summary of comparisons of NEED outputs with other data sources for quality assurance purposes.
- **Annex D: Methodology Note** – details of how the estimates of domestic electricity and gas consumption by property attributes and household characteristics are produced. It also sets out how the estimates of the impact of energy efficiency measures were derived.

Quality assurance of all data sources is undertaken before they are used in Domestic NEED and throughout the production process to ensure accuracy. This validation includes comparisons with other data sources which is published in Annex C: Comparisons with other Sources.

There is also a Non-Domestic National Energy Efficiency Data-framework (ND-NEED) which is not covered by this note, although the key methods and data sources used are similar in both cases.

Contents

1. Introduction

The UK has collected and published energy consumption data within the Digest of UK energy Statistics since 1948. This has been produced and published at a national level and is based on aggregate information from energy suppliers. Data relating to domestic energy use has also been published in Energy Consumption in the UK. Whilst these data are still used, the development of UK energy policy has required more detailed data to help deliver and monitor reductions in energy use and emissions.

In 2004, the Department for Business, Enterprise and Regulatory Reform first started to collect individual meter point data primarily to produce small area consumption data, but by working closely with the energy industry and other key energy efficiency stakeholders, plans were established for a future data architecture suitable for matching the consumption data with other data sources. The National Energy Efficiency Data-Framework (NEED) is the means by which this has been achieved. Gas and electricity consumption data are matched at an individual property level, with information about energy efficiency measures installed in households, property attributes and household characteristics.

NEED was first announced in the Heat and Energy Saving Strategy in 2009 and was subsequently developed by the Department for Energy and Climate Change (DECC), with support from the Energy Saving Trust (EST) and gas and electricity suppliers, in order to assist DECC in its business plan priority to “save energy with the Green Deal and support vulnerable consumers”. It now forms a key element of the Department for Energy Security and Net Zero's (DESNZ) evidence base, and supports DESNZ to:

- Develop, monitor and evaluate key policies.
- Identify energy efficiency potential which sits outside the current policy framework.
- Develop a greater understanding of the drivers of energy consumption.
- Gain a deeper understanding of the impacts of energy efficiency measures for households.

The data framework provides the largest source of data available for analysis of gas and electricity consumption and the impacts of energy efficiency measures. Previously, DESNZ has relied on evidence from surveys and small technical monitoring trials. The first results from the framework were published in June 2011 as a pilot to test the framework approach worked. It demonstrated the value of NEED, and its importance to DESNZ and a wider group of stakeholders. Since 2011 DESNZ has updated and expanded NEED further.

2. The Overall Framework

Domestic NEED links together various existing data sources (administrative and commercial) to report on the electricity and gas consumption of households in Great Britain. This data framework, which holds information on individual properties, also demonstrates the real-world impact of installation of energy efficiency measures on electricity and gas consumption. Domestic NEED includes data on:

- annual electricity and gas consumption;
- characteristics of the property (floor area, property age, property type, etc.);
- characteristics of the household (household income, tenure, number of adults etc.);
- energy efficiency measures installed (cavity wall insulation, loft insulation, etc.); and
- information about the area in which the property is located (local authority, index of multiple deprivation etc.).

Table 2.1 summarises the data sources that feed into Domestic NEED, and more information about the individual data sources is provided in Sections 3 and 4. The main aim of this dataset is to provide insights into energy use in domestic (residential) properties and the impact of energy efficiency measures on gas and electricity consumption. More information about how Domestic NEED has been used is provided in Section 5.

Table 2.1: The data sources that feed into Domestic NEED

Data	Source
Meters and consumption	
Gas meters and gas consumption	Xoserve
Electricity meter metadata	Electricity Enquiry Service
Electricity consumption	Electricity data aggregators
Geographical information	
Address information	Ordnance Survey (OS)
Geographies and area classifications	Office for National Statistics (ONS)
Property characteristics	
Domestic properties in England and Wales	HM Revenue and Customs (HMRC)
Energy Performance Certificate (EPC) ratings	Ministry of Housing, Communities and Local Government (England and Wales), Scottish Government (Scotland)
Domestic properties in Scotland	Ordnance Survey AddressBase
Household characteristics	Experian
Energy efficiency measures installed	
New boiler installations	Gas Safe Register
Energy efficiency measures installed under the Energy Company Obligation (ECO) scheme (as well as other schemes such as the Social Housing Decarbonation Fund).	Scheme administrators (for example, Ofgem for ECO)

Data	Source
Solar panels (all MCS accredited solar panels, including those installed as part of the Feed-In Tariff (FIT) scheme) and other accredited renewable installations as recorded in the MCS installations database.	Ofgem, MCS (Microgeneration Certification Scheme)

The scope of Domestic NEED

Table 2.2: Summary of the scope of Domestic NEED

In scope	Out of scope
Domestic (residential) properties	Non-domestic (e.g. commercial, public sector)
Great Britain	Northern Ireland
Metered gas and electricity	Non-metered fuels (e.g. oil, coal) and consumption from on-site generation (e.g. generated by solar panels)
Energy Efficiency Measures installed through government schemes	DIY measures and other measures not installed through government schemes

The scope of Domestic NEED is summarised in Table 2.2. Although NEED provides data and analysis on domestic (residential) properties across Great Britain, it should be noted that statistics for Scotland are provided separately to those for England and Wales (which are combined). This is due to different data sources being used for property characteristics for Scotland which means categories do not align. Northern Ireland is not included within the Domestic NEED framework; however, DESNZ does produce summary estimates of electricity consumption and gas consumption in Northern Ireland by local government districts.

Domestic NEED only covers residential properties; there is a separate Non-Domestic National Energy Efficiency Data-Framework (ND-NEED) which covers England and Wales.

Only metered gas and electricity consumption are included within Domestic NEED. DESNZ does not currently monitor the use of other (non-metered) fuels (such as oil, coal and wood) by individual households. While Domestic NEED includes metered gas and electricity consumption, DESNZ cannot monitor what this energy is being used for by individual households (space heating, hot water, lighting, cooking, etc.) so this information is not included within Domestic NEED. However, DESNZ does provide an estimated breakdown of total UK household energy consumption by fuel source (inc. non-metered fuels) and end use, as a part of the Energy Consumption UK (ECUK) publication. The ECUK figures are based on survey information and modelling.

Domestic NEED includes information on the energy consumption impact of measures installed as part of government schemes, such as the Energy Company Obligation (ECO). This information is provided to DESNZ by scheme administrators (for example Ofgem, for ECO). While these schemes are generally Great Britain wide, information is also included for past Scotland-specific schemes (Homes Energy Efficiency Programmes). Domestic NEED does not include information on any energy efficiency improvements being made outside of government schemes.

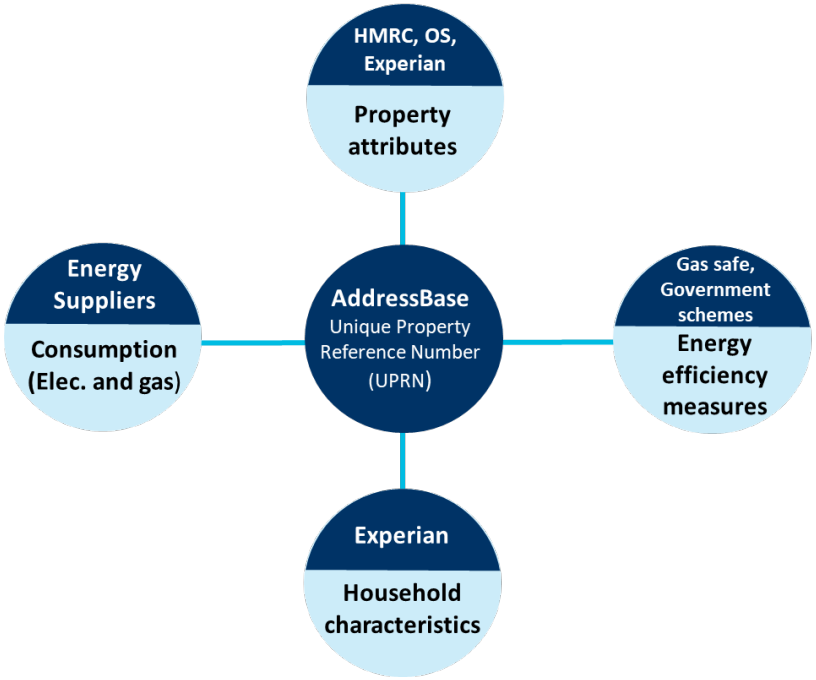
In terms of renewable technologies, data from the Renewable Heat Incentive (RHI) and Microgeneration Certification Scheme (MCS) accredited installations are included in domestic NEED. This includes installations of solar photovoltaics from the government's Feed-in Tariff Scheme (FITS) which, although now closed, was designed to promote the uptake of renewable and low-carbon electricity generation technologies.

DESNZ also receives information on new condensing (gas) boilers being installed from the Gas Safe register. While it is mandatory to register the installation of all new condensing boilers in England and Wales, registration is not mandatory in Scotland. Therefore, NEED is likely to only include information on some installations of new condensing boilers in Scotland.

Linking datasets

Domestic NEED is formed from linking various existing datasets (both administrative and commercial) which each provide different information on individual residential properties or households. How these datasets are linked to each other is illustrated in Figure 2.1 below.

Figure 2.1 – The overall structure of Domestic NEED



Ordnance Survey maintains the AddressBase database of all addresses in Great Britain, in which a unique property reference number (UPRN) is assigned to each address. For each Domestic NEED input dataset, the addresses are matched to the addresses in AddressBase so that the UPRN can be retrieved for each record. This process is referred to in Domestic NEED documentation as "address matching". Once the records in each of the input datasets have been address-matched they are linked on the UPRN.

However, as addresses are not recorded in a consistent way across datasets, address matching has some limitations. There are some addresses which cannot be matched confidently to AddressBase, and a proportion of matches that are made are likely to be incorrect. The address matching algorithm being used is estimated to have an error rate of around 1% for domestic addresses. In general, there can be a trade-off whereby accepting matches more readily can admit more incorrect matches and thereby increase the error rate.

Records removed through the address matching process are not evenly distributed across different property types. For example, flats are less likely to be matched to AddressBase and consequently, proportionately more records are lost in cities and metropolitan areas.

Some of the datasets which DESNZ receives are already matched to a UPRN. The main datasets that DESNZ needs to address match before they can be incorporated into Domestic NEED are the gas and electricity meter data and all data on energy efficiency measures installed. More information on the match rates for the various datasets can be found in Annex C: Comparisons with other Sources.

Information on domestic properties

The gas and electricity meter data that DESNZ receives from industry does not allow it to adequately distinguish between meters installed in domestic properties and those installed in non-domestic properties. A database of domestic properties is therefore required so that DESNZ can match energy meters to domestic properties.

For England and Wales, since 2019, DESNZ has received a dataset containing all properties in the HM Revenue & Customs (HMRC) Council Tax Database. An updated dataset is received on an annual basis. Prior to the 2019 NEED, a stratified random sample of approximately one in five records was selected from the complete property attribute dataset held by HMRC.

For Scotland, up to and including the 2023 publication, NEED used a dataset from the Scottish Assessors Association (SAA) to identify domestic properties in Scotland. This dataset was last updated in 2014 which means that properties built since 2014 would not be included in the Domestic NEED sample and some of the attribute information will be out of date. Since it has not been possible to obtain an updated SAA dataset, from the 2024 publication onwards a database of domestic properties in Scotland has been constructed using Ordnance Survey AddressBase Plus where UPRNs are classified as residential dwellings. This means SAA data is no longer being used as part of the Scotland NEED estimates.

How Domestic NEED is created

The steps for the creation of Domestic NEED are as follows:

1. The HMRC data (for England and Wales) and the Ordnance Survey AddressBase Plus data (for Scotland) form Domestic NEED's database of domestic properties in Great Britain.
2. The metered gas and electricity consumption data which DESNZ receive from industry is address matched so that each meter has a UPRN (representing a domestic property) matched to it.
3. Based on the UPRN, gas and electricity meters can then be linked to properties in Domestic NEED's database of domestic properties in Great Britain.
    - The NEED methodology allows for the fact that some domestic properties may have more than one gas and/or electricity meter. For each domestic property, it permits up to two gas and two electricity meters.

- Properties which have had more than two gas meters linked to them are discarded for the purposes of gas consumption (with the address matching assumed to be erroneous), and likewise for electricity.
- For properties with two gas meters, the consumption from both meters will be aggregated to give the total gas consumption for the property, and likewise for electricity.

4. The other various datasets are address matched (where they do not already have a UPRN field) and they can then be linked into NEED using the UPRN.

Table 2.3 summarises the number of properties in Domestic NEED 2026 and how these are linked (or not) to gas or electricity meters. A higher proportion of domestic properties had an electricity meter matched to them than a gas meter. This is to be expected given that a certain proportion of domestic properties are not connected to the gas grid.

Table 2.3: The number of properties included in Domestic NEED 2026
(numbers of properties are given in millions)

	Total domestic properties	Number of properties with meter(s) matched to them		Percentage of properties with meter(s) matched to them	
		Gas	Electricity	Gas	Electricity
England and Wales	27.3	21.0	25.2	77%	92%
Scotland	2.8	1.8	2.4	64%	86%
Total	**30.1**	**22.9**	**27.7**	**76%**	**92%**

While Table 2.3 shows the total number of properties contained in Domestic NEED 2026 for both gas and electricity, any analysis carried out using Domestic NEED will typically require further exclusions. Reasons for this include the meter readings being implausibly high or low for certain years. The exclusions made will be influenced by factors such as what years are to be included in the analysis. Table 2 in Annex C: Comparisons with other sources shows how the samples of properties used in the 2024 NEED domestic consumption estimates for England and Wales are arrived at. Full details of the further exclusions made in producing annual consumption estimates are provided in Annex D: Methodology Note.

Data protection

NEED is constructed to ensure it is compliant with the Data Protection Act 2018 and the UK General Data Protection Regulation (UK GDPR). Data in NEED are gathered from a variety of sources including publicly available data, commercial licences, voluntary agreements and data sharing agreements with owners of datasets. As part of these agreements the Domestic NEED publication process ensures that no individual property or energy supplier can be identified; only aggregated or anonymised results are published. The anonymised NEED dataset is published at individual property level, but in an anonymised format. Other NEED outputs are based on a minimum of 5 observations for each result quoted; any results based on fewer than 5 properties are suppressed. More information on data protection is available in the NEED Privacy Impact Assessment.

3. Energy meter and consumption data

DESNZ has collated and analysed property level electricity and gas consumption data since 2004 for the purpose of producing aggregate statistics at a subnational level. DESNZ publish these data at a range of geographical levels including country, regional, local authority, Middle Layer Super Output Area (MSOA) and Lower Layer Super Output Area (LSOA). DESNZ also publish statistics on electricity and gas consumption at the postcode level for domestic meters.

The meter point level data are provided to DESNZ by Xoserve (gas consumption) and data aggregators (electricity consumption). The addresses corresponding to each electricity meter point administration number (MPAN) are obtained from the Electricity Enquiry Service (EES).

Gas and electricity years

Domestic NEED publishes gas and electricity consumption by 'consumption years'. The definition of a consumption year differs between gas and electricity due to their different data collection requirements.

For domestic electricity consumption, the consumption year covers the months February to January. For example, the 2024 electricity consumption year refers to the period 31 January 2024 to 30 January 2025.

For gas consumption, the consumption year has varied historically. The gas consumption years are as follows:

- Prior to 2015: October – September (same period as 2015)
- 2015: October 2014 – September 2015
- 2016: mid-July 2016 – mid-July 2017
- 2017: mid-June 2017 – mid-June 2018
- 2018: mid-May 2018 – mid-May 2019
- 2019: mid-May 2019 – mid-May 2020
- 2020: mid-May 2020 – mid-May 2021
- 2021: mid-May 2021 – mid-May 2022
- 2022: mid-May 2022 – mid-May 2023
- 2023: mid-May 2023 – mid-May 2024
- 2024: mid-May 2024 – mid-May 2025

For this report and all accompanying annexes and tables, when years are mentioned with reference to electricity or gas consumption (or savings), these relate to the respective consumption years as set out above, rather than calendar years.

Annual household consumption estimates

Gas

Xoserve provide annualised estimates of consumption for all Meter Point Reference Numbers (MPRNs) based on an Annual Quantity (AQ). An AQ is an estimate of annualised consumption based on two meter readings at least six months apart.

As gas consumption is heavily influenced by the weather (as it is predominantly used for space heating), annual gas consumption estimates are weather corrected by Xoserve to remove the effect of year-on-year changes in weather conditions. This enables more like for like comparisons over time. Weather correcting entails adjustment to reflect ‘seasonal normal weather conditions’, a typical years’ weather taken as the average of multiple years. More information on this can be found in the overview of weather correction of gas industry consumption data.

The summer of 2017 saw the implementation of new gas meter point management and settlement processes, which caused a change in the period of gas consumption covered by the 2016 data. Furthermore, with the 2016 consumption figures, Xoserve introduced a new data collection system. Due to this, a large proportion of meters which had not reported for some time had their annual consumption figures updated in the 2017 gas consumption figures.

Electricity

For electricity, annualised estimates are based on either an annualised advance (AA) or estimated annual consumption (EAC). The AA is an estimate of annualised consumption based on consumption recorded between two meter readings. In comparison an EAC is used where two meter readings are not available, and an estimate of annualised consumption is produced by the energy company using historical information and the profile information relating to the meter. More information on meter point level gas and electricity consumption data can be found in the Subnational methodology and guidance note.

4. Data sources used in NEED

Address and geographical information

AddressBase

AddressBase is the brand name for the compilation of local authority Addressing Datasets managed by Ordnance Survey. AddressBase matches Royal Mail postal addresses to unique property reference numbers (UPRNs).

AddressBase is updated on a regular basis and provides comprehensive coverage of all addresses in Great Britain. In AddressBase each record has a UPRN which provides a reference key to join related address records across different datasets. Even if a property is demolished, the UPRN can never be reused and retains its historical information.

ONS UPRN Directory

The Office for National Statistics (ONS) UPRN directory provides a range of different attributes about the local area in which the domestic property is situated, including the urban-rural classification and the output area classification.

Property characteristics

HM Revenue & Customs (HMRC) Council Tax data (England and Wales)

HMRC is responsible for allocating homes in England and Wales to the appropriate Council Tax band. In order to do this, it maintains a property database covering all properties in England and Wales. It includes information on the age of property, property type, number of bedrooms and floor area.

Since 2019, an updated dataset has been received from HMRC (formerly the Valuation Office Agency which became part of HMRC in April 2026) on an annual basis. This was made possible through an enhanced data sharing agreement. Prior to 2019 a stratified random sample of approximately one in five records taken from the full dataset was used for Domestic NEED.

Experian – domestic data (Scotland)

Experian is a commercial organisation which produces modelled data of property attributes and household characteristics at address level. The Experian model derives these variables for each address using data from a range of sources including Census outputs and Experian's consumer survey. DESNZ uses Experian as the source of property attributes data (property age and number of bedrooms) for properties in Scotland.

Ordnance Survey AddressBase – domestic data (Scotland)

AddressBase Plus contains information on the classification of properties using a four-level classification scheme which explains the function of each property. This classification scheme has been used to create a Scotland domestic property database, and the classification data is used to report on property type for properties in Scotland. For further information on AddressBase please see the section above on AddressBase.

Energy Performance Certificate (EPC) data

The Ministry of Housing, Communities and Local Government (MHCLG) maintains a register of Energy Performance Certificate (EPC) ratings carried out on domestic properties in England and Wales, and it publishes this information as open data. The equivalent EPC data for Scotland is published by the Scottish Government.

It is generally only mandatory to have a valid EPC certificate for new properties, those which are being rented and at the point of sale, so therefore not all properties will have had an EPC Assessment carried out. The EPC register for England and Wales contained EPC ratings for around 19.9 million properties in November 2025 (the EPC extract that has been used for the NEED 2026 report). In addition to this, EPC certificates are valid for 10 years, so many properties may have an EPC rating assessed several years ago which may no longer reflect its current energy efficiency.

Household characteristics

Experian – domestic data

Experian is a commercial organisation which produces modelled data of property attributes and household characteristics at address level. Variables include income group, number of adults and tenure. The Experian model derives these variables for each address using data from a range of sources including Census outputs and Experian's consumer survey. DESNZ uses this data in NEED 2026 for all properties in Great Britain. A quality assessment of the Experian data is provided in Annex C: Comparisons with other Sources.

Energy efficiency measures

Below are listed the various data sources used for energy efficiency measures in Domestic NEED, mostly data related to government schemes. The types of energy efficiency measures that can be installed through household energy efficiency schemes include:

- External and Internal Solid and Cavity Wall Insulation (including Party Wall Cavity Wall Insulation)
- Loft Insulation
- Flat Roof Insulation
- Park Home Insulation
- Room-in-Roof Insulation
- Underfloor Insulation
- Solid Floor Insulation

- Window Glazing
- Energy Efficient Doors
- Boilers (new and replacements)
- Electric Storage Heaters (new and replacements)
- District Heating Systems
- Heating Controls (Conventional and Smart), Smart Thermostats and Thermostatic Radiator Valves
- Solar PV

Information on installations from the below energy efficiency schemes are currently used in NEED's 'Impact of measures' analyses to inform energy savings from energy efficiency measure installations.

Energy Company Obligation (ECO)

ECO is a government energy efficiency scheme in Great Britain to help reduce carbon emissions and tackle fuel poverty. Broadly, ECO takes over from two previous Energy Obligation schemes: Carbon Emissions Reduction Target (CERT) and Community Energy Saving Programme (CESP).

The scheme began in January 2013 and has seen several iterations. ECO4 is the current scheme which applies to measures installed from 1 April 2022 and is due to end on 31 December 2026. Statistics on installations of measures under ECO are published in Household Energy Efficiency Statistics.

Great British Insulation Scheme (GBIS)

GBIS is a government scheme in Great Britain to help people insulate their homes, make them more energy efficient and save money on their energy bills. The government announced the scheme at the end of March 2023. The scheme closed at the end of March 2026. Statistics on installations of measures through GBIS are published in the GBIS Statistical release.

Warm Homes: Local Grant (WH:LG)

The government has published its Warm Homes Plan to upgrade up to 5 million homes by 2030. The Warm Homes: Local Grant (WH:LG) is part of this plan. It is a government-funded scheme delivered by Local Authorities that provides grants for energy performance upgrades and low carbon heating to low-income households living in the worst quality, privately owned homes in England to achieve energy bill savings and carbon savings. Statistics on measures installed and households upgraded are published in Warm Homes: Local Grant Statistics.

Warm Homes: Social Housing Fund (WH:SHF)

The government has published its Warm Homes Plan to upgrade up to 5 million homes by 2030. The Warm Homes: Social Housing Fund (WH:SHF) is part of this plan, installing energy efficiency upgrades and low-carbon heating measures in English social housing. The scheme provides funding to local authorities, combined authorities, registered providers of social housing, and registered charities that own social housing in England. Statistics on measures installed and households upgraded are published in Warm Homes: Social Housing Fund statistics.

Green Deal (GD)

The Green Deal was a government initiative designed to help homeowners install energy efficiency measures into their properties. The costs of these measures are paid back via energy bills over a period of time; this is in the form of a Green Deal Finance Plan (GD Plan).

Green Homes Grant Vouchers (GHGV)

The Green Homes Grant Vouchers (GHGV) scheme launched for applications on 30th September 2020 and closed to new applicants on 31st March 2021. It was available in England only. Householders and landlords could apply for a grant of up to £10,000 to cover the cost of installing energy efficiency measures. The scheme was split into a main scheme and a low-income scheme, which was determined by the receipt of certain benefits. Applicants on the main scheme would receive up to two-thirds of the cost of the retrofit up to a value of £5,000, while low-income applicants would be fully funded up to £10,000. Further information on the scheme is available in the official statistics and GHGV guidance.

Green Homes Grant Local Authority Delivery (LAD)

The Green Homes Grant Local Authority Delivery (LAD) scheme launched in 2020 with £500 million of funding to support the energy efficiency upgrades of low-income households across England. LAD is delivered over different phases, with Phase 1 allocating £200m in grants to over 136 Local Authorities for delivery by March 2022. Phase 2 allocated £300m in grants to the five Local Net Zero Hubs, who will work with their regional Local Authorities. Under the scheme, local authorities identify households that meet the eligibility criteria for the scheme - these are targeted as those most at risk of fuel poverty or in the least energy efficient housing. Further information on the scheme is available in the official statistics.

Sustainable Warmth (SW)

The Sustainable Warmth (SW) scheme launched in early 2022 to further support the energy efficiency upgrades of low-income households across England. SW consists of LAD Phase 3 and the Home Upgrade Grant (HUG) Phase 1. LAD Phase 3 has allocated £287 million of funding to Local Authorities to support low-income homes on the gas grid, whilst HUG Phase 1 has allocated £152 million of funding to Local Authorities to support low income homes off the gas grid. Further information on the scheme is available in the official statistics.

Social Housing Decarbonisation Fund (SHDF)

The Social Housing Decarbonisation Fund (SHDF) scheme is a government scheme that will upgrade a significant amount of the social housing stock currently below Energy Performance Certificate (EPC) C up to that standard. It supports the installation of energy performance measures in social homes in England. SHDF Wave 1 launched in August 2021. It has awarded around £179m of grant funding for delivery from 2022 into 2023 and will see energy performance improvements to up to 20,000 social housing properties. Successful projects within Wave 2.1 of the SHDF were announced on 22 March 2023. Wave 2.1 of the SHDF awarded around £778m of grant funding, delivering from 2023 to 2025. Further information on the scheme is available in the official statistics.

Homes Energy Efficiency Database (HEED)

The Homes Energy Efficiency Database (HEED) is a national database developed by the Energy Saving Trust. It was set up to help monitor and target carbon reduction and fuel poverty work. It contains details of energy efficiency and micro-generation installations such as cavity wall insulation and solar hot water, including the date of installation.

Data have been recorded in HEED since 1995 including activity reported from government programmes, such as the Energy Efficiency Commitment (EEC) and Carbon Emissions Reduction Target (CERT), and activity reported by trade associations such as Gas Safe and FENSA. Approximately 50 per cent of UK homes have a record in HEED[1].

Homes Energy Efficiency Programmes (HEEPs)

Launched in April 2013, the Home Energy Efficiency Programmes for Scotland (HEEPS) provided an offer of support to households across Scotland. Data from HEEPS included in NEED covers installations between 2013 and 2018.

Feed-in Tariffs (FIT)

The Feed-in Tariffs (FIT) scheme was designed by government to promote the uptake of renewable and low-carbon electricity generation. Introduced on 1 April 2010, the scheme requires participating licensed electricity suppliers to make payments on electricity generated and exported by accredited installations. The FIT scheme closed to new applicants from 1 April 2019. Installations from FITS are included within NEED via the Microgeneration Certification Scheme (MCS) Installation Database. Monthly statistics are published on solar photovoltaic deployment.

The FIT installation data recorded in the MCS Installation Database include:

- geographical location
- technology type (e.g., wind, solar)
- installed capacity
- type of installation (i.e., domestic, community, or commercial)

Gas Safe Boiler Installations

Gas Safe are the organisation that maintains the registration of all legally installed gas appliances and replaced CORGI as the gas registration body in 2009. Boiler installation data is provided to DESNZ annually and contains information on the type of boiler installed and property address information that can link the installation to a UPRN. DESNZ cross checks new boiler installations at a property to only include the most recent installation. Gas Safe data includes installations up to the end of December 2025.

[1] There are records for approximately 50 per cent of homes in the UK, however there may not be full information for each of these records. There is no information on measures that a household has installed itself (DIY) or measures installed in the home when they were built.

5. Users and uses

Analysis using NEED has supported a number of DESNZ policies:

- NEED has been used to understand the changes in consumption (and resulting impacts on energy bills) for households installing energy efficiency measures.
- NEED informs a range of other DESNZ policies, for example, evaluating the impact of specific energy efficiency schemes.
- NEED has helped policy analysis to better understand the actual consumption for different types of properties and households, and therefore to better understand how policy options will impact on different households. Having this information enables DESNZ to provide better value for money and better understand the impacts of policy options.
- NEED has also helped DESNZ understand where further research should be focused. It provides high level results which have highlighted areas for further investigation.

Domestic NEED provides a valuable resource, and the team recognises potential uses beyond the projects currently taking place. There is published guidance which outlines routes for individuals or organisations to access property level data. Samples of anonymised record-level data are also published. The property level consumption aspect of NEED is made available to accredited researchers for approved projects via a number of Trusted Research Environments (TREs), including the ONS Secure Research Service and Scottish National Safe Haven.

In addition, NEED published outputs are also used externally by a wide range of interested parties, including local authorities, academics and energy suppliers. These include:

- The Committee on Climate Change use the outputs to inform reports, including recommendations to government.
- Energy companies and academics use the outputs to validate and inform their own research and estimates.
- Energy suppliers use the NEED reports to act as an independent trusted source demonstrating the benefit of installing energy efficiency measures.
- Local authorities use the outputs to help with modelling housing stock and understanding the impact of installing energy efficiency measures.

This publication is available from: www.gov.uk/government/collections/national-energy-efficiency-data-need-framework

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