

ODI Analyses: Fuel Poverty

1. Data Sources

*Name/describe key your project's data sources, whether you're collecting data yourself or accessing via third parties.
Is any personal data involved, or data that is otherwise sensitive?*

Comments

A variety of different existing and publicly available data sources have been used for this project. No primary data collection has been undertaken. No personal data or data that is otherwise sensitive has been processed.

To explore fuel poverty data was drawn together from a number of sources:

- [BEIS Fuel Poverty Statistics](#)
- [BEIS Green Homes Grant and Home Upgrade Scheme](#)
- [BEIS Household Energy Efficiency Statistics](#)
- [DLUHC/MHCLG English Housing Survey data on dwelling condition and safety](#)
- [DLUHC/MHCLG Live tables on Energy Performance of Buildings Certificates](#)
- [DWP Household Support Fund Grant Determination 2022](#)
- [DWP Winter Fuel Payment statistics](#)
- [Met Office Historic Station Data](#)
- [MHCLG English indices of deprivation 2019](#)
- [Ofgem Default Tariff Cap](#)
- [ONS Census 2021](#)
- [ONS Excess winter mortality in England and Wales](#)
- [ONS Household Income](#)
- [ONS Population by Age](#)

	○ StatXplore Income Related Benefits
Actions and decisions	● We have created an interactive tool to allow others to use the data that we have collected together in a single location. No personal information is included in the underlying data sources that have been included or the findings presented in the tool itself. The majority of data included in the tool is openly available (via Open Government Licence for example). Where this is not the case explicit permission for inclusion has been provided by the relevant party. Where relevant the constituent datasets which comprise the interactive tool were linked and processed to ensure consistency. The resulting final dataset has also been made open here on the ODI website as a Google Sheet (this can be downloaded by users in a variety of formats including CSV, ODS, XLSX etc.) with accompanying metadata. This data will be made available under a CC BY 4.0 licence. ● To inform any future changes to the tool we have allowed users to leave feedback via a standardised form. After reviewing this feedback we will undertake any required actions including ongoing maintenance.
Responsible	Mime, ODI
Date	07/11/23

2. Rights around data sources

Where did you get the data from? Is it produced by an organisation or collected directly from individuals?

Was the data collected for this project or for another purpose? Do you have permission to use this data, or another basis on which you're allowed to use it? What ongoing rights will the data source have?

Comments	Information on data sources and the relevant data owners is set out in Section 1. All data used in the interactive tool and open dataset is published under open licences or explicit permission for our usage and re-sharing has been obtained from the data owners.
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Actions and decisions	• A full list of the data sources used and under which licence is included in the interactive tool which can be accessed here • The underlying open licences allow for the publication of the interactive tool and open dataset.
Responsible	Mime
Date	07/11/23

3. Limitations in data sources

Are there limitations that could influence your project's outcomes?

Consider:

- *bias in data collection, inclusion/exclusion, analysis, algorithms*
- *gaps or omissions in data*
- *provenance and data quality*
- *other issues affecting decisions, such as team composition*

Comments	No primary data was collected for this work. However, the secondary sources used will be subject to specific limitations. In particular: ○ Some of the fuel poverty statistics we calculate are based on the government's definition of fuel poverty which is narrow and excludes all those living in energy efficient homes. ○ Some of the datasets we rely on are more than a year old and therefore may not exactly reflect the current situation. ○ Changes to ONS geographic boundaries over time make comparisons for certain local areas more challenging, though steps have been taken to minimise these discrepancies.
Actions and decisions	The supporting metadata included in the tool (accessed here) includes a limitations section which refers to geographical data gaps. Some data cleaning has been carried out on lower quality datasets and, where possible, raw numbers have been converted to rates or percentages to make comparisons more meaningful.

	Steps have been taken to standardise data across changing geographic boundaries. For example, where new local authority districts have been created by joining together existing local authority districts, we have aggregated data across the old districts to create data for new districts.
Responsible	Mime
Date	07/11/23

4. Ethical and legislative context <i>What existing ethical codes apply to your sector or project? What legislation, policies, or other regulation shape how you use data? What requirements do they introduce? Consider: the rule of law; human rights; data protection; IP and database rights; anti-discrimination laws; and data sharing, policies, regulation and ethics codes/frameworks specific to sectors (eg health, employment, taxation).</i>	
Comments	No personal data has been processed as part of this project. As such the Data Protection Act 2018 and UK General Data Protection Regulation ("UK GDPR") do not apply to this project. Other forms of data sharing (which do not relate to personal data) are covered by the information provided above. As described above the data we used in the interactive tool and open dataset is published under open licences or explicit permission for our usage and re-sharing has been obtained from the data owners
Actions and decisions	
Responsible	Mime
Date	07/11/23

5. Your reasons for using data

What is your primary purpose for collecting and using data in this project? What are your main use cases? What is your business model? Are you making things better for society? How and for whom? Are you replacing another product or service as a result of this project?

Comments	We have brought together a unique combination of existing datasets to provide a detailed data-informed picture of fuel poverty. These sources of data include: nationally representative household surveys on prevalence of fuel poverty and the size of the fuel poverty gap, administrative data on who receives specific types of government support, and data on the drivers of fuel poverty such as energy efficiency ratings of dwellings. We have updated and extended our fuel poverty risk index, which provides insights on the scale of fuel poverty in local areas and the extent to which support schemes are well targeted.
Actions and decisions	
Responsible	Mime
Date	07/11/23

6. Positive effects on people

Which individuals, groups, demographics or organisations will be positively affected by this project? How? How are you measuring and communicating positive impact? How could you increase it?

Comments	The interactive fuel poverty risk index tool we have created brings together data that we have collected in a
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	single location. This has a variety of use cases including highlighting potential for fuel poverty across England and flagging specific Local Authorities which may be in need of additional support from Government. • The publication of the open dataset will increase the impact of this project by allowing further analysis to be carried out on this data. This could include researchers and policy makers applying different analysis methods to the dataset or combining it with other data to enable further insight.
Actions and decisions	Promotion of report findings through media channels.
Responsible	Allegory, ODI
Date	07/11/23

7. Negative effects on people

Who could be negatively affected by this project?

Could the way that data is collected, used or shared cause harm or expose individuals to risk of being re-identified? Could it be used to target, profile or prejudice people, or unfairly restrict access (eg exclusive arrangements)?

How are limitations and risks communicated to people? Consider: people who the data is about, people impacted by its use and organisations using the data.

Comments	• There is no risk of identification as all datasets used are highly aggregated and have previously been made publicly available. • It is possible that limitations in existing data sources could in some very limited circumstances cause misleading results. For example, median annual income is missing for some local authority districts, which may slightly affect their overall fuel poverty risk index score. In addition, some measures - such as winter mortality index - are influenced by other factors, such as the age of a local population. • A score has been calculated to show the relative amount of support each local authority district receives. This may be misinterpreted as these areas receiving too much support.
Actions and decisions	All data sources have been described transparently in all project outputs.
Responsible	Mime
Date	07/11/23

8. Minimising negative impact

What steps can you take to minimise harm? How could you reduce any limitations in your data sources? How are you keeping personal and other sensitive information secure? How are you measuring, reporting and acting on potential negative impacts of your project? What benefits will these actions bring to your project?

Comments	- The index is an update and extension of the 2022 fuel poverty index, which was informed by a rigorous literature review and stakeholder engagement
Actions and decisions	
Responsible	N/A
Date	07/11/23

9. Engaging with people

How can people engage with you about the project? How can people correct information, appeal or request changes to the product/service? To what extent? Are appeal mechanisms reasonable and well understood?

Comments	We would like relevant organisations and individuals to engage with this report. This includes policymakers, charities and other service delivery organisations.
Actions and decisions	- Project members engaged with a variety of stakeholder organisations in the creation of the 2022 index , including those involved in providing support for those experiencing fuel poverty. In particular we partnered with both Age UK and the End Fuel Poverty Coalition. - The ODI will engage with the media, and share on the ODI's social media channels. - A form will be added to the report landing page on the ODI's website which will allow readers to provide feedback. The ODI team will monitor any responses and flag whether any changes are needed.

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Responsible	ODI, Allegory, Mime
Date	07/11/23

10. Communicating your purpose

Do people understand your purpose – especially people who the data is about or who are impacted by its use?

How have you been communicating your purpose? Has this communication been clear?

How are you ensuring more vulnerable individuals or groups understand?

Comments	• • No data subjects will be directly impacted by our usage and no personal data has been collected or processed.
Actions and decisions	• • The index uses accessible language and presents the data visually
Responsible	Mime
Date	07/11/23

11. Openness and transparency

How open can you be about this project? Could you publish your methodology, metadata, datasets, code or impact measurements?

Can you ask peers for feedback on the project? How will you communicate it internally?

Comments	All data used in the tool will be published openly. Data processing and analysis, including the creation of the Fuel Poverty Risk Index, has been conducted using widely available software, <i>Microsoft Excel</i> and <i>Tableau</i> , so could be repeated. Additionally, the open dataset will be available to download as an XLS or CSV file.
Actions and decisions	• Tool and supporting data published
Responsible	Mime
Date	07/11/23

12. Sharing data with others

Are you going to be sharing data with other organisations? If so, who?

Are you planning to publish any of the data? Under what conditions?

Comments	The interactive tool and underlying data sources will also be published. This dataset will also be available to download in a spreadsheet under a Creative Commons Attribution 4.0 licence.
Actions and decisions	• All of the data that will be published is already available on an open basis. • There is no risk of identifying individuals. The lowest level of geographical granularity used is lower tier local authorities.
Responsible	Mime
Date	07/11/23

13. Ongoing implementation

Are you routinely building in thoughts, ideas and considerations of people affected in your project? How?

What information or training might be needed to help people understand data issues?

Are systems, processes and resources available for responding to data issues that arise in the long-term?

Comments	Project members engaged with a variety of stakeholder organisations throughout the development of the 2022 index. Several case studies with practitioner organisations / those involved directly with addressing fuel poverty were developed.
Actions and decisions	• Case study selection •
Responsible	ODI, Allegory
Date	07/11/23

14. Reviews and iterations

How will ongoing data ethics issues be measured, monitored, discussed and actioned? How often will your responses to this canvas be reviewed or updated? When?

Comments #1	This is a one-off update of a previous index and tool . However, ongoing data ethics issues were monitored as the project developed by the ODI team. Learnings from this piece of work will be applied in future ODI research.
Actions and decisions	
Responsible	Mime
Date	07/11/23

15. Your actions

What actions will you take before moving forward with this project? Which should take priority? Who will be responsible for these actions, and who must be involved? Will you openly publish your actions and answers to this canvas?

Comments	Ethical issues were monitored on an ongoing basis during the project
Actions and decisions	• We will publish this Data Ethics Canvas alongside the report publication
Responsible	ODI
Date	07/11/23