



DOMESTIC ENERGY EFFICIENCY FUEL POVERTY REPORT 2022

Introduction

Fuel Poverty occurs when a household falls below the poverty line following energy expenses. This can lead to households being unable to maintain adequate warmth or use the required energy for other essential needs, e.g., cooking and any electrical household appliances. The Low Income Low Energy Efficiency (LILEE) fuel poverty indicator, which is currently favoured by the UK Government, considers a household to be fuel poor if residual household income is below the poverty line (following energy expenses) and the home has an EPC rating of D–G.

The Fuel Poverty Strategy is a high-level response to tackle fuel poverty in Nottingham, but behind the data are serious personal impacts. This is why the strategy recommends that the city take a whole-house retrofitting and person-centred approach to addressing fuel poverty.

Tackling Fuel Poverty

Nottingham City Council launched a Fuel Poverty Strategy for the city in September 2018 through the Domestic Energy Efficiency Fuel Poverty subgroup (DEEFP). The group exists to foster citywide collaboration, reporting to the Health and Wellbeing Board, and consists of council officers from different directorates, third sector local and national organisation. The strategy aims to increase thermal comfort and wellbeing in the coldest and most vulnerable homes. The strategy identifies the following key actions:



REDUCE ENERGY BILLS



IMPROVE ENERGY EFFICIENCY



MAXIMISE
HOUSEHOLD INCOME

These factors are complex and interrelated. For example, low-income households tend to be less energy efficient and often have more expensive energy payment methods, including pre-payment meters, which are typically more expensive than direct debit.

The most recent fuel poverty statistics, provided by the Department for Business, Energy & Industrial Strategy (BEIS)¹, show that 20.6% of households in Nottingham are fuel poor. It should be noted that although the most recent fuel poverty statistics were released in 2022, they are based on data from 2020. BEIS also provide sub-regional fuel poverty estimates for council wards and Lower Super Output Areas (LSOAs), which can be used to make geographical comparisons (see Appendix: **Figure A1** for fuel poverty map of Nottingham). The rate of fuel poverty per council ward and the change in fuel poverty from 2019 to 2020 can also be seen in Appendix: **Table A1**. All of Nottingham's council wards experienced a rise in fuel poverty from 2019 to 2020, with the exception of Mapperley. Given in the

¹ <https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2022>



further rise of the energy price cap in October 2022 , it is inevitable that more properties will become fuel poor, as discussed in greater detail in the ‘Energy Prices’ section.

DEEFP has developed an accompanying action plan that covers the three areas above in relation to citywide ambitions and actions to reduce fuel poverty, each of which is reviewed later in this report. The overarching target of the action plan is to reduce Nottingham city’s fuel poverty rate with the aim to be below the national average by 2025.

Among all the English Local Authorities, Nottingham has the 6th highest fuel poverty rate (20.6%). This is considerably higher than the average across England (13.2%) and for the East Midlands region (14.2%). Compared to the core cities², Nottingham has the second highest rate of fuel poverty in 2020 and the greatest increase in fuel poverty from 2019 to 2020 (+2.1%), as displayed in **Table 1**.

Table 1: Fuel poverty (LILEE) in core cities during 2019 and 2020 (BEIS, 2022)

CITY	LILEE FUEL POVERTY 2019 (%)	LILEE FUEL POVERTY 2020 (%)	% CHANGE
Birmingham	21.2	21.8	+0.6
Nottingham	18.5	20.6	+2.1
Manchester	19.8	20.5	+0.7
Sheffield	17.5	18.9	+1.2
Liverpool	18.1	18.7	+0.6
Leeds	16.8	17.6	+0.8
Newcastle	16.4	16.8	+0.4
Bristol	13.8	14.4	+0.6

Fuel Poverty has seen changing national calculation methods including 10% income, Low Income High Cost and Low Income Low Energy Efficiency, directly affecting % and household number in Fuel Poverty.

2012	2012	2013	2014	2015	2016	2017	2018	2019	2020
21.2%	18.4%	14.0%	12.6%	15.8%	14.6%	12.6%	13.9%	18.5%	20.6%
27,311	23,648	18,050	16,245	20,493	18,980	16,222	18,666	25,069	27,954
10%	LIHC	LILEE	LILEE						

The 10% income rule ran until 2012 when it was 21.2% affecting 27,311 homes. Between 2012 and 2018 Low Income High Cost method was used nationally during which time it Fuel Poverty fell by 4.5% or 4,982 homes from 18.4% affecting 23,648 homes in 2012 to 13.9% affecting 18,666 homes. In 2019 methodology nationally switched to Low Income Low Energy Efficiency (LILEE) method which calculated Fuel Poverty as 18.5% or 25,058 homes. The latest data is for 2020 using LILEE when 20.6% or 27,954 homes. (BEIS sub national Fuel Poverty data)

As a result of the COVID-19 pandemic and increased working from home from March 2020, household energy consumption increased across England in 2020 by 3.4% domestic gas and 5.3% domestic electricity compared to 2019. In Nottingham the change was lower with mean domestic gas consumption (in kWh) being 2.6% higher in 2020, while mean electricity consumption increased by 4.5%. (BEIS sub national consumption data)

The DEEFP subgroup and action plan align to and support the council plan targets to:

² <https://www.corecities.com/>



- Milestone Year 1 (31 March 2020): Action plan for Fuel Poverty strategy 2018-2025 and annual review launched. Appropriate PI and monitoring system to be developed through DEEFP group.
- Milestone Year 2 (31 March 2021): Deliver fuel poverty action plan. Introduce new fuel poverty measure
- Milestone Year 3 (31 March 2022): Deliver fuel poverty action plan. Target 5% increase in number supported
- Become the first carbon neutral city in the country, reaching this target by 2028

Although there currently is no method to directly monitor the age of Nottingham citizens in fuel poverty, Age UK Notts is one of the DEEFP partners. They bring specialist support services aimed at senior citizens.

Health and Wellbeing

Living in cold housing increases the risk of poor health and wellbeing, and also contributes to excess winter deaths (EWDs). In addition, the health problems caused by cold housing puts further pressure on the NHS and other public services. Children living in cold homes are more than twice as likely to suffer from a range of respiratory problems compared to those living in warm homes. This can also have secondary negative effects on educational attainment and emotional wellbeing.

In Nottingham there were 130 EWDs excluding covid cases during the most recent periods 2018/19 and 2019/20³. This is a considerable improvement on the 220 EWDs in 2017/18 and 250 in 2014/15 documented Department of Health Excess winter mortality by local authorities, England and Wales, 1991/1992 to 2019/2020.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20 exc covid
Excess Winter Deaths	250	150	140	220	130	130

National Energy Action (NEA) estimate that 1 EWD equates to 8 hospital visits. Given that the average cost of a hospital bed is £222⁴, the estimated cost of EWDs from August 2019–July 2020 for Nottingham was £230,880 (i.e., 8*130*222). This constitutes a 42% reduction in cost compared to the estimated cost of EWDs stated in the previous DEEFP report (£397,824). It is worth noting that EWDs and associated costs are likely to be considerably higher in next year’s report due to COVID-19.

Public Health England’s (PHE) continued winter campaign, ‘Stay Well’, offers some simple suggestions on how people can stay warm throughout winter, as well as directing citizens to advice on the Winter Fuel Payment and Cold Weather Payment. For more information please see: <https://www.nhs.uk/staywell/>.

Housing conditions that impact health

Excess cold – PHE recommend that home temperature should be at least 18°C, although they also recognise that vulnerable groups may benefit from higher temperatures. Cold conditions can affect respiratory and cardiovascular function, as well as the immune system; and worsen arthritis symptoms (increasing the risk of home injuries).

Damp and mould – Homes that are affected by damp, are at risk of mould growth and the proliferation of dust mites. There is evidence that damp and mould are associated with asthma, respiratory issues

³ <https://fingertips.phe.org.uk/profile/health-profiles/data#page/1/gid/1938132701/pat/6/par/E12000004/ati/202/are/E06000018/yr/3/cid/4/tbm/1>

⁴ <https://www.nice.org.uk/guidance/ng27/resources/costing-statement-2187244909>



and eczema, particularly amongst young people. There is also a potential link with anxiety, depression and social isolation.

Excess heat and poor air quality – In some cases, insulation intended to prevent cold and damp has been linked to health problems. Insulation can worsen ventilation when it is added to existing housing. Inadequate ventilation can lead to occupants being overexposed to indoor pollutants, such as mould and second-hand tobacco smoke, which has negatively health consequences. Housing with poor insulation and high ventilation can lead to harmful pollutants from outside the home mixing with those indoors. Insulated homes are also at greater risk of overheating in hot weather.⁵

Impact of the COVID-19 lockdown on people's health and wellbeing:

The 2020 *Lockdown, Rundown, Breakdown* report notes that the safest place for some is not actually the home during the pandemic, as people feel less secure in their tenancies, less likely to report repairs and with the worry over costs for heating, many people are going into the winter months much more concerned on how they will cope financially.⁶

Research carried out by Age UK found:

- 1 in 3 respondents (4.2million) or 34% reported feeling more anxious since the start of the pandemic,
- 1 in 3 (4.4million) or 36% agreed they felt less motivated to do the things they enjoy,
- Over a quarter (3.2 million) or 26% can't walk as far as they used to,
- 1 in 5 (2.4 million) or 20% are finding it harder to remember things,
- 1 in 5 (2.3 million) or 18% say they feel less steady on their feet,
- 2 in 3 (7.9million) or 64% felt less confident taking public transport, 2 in 5 (5.3 million) or 43% felt less confident going to the shops or 1 in 4 (3.3million) or 26% felt less confident spending time with family.

The impacts of COVID-19 such as job loss, furlough and working from home increase the risk of people falling into fuel poverty.

Review of Strategic Areas

MAXIMISE HOUSEHOLD INCOME

Household income is one of the main factors affecting fuel poverty. Low-income households are more likely to be less energy efficient and to have more expensive energy payment methods. **Table 1** shows the proportion of fuel poor households among the two lowest deciles of household income, and also for the third–fourth deciles and fifth–tenth deciles, jointly. It should be noted that the household income statistics are equivalised (adjusted depending on household composition and size) and are after housing costs (AHC), hence household income will be referred to as AHC equivalised income. It should also be noted that **Table 1** reflects the proportion of fuel poor households per income group in 2020, as these are the most recent available data.

Another important note to be made about **Table 1** is that being fuel poor is becoming more common in higher income deciles, for example, in 2018 11.7% of the third–fourth decile group were fuel poor, whereas 20.1% of this group were fuel poor as of 2020.

⁵ <http://researchbriefings.files.parliament.uk/documents/POST-PN-0573/POST-PN-0573.pdf>

⁶ <https://www.flipsnack.com/NorthernHousingConsortium/lockdown-rundown-breakdown-1hpf1x7e47.html>



Table 2: Proportion of fuel poor households per AHC equivalised income group⁷

AHC EQUIVALISED INCOME GROUP	PROPORTION OF HOUSEHOLDS WITHIN GROUP (%)	
	NOT FUEL POOR	FUEL POOR
1 st decile – lowest income	53.5	46.5
2 nd decile	54.5	45.5
3 rd –4 th deciles	79.9	20.1
5 th –10 th deciles – highest incomes	100	–
All households	86.8	13.2

In 2020 gross disposable household income per head (GDHI) in Nottingham was £13,952, a growth of 2.9% compared to 2019 (£13,560)⁸. Despite progress in the city’s GDHI growth which was the 3rd highest in UK in 2020, this is still considerably below the rate of inflation, as discussed further in the ‘Energy Prices’ section. Nottingham City in 2019 and 2020 remained the lowest Local Authority for GDHI in the UK and is considerably below the UK average in 2020 of £21,440, which saw a 0.2% fall from 2019. The income gap to the national average has increased since 2015 and the amount of disposable income in Nottingham is over 2.5% lower than in 2015. Therefore, maximising household income is a key action with DEEFP’s focus on support and communication of energy-related benefits, subsidies and grants.

Subsidies and Grants

There is a range of government assistance to help subsidise the cost of energy including the Winter Fuel Payment, Cold Weather Payment and Warm Homes Discount (WHD). For further advice on heating and housing benefits go to <https://www.asklion.co.uk/>.

Engagement and distribution of targeted information in community

Providing up-to-date information and increasing awareness of the available financial support around utility costs is key area action for all DEEFP members. Citizens should contact their supplier to see if they are eligible for grants/schemes, some of which are offered to non-customers for access to white goods (large home appliances, e.g., washing machines or refrigerators) or to pay off fuel debt.

Interventions

⁷ <https://www.gov.uk/government/collections/fuel-poverty-statistics#2020-statistics>

⁸ <https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/bulletins/regionalgrossdisposablehouseholdincomegdi/1997to2019>



DEEFP have updated the Ask Lion debt advice page with signpost links to local support services and national schemes available. The group continues to use and promote messages via, social media, community networks and partnerships to share key messages and increase uptake energy related benefits, subsidies and grants as well as the location of warm spaces across the city during the winter months.

Regular briefings were created and shared with councillors to communicate the regular changes arising from the impact of Covid-19, political changes and cost-of-living crisis.

DEEFP continue to monitor both citywide and ward level data on fuel poverty to identify target areas. This is then overlaid with the city's building stock data (both BRE modelling and EPC data) and the multiple deprivation index.

There is a noticeable trend of higher views during winter months which reduces during spring and summer. Ideally, citizens would be engaged over the spring/summer months so preventative measures can be implemented ahead of winter.

It is worth noting that while local support organisations work hard to enable eligible citizens access to WHD it remains difficult to measure uptake of WHD at a local level.

Direct assistance to complete applications and/or signpost towards installers/providers

Next Steps: Subsidies and Grants

- DEEFP continue to support the Nottingham Financial Resilience Partnership and deliver key messages to target areas. Fuel poverty continues to be one of three at risk factors to financial vulnerability and has been mapped to identify target areas.
- DEEFP will be encouraging eligible private homeowners to apply for available funding opportunities such as the such as the Green Homes Grant (GHG), and will continue to roll out energy efficiency measures to council owned property through schemes such as the Social Housing Decarbonisation Fund.

Communication/ Signposting Services

Through the WHH, DEEFP aim to maximise all points of contact with citizens to ensure access to a network of services and partners, using a co-ordinated approach. The WHH aims to empower citizens to make low/zero cost changes to reduce energy bills, increase warmth and wellbeing by providing the right information and knowledge.

Link into broader Financial Vulnerability Strategy

A collaborative approach enables a great opportunity for additional coordination of services. Fuel-poverty is a multi-dimensional problem, and it is vital that it is tackled in a systematic manner. The Nottingham financial Resilience Partnership (NFRP) covers aspects broader than DEEFP's remit; this provides insight into city support to help maximise household income. The DEEFP group specifically support action 6.3 of NFRP's action plan – Reduce household expenditure and help prevent eviction. While broader than fuel poverty, this ensures that the poverty premium and other relevant costs such as housing costs are considered and supported.



Signpost to simple energy advice– information on energy efficiency and where to go for help

A council consultation in 2018 identified that citizens are not sure where to go for help and advice on reducing energy bills. This is where we as a council can make the one of the biggest impacts. DEEPF have created a leaflet, “cut the cost of keeping warm this winter”, that signposts citizens to citywide agencies that can help with various issues arising from fuel poverty. This leaflet is checked and updated regularly.

A government website www.simpleenergyadvice.org.uk additionally offers personalised online advice to help households become more energy efficient, find out about support and understand their own property’s current and potential energy performance.

Encourage citizens and inform front line staff of the benefits of registering for the Priority Service Register

The Priority Services Register (PSR) is a free service provided by energy suppliers and network operators to customers in need. Citizens can register as a priority services customer to receive additional support during power cuts. For more information, visit <https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/extra-help-energy-services/priority-services-register-people-need>.

Funding

Look into funding sources to support council targets and objectives

The Energy Company Obligation (ECO) provide grants for insulation (roof, wall and floor) and boilers. ECO 2013 to March 2022 installed 28,315 measures in Nottingham, of which 2,570 under NCC’s LAFlex Statement of Intent which widens eligibility. As shown in **Table 2**, Nottingham has installed approximately 218 ECO measures per 1,000 homes, as of March 2022.

Table 3: ECO measures implemented by core cities until March 2022 (BEIS 2022)

CITY	ECO MEASURES PER 1,000 HOMES	ECO3 LA FLEX PER 1,000 HOMES
BIRMINGHAM	336.7	3.5
MANCHESTER	264.9	0.3
LIVERPOOL	220.0	16.6
NOTTINGHAM	217.7	20.6
LEEDS	191.8	4.2
NEWCASTLE	160.0	7.2
SHEFFIELD	148.0	0.1
BRISTOL	80.5	6.5

The DEEPF group continue to look for funding which will support our objectives.

Green Homes Grant Local Authority Delivery (LAD)



A £2 billion grant was announced by Government in July 2020 to tackle fuel poverty and support green recovery. The primary purpose of the LAD is to raise the energy efficiency rating of low-income and low EPC rated households and reduce household bills.

- Vouchers of £1.5 bn to owner occupiers and landlords
- Local Authority Delivery of £0.5bn allocated to LA's
 - LAD 1B – upscale bids from LA's successful under 1A or new bids. Delivery completed 2022
 - LAD 2 - £300 million allocated to the 5 Local Energy Hubs across England. Delivery completed 2022

Social Housing Decarbonisation Fund Wave 1 and 2 (SHDF)

Social Housing Decarbonisation Fund Wave 1 provides funding to support the installation of energy performance measures in social homes in England). It will mean warmer and more energy efficient homes, a reduction in households' energy bills, and lower carbon emissions. Delivery of Wave 1 to take place during 2022 and 2023, with a further bid submitted for Wave 2 in 2022

Sustainable Warmth Competition (SWC)

The competition encompasses 2 existing schemes:

- Local Authority Delivery Phase 3 (LAD3): £287 million to support low-income households heated by mains gas
- Home Upgrade Grant Phase 1 (HUG1): £152 million to support low-income households off the gas grid

Its focus is on upgrading the worst insulated owner occupier and private rented homes with energy efficiency installations and low carbon heating. Projects that upgrade homes with an Energy Performance Certificate (EPC) rating of E, F or G will be prioritised. Upgrades to properties with an EPC rating of D will be allowed but will be limited.

Further green package funding

- £1 bn Public Sector Decarbonisation Scheme (PSDS). Aims to support 30,000 skilled jobs as part of the 'Plan for Jobs 2020' commitment to support the UK's economic recovery from COVID-19. The scheme also supports the government's net zero and clean growth goals.
- £32m Public Sector Low Carbon Skills Fund.
-
- Home Upgrade Grant (HUG) £700 million of funding will be made available to local authorities to help them deliver HUG phase 2 until March 2025

Create a document of organisations

Work has taken place by colleagues to create a Money Talks campaign with signposting information to direct citizens to money related support including energy advice, debt advice and possible avenues of funding available.

DEEFP regularly checks the energy and debt advice pages on the Ask Lion website are up to date with digital signposting of information and support services.



Next Steps: Funding

- Where appropriate, DEEFP will aim to collaborate on funding bids.
- Continue to develop signposting document listing organisations working on fuel poverty.

Support the Nottingham Financial Resilience Partnership Action Plan

Keep up to date with actions and coordinated citywide approach

Active participation is ongoing in the Financial Resilience Partnership. The DEEFP group specifically support action 6.3 of NFRP's action plan – Reduce household expenditure and help prevent eviction. Household income is maximised through reduced household expenditure.

NCH have their own in-house Energy Team to offer advice to tenants.

Tailored benefit advice

DEEFP promote qualified advice resources such as DWP, welfare rights and other third sector organisational support across the city to make sure income levels for people on low income are maximised and reduce the level of over-indebtedness in the city.

As there are many contributing factors to fuel poverty, often a combined and tailored approach is required to have the most sustained effect. Age UK Notts provide home energy checks, which take individual, and household needs into consideration when offering support.

Next Steps: Support Nottingham Financial Resilience Action Plan

- Continue to attend NFRP meetings
- Continue to prevent citizens reaching a crisis point through intervention mechanisms set up

ENERGY PRICES

In August 2022, The Office of Gas and Electricity Markets (Ofgem) announced that the energy price cap will increase to £3,549 per year for an average dual fuel household from 1st October 2022⁹. It is worth noting that the energy price cap only applies to the profits of energy suppliers, therefore, if the wholesale price of gas and electricity continues to rise the price cap will do little to protect consumers.

Given increasing energy prices and a sharp rise in the cost of living (the Consumer Prices Index rose by 10.1% in 12 months from July 2021 to July 2022¹⁰), it is inevitable that a larger proportion of households will struggle to afford energy bills during winter 2022, in comparison to previous years.

Citizens who are concerned about the rising cost of living may find advice from the following organisations helpful:

- StepChange a national charity can help you with free debt advice and resources to get back on track, as well as providing support. Find out more [here](#)
- Citizens Advice have a Nottingham office and can help with many issues including debt

⁹ <https://www.ofgem.gov.uk/cy/publications/ofgem-updates-price-cap-level-and-tightens-rules-suppliers>

¹⁰ <https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/july2022>



- [Money Saving Expert](#)
- NCC’s [Welfare Rights Service](#) provide advice and support.

Table 4 shows the proportion of fuel poor households per payment type and main fuel type (e.g., gas or electricity) in the UK. A considerably higher proportion of prepayment households are fuel poor, when compared to other payment methods. Given that the unit price of gas and electricity is rising considerably in October, it is likely that those using prepayment methods will be forced to limit their energy consumption over winter.

Table 4: Percentage of fuel poor households per payment method (BEIS, 2022)

GAS				
METHOD OF PAYMENT	PROPORTION OF HOUSEHOLDS WITHIN GROUP (%)		PROPORTION OF FUEL POOR HOUSEHOLDS (%)	AVERAGE FUEL POVERTY GAP (£)
	NOT FUEL POOR	FUEL POOR		
Direct debit	90.0	10.0	53.7	174
Standard credit	84.0	16.0	9.1	222
Prepayment	72.2	27.8	19.6	149
N/A = no gas	80.6	19.4	17.7	455
All households	86.8	13.2	100.0	223
ELECTRICITY				
Direct debit	89.3	10.7	64.6	232
Standard credit	85.1	14.9	9.9	222
Prepayment	69.4	30.6	25.4	202
All households	86.8	13.2	100.0	223

Switching

We aim to empower citizens to compare prices and switch to the best tariff, enabling a greater number of citizens to have more affordable bills through being on the best tariff for their circumstances.

Ofgem introduced a Consumer Vulnerability Strategy in 2018. This sets out how gas and electric consumers in vulnerable situations will be protected until 2025. The strategy aims to improve competition in the energy market, and offers an energy price cap on the amount suppliers can charge domestic prepayment meter customers per unit of energy – not the total cost of the bill.



Since the April 2022 price cap increase switching is no longer an advised method for saving money on energy bills. This has added pressure to households and advice centres when trying to save money.

New Technology

Smart meters to be installed to customers who want them in line with national target by 2024.

Citizens are more easily able to read, monitor and control their energy usage with a smart meter installed. “Smart meters can also help people to save money on fuel bills, aid budgeting and identify unnecessary fuel consumption for example, where lights are left on in an unoccupied room” according to Smart Energy GB.

Next Steps: New technology

- Estimate the number of smart meters installed and understand barriers
- Promote tips to reduce consumption

Retrofit

Retrofit of properties with poor energy efficiency, through holistic and whole house approaches.

Table 5: Green Homes Grant (GHG) vouchers in Nottingham and core cities

CITY	GHG VOUCHER INSTALLS TO 31 ST MARCH 2021	INSTALLS PER 1,000 HOMES	VOUCHERS PER 1,000 HOMES	APPLICATIONS PER 1,000 HOMES	HOUSEHOLDS
Nottingham	95	0.73	4.0	10.2	128,542
Newcastle	83	0.68	1.9	7.6	121,281
Birmingham	242	0.57	3.5	12.1	419,526
Sheffield	117	0.49	3.4	10.8	237,562
Leeds	151	0.46	1.8	6.1	327,670
Liverpool	85	0.39	2.2	5.8	216,266
Bristol	68	0.35	1.5	4.6	190,104
Manchester	69	0.32	2.8	9.1	213,994



ENERGY EFFICIENCY

Table 6 shows the proportion of households per EPC rating as of June 2022. 39.3% (66,651) of Nottingham households have an EPC rating of A–C, hence these households cannot be considered fuel poor under the LILEE fuel poverty metric, regardless of household income or composition. The remaining 60.7% have an EPC rating of D–G.

Table 6: Proportion of households per EPC band in Nottingham (EPC database¹¹)

EPC RATING	FREQUENCY	PROPORTION (%)
A	441	0.3
B	12,460	7.3
C	53,750	31.7
D	65,283	38.5
E	29,795	17.5
F	6,795	4.0
G	1,261	0.7
TOTAL	169,786	100.0

As illustrated in **Figure 1**, older households tend to be less energy efficient than newer builds.

¹¹ <https://epc.opendatacommunities.org/>

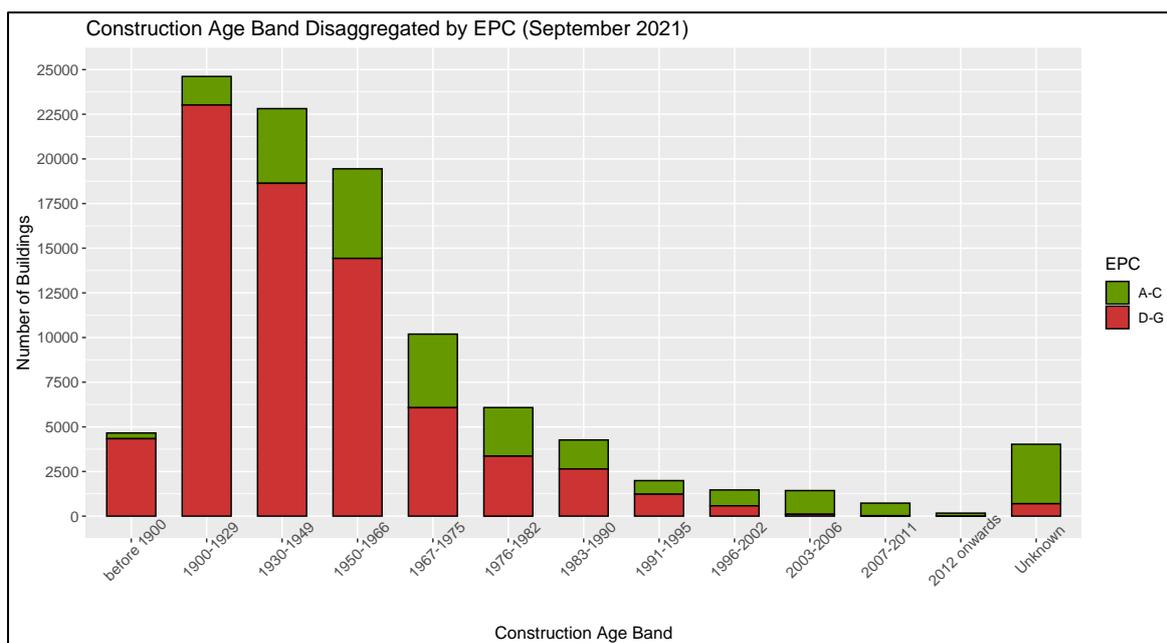


Figure 1: Construction age band of Nottingham’s housing stock, disaggregated by EPC

Nationally in 2020, 13.2% of households were fuel poor, down from 13.4% in 2019¹². From 2010 to 2020, the proportion of low-income households living in a property with an EPC rating of C or above rose from 14.6% to 52.1%. Under the LILEE fuel poverty metric this means that those living in a low-income and high efficiency household (EPC rating of A, B or C) are no longer considered to be fuel poor, regardless of household income and changes in energy prices. Ongoing research at the University of Nottingham aims to estimate the proportion of low-income, high efficiency households that would be considered fuel poor under alternative metrics, e.g., the 10% fuel poverty indicator.

Despite progress in upgrading the efficiency of low-income households, rapidly rising energy costs and inflation are likely to plunge many more households into fuel poverty. Inefficient households, however, will still be most vulnerable to rising energy costs. As of 2020 in the UK, 24.9% of EPC D rated households, 26.5% of E rated, and 30.4% of F rated households were fuel poor – sample size was too low to arrive at an accurate figure for G rated households.

Table 7 shows that a higher proportion of older households are fuel poor, while it is very unlikely that newer builds will be fuel poor. This essentially reflects the relationship shown between energy efficiency and construction age shown in **Figure 1**, albeit for different age ranges.

Table 7: Proportion of fuel poor households per construction age band in the UK (BEIS, 2022)

DWELLING AGE	PROPORTION OF HOUSEHOLDS WITHIN GROUP (%)	
	NOT FUEL POOR	FUEL POOR
Pre 1919	78.3	21.7

¹² <https://www.gov.uk/government/statistics/annual-fuel-poverty-statistics-report-2022>



1919 to 1944	82.3	17.7
1945 to 1964	83.9	16.1
1965 to 1980	90.2	9.8
1981 to 1990	92.0	8.0
1991 to 2002	92.0	8.0
Post 2002	98.2	1.8
All households	86.6	13.4

Table 8 shows the proportion of fuel poor households per main fuel type (gas, electricity or other) and Fuel Poverty Energy Efficiency Rating (FPEER) band, which is a way of grouping EPCs under the LILEE metric. Households where electricity is the main fuel type are more likely to be fuel poor than households where gas is the main source of energy.

Table 8: Proportion of fuel poor households per main fuel type (BEIS, 2022)

MAIN FUEL TYPE	FPEER BAND	PROPORTION OF HOUSEHOLDS WITHIN GROUP (%)	
		NOT FUEL POOR	FUEL POOR
Gas	A, B and C	100.0	0.0
	D	75.4	24.6
	E	75.8	24.2
	F and G	N/A*	N/A
Electricity	A, B and C	100.0	0.0
	D	68.2	31.8
	E	62.9	37.1
	F and G	62.9	37.1
Other	A, B and C	100.0	0.0
	D	78.7	21.3
	E	76.1	23.9
	F and G	N/A	N/A

*Some fields in **Table 8** are based on very low samples (less than 30 households) and are therefore denoted as “N/A”.

Dwelling Characteristics

Increase awareness of SAP/EPC ratings and interventions available

Households with solid insulated walls are least likely to be in fuel poverty (8.0% of households with an average fuel poverty gap of £192) compared to households with uninsulated solid walls (22.5% and an average fuel poverty gap of £292). As discussed previously, there is a relationship between building age and likelihood of fuel poverty. Nationally, households in dwellings built pre-1919 were most likely to be fuel poor (21.7% of households compared to just 1.8% of fuel poor households in dwellings built post-2002).

As a result of the inherent link between inefficient housing and fuel poverty, it is important to raise public awareness of EPC ratings and retrofitting. DEEFP are taking collective action to champion the importance of energy efficiency and increase awareness of household energy efficiency, particularly for private renters. The PRS now has a Minimum Energy Efficiency Standard (MEES) of E. The aim of this is to increase thermal comfort, reduce energy consumption and save citizens money on their energy bills.

Since the introduction of selective licencing and 10-year expiry of EPCs on new lettings, there has been a local increase in the number of new EPCs lodged.

As of June 2022, 36.8% of Nottingham’s PRS had an EPC rating of A–C, 74.1% of Nottingham’s PRS is a band D or better and 5.4% are F-G. All PRS homes must have an EPC D or better by 2025.

Table 9: Number of EPCs lodged in Nottingham from third quarter in 2021 to third quarter in 2022 (EPC database)

EPC CARRIED OUT IN ALL DWELLINGS	TOTAL	A	B	C	D	E	F	G
2021 Q3 July–Sept.	2,623	3	275	1,046	1,015	223	41	20
2021 Q4 Oct.–Dec.	2,172	1	202	856	845	220	37	11
2022 Q1 Jan.–March	3,121	15	308	1,342	1,048	338	56	14
2022 Q2 April–June	2,709	0	241	1,008	1,081	318	52	9
2022 Q3 JULY-SEPT	2,473	2	273	992	982	186	28	10

Next Steps: Dwelling characteristics

- Promoting the extent of savings from energy efficiency measures over time, as well as assistance with identifying ways of financing the upfront costs including grants.
- Continue to promote the national ‘simple energy advice’ website to find out information on their properties and action that can be taken.
- Targeted campaign on the importance of energy efficiency and associated cost savings.



- Encourage and facilitate citywide energy efficiency measures through the established Greener Housing brand used across the city including for the REMOURBAN demonstration work in Sneinton, Social Housing Decarbonisation scheme, Whole House retrofit and the LAD1,2 and 3 schemes. In Nottingham. 19.7% of existing homes will need to shift EPC band rating to achieve the new Minimum Energy Efficiency Standards for the Private Rented Sector by 2025 for new tenancies, 2028 for existing tenancies.

Occupier Characteristics

Nationally, the level of fuel poverty is highest in the PRS, with 25.0% of households in fuel poverty in 2020, compared to 8.4% in owner-occupied properties and 18.7% in socially rented households. Households in the owner-occupied sector also tend to be deeper in fuel poverty, with an average fuel poverty gap of £254, compared to £238 in privately rented housing and £152 in social housing, however, this is likely to be influenced by other factors, such as property size and age.

Table 11 shows the proportion of fuel poor households depending on the employment status of the household reference person (HRP). The HRP is the household’s highest income earner, or the oldest occupant if all occupants have no source of income.

Table 10: Fuel poverty by employment status of HRP (BEIS, 2022)

EMPLOYMENT STATUS	PROPORTION OF HOUSEHOLDS FUEL POOR (%)		AVERAGE FUEL POVERTY GAP (£)
	NOT FUEL POOR	FUEL POOR	
Full-time work	91.1	8.9	238
Part-time work	80.5	19.5	221
Retired	90.3	9.7	250
Unemployed	63.4	36.6	227
Full-time education	59.9	40.1	255
Other inactive	66.9	33.1	162
All households	86.8	13.2	223

Table 11 shows fuel poverty by household income decile and FPEER band. 100% of those in the first two income deciles (i.e., the lowest 20%) living in a property with an EPC rating of D, E, F or G are fuel poor. Conversely, 100% of the same income grouping living in EPC A–C rated households are not fuel poor. This is a result of the LILEE fuel poverty indicator, which does not consider any household with an EPC rating of C or above to be fuel poor. In reality, it is highly likely that a significant proportion of those living in low-income households with EPC ratings of A–C will not be able to afford their energy bills.

Table 11: Fuel poverty by AHC household income decile group (BEIS, 2022)



AHC EQUIVALISED INCOME GROUP	FPEER BAND	PROPORTION OF HOUSEHOLDS WITHIN GROUP (%)	
		NOT FUEL POOR	FUEL POOR
1 st –2 nd deciles	A, B and C	100.0	0.0
	D	0.0	100.0
	E	0.0	100.0
	F and G	0.0	100.0
	All	54.0	46.0
3 rd –4 th deciles	A, B and C	100.0	0.0
	D	62.1	37.9
	E	51.1	48.9
	F and G	N/A*	N/A
	All	79.9	20.1
5 th –10 th deciles†	A–G	100.0	0.0
All households	A–G	86.8	13.2

* “N/A” = less than 30 households in group.

† There are no fuel poor households among the 5th–10th income decile group

Targeted approach

Use all available information

EPCs, indices of multiple deprivation and fuel poverty are used to identify target areas through combining and analysing resulting datasets.

The DEEFP group maintains the aim within the strategy to “use knowledge of ward level areas of high fuel poverty, wider deprivation and poor housing, to target delivery at groups that are in most need”.

Legal requirement and enforcement

There is greater focus and attention on energy efficiency by landlords and tenants as a result of the introduction of MEES in 2018 and selective licencing. Citizens who rent are protected from excess cold and higher energy costs.



CONCLUSION

This report demonstrates that progress has been made towards tackling Fuel Poverty in Nottingham during 2021/22. The Covid-19 epidemic followed closely by the cost-of-living crisis has created challenges for delivery partners and will pose a challenge for all sectors working with citizens in fuel poverty.

Acronyms

DEEFP	Domestic Energy Efficiency Fuel Poverty subgroup
BRE	Building Research Establishment
DWP	Department for Work and pensions
ECO	Energy Company Obligation
EPC	Energy Performance Certificate
EWD	Excess Winter Deaths
FPEER	Fuel Poverty Energy Efficiency Rating
GDHI	Gross Disposable Household Income
GHG	Green Homes Grant
kWh	kilowatt hour
LAD	Local Authority Delivery
LILEE	Low Income Low Energy Efficiency
LSOA	Lower Super Output Area
MEES	Minimum Energy Efficiency Standard
NCC	Nottingham City Council
NCH	Nottingham City Homes
NFRP	Nottingham Financial Resilience Partnership
NEA	National Energy Action
NEP	Nottingham Energy Partnership



NHS	National Health Service
Ofgem	The Office of Gas & Electricity Markets
PHE	Public Health England
PRS	Private Rented Sector
PSDS	Public Sector Decarbonisation Scheme
SHDFD	Social Housing Decarbonisation Fund Demonstrator
WHD	Warm Homes Discount
WHH	Warm Homes Hub



1 Appendix

2

3 **Table A1 – Fuel poverty rate per council ward in Nottingham in 2019 and 2020 (LILEE metric)**

COUNCIL WARD	% FUEL POOR IN 2019 (LILEE)	% FUEL POOR IN 2020 (LILEE)	% CHANGE FROM 2019 TO 2020
Hyson Green & Arboretum*	22.1	27.5	+5.4
Lenton & Wollaton East*	23.2	32.1	+8.9
Radford*	20.5	27.2	+6.7
Aspley	29.7	32.9	+3.2
Basford	18.3	19.7	+1.4
Berridge	20.6	21.5	+0.9
Bestwood	19.3	20.2	+0.9
Bilborough	18.9	20.2	+1.3
Bulwell	19.9	20.7	+0.8
Bulwell Forest	13.1	13.8	+0.7
Castle	10.7	12.1	+1.4
Clifton East	16.0	16.7	+0.7
Clifton West	11.7	11.9	+0.2
Leen Valley	12.7	13.8	+1.1
Mapperley	17.8	16.8	-1.0
Meadows	15.9	16.9	+1.0
Sherwood	20.2	20.5	+0.3
St Ann's	20.8	24.2	+3.4
The Dales	20.6	22.0	+1.4
Wollaton West	8.7	9.5	+0.8

4 *Hyson Green & Arboretum, Lenton & Wollaton East, and Radford all have high student populations
5 compared to the remaining wards. Interestingly, the rise in fuel poverty was particularly pronounced
6 in the council wards with high student populations.

7

1 **Figure A1 – Nottingham fuel poverty map, showing fuel poverty per Lower Super Output Area (LSOA) and council ward**
2

