

How COVID-19 has exacerbated fuel poverty in the UK

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COVID-19 has exacerbated an already difficult situation for the fuel-poor. Consistent access to warm housing and electricity—a basic need—can be challenging for households with low incomes and high energy bills. Although decreasing year-on-year, fuel poverty is estimated to still affect four million households in the UK, around 14% of all households.^{1,2} Left unsupported, vulnerable people may have little choice but to ration their food and energy supply, and even self-disconnect if unable to pay. Fuel poverty creates a myriad of poor health outcomes and has a negative impact on physical and mental health. Cold homes are thought to cause 10,000 yearly deaths in the UK and contribute to £1.3 billion worth of health service costs in England.¹

The pandemic underscored the fragility of this reality, making an already difficult situation worse. It also presents a unique situation in which the support systems that address fuel poverty, such as charities and utilities, are also under unprecedented stress. In the UK, government policies are devolved across the four British nations and have respective methodological differences. Since the pandemic, the policies have faced hiatuses as stringent public health measures changed priorities. Although the rollout of COVID-19 recovery programmes brings some short-term relief, the programmes are not designed to tackle the longer term complexities of fuel poverty—especially when existing fuel poverty strategies could improve—and should thus be seen in a localised light.

In this paper, we highlight the UK's current fuel poverty landscape and mitigation strategies, key COVID-19 impacts, and perceived policy gaps. We examine how best to address fuel poverty through the lens of people, housing, and business, and as a topic outside of broader poverty initiatives.

Fuel poverty is complex and is affected by housing quality and effectiveness of support systems

The four UK nations each have fuel poverty classifications and local targets. They are based on different methodological assumptions that complicate comparisons across nations and calculations of a precise total for the UK.³ In Scotland, Wales, and Northern Ireland, a household is defined as being in fuel poverty if over 10% of the household income is spent on energy costs.⁴ In England, a fuel-poor household is defined as one with higher than average energy costs as well as income below the poverty line if they were to spend that amount on fuel.⁴

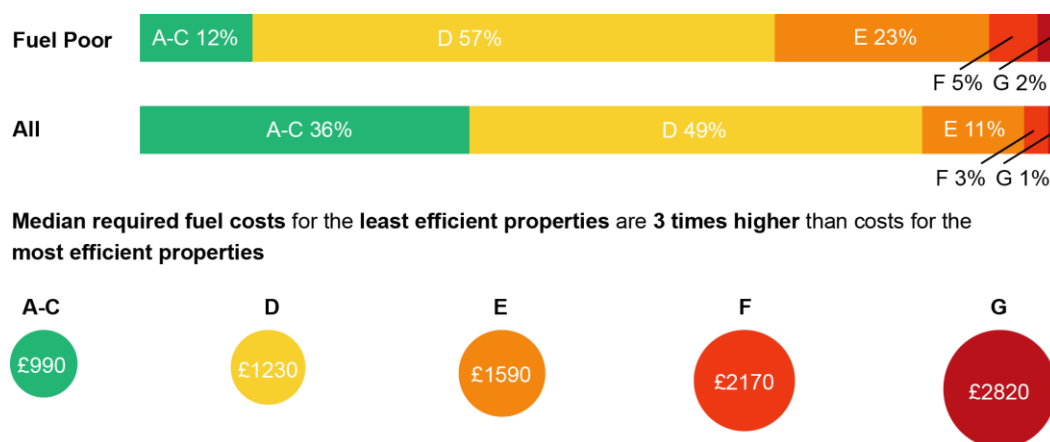
Those who are defined as 'fuel-poor' may have additional difficulties brought on by a disability, long-term illness, or bereavement. These characteristics are harder to capture in a simple definition yet can compound an already complex living situation. Ofgem has recognised the need for full consumer representation through its Priority Services Register eligibility criteria, which defines those who have mental health conditions, difficulties in topping up their pre-payment meters, or who have young children as being in a 'vulnerable situation.'⁵ For example, New Zealand's Integrated Data Infrastructure goes a step further by linking health data to other data sources, such as tax, education, welfare, and housing,

enabling both the facilitation of cross-agency collaboration and implementation of nationally standardised processes.⁶

Fuel poverty is worsened by poor quality housing

In the UK, the majority of homes have poor energy efficiency, and fall below the average Energy Performance Certificate (EPC) Bands A- through C.^{7,8} In England most fuel-poor households are in B and D.⁹ Approximately 67% of privately rented homes are rated at less than EPC B and C.¹⁰ A low EPC rating is typically linked to suboptimal heating, insulation, ventilation, fuels, and consequently higher overall energy costs. A property with a D-rated EPC, for example, costs an average of £240 more per annum for energy than A-through C-rated properties of the same size, and a G-rated property can cost almost £2000 more.⁹

Figure 1: Energy efficiency, England, 2018



Source: Department for Business, Energy & Industrial Strategy, Fuel Poverty Fact Sheet, England, 2018, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882159/fuel-poverty-factsheet-2020-2018-data.pdf

This problem is particularly relevant in the private rented household sector where 18% of households live in fuel poverty, compared to 8% in the owner-occupier sector.¹⁰ Many of these properties have additional infrastructure issues such as mould or broken appliances.²⁵ However, repairs and improvements may be out of tenants' control.

A range of businesses support vulnerable consumers based on their internal social obligations and government guidelines

A broad spectrum of energy businesses and organisations provide services to mitigate the impacts of fuel poverty. These services target fuel-poor households from different angles, ranging from financial support to grassroots help with benefits applications.

These businesses often work alongside government policies which support those in need, such as the Energy Company Obligation (ECO) and Warm Home Discount, as well as the default and pre-payment meter price caps.^{4,11} The ECO scheme and Green Homes Grant

enables households to install energy efficiency measures in their homes. The Warm Home Discount allows certain vulnerable populations to receive a one-off discount on their energy bills.¹¹ Price caps—particularly for the pre-payment meter segment in which many fuel-poor customers reside—have been justified as a way to protect these customers against unduly high prices.^{12,4}

Table 1: How organisations support vulnerable customers

Organisation	How they support vulnerable customers
Energy suppliers	<ul style="list-style-type: none"> • Offer fuel-poverty schemes such as Warm Home Discounts and often have their own initiatives to support vulnerable customers. • For example, British Gas Energy Trust provides grants and support to those struggling to pay for their fuels, including providing a COVID-19 response grant of £800,000 to charities within high need areas.¹³
Charities	<ul style="list-style-type: none"> • Provide targeted support to fuel-poor households. • For example, the National Energy Action (NEA) provides direct advice and support to those struggling to keep on top of their energy bills, installing heating and insulation measures in low-income households, and providing local community support to tackle fuel poverty.¹⁴
Local authorities	<ul style="list-style-type: none"> • Develop independent fuel poverty action plans and energy efficiency programmes. • For example, London's Fuel Poverty Action Plan supports existing borough services, focusing on households with the worst rates of fuel poverty to provide targeted advice and referrals for services, as well as providing focused support to help improve energy efficiency of homes.¹⁵
Contractors and engineers	<ul style="list-style-type: none"> • Work closely with suppliers, charities, and local authorities to enable the delivery of energy efficiency measures, as well as any emergency repairs.^{4,16}

However, fuel-poor households are typically the least engaged in the competitive retail energy market. Reliable and effective access to help hinges on close alignment between central and local government policy, businesses, and customer needs, as well as the ability to identify vulnerable groups in the first place. Government focus has been weakened due to the pandemic, as seen by the delayed Fuel Poverty Strategies for England and Scotland, and delayed consultation plans in Wales and Northern Ireland, resulting in ongoing unclarity in the strategic frameworks that underpin fuel poverty actions.¹⁶ A lack of strong coordination between different stakeholders has arguably led to the fuel-poor having to rely on broader socio-economic and poverty initiatives such as government benefits and charities which offer poverty advice and grants (e.g. Turn2Us).^{17,18} New fuel poverty policies and strategies to implement existing targets should be harnessed, with clear identification of funding requirements, delivery timelines, and approaches.¹⁹

COVID-19 brought numerous challenges, particularly for those already living in fuel poverty

The pandemic has had a widespread and pervasive impact, and in the case of fuel poverty, worsened the situation of the fuel-poor, their housing, and the businesses who support them. This means that getting help can seem harder than ever, whilst the livelihoods of those in fuel poverty have been declining over these difficult colder months.

The fuel-poor have increased financial and wellbeing worries

The average UK household energy bill increased by £32 per month due to people spending more time at home because of the pandemic.²⁰ With 1.62 million people unemployed and 9.6 million furloughed, the job market also worsened.^{21,22} Higher bills and reduced job security mean fuel-poor households find themselves under even more stress. This stark economic climate has been aggravated by the mandated closing of ‘third places,’ a phrase coined by sociologist Ray Oldenburg.²³

Pre-pandemic, people were able to distinctly segment their home (‘first place’) and work (‘second place’) environments, and had access to in-between mediums such as cafes, shops, and libraries (‘third place’). COVID-19 has underscored how mediums that provide heat and warmth, such as transport, are also considered ‘third places’ for the fuel-poor, as they form reliable and low-cost coping strategies. The mental and physical health impacts from the blurring, and temporary absence, of these environments are compounded for the energy vulnerable.

“I miss being in work—it was always warm in there. I sat by a gas fire in the winter and that was bliss really. I miss being able to go to the library and read the paper in a warm place before maybe going to a café and nursing a tea for a bit.” – Anonymous interviewee²⁴

The quality of housing is deteriorating

Due to COVID-19, poor quality housing has worsened, with essential repair and maintenance work postponed due to the pandemic.²⁵

“I’ve got a hole in my roof that’s gradually getting worse. Water pours in. The central heating hasn’t worked for three years, so I’ve had no hot water.” – Anonymous interviewee²⁵

Renters underreported critical issues for fear of future issues with their landlords—such as the possibility of evictions.²⁵ Lockdown measures meant vulnerable people spent more time in poor accommodation, and with higher living costs because of energy inefficiencies.

“The living conditions weren’t ideal or weren’t suitable; they were dangerous to my health...I just didn’t know what to do.” – Anonymous interviewee²⁵

Businesses are finding it harder to effectively support vulnerable customers

National Energy Action, a fuel poverty charity covering England, Wales, and North Ireland, reported that lockdown also had a significant impact on businesses which support vulnerable customers, such as the charities and local authorities mentioned above. Of the businesses interviewed, one-third had furloughed staff and three-quarters switched to home working, affecting the resources available to provide critical services. Many organisations had to change the way they delivered customer services, whilst the number of vulnerable households needing support provisions increased.¹⁶

One tangible impact on fuel poverty initiatives was the delay in smart meter installations. Smart meters can have positive benefits to those in fuel poverty, as they allow customers to have more accurate energy readings, a better sense of where their energy is being used, and access to a potentially wider range of cheaper tariffs.^{26,27} Government figures showed a steep decline of smart meter installations in 2020, and significant work is needed to pick up the pace again whilst maintaining safety precautions.^{28,29}

COVID-19 should not mask the need for reform of fuel poverty strategies

COVID-19 has hampered the delivery of fuel poverty policymaking and initiatives, including lost progress on energy efficiency projects and smart meter installations, and delays in publishing new strategies.¹⁶

We outline, below, a selection of the policy and regulatory ideas that might address the weak position of the UK's vulnerable energy consumers, the infrastructure they rely on, and the businesses that support or supply them.

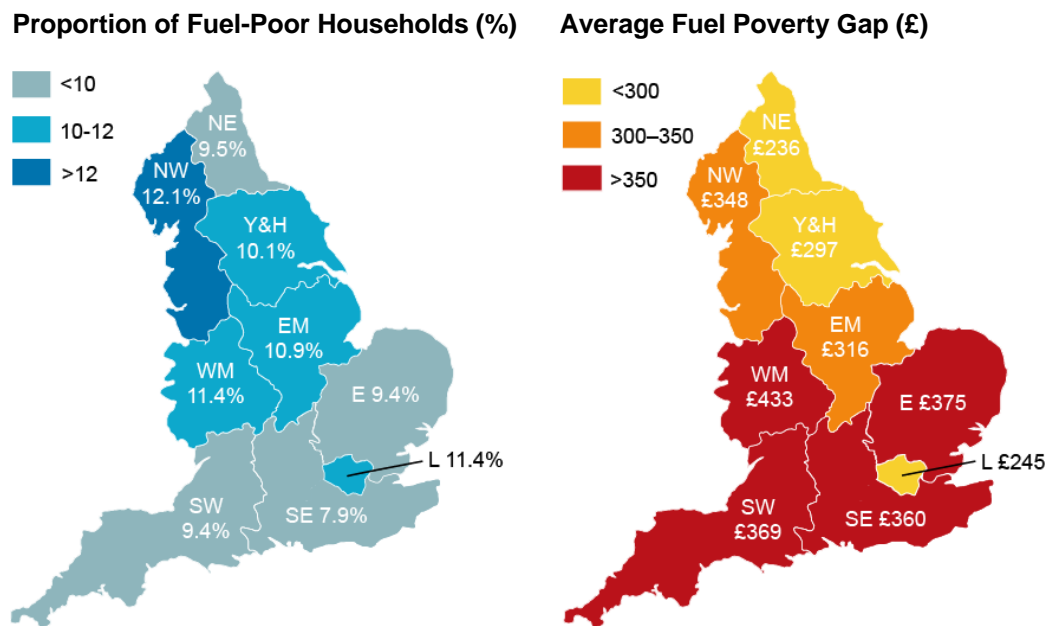
National commitment to 'third places' to support the most fuel-poor regions

Public places need to be maintained to support communities and particularly energy vulnerable consumers whose coping strategies often rely on them. The enduring effects of the pandemic on people, housing, and business will compound unless addressed. Lockdowns and socialisation restrictions have removed not only the 'third place,' but in many cases the workplace, or 'second place.' The latter may never return to pre-pandemic levels, given remote working has, in some cases, reduced the need for expensive property leases. The £750,000 'Community Spaces at Risk' fund to protect London's locally rooted spaces is an example, albeit localised, of such an approach.³⁰ There is also an increasing number of non-governmental organisations that play active roles in keeping community areas open, such as the resilience fund set up by the Charities Action Foundation.³¹

Whilst almost 10% of London's households are deemed fuel-poor,³² the 2020 Annual Fuel Poverty Statistics Report indicates North West regions have the highest proportion of fuel-poor households, with the West Midlands having the highest average gap.³³ Best practices, therefore, need to be adopted by local authorities across the country to ensure

the UK's most vulnerable are still able to access cultural centres, social clubs, and education spaces for heat, coping with loneliness, and mental health respite.

Figure 2: Fuel Poverty Fact Sheet, England, 2018



- **North West** had the **highest proportion** of fuel-poor households
- **South East** had the **lowest proportion** of fuel-poor households
- **North East** had the **lowest average gap**
- **West Midlands** had the **highest average gap**

Source: Department for Business, Energy & Industrial Strategy
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882159/fuel-poverty-factsheet-2020-2018-data.pdf

Energy efficiency as a national infrastructure policy

Whilst some social obligations naturally fall on utilities, framing energy efficiency as a public good can help bring greater clarity over roles and cost burdens to help alleviate fuel poverty. EnergyUK, the UK trade association, recently argued that energy efficiency should become a fully funded national infrastructure policy.³⁴ Scotland recognised this in 2015 and stakeholder evidence suggests that this designation has helped improve its policy impact compared to England.³⁵

The Ten Point Plan for a Green Industrial Revolution outlines the green home finance initiatives to help improve the energy efficiency of buildings.³⁶ Novel schemes such as the Future Homes Standard will ensure new buildings have 75-80% lower carbon dioxide emissions than current standards.³⁶

However, as the fuel-poor are less likely to reside in new-build or self-owned homes, it is critical to focus on deploying energy efficiency initiatives across local authority estates and

social housing stock (such as shared-ownership housing). For example, The Committee on Fuel Poverty has highlighted how only 15% of the total budgets for the Winter Fuel Payment, ECO, and Warm Home Discount fuel poverty programmes is targeted at fuel-poor households, and only 20% is on energy efficiency.³⁷ Large portions of the circa £2.5 billion per year budgets for these programmes are instead spent on cohorts outside of the most severely fuel-poor, such as a benefits provision to pensioners who have on average double the income levels of fuel-poor households.³⁸

Best practice initiatives to permanently break the debt cycle

Whilst the Department for Business, Energy & Industrial Strategy (BEIS) has mandated that domestic energy supply companies not disconnect gas or electricity if payments are missed,³⁹ energy supply still might temporarily stop if prepayment meters are not topped up on time.⁴⁰ Given consumers will need to pay any credit back, utilities have a role to play in monitoring debt and self-disconnections across all fuels to ensure consumers opt for sustainable debt-recovery practices.

However, these mandates are short-term and reactive responses to the pandemic and are unlikely to provide enduring solutions to the customer. If the most vulnerable are to truly have a market that protects them, a mechanism is needed to break the immediate consumer debt cycle, whilst also mitigating future bill increases, as a result of bad debt write offs. The UK Government could, for example, accelerate the repayment of debts by making contributions towards payment matching schemes. This is already practiced in the water industry, where customers see a portion of their debt written-off, providing a certain amount is paid for a specified length of time.

Given the large variances in data quality between energy suppliers, and access barriers between parties to better deliver assistance to vulnerable households, opportunities for maximising data sharing could also be explored.¹⁶ This includes better utilisation of existing mechanisms such as the Priority Services Register and Digital Economy Act Regulations. This approach might facilitate earlier intervention to those in financial difficulty at the earliest possible opportunity, reducing the need for retrospective action and removing the requirement for a customer to actively apply to the supplier for respite.⁴¹ To ensure an accurate understanding of the most at-risk groups, additional research and exploration of how stakeholders define and identify their common hard-to-reach audiences is required for the non-office commercial sector, small-medium enterprises, and psychographics.⁴² Further analysis across a series of these shared socio, economic, and regional parameters is needed to formulate how central funding should be ultimately allocated to local authorities. The complex and fragmented nature of the local public health landscape in England has resulted in varied models for delivering action, resulting in only a small minority of England council areas that have the required leadership, expertise, strategies, funding, and programmes in place.⁴³

Implementable, quantifiable and coordinated measures can tackle fuel poverty long term

COVID-19 has highlighted the already tenuous position of the UK's fuel-poor. In this paper, we have discussed some of the support mechanisms and put forward some longer term focus areas for further development to address fuel poverty, such as sharing best practices and joined-up decision-making across the different actors (public, private, and charitable) in this space.

This year, the UK hosts the United Nations Climate Change Conference. The organising committee has set itself a milestone to ensure a just transition, mandating inclusive policymaking and the closing of energy access gaps to meet the goals of the Paris Agreement.⁴⁴ Action groups and community services recognise the criticality of face-to-face interaction to deliver grassroots aid, especially for the fuel-poor. They should be engaged to ensure that the vulnerable are protected in the post-carbon economy transition.

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Further reading, in addition to references

- “How Lockdown Is Disrupting The Usual Coping Strategies Of The Fuel Poor And Necessitating New Ones,” Housing Studies Association 2020, accessed March 1, 2021, <https://www.housing-studies-association.org/articles/196-how-lockdown-is-disrupting-the-usual-coping-strategies-of-the-fuel-poor-and-necessitating-new-ones>.
- “Stuck At Home In A Cold Home: The Implications Of Covid-19 For The Fuel Poor,” Extra.shu.ac.uk. 2020, accessed March 1, 2021, <https://extra.shu.ac.uk/ppp-online/wp-content/uploads/2020/05/stuck-home-cold-covid-19-fuel-poor.pdf>.
- “Addressing The Impacts Of Covid-19 On Vulnerable Energy Customers,” National Energy Action, Nea.org.uk. 2020, accessed March 1, 2021, <https://www.nea.org.uk/wp-content/uploads/2020/10/Addressing-the-impacts-of-COVID-19-for-vulnerable-customers-020420.pdf>.
- “Social Tariffs In Water: The Impact Of Covid-19,” National Energy Action, Nea.org.uk. 2020, accessed March 1, 2021, <https://www.nea.org.uk/wp-content/uploads/2020/10/Social-Tariffs-in-Water-The-Impact-of-Covid-19-2-page-FINAL.pdf>.
- “The Gathering Storm: Utility Debt And COVID-19,” National Energy Action, Nea.org.uk. 2020, accessed March 1, 2021, <https://www.nea.org.uk/wp-content/uploads/2020/09/The-Gathering-Storm-Utility-Debt-and-Covid-19-June-2020.pdf>.
- “Reaching The 'Hardest To Reach' With Energy Advice: Final Report,” Sheffield Hallam University, Wwww4.shu.ac.uk. 2020, accessed March 1, 2021, <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/reaching-hardest-reach-energy-advice-final.pdf>.
- “Who Are Hard-To-Reach Energy Users? Segments, Barriers And Approaches To Engage Them,” 2020, accessed March 1, 2021, <https://doi.org/10.47568/3FALSE103>.

References

- ¹ “What Is Fuel Poverty?,” National Energy Action (NEA) 2020, accessed February 23, 2021, <https://www.nea.org.uk/articles/what-is-fuel-poverty/?parent=about-us>.
- ² “Families and households in the UK—Office for National Statistics,” Office for National Statistics 2019, accessed February 23, 2021, <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2019>.
- ³ “Fuel Poverty Statistics Methodology Handbook,” HM Government 2020, accessed February 23, 2021, <https://www.gov.uk/government/publications/fuel-poverty-statistics-methodology-handbook>.
- ⁴ “Annual Fuel Poverty Statistics in England, 2020 (2018 Data),” Department for Business, Energy & Industrial Strategy 2020. Accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882404/annual-fuel-poverty-statistics-report-2020-2018-data.pdf.
- ⁵ *Priority Services Register*, Ofgem 2021, accessed February 23, 2021, <https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/extra-help-energy-services/priority-services-register>.
- ⁶ T. Blakely and J. Atkinson, “View Of New Zealand’s Integrated Data Infrastructure (IDI): Value To Date And Future Opportunities, (Ijpbs.org, 2017), accessed February 23, 2021, <https://ijpbs.org/article/view/124/107>.
- ⁷ “A Guide To Energy Performance Certificates For The Marketing, Sale And Let Of Dwellings,” Department for Communities and Local Government 2017, accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/671018/A_guide_to_energy_performance_certificates_for_the_marketing__sale_and_let_of_dwellings.pdf.
- ⁸ *BBC News* 2020, “Two-Thirds Of UK Homes ‘Fail On Energy Efficiency Targets,’” accessed February 23, 2021, [https://www.bbc.co.uk/news/uk-50573338#:~:text=Nearly%20two%20thirds%20of%20UK,\(EPCs\)%20graded%20from%20A%2DG](https://www.bbc.co.uk/news/uk-50573338#:~:text=Nearly%20two%20thirds%20of%20UK,(EPCs)%20graded%20from%20A%2DG).
- ⁹ “Fuel Poverty Factsheet, England 2018,” HM Government 2020, accessed February 23, 2021, <https://www.gov.uk/government/statistics/fuel-poverty-factsheet-2020>.
- ¹⁰ “Improving the Energy Performance of Privately Rented Homes.” Department for Business, Energy & Industrial Strategy 2020, accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/946175/prs-consultation-2020.pdf.
- ¹¹ “Warm Home Discount Scheme,” HM Government 2021, accessed February 23, 2021, <https://www.gov.uk/the-warm-home-discount-scheme>.

- ¹² “Decision—Protecting Prepayment Customers,” Ofgem 2020, accessed February 23, 2021, https://www.ofgem.gov.uk/system/files/docs/2020/08/protecting_energy_consumers_with_prepayment_meters_-_august_2020_decision.pdf.
- ¹³ “Home—British Gas Energy Trust,” British Gas Energy Trust 2021, accessed February 23, 2021, <https://britishgasenergytrust.org.uk/>.
- ¹⁴ Projects—NEA, National Energy Action 2021, accessed February 23, 2021, <https://www.nea.org.uk/what-we-do/projects/>.
- ¹⁵ “Fuel poverty action plan for London,” Mayor of London 2018, accessed February 23, 2021, https://www.london.gov.uk/sites/default/files/fuel_poverty_action_plan.pdf.
- ¹⁶ “UK Fuel Poverty Monitor 2019-20,” National Energy Action & Energy Action Scotland 2020, Nea.org.uk, accessed February 23, 2021, <https://www.nea.org.uk/wp-content/uploads/2020/07/UK-FPM-2019.pdf>.
- ¹⁷ How benefits work—GOV.UK (browse), HM Government 2021, accessed February 23, 2021, <https://www.gov.uk/browse/benefits/entitlement>.
- ¹⁸ “Fighting UK Poverty,” Turn2us, accessed February 23, 2021, <https://www.turn2us.org.uk/>.
- ¹⁹ Consultation on the fuel poverty strategy for England, Centre for Sustainable Energy 2019, accessed February 23, 2021, <https://www.cse.org.uk/downloads/file/CSE%20response%20to%20BEIS%20consultation%20on%20the%20fuel%20poverty%20strategy%20for%20England.pdf>.
- ²⁰ “Compare The Market—Millions Can Expect ‘Shock’ Energy Bill This Autumn,” Compare the Market 2020, accessed February 23, 2021, <https://www.comparethemarket.com/news-and-views/millions-can-expect-shock-energy-bill/>.
- ²¹ BBC News 2020, “Unemployment Rate: How Many People Are Out Of Work?,” accessed February 23, 2021, <https://www.bbc.co.uk/news/business-52660591>.
- ²² “HMRC Coronavirus (COVID-19) Statistics,” HM Government 2020, accessed February 23, 2020, <https://www.gov.uk/government/collections/hmrc-coronavirus-covid-19-statistics>.
- ²³ R. Oldenburg, *“The great good place,”* (Philadelphia: Da Capo Press, 2005).
- ²⁴ A. Ambrose, “Lockdown Is Disrupting The Usual Coping Strategies Of The Fuel Poor And Necessitating New Ones,” Fuelpovertyresearch.net (FPRN, online, 2020), accessed March 1, 2021, <http://www.fuelpovertyresearch.net/comment/lockdown-is-disrupting-the-usual-coping-strategies-of-the-fuel-poor-and-necessitating-new-ones/>.
- ²⁵ P. Brown, D. Newton, R. Armitage, and L. Monchuk, “Lockdown. Rundown. Breakdown. The COVID-19 lockdown and the impact of poor-quality housing on occupants in the North of England,” 2020, accessed February 23, 2021, <https://www.northern-consortium.org.uk/wp-content/uploads/2020/10/Lockdown.-Rundown.-Breakdown..pdf>.
- ²⁶ “Lived Experience Of Fuel Poverty: Research—Gov.Scot,” Scottish Government 2020, accessed February 23, 2021, <https://www.gov.scot/publications/research-lived-experience-fuel-poverty-scotland/pages/8/>.

- 27 “A Smarter Approach To Fuel Poverty,” RSPH 2021, guest blog, accessed February 23, 2021, <https://www.rsph.org.uk/about-us/news/guest-blog-a-smarter-approach-to-fuel-poverty.html>.
- 28 “Smart Meters In Great Britain, Quarterly Update September 2020,” HM Government, accessed February 23, 2021, <https://www.gov.uk/government/statistics/smart-meters-in-great-britain-quarterly-update-september-2020>.
- 29 “Covid-19’s Impact On Smart Meter Installations Revealed, Dyball Associates 2020, accessed February 23, 2021, <https://www.dyballassociates.co.uk/covid-19s-impact-on-smart-meter-installations-revealed>.
- 30 Community Spaces At Risk Fund, Mayor of London 2020, accessed February 23, 2021, <https://www.london.gov.uk/what-we-do/arts-and-culture/cultural-infrastructure-toolbox/culture-risk-0/community-spaces-risk-fund>.
- 31 CAF Resilience Fund, Funding For Charitable Organisations, Charities Aid Foundation 2020, accessed February 23, 2021, <https://www.cafonline.org/charities/grantmaking/caf-resilience-fund>.
- 32 “Community Action On Fuel Poverty.” Fuel Poverty 2019, accessed February 23, 2021, <https://fuelpovertyresource.org.uk/fuel-poverty/>.
- 33 Department for Business, Energy and Industrial Strategy. 2020, accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882404/annual-fuel-poverty-statistics-report-2020-2018-data.pdf.
- 34 R. Taylor, “Energy UK responds to ECO announcement,” Energy UK, Energy-uk.org.uk, 2018, accessed February 23, 2021, <https://www.energy-uk.org.uk/media-and-campaigns/press-releases/412-2018/6708-energy-uk-responds-to-eco-announcement.html>.
- 35 “Energy efficiency: building towards net zero.” House of Commons Business, Energy and Industrial Strategy Committee 2019, accessed February 23, 2021, <https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/1730/1730.pdf>.
- 36 “The Ten Point Plan for a Green Industrial Revolution,” HM Government 2020, accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf.
- 37 P. Bolton and S. Hinson, “Fuel Poverty,” House of Commons Library 2020, accessed February 23, 2021, <https://commonslibrary.parliament.uk/research-briefings/cbp-8730/>.
- 38 “Committee on Fuel Poverty Fourth Annual Report,” HM Government 2020, Accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/894502/CFP_Annual_Report_June_2020.pdf.
- 39 “Government Agrees Measures With Energy Industry To Support Vulnerable People Through COVID-19,” HM Government 2020, accessed February 23, 2021, <https://www.gov.uk/government/news/government-agrees-measures-with-energy-industry-to-support-vulnerable-people-through-covid-19>.

- ⁴⁰ “If You Can’t Pay Your Bills Because Of Coronavirus,” Citizens Advice 2020, accessed February 23, 2020, <https://www.citizensadvice.org.uk/debt-and-money/if-you-cant-pay-your-bills-because-of-coronavirus/>.
- ⁴¹ Jess Cook, “Surviving The Wilderness—The Landscape Of Personal Debt In The UK,” accessed February 23, 2021, <https://www.nea.org.uk/wp-content/uploads/2020/10/Surviving-the-wilderness-final-version.pdf>.
- ⁴² A. Ambrose, S. Rotmann, L. Mundaca, J. Smith and K. Ashby, “HTR Characterisation Hard-To-Reach Energy Users Annex,” Citizens Advice, 2020, [Www4.shu.ac.uk](https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/HTR-characterisation-annex.pdf), accessed February 23, 2021, <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/HTR-characterisation-annex.pdf>.
- ⁴³ J. Ruse and J. Burroughs, “*Get warm soon? Progress to reduce ill health associated with cold homes in England*,” (Nea.org.uk, 2016), accessed February 23, 2021, <https://www.nea.org.uk/wp-content/uploads/2020/11/Get-Warm-Soon-Full-Report.pdf>.
- ⁴⁴ COP26 Energy Transition Council—Summary Statement, COP26 Energy Transition Council 2021, accessed February 23, 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/941515/COP26_ETC_Summary_Statement_2020_12_01_04.docx_1_.odt.