

Review of methods of identifying energy poor households

Energy poverty is a complex condition based on a combination of high energy prices, low household incomes, inefficient buildings and appliances, and specific household energy needs. Hence, the identification of energy-poor households represents a major challenge and is yet the key element for addressing and alleviating energy poverty. This report explores the **range of methods** forwarded for the **identification of energy poor households** across Europe. It examines a number of **approaches to the measurement of energy poverty**, including indicators of energy poverty and so-called supporting indicators. While a great deal of effort by experts is expended on analysing energy poverty at the macro-, or the meso-level there remains a gap in understanding how best to **identify and engage with energy poor households at the local level**. This report bridges the gap by exploring approaches to identifying energy poor households, considering practices reported in literature, those used in cognate projects, and the experiences of some practitioners active 'in the field'.

Main types of expenditure-based metrics to define and measure energy poverty:

- **High share of energy costs:** share of income spent on energy above a set threshold, i.e. those who spend too much.
- **Low income, high cost:** income after energy costs below a set threshold, i.e. high energy expenditure and/or insufficient income.
- **Insufficient energy expenditure:** absolute energy expenditure below the set threshold, i.e. those who are self-limiting, the hidden energy poor.

Approaches to identifying energy-poor households:

- National level data analysis and extrapolation for targeting, monitoring and comparison of energy poor households.
- Combination of national socio-demographic data and local housing data to derive local energy poverty risk scores.
- Small area-based targeting using a range of environmental and socio-economic variables to assess the risks for energy poverty at reasonably detailed level.
- Zonal approach for local authorities tackling energy poverty to encourage take-up and minimise administrative overheads.
- Smart meter data coupled with surveys to distinguish different consumer groups in order to develop support measures tailored to the specific needs of these groups.
- Engaging energy-poor households via energy advice centres as their barriers to engagement are relatively low.
- Referrals to social services to help identify energy-poor households while leveraging public trust and household access to existing public service providers.



- Public health referrals to improve the living conditions of energy vulnerable people suffering from chronic respiratory diseases.
- Delegated approach to use the strengths of both central administration (coordination and communication) and local actors (e.g. medical and social centres) in identifying and engaging households.
- Leveraging billing relationship with customers combined with multiple other data sources, including e.g., area-level social data, housing profiles etc.

Please find the full report at:

www.energymeasures.eu (<https://rb.gy/py4xyz>) or [Zenodo](https://zenodo.org/record/10000000) (<https://rb.gy/xjssuf>).

Lead beneficiary: University College Cork

Contributing beneficiaries: Energy Action CLG, DuneWorks BV

About the EnergyMeasures Project

Between **50 and 125 million people** in the EU are at **risk of energy poverty**. Tackling this problem requires a variety of strategies that include the active participation and involvement of those affected.

The **EnergyMeasures project aims to tackle energy poverty** in seven European countries (BE, BG, IE, MK, NL, PL, UK) through a combination of **direct household involvement** and the inclusion of **innovative policy and practical measures**.

For more information, please visit www.energymeasures.eu.

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