

Energy Transition as an Opportunity to Eliminate Energy Poverty



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Abbreviations

AWS

Amazon Web Services

ALIGN

Aligning Energy Policy with Lived Experience to Deliver Interdisciplinary Solutions to Alleviate Energy' [project]

BER

Building Energy Rating

CRU

Climate Action Plan

CEPI

Composite energy poverty index

CAN

Climate Action Network

DECC

Department of Environment, Climate and Communications

EECA

Energy Efficiency and Conservation Authority

EPBD

Energy Performance of Buildings Directive

EPAP

Energy Poverty Action Plan

ERDF

European Regional Development Fund

EEOS

Energy Efficiency Obligation Scheme

HHSRS

Housing, Health and Safety Rating System

HSE

Health Service Executive

EPAP

Irish Energy Poverty Action Plan

LSHTM

London School of Hygiene and Tropical Medicine

MABS

Money Advice and Budgeting Service

NexSys

Next Generation Energy Systems

NEA

National Energy Action

RD&D

Research, Development and Demonstration

NEA

National Energy Action

NIE

Northern Ireland Executive

PAYG

Pay-As-You-Go

PSO

Public Service Obligation

SFRC

Southend Family Resource Centre

SEAI

Sustainable Energy Authority of Ireland (

SETU

South East Technological University

SVP

St Vincent de Paul

SEC

Sustainable Energy Community

UCL

University College London

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Executive Summary

In achieving independence from fossil fuels by 2050, while enhancing well-being and leaving no one behind, there is a need to work towards the elimination of energy poverty in the transition.

Energy poverty is defined in Ireland as 'an inability to heat or power a home to an adequate degree'. People and households can find themselves at risk of energy poverty because of; low income; poor building condition; and/or rising or high energy prices.

There are a number of measures of energy poverty. It is estimated that 29.4 per cent of households in Ireland in 2022 spent more than one tenth of their income on energy, which is one measure of energy poverty. The figure for Northern Ireland is 22 per cent. Using a self-reported measure of being unable to keep the house adequately warm, 7 per cent of households in Ireland in 2023 were in energy poverty. Questions have been raised in both jurisdictions about how energy poverty is measured with calls for further research to derive a more accurate measure.

Groups at risk of energy poverty are also those at risk of poverty due to low income and deprivation. These groups include: lone parent households; people with disabilities and/or ill health; older people, especially those living alone; tenants in private rented housing; some people living in rural areas; and Travellers, especially those living in mobile homes and trailers. Many of these households contain children, with long term detrimental health and other impacts of growing up in an energy poor household.

As well as the cost of fuel, poor building fabric and type of fuel used contributes to energy poverty. Households using solid fuel or oil as their main fuel source are more likely to be in energy poverty than those using electricity or gas or renewables. These fuel types tend to be used by people living in rural areas.

The consequences of living with energy poverty include: mould and damp in the home, poor heating systems, being unable to buy fuel, unable to make improvements to the home, and falling into debt. This can result in respiratory infections, mental stress, and even excess deaths. As many as 2,000 excess winter deaths have been associated with energy poverty with the majority in the 65 plus age group.

Both Ireland and Northern Ireland have energy poverty strategies/action plans in place which are currently being revised, following a period of consultation. Both jurisdictions have income supports and energy efficiency schemes in place to address energy poverty. While there is an emphasis on addressing energy efficiency through retrofits, upgrades and the installation of heat pumps in the transition to a carbon neutral future, income supports and tackling underlying poverty and deprivation are critical to addressing energy poverty in the transition.

The main income supports in Ireland for those at risk of energy poverty are the Fuel Allowance and the Household Benefits Package. There are a number of energy efficiency schemes, the main one being the Warmer Homes Scheme. A key element is the provision of adequate advice for energy retrofits in general and for the installation of and operation of heat pumps in particular. Many households experiencing energy poverty will need additional support through education and advice to make the transition to heat pumps.

While heat pumps will be a key element in our future home heating provision, they may not be suitable for many households experiencing energy poverty at present given the current cost of electricity, the nature of the household's characteristics, the energy efficiency of the accommodation, and the behavioural changes required.

To address energy poverty more comprehensively it must be accepted that energy poverty is complex as it is the result of the interplay of a range of factors, and that addressing energy poverty requires a focus on people. There is also a need to accept that there is a moral obligation to address energy poverty to prevent people from living in cold damp conditions potentially leading to poor physical and mental health outcomes. There must be a focus on principles of equality and fairness, alongside principles of climate, cost and competitiveness. It should be acknowledged that access to affordable energy is a right, and addressing energy poverty is an opportunity to reduce systemic inequality.

To set out appropriate pathways to lift people out of energy poverty and assist them towards a fossil free future there needs to be both a focus on short term (to 2030) and longer-term (to 2050) actions. To bring forward the necessary actions will require a collaborative approach involving the relevant public, private and NGO sectors. These actions should adopt a shared island perspective as climate change and carbon emissions know no border.

This report draws the following conclusions.

- ***An integrated approach is required:*** Given the complex and multidimensional nature of energy poverty it would be beneficial to have an overall Government strategy or framework for the transition to a fossil free future where addressing energy poverty would clearly be part of that. While there are commitments in the Climate Action Plan and the National Retrofit Plan, and much progress has been made, all those with a remit for supporting the transition to a zero-carbon future should have to consider the impact of their actions on low income households and those in inefficient dwellings. It is important that there is cross departmental working to ensure that income supports to tackle energy poverty are coordinated with energy efficiency measures and other financial supports. The involvement of community and environmental NGOs will be key as trusted local actors who can work with, and support, energy poor households to engage with energy experts, energy suppliers, and government officials.
- ***Strengthen income supports:*** A number of initiatives are suggested in this regard. One is an energy guarantee which would be a transformed version of the fuel allowance, including a home's insulation level as well as household income. The payment could be carefully calibrated with people on lower incomes and/or in more poorly insulated homes receiving a larger income supplement, until their home is improved. Another initiative is a targeted energy credit system where a certain amount of electricity use is paid for in the case of people in energy poverty. A related element is how to mitigate the 'standing charge', and other components on the energy bill, to lessen the impact of energy bills for those in energy poverty.
- ***More extensive energy efficiency measures:*** While much progress has been made in supporting low-income households to retrofit their homes through the Warmer Homes Scheme, there is a need for ongoing provision of information and advice, along with the need to continue to shorten the timescale between applying for the grant and getting the work done. There is a need to ensure that lower income households do not become locked into fossil fuel heating in the long-term.

However, a cautious approach should be taken to the installation of heat pumps in energy poor households as they may not yet be suitable given the household's circumstances and the nature of the dwelling. The piloting of heat pumps under the Warmer Homes Scheme is being done on this basis.

To improve the situation for private renters the current package of measures (grants, low-cost loans, tax relief) in place for small scale private landlords should be continued, to encourage landlords to upgrade their properties to a satisfactory BER standard. Research on the 'split-incentive' would be useful, especially from a landlord perspective.

In addition, the Warmers Homes Scheme should be expanded to include properties in the private rented sector if the tenant is receiving the Housing Assistance Payment, with eligibility being contingent on the landlord providing a long-term lease (5+ years) to the tenant. Such an expansion needs to take into account the current demand for the Warmer Homes Scheme and its overall cost. A

further solution to making some energy poor households more efficient, especially in urban areas, is district heating, and where sources for district heating are available they should be developed as quickly as possible.

Finally, support for social enterprises such as EnergyCloud, which uses unused wind energy to heat water in energy poor households, should be considered so that they can operate at a bigger scale. Lessons from the Warmth and Wellbeing pilot should be applied in energy poor households across the country to improve health outcomes for people with health conditions living in energy poor homes. These include: a customer journey manual; on-hand support with applications; greater communication on the works and timelines upfront; a longer time spent on survey visits; and learning from health and retrofitting experts. In addition, transposition of the Energy Market Directive will give greater scope to energy sharing and energy communities.

- ***Prioritise awareness, education and advice:*** This was one of the most frequently raised issues, in the consultation for this research. The identification and funding of a local energy champion who is known and trusted by the community is key, who is then supported by people skilled and knowledgeable about what the retrofit entails. Face-to-face contact is important as many of those at risk of energy poverty are less familiar with, or trusting of, digital information and advice. Consideration should be given to providing a holistic energy advice service, that would incorporate support towards retrofitting, but also include support with more immediate issues such as addressing arrears, consumer protection awareness, and navigating appropriate tariffs. One stop shops have an important role to play too.
- ***A robust regulatory framework:*** Ensuring a robust regulatory framework that promotes fair energy pricing, consumer protection, and incentives for energy efficient upgrades is critical to address energy poverty. The CRU needs to continue to encourage suppliers to make their customers more aware of the Vulnerable Customer Register. In addition, consideration should be given to how people who are financially vulnerable could be included on the register. There is a need to ensure that suppliers put customers in financial hardship on the most economical tariff. Smart meters have the potential to enable households to monitor their energy use and select the best tariff to meet their household needs. However, these meters would need to be able to provide 'in house' live readings of energy use to be of optimal benefit.
- ***Refine energy poverty definition and measurement:*** There are currently a range of energy poverty definitions and measurements. There is a European definition which will be transposed into Irish law. Research has been commissioned which will try to capture the measurement of energy poverty using this definition and which will combine information on low income with energy efficiency. Consideration should be given to legislating for energy poverty and setting targets for its reduction.
- ***Enrich Shared Island opportunities:*** Many of the issues to be addressed for energy poor households, especially in relation to a just transition to net-zero carbon emissions, are shared by both jurisdictions on the island. Thus, there is a real opportunity to learn from one another on the best way to address issues of energy poverty and to collaborate on relevant issues.

Chapter 1 Introduction

This report focuses on the implications for households at risk of energy poverty in Ireland and across the island of Ireland in the transition to a fossil free future.

The energy system affects the lives of everyone - including children, youth, retirees, unemployed, employed, employers, and farmers. We all rely on the energy system for warmth, light, transport, cooking, and supporting production activities. We are all consumers of energy, and already, some of us are, and many more of us could be, producers of energy. The energy system, and our demands on it, are constantly evolving from energy access and energy affordability to energy security, enterprise, and decarbonisation.

Work by NESC in 2024-25 on energy focuses on the heat and power services of the energy system but does not consider transport at this time. From an energy poverty perspective, the focus is also on heat and power. While it is acknowledged that transport poverty is an element of energy poverty it is not part of this work. Nevertheless, its contribution to energy poverty is noted in that energy poverty is complex and multidimensional, with detrimental effects on wellbeing (Da Silva Pedrosa *et al.*, 2024; Dingley *et al.*, 2024).

The work was informed by desk research, interviews with key stakeholders and attendance at relevant events over the course of 2024. The desk research included information on the extent and nature of poverty in Ireland, Northern Ireland and at European level. Policies to address energy poverty were examined in Ireland, Northern Ireland and internationally with a focus on energy efficiency and income support measures. More than 30 interviews were undertaken with key stakeholders including national and local government officials, researchers and academics, community and voluntary, and environmental organisations, energy authorities, suppliers and regulators in Ireland, Northern Ireland and Scotland. Events attended included consultations on the forthcoming energy poverty action plan/strategy in Ireland and Northern Ireland, as well as attendance at other relevant events.

The report is structured as follows:

- **Chapter 2** documents definitions and understandings energy poverty and outlines the extent and nature of energy poverty in Ireland, Northern Ireland, and in a broader comparative context.
- **Chapter 3** presents the wider background for energy poverty in terms of climate change, energy price volatility and housing policy. It also explores the potential role of social enterprise in ameliorating energy poverty.
- **Chapter 4** provides information on policy frameworks and existing schemes for addressing energy poverty in Ireland and Northern Ireland.
- **Chapter 5** outlines the conclusions.
- **Appendix 1** provides international examples of measures to address energy poverty.

Chapter 2 Energy Poverty in Ireland & Northern Ireland

2.1 Introduction

This chapter examines the definitions and understandings of energy poverty. These understandings help to highlight the main reasons why people and households can find themselves at risk of energy poverty, namely low income; poor building condition; and/or rising or high energy prices.

The chapter then documents the extent of energy poverty in Ireland using standard measures as well as describing the nature of energy poverty and the impact it can have on households' wellbeing. It also describes the extent and nature of energy poverty in Northern Ireland.

Finally, the chapter examines energy poverty in Ireland in a comparative European perspective.

2.2 Definitions and Understandings of Energy Poverty

In Ireland, the 2016 Strategy to Combat Energy Poverty defined energy poverty as 'an inability to heat or power a home to an adequate degree' (Government of Ireland, 2016: 8).

Energy poverty is often measured using expenditure-based metrics, with the most common definition being a household that spends more than 10 per cent of their disposable income on energy services (Boardman, 1991).

While this definition is widely used it does not capture the extent to which households may reduce their energy expenditures in response to price changes or income constraints (Barrett *et al.*, 2022).

Self-reporting by households can also capture the extent to which a household goes without adequate heat in the home, referred to as energy deprivation. For example, households can be asked whether they have reduced their expenditure on energy services due to budget constraints, or whether their home is in such a condition that they cannot keep it adequately warm (Barrett *et al.*, 2022; Watson & Maître, 2015). This last element takes building condition into account.

Often the terms fuel poverty and energy poverty are used interchangeably. Generally, the term fuel poverty is associated with the costs of heating and refers to the inability of a household to heat their home to an acceptable standard. Energy poverty is a broader concept encompassing all the needs of a household, including but not limited to heating and can extend to lighting, cooking and cooling (in the summer) (Lawlor & Visser, 2022). Thus:

Any definition of fuel poverty is a complex combination of who and why, dictated by political, policy and practical concerns. Thus, variations exist in the way fuel poverty is defined and the contexts within which it is sometimes interchangeably used with the term energy poverty or distinguished from it (Hiteva, 2013).

In this report the term energy poverty will generally be used as it more fully captures the range of energy issues facing low-income households. It is also the term used in official policy documents.

In the European Commission energy poverty is understood as a multidimensional phenomenon, driven primarily by underlying root causes linked to high energy expenditure in proportion to the household budget, low levels of income and low energy performance of buildings and appliances. These root causes can be further influenced by geographic and climate factors, household characteristics, gender, health, and specific household energy and transport needs. As such, households with higher energy needs, which include families with children, persons with disabilities and older people, are also more susceptible to energy poverty and its effects. Women, in particular those who are lone parents and older women are especially affected by energy poverty due to structural inequalities in income distribution, socio-economic status and the gender care gap (European Commission, 2023). Taking this approach captures the essence of 'energy vulnerability', a term which is growing in significance across Europe.

It is estimated that 10.6 per cent of the European population were unable to keep their home adequately warm in 2023, a substantial increase from 6.9 per cent in 2021. Significantly, the share has more than doubled for people in the lower income categories (European Commission, 2023). The comparable figure for Ireland is 7.2 per cent in 2023, up from 3.4 per cent in 2021.

The European Commission Recommendation on Energy Poverty (2023/2407) will be transposed into Irish law and implemented accordingly.

Europe's Revised Energy Efficiency Directive (EU/2023/1791) raises the EU's ambition on the energy efficiency dimension of energy poverty. The revised Directive puts a stronger focus on alleviating energy poverty, through the following:

- By empowering consumers through requiring countries to raise awareness and provide information on energy poverty;
- The creation of one-stop shops, technical and financial advice, and consumer protection;
- Improved regulations to identify and remove barriers related to split incentives for energy efficiency renovations between tenants and owners or among multiple owners;
- Prioritising energy efficiency improvements for vulnerable customers, individuals affected by energy poverty and those living in social housing; and
- Under the energy savings obligation each country is responsible for achieving a share of its energy savings among vulnerable customers and those affected by energy poverty (European Commission, 2024).

The Revised Energy Efficiency Directive is to be implemented by 2030.

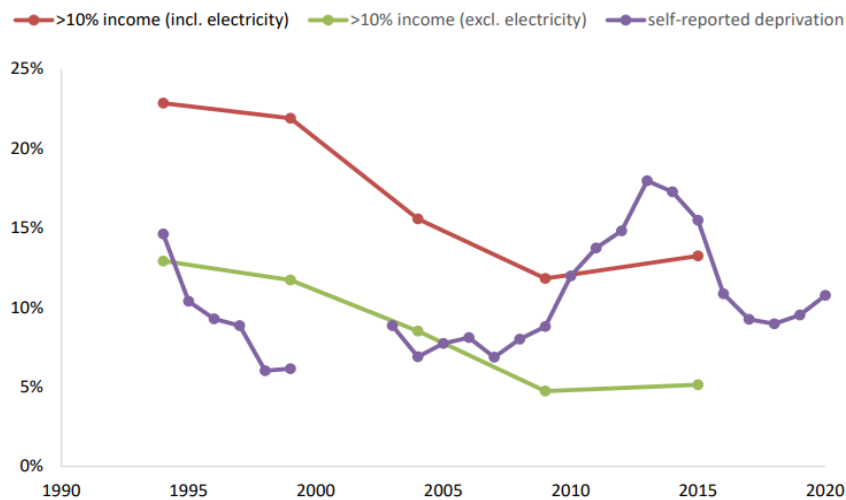
2.3 Extent of Energy Poverty in Ireland

Researchers at the ESRI have calculated the trajectory of energy poverty and deprivation in Ireland from 1994-2020, using both an expenditure-based metric and self-reported energy deprivation, see Figure 2.1.

The figure shows that both the energy-based poverty measures (with and without electricity included) and self-reported energy deprivation fell over the 1990s and early 2000s but rose after the 2008 economic crash. Self-reported energy deprivation, in particular, rose sharply after 2008, in line with the increase in material deprivation and poverty, more generally. It fell again when the economy started to recover in 2012 but has seen an increase since 2018.

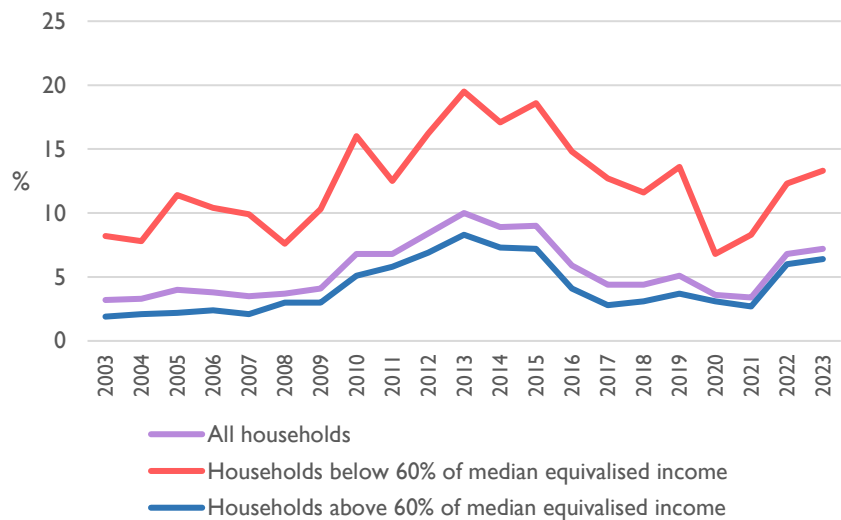
While Figure 2.1 presents the overall picture, some population groups are more affected by energy poverty than others. As expected, groups at risk of poverty generally are also more likely to be at risk of energy poverty. For instance, in 2023, 13 per cent of households at risk of poverty (below 60 per cent of median equivalised income) were unable to keep their home adequately warm compared to 6 per cent of households who were not at risk of poverty. However, as those at risk of poverty make up less than 11 per cent of the overall population, those not at risk of poverty generally, still make up a relatively large share of those experiencing energy poverty, as reflected in Figure 2.2.

Figure 2.1: Trajectory of Energy Poverty/Deprivation in Ireland (1994-2020)



Source: (Barrett *et al.*, 2022: 7).¹

Figure 2.2: Share (%) of households in Ireland unable to keep home adequately warm by household income

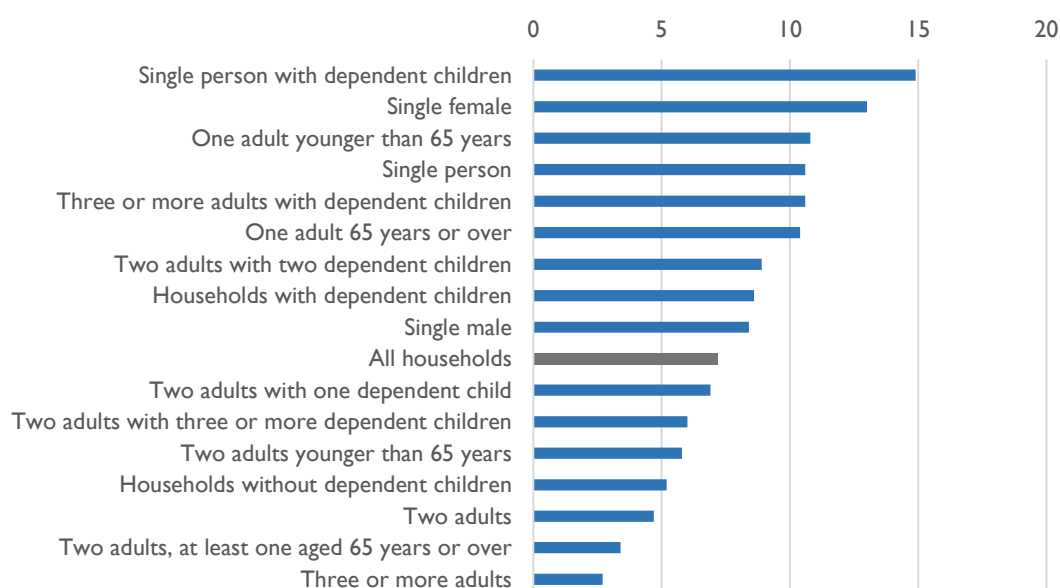


Source: (Eurostat, 2025).

¹ Author’s calculations using the Household Budget Survey, Living in Ireland Survey, and Survey of Income and Living Conditions.

Figure 2.3 shows those household types unable to keep the home adequately warm in 2023. Single parents, households with children, and people living alone are those most likely to be in energy poverty. Some 15 per cent of lone parents were unable to keep their home adequately warm in 2023.

Figure 2.3: Share (%) of households in Ireland unable to keep home adequately warm by household type, 2023



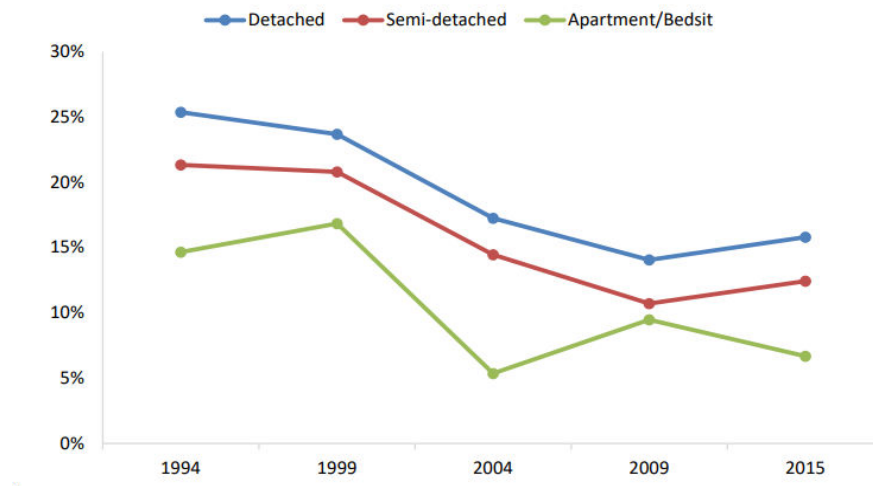
Source: (Eurostat, 2025)

As well as low income, the fabric of the building can also be a factor in energy poverty. Figure 2.4 shows that households living in detached properties are more likely to be in energy poverty than those in semi-detached accommodation, who are more likely to be in energy poverty than those living in apartments or bedsits.

However, those living in apartments experience the highest rates of energy deprivation while those living in detached houses report the lowest rates of energy deprivation. This suggests that apartment dwellers are more exposed to being deprived of adequate warmth than those living in houses. A possible explanation for this is that those who live in apartments have, on average, lower levels of resources, leading to a greater likelihood to go without adequate heating (Barrett *et al.*, 2022: 10).

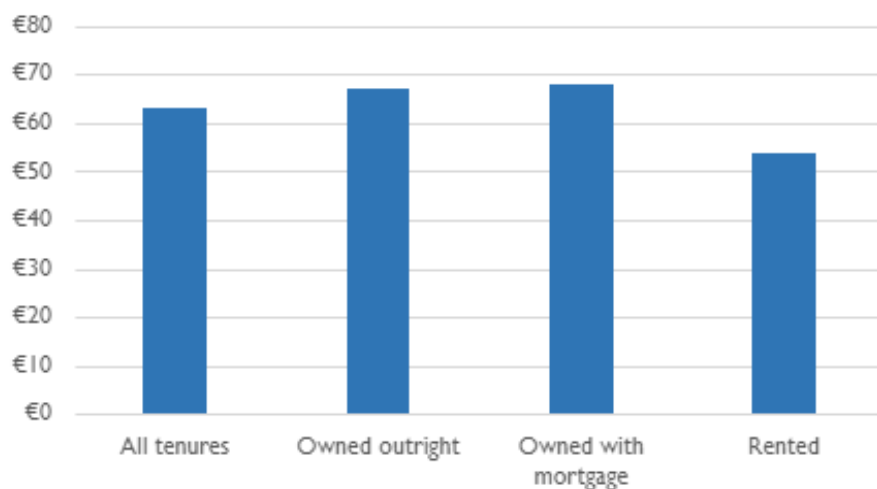
More up to date data on the average weekly household expenditure on energy by tenure type shows that in 2023 household expenditure on energy in rented accommodation was €53.79 compared to €67.13 in dwellings owned outright and €68.00 in homes owned with a mortgage, see Figure 2.5. For all tenures the average weekly household expenditure on energy in 2023 was €63.11. Spending less on energy may expose such households to energy deprivation. It is suggested that younger and lower-income groups who are more likely to be renting may reduce their energy/heat consumption in response to financial limitations (Barrett *et al.*, 2022).

Figure 2.4: Rates of energy poverty by dwelling type



Source: (Barrett *et al.*, 2022: 11).²

Figure 2.5: Average weekly household expenditure (€) on energy by tenure type 2023



Source: (CSO, 2024a).

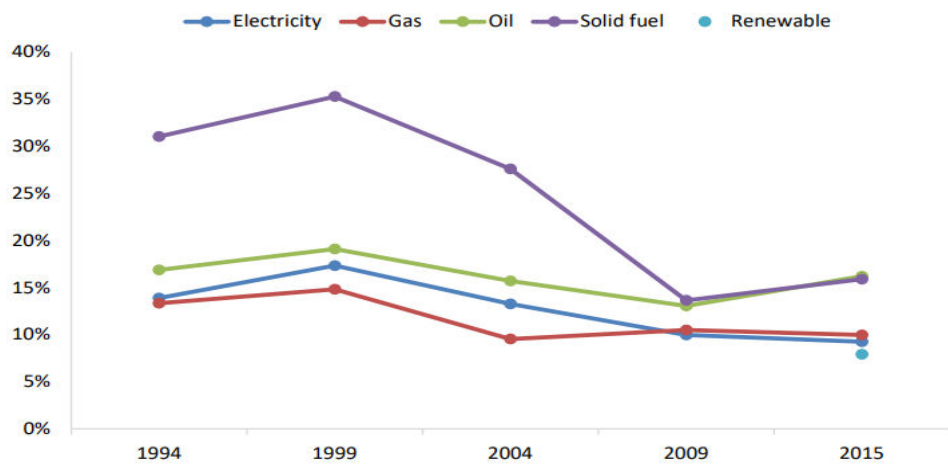
In relation to the incidence of energy poverty by fuel type, the rate of energy poverty among households who use solid fuel as their primary energy source has fallen substantially since the early 1990s. This may reflect the decline in income poverty among households most likely to use solid fuels, especially older households. Energy poverty rates for those who use oil have varied little from 1994 to 2015, while there is a small reduction for those using gas and electricity, see Figure 2.6 (Barrett *et al.*, 2022).

² Authors' calculations using the Household Budget Survey. Excludes 'other' housing type. Energy poverty calculation includes electricity.

Thus, in 2015/16, approximately 11 per cent of the population could be said to be in energy poverty, and used either gas, oil or electricity as their main fuel for heating.³

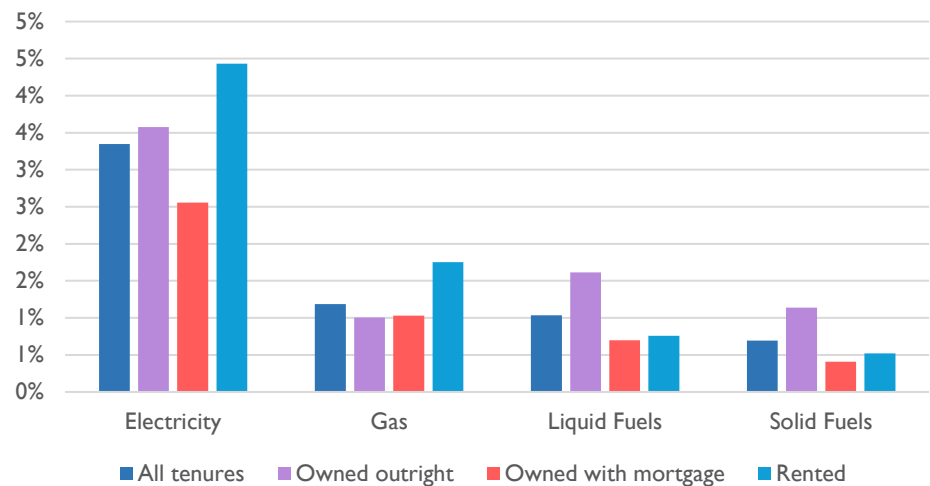
These fuels have been experiencing considerable price changes since 2020/21, with the ESRI estimating that one tenth of the population are vulnerable to energy price fluctuations (Barrett *et al.*, 2022). Figure 2.7 shows average weekly energy related household expenditure by tenure type in 2023. All tenures spend most on electricity at an average of €33.72. Households owned outright with a mortgage spent the most on electricity at €37.04 per week. While less than half that amount was spent on other fuel types it is notable that households who owned their homes outright spent proportionately less on gas and more on liquid and solid fuels than other tenure types.

Figure 2.6: Rates of energy poverty by fuel type



Source: Barrett *et al.*, 2022:14.⁴

Figure 2.7: Average weekly energy related household expenditure (€) by tenure type, 2023



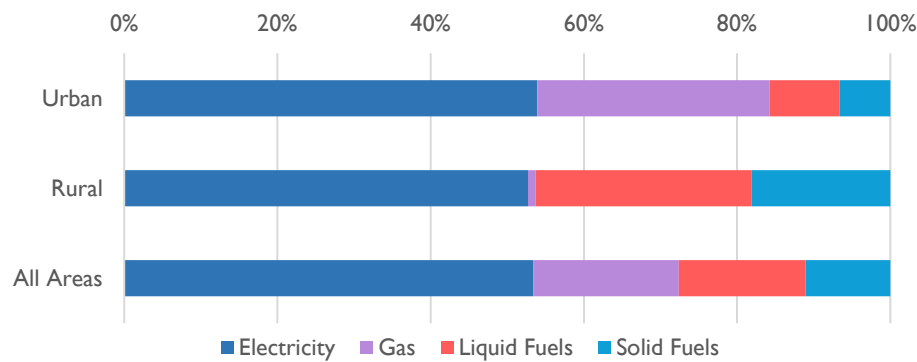
Source: (CSO, 2024a).

³ A further 3-4 per cent used solid fuels for their heating.

⁴ Authors' calculations using the Household Budget Survey. Energy poverty calculation includes electricity.

This point is illustrated in Figure 2.8 which shows that while all areas spent just over half of their energy costs on electricity, rural households spent negligible amounts on gas (1 per cent compared to 30 per cent) but proportionately more on liquid fuels (28 per cent compared to 9 per cent) and solid fuels (18 per cent compared to 7 per cent) than urban households.

Figure 2.8: Energy costs by share (%) of expenditure type, urban and rural, 2023

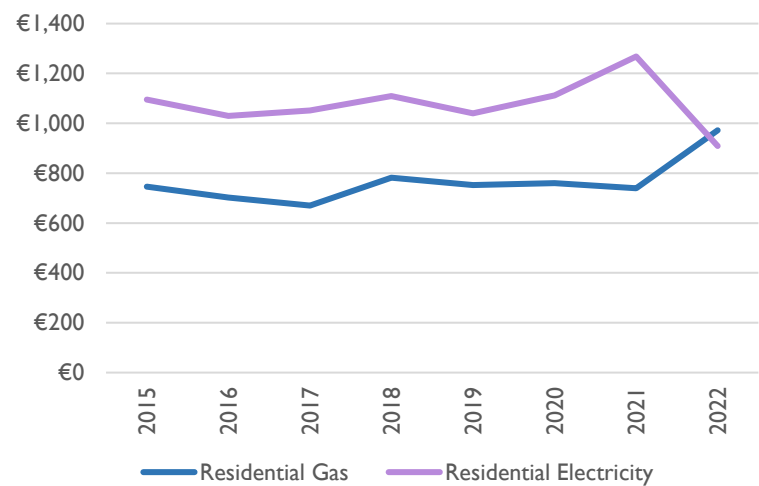


Source: (CSO, 2024a).

Turning to the impact of rising energy prices on households, Barrett *et al.*, (2022) estimate that recent increases in energy prices have had a substantial effect on households, especially lower-income households where a larger proportion of their income is spent on energy. It is estimated that between 5 and 15 per cent of households were experiencing problems adequately heating their homes before the recent rise in prices. Variation in the level of these estimates is partly due to whether or not electricity is included in electricity expenditure.

Figure 2.9 shows changes in median annual gas and electricity bill costs from 2015 to 2022. Gas bill costs have gradually increased from €746 in 2015 to €972 in 2022. Electricity bill costs have been considerably higher from 2015 at €1,095, rising to a peak of €1,268 in 2021, before falling below gas bill costs in 2022, to €909.

Figure 2.9: Median annual gas and electricity bill costs (€)



Source: (CSO, 2024c).

Earlier work by the ESRI explored whether energy poverty was a distinct dimension of deprivation and the extent to which energy poverty was affected by characteristics of the dwelling vis-a-vis the residents (Watson & Maître, 2015). They found that the same factors were associated with both general deprivation and energy poverty. This was especially the case for households where no one was in a paid job, being younger, having a disability, living alone, lone parenthood, and larger family size. The problem of energy poverty was found to be primarily one of inadequate resources rather than a housing issue, and that command over resources, rather than the cost of heating the dwelling, was the dominant influence on energy poverty. Thus, they concluded that energy poverty is not primarily about the energy efficiency of the dwelling but about the capacity of the household to afford an adequate standard of living.

However, one of the challenges in measuring the extent of fuel poverty is trying to identify those who are in poverty and/or living in energy inefficient dwellings so that supports and remedial solutions can be efficiently and appropriately targeted. This is also necessary in the transition to a carbon neutral future. Recent work by the ESRI has considered the interactions between households' socioeconomic characteristics and buildings' energy efficiency. They found that improvements in buildings' energy efficiency only have modest effects in tackling energy poverty, with the main benefits being concentrated in improving the least energy efficient (G-rated) homes. Thus, they conclude that 'energy efficiency is no silver bullet' and that initiatives to improve building efficiency should be part of a broader strategy to reduce inequality, improve household incomes, support vulnerable groups and promote behavioural change (Estévez & Tovar, 2024).

One of the challenges in undertaking this type of analysis is the ability to link socioeconomic data and energy efficiency (BER ratings) information. Further work in this area would improve the ability to more effectively and efficiently target those experiencing energy poverty.

It is also important to place energy poverty within a broader energy context and it can be helpful to see this through an energy justice lens. A key element must be not to create energy poverty in the transition to net zero. The Next Generation Energy Systems (NexSys) project is defining pathways to a net zero system, with energy poverty part of the overall project, see Box 2.1. Initiatives from projects such as these will provide evidence to support a just transition to achieving a fossil free future while leaving no one behind.

Box 2.1: Next Generation Energy Systems (NexSys) research programme

Next Generation Energy Systems (NexSys) is an all-island, multidisciplinary energy research programme hosted by the UCD Energy Institute in partnership with eight other leading research institutions: ESRI, DCU, QUB, University of Galway, Maynooth University, TCD, UCC, and Ulster University. 46 leading academics are working in partnership with industry to tackle the challenges of energy decarbonisation by developing evidence-based pathways for a net zero energy system. There are five strands of the research being researched through 24 work packages:

- Energy systems;
- Transport;
- Water;
- Cities and communities; and
- Offshore wind.

Issues of energy poverty are being examined through an energy justice lens in the cities and communities strand. The project is running from 2022 to 2026, so that by 2027 the NexSys programme intends to have identified pathways for a zero energy system, along with the technologies and talent needed for the energy transition, see <https://www.nexsys-energy.ie/>.

2.3.1 Qualitative Insights on the Nature of Energy Poverty

Charities support people living in poverty and see first-hand the challenges of trying to heat a home on a low income and the subsequent implications. As highlighted in the previous section the heat efficiency of the home and cost of fuel impact on households' risk of energy poverty.

The Society of St Vincent de Paul (SVP) has noted that the assistance it provides to address energy poverty has substantially increased in recent years – from €4.2m in 2021 to €7.1m in 2022. Between 2021 and the end of 2023, calls to the St Vincent de Paul for help with energy costs increased by 68 per cent (SVP, 2024). The consequences of living in energy poverty include living with mould and damp in the home, poor heating systems, unable to afford to buy fuel, unable to make improvements to their home, and often falling into debt.

Energy poverty has an adverse effect on health. The direct effects of energy poverty are:

- Colder indoor temperatures place a 'thermal stress' on the body affecting the immune system and the blood and cardiovascular system.
- Cold damp accommodations harbour mould and dust mites which aggravate respiratory and allergic conditions, independent of smoking behaviours in the household.
- Living in damp, cold accommodation has negative effects on mental health.
- Inability to pay bills leads to mental stress.

There are also indirect effects:

- In order to adequately heat their accommodation, people experiencing energy poverty can cut back on spending across other areas, such as food, clothing and transport, sometimes referred to as 'heat or eat'.
- Energy-poor households tend to accumulate debt which can ultimately lead to disconnection from mainstream fuel and electricity supplies.
- Energy-poor households are associated with 'spatial shrink' where fewer rooms are occupied in winter months. This can lead to overcrowding in rooms that are occupied with implications for areas for children to play or do homework.

Certain groups of people are particularly vulnerable to both experiencing energy poverty and to suffering its health consequences: households comprising older people and/or young children, and those with disabilities and/or long term illness (FoE, 2023; McAvoy, 2007).

One extreme measure of the impact of energy poverty is excess deaths over the winter period. Healy found that as many as 2,000 excess winter deaths have been associated with energy poverty, with the majority in the 65 plus age group (Healy, 2003). Another study found 19.7 per cent of excess winter deaths in Ireland in the period 1980-2013, a particularly high rate for northern European countries. Ironically, excess winter deaths tend to be lower in more northerly countries, such as Iceland (8.4 per cent) and Finland (9.5 per cent) where winters are severe, than in more southerly countries where climates are temperate and winters are cool, referred to as the 'excess winter mortality paradox'. Factors contributing to this effect are; spending more of income on heating costs; better insulated and more energy efficient buildings; and lifestyle adjustments such as wearing adequate protective clothing and altering activity patterns (Liddell *et al.*, 2016). Ireland counters this trend, with the consequence that thousands of people in Ireland die prematurely every year because of energy poverty (FoE, 2023).

Attention has been drawn to the situation of Travellers, many of whom live in poor accommodation and where energy poverty levels of up to 77 per cent have been recorded for Travellers living in mobile homes and trailers (Stamp & Kearns, 2019). Issues have been raised in relation to the Fuel Allowance⁵ where only one Fuel Allowance is available per bay even if there is a number of families using the bay.⁶ In a similar vein, some Travellers on halting sites could not avail of the energy credit as they pay their energy bill with their rent and so do not have an electricity account to receive the credit. In many instances, but not all, this issue has now been resolved.

Living in mobile homes and trailers may expose people to energy poverty where the mobile home/trailer is poorly insulated, cold and damp. Since 2021, a caravan loan scheme has been available nationally with loans of €40,000 available through local authorities. However, following feedback that it was difficult to purchase an adequate trailer for this amount a new preferential National Caravan Loan Scheme has been announced for Traveller families to purchase a caravan/trailer for use as their primary residence. The new scheme will increase the loan limits from €40,000 up to a maximum of €80,000 in certain circumstances, e.g. for larger families (DHLGH, 2024). This should ensure that trailers purchased are culturally appropriate and meet energy efficiency standards to provide a warm comfortable home.

A related challenge is supporting Travellers living in mobile homes with a just energy transition. A SEAI funded project being undertaken by the Atlantic Technical University in partnership with the Traveller stakeholders, Sligo and Cork County Councils is researching the societal, economic, political and technological factors affecting the implementation of energy efficiency measures in Traveller communities. The MOBILISE project aims to provide practical retrofit solutions for enhancing energy efficiency in mobile homes. The research outputs are intended to inform local authorities, government bodies, and policy stakeholders (ATU, 2024).

Some commentators (Friends of the Earth Ireland, Social Justice Ireland, TASC, MABS) have referred to a 'poverty premium' which is the extra costs people on low incomes pay for essential goods and services (Davis & Trend, 2020). With regard to energy this can relate to higher tariffs for pay-as-you-go customers;⁷ being difficult to switch energy suppliers to avail of the best tariffs because of capacity, literacy and digital literacy; higher charges for those paying in cash who are unable to benefit from direct debit options; and limited options for those who are currently or previously indebted to energy suppliers. An ultimate disadvantage is disconnection with obvious implications for heating, but also additional costs associated with reconnection and detrimental health effects.

The Vincentian Minimum Essential Standard of Living Research Centre has calculated the cost of adequately heating the home for a number of household types (O'Carroll, 2023). Of 96 cases examined the 10 per cent threshold of expenditure on energy was exceeded in 83 cases, with 28 exceeding a 20 per cent threshold. Households dependent on social welfare showed the greatest prevalence and severity of energy poverty. The study also found that energy poverty is more prevalent and a greater burden when buying energy on a 'pay-as-you-go' system. Overall, as dwelling efficiency improves energy costs are lower and therefore energy poverty is reduced.

Energy poverty impacts on people's health particularly through living in cold and damp conditions. However, particulate matter in the air from the burning of fossil fuels has been linked to cardiac impacts such as heart attacks and strokes. A study on air pollution on the island of Ireland found that the biggest risk to life from pollution is heart disease, with 680 heart disease and stroke deaths in Ireland and 300 in Northern Ireland linked to the inhalation of harmful particles caused by the burning of solid fuels (Goodman *et al.*, 2023). While the authors propose a coordinated all-island approach between the Irish Government and the Northern Ireland Executive to the phasing out of the most health-harming solid fuels, it is recognised that there is a cultural dimension to solid fuel fires and stoves on the island of

⁵ The Fuel Allowance is a payment to help with the cost of heating a home during the winter months. It is paid to only one person in a household.

⁶ This is a legal issue related to planning permission.

⁷ While prepay meters can help people to budget and manage their money some prepay meters may have extra charges and higher tariffs which can make them comparatively more expensive.

Ireland. Many older people, lone parents and people living in rural areas continue to be reliant on solid fuels, with a potential detrimental impact on children and older people in particular.

Particulate matter has also been shown to increase the risk of lung cancer. The Irish Cancer Society funded Dr. Suzanne Denieffe and her research team at the South East Technological University to examine energy hardship for people with a life-limiting cancer diagnosis receiving palliative care at home. The study found that people with palliative care needs and their carers may be more likely to be unable to afford to heat their homes adequately, for example, if their income from work reduced following diagnosis. At the same time, energy use and therefore their costs may also increase if they and their carers are spending more time in the home. They are also often more vulnerable to the cold because of their condition. A survey of the nurses providing palliative care found that 1 in 3 nurses providing end-of-life care in homes across the country experienced patients' homes without any heating, with 2 in 3 nurses reporting that their patients struggle to afford home heating, while almost half (46 per cent) reported that there was no central heating in the homes they were working in. The nurses also reported observing damp (64 per cent), mould (50 per cent) and condensation (70 per cent) in the homes where they were delivering palliative care (South East Technological University, 2023).⁸ Cancer patients can register as vulnerable customers with their energy providers but this requires online self-declaration and many people are not aware of this facility. On the basis of this research, the Irish Cancer Society suggests that customer facing staff in energy companies should receive training to be able to deal with the sensitive issues facing vulnerable customers.

Energy poverty has different dimensions in urban and rural homes. Rural households are more reliant on fossil fuels such as oil, coal, wood and turf and can be built of materials such as stone and traditional building materials rather than modern construction which uses concrete. This makes them more difficult to retrofit.

2.4 Energy Poverty in Northern Ireland

Northern Ireland uses a similar energy poverty definition to Ireland in that a household is energy poor if it needs to spend 'more than 10 per cent of its income on energy to maintain an adequate standard of warmth'⁹ (UK Government, 2011: 4).

The official figure for energy poverty in Northern Ireland is 22 per cent, based on the 2016 House and Condition Survey (NI Housing Executive, 2018), a substantial improvement from 2009 where it was found that 44 per cent of Northern Ireland's households were fuel poor (UK Government, 2011). Using modelling for the interim years, based on the 2016 House and Condition Survey, the Housing Executive has estimated that the impact of the 2022 fuel prices and government support was to increase fuel poverty from the 2021 estimate of 24 per cent in fuel poverty to 27 per cent fuel poor households, when keeping incomes and energy efficiency the same, and assuming no changes to household composition. Had none of the measures of support been implemented, fuel poverty estimates were predicted to rise to 76 per cent of all households (NI Housing Executive, 2024b). There are measures which can be taken to improve household incomes and energy efficiency but not the price of energy. Specific supports are needed to help households with increased costs of energy.

Whilst 22 per cent continues to remain the official figure of energy poverty in Northern Ireland, the UK's national fuel poverty charity National Energy Action (NEA)¹⁰ with LucidTalk¹¹ reported that 40 per cent of Northern Irish households were experiencing energy poverty in September 2024, a reflection of

⁸ Night nurses and palliative care nurses working across 25 counties participated in the survey. A total of 58 nurses responded to the survey. The inclusion criteria required the person to have worked in their role for at least a year.

⁹ The Northern Ireland measurement of energy poverty calculates what each household needs to spend, as opposed to what a household actually spends.

¹⁰ National Energy Action is a charity working across England, Wales and Northern to eradicate fuel poverty.

¹¹ LucidTalk is a polling and market research company based in Belfast.

increases in energy prices (National Energy Action, 2024b). This more recent figure implies that two in five Northern Irish households are currently experiencing fuel poverty.

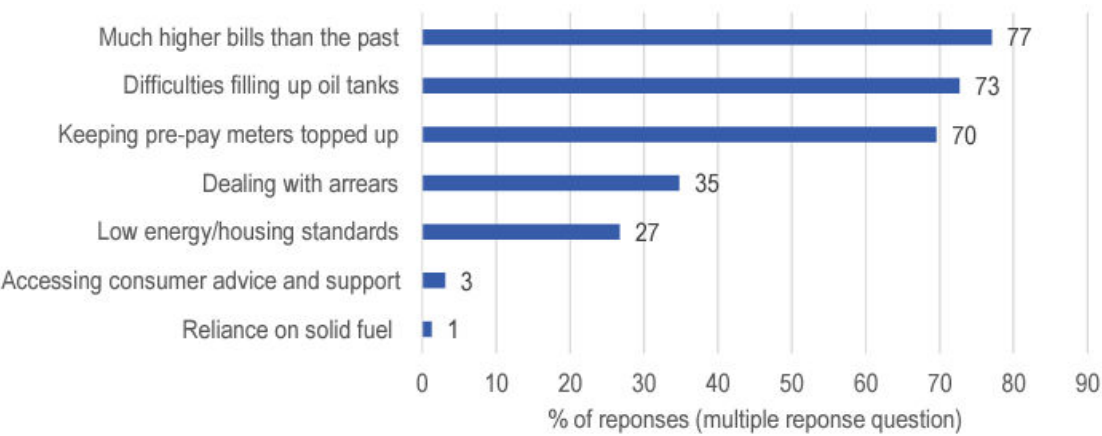
The use of the standard 10 per cent of income on energy has been questioned by some academics and civil society organisations who argue that the measure can under- or over-estimate the extent of energy poverty making it difficult to design appropriate solutions (Liddell *et al.*, 2012).

For example, the NEA/LucidTalk survey (National Energy Action, 2024b) illustrates the pressure on household budgets with a quarter (27 per cent) of households saying that they went without heating (oil/gas) or electricity at a point during the last 24 months because they could not afford the costs of energy. This has risen from 19 per cent in September 2023, when the poll was last conducted. Coping mechanisms to deal with the rising energy prices and cost of living included: reducing the use of central heating in their home (70 per cent); using alternative heating sources such as coal fires and fan heaters (36 per cent); sitting in a cold house wearing coats, blankets or using a hot water bottle (36 per cent); reduced use of hot water (27 per cent); and skipping meals (9 per cent). As in Ireland, energy poverty in Northern Ireland can result in excess deaths, with an estimated 290 people dying each winter as a result of energy poverty (National Energy Action, 2024a).

The definition of fuel poverty is currently being reviewed in Northern Ireland. There are mixed views on whether it should be changed. Some are of the opinion that the current definition should be retained for consistency and comparability purposes, while others are of the view that a broader definition is required which includes a basket of indicators rather than relying on the 10 per cent of expenditure measure.

In Northern Ireland, about 68 per cent of households rely on home heating oil, which is a non-regulated fuel. The need to have a significant lump sum to afford a fill of oil is difficult for households on benefits or in low paid work. Prepayment meters form a significant segment of the energy market in Northern Ireland. For electricity, 39 per cent of customers pay through a prepayment meter, while for gas customers, 57 per cent are pre-pay customers. These are unusually high proportions compared to Great Britain and Ireland. While pre-pay meters can help people to budget for the cost of their energy in some cases their energy can cost more depending on which tariff they are on and some people have difficulties in keeping their meters topped up (SVP Northern Region, 2023). Figure 2.10 shows the main difficulties for people seeking support with energy.

Figure 2.10: Main difficulties for people seeking support with energy in NI



Source: (SVP Northern Region, 2023: 36).

These energy poverty data suggest that more comprehensive and up-to-date measures are required to measure the extent of energy poverty in Northern Ireland. The Fuel Poverty Coalition has proposed a ‘tandem approach’ to define and conceptualise energy poverty, maintaining but extending the ‘10 per cent definition’ by measuring *severe* fuel poverty (at 20 per cent of household income) and *extreme* fuel poverty (at 30 per cent of household income) alongside measuring low-income households living in low energy efficient homes (Fuel Poverty Coalition NI, 2023).¹² They also make the case for regular analysis and monitoring of energy poverty.

While measures are not directly comparable because of the use of different ways of measuring energy poverty and different timescales, nevertheless energy poverty can be seen to be higher in Northern Ireland compared to other UK countries, see table 2.1. The close correlation between poverty in general and energy poverty is affirmed by Northern Ireland having an average gross household income 11 per cent lower than the rest of the UK (Fuel Poverty Coalition NI, 2023).

Table 2.1: Energy poverty figures for the UK¹³

Northern Ireland (2016)	22 per cent
Scotland (2021)	19.5 per cent
England (2023)	13 per cent
Wales (2021)	14 per cent

Source: (Hinson & Bolton, 2024).

2.5 Energy poverty in a comparative context

Figure 2.11 illustrates energy poverty in Europe using the share of households unable to adequately heat their homes in 2023.

Luxembourg, Finland, Slovenia, Austria, Estonia and Poland had the lowest levels of energy poverty in Europe in 2023, all of whom had a share of households who were unable to adequately heat their home of less than 5 per cent. Ireland has a relatively low share of the population unable to keep their home adequately warm at 7.2 per cent. The highest levels of energy poverty using this measure are seen in Portugal, Spain and Bulgaria, which are all above 20 per cent.

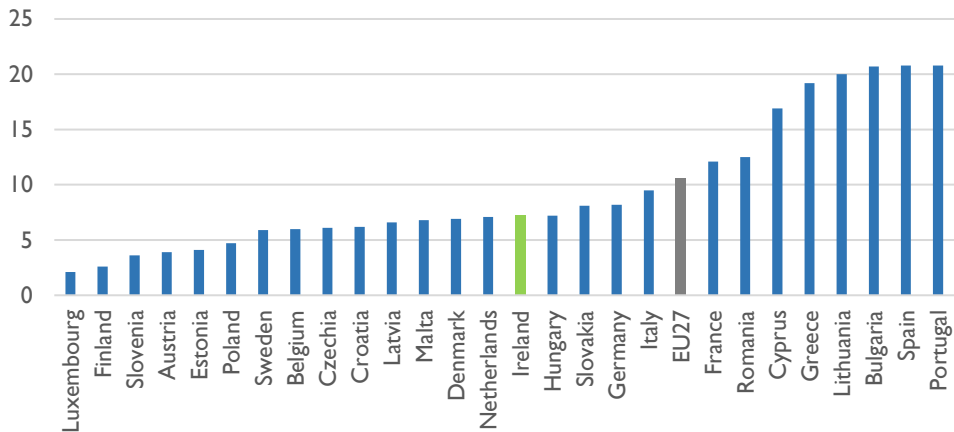
In terms of trends over time, the share of the Irish population unable to keep their home adequately warm has consistently been lower than that for the EU27 as a whole, see Figure 2.12.

As discussed earlier, there are various ways to measure energy poverty and this is illustrated in Figure 2.13, which provides four measures of energy poverty calculated by the Joint Research Centre of the European Commission (Maier & Dreoni, 2024). Two of the four indicators shown in Figure 2.13 are ‘expenditure-based’ and two use a ‘consensual’ approach. The 2M indicator is the proportion of households whose share of energy expenditure is more than twice the national medium. The M2 indicator is the proportion of households whose energy expenditure is below the national medium

¹² The Fuel Poverty Coalition, established in 2010, comprises 160 members of organisations and individuals from across all sectors of society with the aim of eradicating fuel poverty in Northern Ireland.
¹³ These are the latest official figures available for each country in the UK. Each country uses different definitions and applies different policy strategies as energy policy is a devolved matter in the UK.

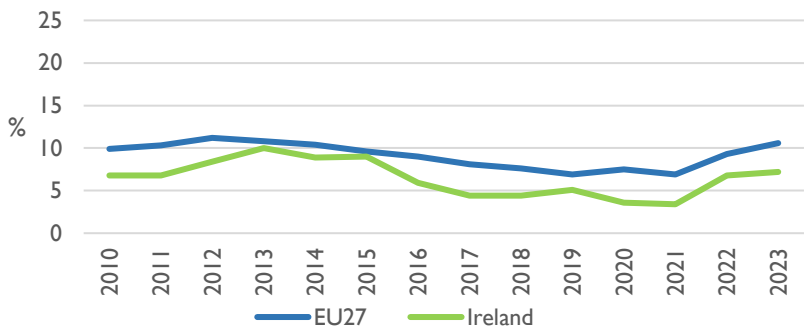
energy consumption. The other two indicators are the ability of people to pay their energy bills and the self-reported ability of people to keep their homes adequately warm (similar to Figure 2.11).

Figure 2.11: Energy poverty in Europe – inability to keep home adequately warm, 2023



Source: (Eurostat, 2025).

Figure 2.12: Share (%) of households unable to keep home adequately warm

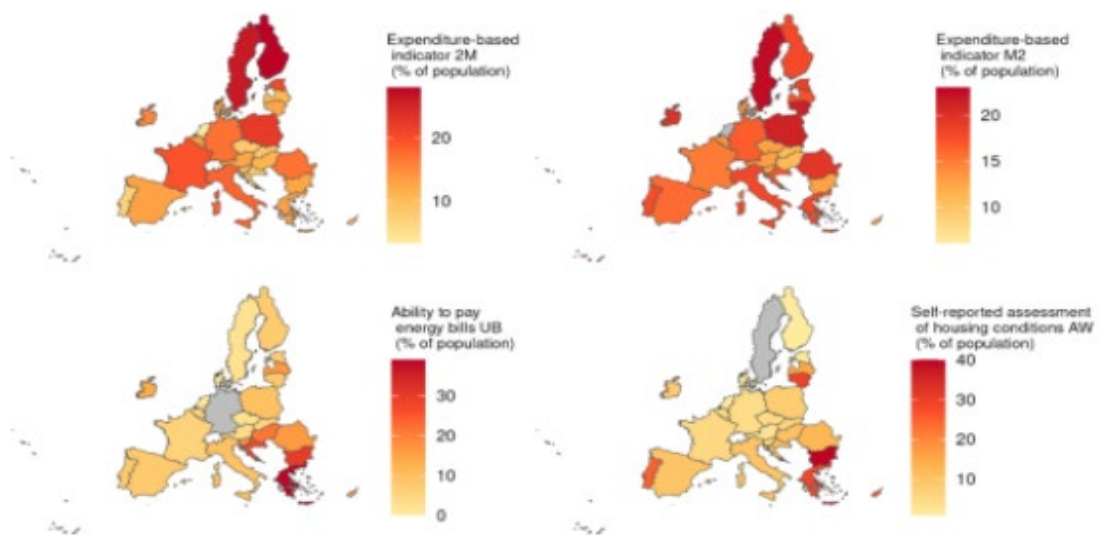


Source: (Eurostat, 2025).

Depending on the indicator selected between 8 (consensual indicators) and 16 (expenditure-based indicators) per cent of the EU population faces energy poverty. The EU study reveals that about 30 per cent of energy-poor households are also income-poor in that they fall below the income threshold. However, the study reveals too that middle-income households face a relatively high incidence of energy poverty, so energy poverty does not only affect income-poor households. In general, education and employment have a significant impact on energy poverty, with those in employment and/or with higher education levels less likely to experience energy poverty (EU Science Hub *et al.*, 2024).

In comparing energy poverty levels across Europe, disparities are influenced by a range of factors such as geography, climate, infrastructure, natural resources and policies to address energy poverty. This is evident from Figure 2.13 which shows high levels of energy poverty in Sweden and Finland using the expenditure-based measures, but low levels when the consensual measures are used. Ireland also follows this pattern, but with a less extreme variation. In general, countries with the largest shares of expenditure-based energy poverty tend to be cold (by climate) and rich (by income) countries, while the opposite is the case for the consensual measures, highlighting the importance of understanding the indicator being used to measure energy poverty (Maier & Dreoni, 2024).

Figure 2.13: Four measures of energy poverty in the European Union

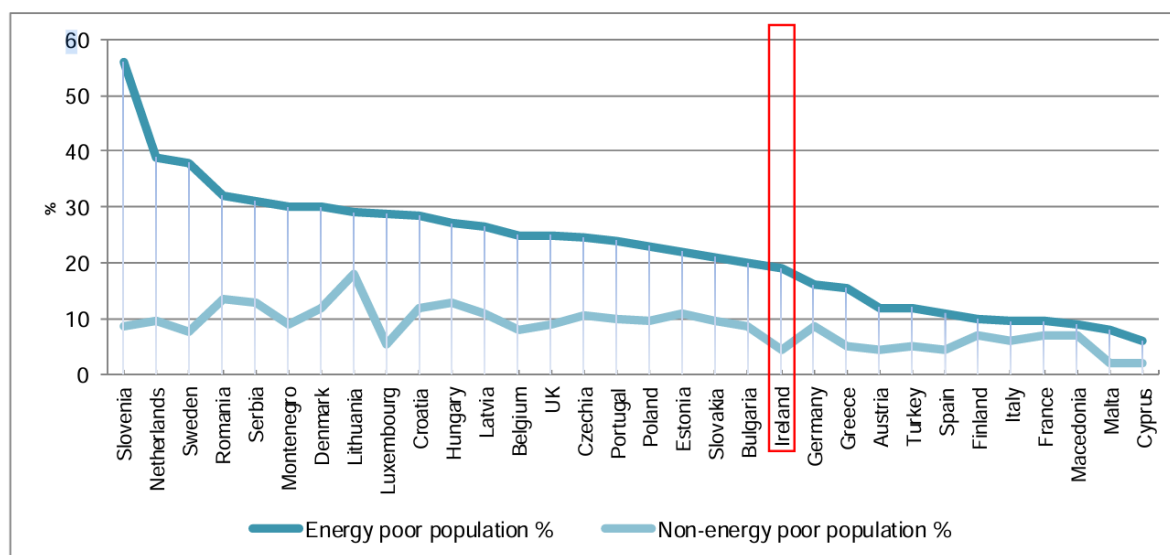


Share of energy poor population by country expressed in % of the total population.

© EU, 2024

Energy poverty can have wide-ranging implications, from worsening health and well-being to limiting economic and social participation. Thomson and her colleagues investigated the relationship between energy poverty, health and well-being across 32 European Countries, see Figure 2.14. While, as expected, they found that the energy poor population is statistically more likely to report poor health and emotional well-being than the non-energy poor population, they also found that the largest disparities in health and well-being levels between energy poor and non-energy poor households occur within relatively equal societies, such as Sweden and Slovenia. The authors conclude that in order to reduce the health inequalities associated with energy poverty, investment in energy efficiency schemes should be prioritised for energy poor households (Thomson *et al.*, 2017).

Figure 2.14: Prevalence of poor health in the energy poor population versus the non-energy poor population (2016)



Sources: (Lawlor & Visser, 2022; Thomson *et al.*, 2017).

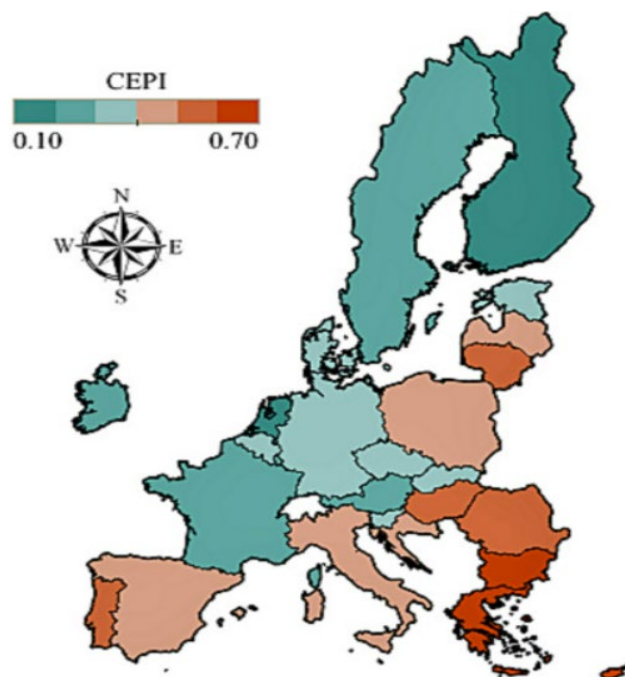
Kashour and Jaber have recently revisited poverty measurement for the European Union, examining both the causes and effects of energy poverty (Kashour & Jaber, 2024). The causes are identified as high energy cost, poor energy efficiency and low income, while the effects are measured as insufficient warmth within dwellings, being in energy arrears and issues of dwelling quality. Using these measures the authors compile a composite energy poverty index (CEPI). The results are illustrated in Figure 2.15.

As in figure 2.11, the highest rates of energy poverty are in the south and east of Europe and the lowest energy poverty rates in the north and west. Cyprus, Bulgaria and Greece had the highest composite energy poverty rates, while Finland, Netherlands and Luxembourg had the lowest composite poverty rates. Using this measure, Ireland was ranked 7th best in terms of energy poverty behind Finland, Netherlands, Luxembourg, Sweden, Austria and France, but having the highest energy efficiency score across the 27 member states.

One of the factors of current relevance is the cost of electricity. Figure 2.16 shows electricity energy prices for the first half of 2024 for all consumption bands across Europe. The graph highlights the high cost of electricity in Ireland, one of the highest in Europe. Costs of electricity in Ireland are high because of both the cost of generating electricity and distributing it. While the costs of generation may reduce in future as we move to more renewable sources the costs of distribution through the electricity network are more likely to increase as the network infrastructure is developed.¹⁴

¹⁴ Dr Paul Deane, Senior Lecturer in Clean Energy Futures at University College Cork. Comment used with permission. See https://www.linkedin.com/posts/thinkingenergy_household-electricity-prices-across-eu-member-activity-7264919164782272512-7c_q?utm_source=share&utm_medium=member_desktop [accessed 25/03/25].

Figure 2.15: Composite Energy Poverty for EU member states in 2020



Source: (Kashour & Jaber, 2024: 4).

2.6 Summary

This chapter has considered the extent and nature of energy poverty in Ireland, Northern Ireland, and in a broader European context. While there are a number of measures of energy poverty, it was estimated that 29.4 per cent of households in Ireland in 2022 spent more than one tenth of their income on energy (including electricity but excluding motor fuel) and are at risk of energy poverty, which is more than double the 13.2 per cent in 2015/16. The large increase is mainly due to the substantial rises in the cost of energy in 2021 and 2022. Using the self-reported measure of being unable to keep the house adequately warm 7 per cent of households in Ireland in 2023 were in energy poverty.

The official figure for energy poverty in Northern Ireland is 22 per cent, based on households spending more than 10 per cent of their income on energy to maintain an adequate standard of warmth, based on the 2016 House and Condition Survey. Other estimates put the figure at 40 per cent of Northern Ireland households experiencing energy poverty in 2024, also a reflection of increases in energy prices. Questions have been raised in both jurisdictions about how energy poverty is measured with calls for further research to derive a more accurate measure.

Groups at risk of energy poverty are also those at risk of poverty due to low income and deprivation. These groups include: lone parent households; people with disabilities and/or ill health; older people, especially those living alone; tenants in private rented housing; some people living in rural areas; and Travellers, especially those living in mobile homes and trailers.

As well as the cost of fuel, poor building fabric and type of fuel used contributes to energy poverty. Households using solid fuel or oil as their main fuel source are more likely to be in energy poverty than those using electricity or gas or renewables. These fuel types tend to be used by people living in rural areas.

In relation to the lived experience of energy poverty the impacts on physical and mental health are well documented. The consequences of living with energy poverty include: mould and damp in the home, poor heating systems, being unable to buy fuel, unable to make improvements to the home, and falling into debt. This can result in respiratory infections, mental stress, and even excess deaths. As many as 2,000 excess winter deaths have been associated with energy poverty with the majority in the 65 plus age group.

Looked at in comparative terms Ireland has a relatively low level of energy poverty in European terms, though attention needs to be paid to the measure used. It is noteworthy that there is an overlap between income poverty and energy poverty, though some middle-income households can experience energy poverty. Using a composite measure of energy poverty, which includes causes (high cost, poor efficiency, low income) and effects (insufficient warmth, energy arrears, dwelling quality) Ireland is ranked 7th best in Europe (Kashour & Jaber, 2024).

However, as we move to a greater dependence on electricity in the transition to a net zero future specific measures will be required to support those at risk of energy poverty given that the cost of electricity in Ireland is currently one of the highest in Europe.

As documented, there are multiple and interrelated impacts of energy poverty which therefore requires a progressive and comprehensive response. As well as addressing the aspects of energy poverty such as living on a low-income, high energy prices, and energy inefficient accommodation a comprehensive approach would also have long-term health benefits. This broader policy context is discussed in the next chapter.

Chapter 3 Context for Action on Energy Poverty

3.1 Introduction

This chapter outlines the context for addressing energy poverty. Global warming commitments to transition to net-zero emissions by 2050 mean a reduction in the use of fossil fuels. This has implications for energy poor households many of whom are reliant on fossil fuels. Energy price volatilities, especially energy price increases, impact on all households but especially those on low incomes who will be stretched to pay their energy bills. Commitments to retrofitting to improve the energy efficiency of dwellings are contained in housing and related policy documents.

In terms of tackling energy poverty, especially in disadvantaged communities, there may be scope for the support and development of social enterprise

3.2 Climate Change

Ireland, along with other countries, has committed to transition to net-zero carbon emissions by 2050 to reduce the impact of climate change on the planet. These legislated climate targets to reduce global warming require deep transformation of the energy system from one dominated by fossil fuels. The aim is to reduce greenhouse gas emissions by 50 per cent by 2030 from 2018 levels and to support achievement of legislated EU targets as well as to reach the legislated national climate objective of climate neutrality by 2050.

Reducing demand for fossil fuels will require greater adoption of electrification in energy use, and an expansion of renewable energy. This has implications for low-income households experiencing energy poverty as they will be least able to make such a transition without additional supports.

A 2019 Oireachtas Committee report stated that:

Ireland has a significant but largely hidden energy poverty problem affecting an estimated 28 per cent of Irish households. Homeowners and tenants experiencing or close to energy poverty tend to live in homes with poor energy performance and are more exposed to negative health impacts associated with cold and damp living conditions. Energy poverty requires a multi-faceted set of policy measures. While energy efficiency improvements alone are not sufficient to lift a household out of poverty, improving the energy performance of a home should reduce the energy bill and improve the health conditions within the household (Houses of the Oireachtas & JOCCA, 2019).

Thus, in relation to meeting our climate targets there is a need for actions to protect those most vulnerable to energy poverty and to ensure a just transition to zero-carbon emissions. Initiatives such as the ALIGN project can help to inform such transitions, see Box 3.1.

Box 3.1: ALIGN Project

The 'Aligning Energy Policy with Lived Experience to Deliver Interdisciplinary Solutions to Alleviate Energy' (ALIGN) project aims to bridge the gap between energy policy and real-world experiences by proposing interdisciplinary solutions to address energy poverty in Ireland and Europe.

The ALIGN project is a collaborative initiative between Maynooth University, Dublin City University, University College Dublin, and the ESRI. It has received €460,000 in funding from the Sustainable Energy Authority of Ireland's (SEAI) National Research, Development and Demonstration Funding Programme (RD&D) which supports Ireland's transition to a clean and secure energy future. SEAI's RD&D Programme is funded by the Department of Environment, Climate and Communications to enhance collaboration across a wide range of stakeholders and promote multidisciplinary, transdisciplinary and interdisciplinary approaches.

ALIGN recognises that decarbonising the Irish residential heat load is an essential part of the journey to climate neutrality, but that this must take place within the principles of a just transition framework. This project takes an interdisciplinary approach in combining economics, building energy engineering, and the social sciences to investigate and mitigate the energy poverty challenge in Ireland.

This approach will help in understanding the complexity of interconnecting factors, including improving energy performance, financial support schemes, and behavioural change. The ALIGN project will use advanced data-driven methods to evaluate energy poverty strategies and their various trade-offs.

Energy efficient housing will also help to meet climate targets and Ireland's Climate Action Plan sets out detailed actions to reduce greenhouse gas emissions in the housing sector. This includes the target to retrofit the equivalent of 500,000 dwellings to the BER (Building Energy Rating) of B2 (or cost optimal equivalent) by 2030 (for further information see section 3.4).

In Northern Ireland the Climate Change Act (Northern Ireland) 2022 sets a target of an at least 100 per cent reduction in net zero greenhouse gas emissions by 2050, along with interim targets including at least a 48 per cent reduction in net emissions by 2030. The Act also sets out other sectoral targets including 2030 targets of at least 80 per cent of electricity consumption from renewable sources and 70 per cent of waste is recycled as well as a target for minimum spend of 10 per cent of overall transport budgets on active travel. The Act contains commitments on carbon budgets, climate action plans, sectoral plans, as well as the establishment of a Just Transition Commission (DAERA, 2024).

3.3 Energy Price Volatility

The invasion of Ukraine by Russia has highlighted the vulnerability of Ireland to imported fuels with consequent volatility in energy prices. Ireland is one of the most energy import dependent countries in the EU, having imported 82 per cent of its energy supply in 2022 (Government of Ireland, 2023). This leaves Irish households vulnerable to external trends and supply shocks, such as increased fossil fuel prices.

Household energy prices have increased steeply, particularly in 2022, mostly due to increases in wholesale gas prices. For example, an illustrative household would have experienced an increase of 51 per cent in the cost of their electricity between 2017 and 2022, with a 24 per cent increase between 2021 and 2022 (IGEES, 2023).

Increased energy prices can have a number of impacts: households reduce their energy consumption which can lead to people being cold in their homes; people cut back on other essential items such as food to meet their energy costs ('heat or eat'); people go into arrears increasing indebtedness and/or disconnection. These behaviours can have a detrimental impact on physical and mental health.

As well as addressing these energy price increases in the short term to alleviate energy poverty – through credits, benefits, and grants – a longer term requirement to address energy price fluctuations is to ensure greater security of supply. This implies less reliance on imports and a transition to renewable energy produced in Ireland, with adequate supports for energy poor households to ensure a just transition. As part of NESC's Energy and Just Transition project, related research (Ireland's future power system and economic resilience; and the international trade dimensions of Ireland's energy transition) is exploring this issue of improving security and stability of supply.

3.4 Housing Policy

Ireland's current housing policy *Housing for All* (Government of Ireland, 2021b) contains only one reference to fuel poverty in relation to the targets set in the Climate Action Plan. This reference states that the Government will develop a roadmap to implement BER standards (or cost optimal equivalents), where feasible, for the private rented sector to increase energy efficiency, help alleviate fuel poverty, protect tenants' health, and improve comfort levels in rental homes, starting in 2025.

However, there is a focus on retrofitting to improve the energy efficiency of dwellings. There is a target to retrofit 500,000 homes by 2030 to a B2 BER (or cost optimal equivalent) through the direct retrofit of 36,500 local authority-owned homes by 2030. In a survey of local authority housing stock published by the National Oversight and Audit Commission it was reported that almost 40 per cent of the local authority-owned homes at the time had been built less than 20 years previously, a further 30 per cent were between 20 and 40 years old, 15 per cent were 40 to 60 years old, and 16 per cent were built more than 60 years ago. This age profile is likely to have implications for the energy efficiency of many of these homes (NOAC, 2017).

The Housing Commission¹⁵ has reiterated this commitment to the National Retrofit Plan target of retrofitting the equivalent of 500,000 homes to a B2 BER by 2030, 36,500 of which are expected to be local authority-owned homes (The Housing Commission, 2024). Reference is made to the National Retrofit Plan (Government of Ireland, 2022b) which is the overarching framework for retrofitting that aims to achieve the equivalent of 500,000 homes having a BER rating of B2 by 2030, as well as the installation of 400,000 heat pumps, see Box 3.2. However, it is the Housing Commission's view that this target will be extremely challenging to meet, especially in older parts of the private rented stock. In particular, they highlight the need for occupants to move out of their dwellings to facilitate deep retrofits in a situation where there is a limited supply of rental accommodation. This will be especially challenging for people in receipt of the Housing Assistance Payment. There is also the scenario where landlords may increase the rent after renovation, which will directly impact on whether existing tenants will be able to afford the increased rent (The Housing Commission, 2024).

The Housing Commission emphasised the need for an appropriately skilled workforce to undertake retrofitting, as well as making the case for district heating to provide zero-carbon heat to homes at a lower upfront cost to both developers and homeowners, with less competition between home building and home retrofit for the available labour and skills. District heating and heat pumps are important

¹⁵ The Housing Commission was established to examine issues such as tenure, standards, sustainability, and quality of life issues in the provision of housing, all of which have long term impacts on communities.

technologies to help Ireland meet its greenhouse gas emission reduction targets. The Commission also highlighted the importance of advisory supports involving registered professionals to assist with retrofitting. It placed an emphasis on the need to retrofit vacant and deteriorating dwellings in rural Ireland by prioritising and extending grants, and increasing housing supports to promote development and retrofitting on the islands and in the Gaeltacht regions.

Box 3.2: The National Retrofit Plan

The National Retrofit Plan, which is part of the Climate Action Plan, sets out how the Government plans to deliver on its retrofit targets of retrofitting the equivalent of 500,000 homes to a BER of B2/cost-optimal standard and installing 400,000 heat pumps in existing homes to replace older, less efficient heating systems by the end of 2030.

The National Retrofit Plan is built on four key pillars:

- Driving demand and activity by ensuring quality and value for money;
- Financing and funding to make home energy upgrades more affordable for households;
- Expanding the capacity of the supply chain and increasing the number of skilled workers; and
- Ensuring that the required structures and governance arrangements are in place.

The Government has approved a package of supports to make it easier and more affordable for homeowners to undertake energy upgrades for warmer, healthier and more comfortable homes, with lower energy bills. The key measures include:

- A National Home Energy Upgrade Scheme providing grant levels of up to 50 per cent of the cost of a typical deep retrofit to a B2 BER standard through a One Stop Shop Service. The One Stop Shops offer a start-to-finish project management service, including access to financing, for home energy upgrades;
- An increase in the number of free energy upgrades through the Better Energy Warmer Homes Scheme for those at risk of energy poverty;
- An enhanced grant rate, equivalent to 80 per cent of the typical cost for attic and cavity wall insulation to all households to reduce energy use in response to very high energy prices; and
- An investment of €8m to 2030 to scale up the supply chain and create jobs for skilled retrofit workers.

For further information see <https://www.gov.ie/en/publication/5052a-national-retrofit-plan/>.

In Northern Ireland a house condition survey is undertaken by the Northern Ireland Housing Executive about every five years and the information collected gives a picture of the condition and energy efficiency of housing in Northern Ireland. The addresses surveyed are chosen at random and can be drawn from any tenure, i.e. privately owned, privately rented, or socially rented through the Northern Ireland Housing Executive or a housing association. Particular areas examined include fuel poverty, energy consumption and heat loss. The Housing Commission propose that a similar house condition survey be carried out in Ireland every five years. The survey could be used to measure the extent of fuel poverty, as well as assist in the management of social housing, including as an indicator of the level of

need for renovation work, upgrading and energy retrofitting of social housing (The Housing Commission, 2024).

3.5 Role of Social Enterprise

A social enterprise is an enterprise whose objective is to achieve a social, societal or environmental impact, rather than maximising profit for its owners or stakeholders. It pursues its objectives by trading on an ongoing basis through the provision of goods and/or services, and by reinvesting surpluses into achieving social objectives. It is governed in a fully accountable and transparent manner and is independent of the public sector. If dissolved it should transfer its assets to another organisation with a similar mission (Government of Ireland, 2019: 9).

There is a potential role for social enterprises to support low-income and energy inefficient households and communities to transition to more energy efficient homes and help tackle energy poverty. One such example is EnergyCloud Ireland, see box 3.3. The EnergyCloud enterprise demonstrates the value of using what was considered waste energy to help address energy poverty, and has the potential to be delivered in other locations.

Box 3.3: EnergyCloud

EnergyCloud is a social enterprise that specifically helps to tackle energy poverty by using surplus renewable energy that would otherwise be wasted. EnergyCloud has partnered with Cluid Housing and delivers surplus renewable energy to heat residents' hot water tanks. Essentially, the scheme works by identifying when there is a high wind forecast where there is likely to be surplus wind produced. This surplus wind energy is directed to residents' homes overnight to heat their hot water tanks so that the residents wake up to have hot water, essentially provided for free. It is estimated that over the course of the year wind produces surplus energy 1 out of 3 nights.

EnergyCloud receives support for this initiative from EirGrid, ESB and partners such as Cluid Housing, Amazon Web Services (AWS), Bord Gais, Prepay Power, SSE Airtricity, Pinenergy, FuturEnergy, Amarengo and the Irish Solar Energy Association. This approach helps homes that are registered with EnergyCloud to save money on electricity, thus tackling energy poverty, while at the same time reducing their use of fossil fuels. Currently there are now approximately 75,000 homes registered with EnergyCloud containing over 180,000 tenants.

A pilot between PrePayPower, Tuath Housing Association and EnergyCloud has provided free renewable energy to 26 residents in Dublin by diverting surplus energy in powering heat pumps. PrePayPower is Ireland's largest Pay-As-You-Go electricity provider. The pilot began in May 2024 and since then has delivered over 600kWh of free electricity to Tuath Housing Association residents. The Commission for Regulation of Utilities (CRU) estimates that the average family home uses 4,200 kWh per year, so that the provision of 600kWh for free will help to reduce these residents' energy bills and alleviate energy poverty.

3.6 Summary

This chapter has provided a broader context for tackling energy poverty in Ireland, especially how low income households experiencing energy poverty can be supported in transitioning to a fossil-free future. With a reduction in the use of fossil fuels and increasing electrification a multifaceted approach will be required. Initiatives such as the ALIGN project will assist in proposing multidisciplinary solutions to address energy poverty.

Another challenge for energy poor households is energy price volatility, with high energy prices recently triggered by Russia's invasion of Ukraine. As well as short term measures to support households at risk of energy poverty there is a need to ensure better security of supply through greater production of renewable energy on the island of Ireland.

Housing policy contains a commitment to retrofit 500,000 homes by 2030 to a B2 BER standard through the direct retrofit of 36,000 local authority-owned homes by 2030. This is intended to increase energy efficiency, help alleviate fuel poverty, protect tenants' health, and improve comfort levels in rental homes.

There is potential for social enterprise to support energy poor households transition to meet zero-carbon commitments, building on the experience of initiatives such as EnergyCloud as well as learning from international examples. For example, there is the potential to share excess solar energy as the Octopus Energy Group are promoting in Britain (see Appendix 1).

Chapter 4 Policy Frameworks and Existing Schemes

4.1 Introduction

Having considered the definitions of energy poverty, its extent and nature in Ireland and Northern Ireland, and the wider context for addressing energy poverty this chapter outlines some of the main policy frameworks and schemes for addressing energy poverty in Ireland and Northern Ireland.

The chapter examines climate action and social inclusion commitments before going on to specifically look at energy poverty policy in Ireland. The chapter then presents information on the main income support and energy efficiency schemes to address energy poverty.

In a shared island context, it is informative to examine how energy poverty is being tackled in Northern Ireland, whether lessons can be shared, and whether there is scope for collaboration on some issues. This is particularly relevant in the context of the single electricity market and the transition to renewables across the island.

4.2 Climate Action Commitments

The Climate Action and Low Carbon Development Act (2021) sets a national climate objective:

The state shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy (Government of Ireland, 2021a).

Subsequently, the Government introduced five-year carbon budgets for the periods 2021-2025 and 2026-2030. The first period requires an annual reduction of 4.8 per cent of emissions and the second period an annual reduction of 8.3 per cent. The aim is to reduce greenhouse gas emissions by 51 per cent from 2018 levels and to support achievement of legislated EU targets as well as to reach the legislated national climate objective of climate neutrality by 2050.

The Climate Action Plan (CAP) sets out a roadmap with the targets and measures necessary to meet the legislated commitments. The first Climate Action Plan was published in 2019 and has been updated regularly since. CAP 2024, approved by the Government in May 2024, sets out to accelerate renewable energy generation.

In relation to energy poverty CAP 2024 references the Energy Poverty Action Plan (2022) with specific mention of the energy poverty research programme being undertaken by the ESRI, addressing energy poverty through retrofitting including reference to the Energy Efficiency Obligation Scheme (EEOS), as well as addressing energy poverty in a just transition. In addition, an energy poverty stakeholder forum has been set up that provides an opportunity for dialogue and collaboration on energy poverty.

4.3 Roadmap for Social Inclusion

The Roadmap for Social Inclusion 2020-2025 is the national strategy to substantially reduce poverty in Ireland. It commits to reduce the national consistent poverty rate to 2 per cent or less by 2025 (from a rate of 3.6 per cent in 2023) and to make Ireland one of the most socially inclusive states in the EU (Government of Ireland, 2020). Consistent poverty is defined as being below 60 per cent of median income and lacking two or more of 11 essential items because you cannot afford them. Two of the 11 essential items are related to energy poverty: having to go without heating at some stage in the last year; and unable to keep the home adequately warm. In 2023, 10.8 per cent of individuals had to go without heating at some stage in the last year and 7.2 per cent were unable to keep the home warm (CSO, 2024b).

While working towards achieving the consistent poverty target of 2 per cent will also reduce energy poverty additional efforts will be required the lower these levels of energy poverty, especially for some of the groups with higher levels of both consistent and energy poverty, i.e. lone parents, people with disabilities and/or ill health, older people especially those living alone, people in private rented accommodation, some people living in rural areas, and Travellers.

The Roadmap for Social Inclusion 2020-2025 contains 7 high level goals and 66 commitments. Goal 7 is to ensure that all people have access to services which includes the commitment to reduce fuel poverty. The specific commitment (60) is 'as part of the Climate Action Plan, review ways to improve how current energy poverty schemes target those most in need' (Government of Ireland, 2020: 71). This commitment was to be undertaken by the Department of Environment, Climate and Communications (DECC) and was delivered in 2022 with changes introduced to the Warmer Homes Scheme to ensure greater priority to those most in need.

Under the heading 'supports to manage energy costs' reference is made to the various schemes and subsidies which exist to support people in energy poverty. These include income supports such as the Fuel Allowance and the Household Benefit Package as well as schemes to improve energy efficiency such as Better Energy Warmer Homes Scheme and the pilot Warmth and Wellbeing Scheme that provides deep interventions for people in energy poverty suffering from acute health conditions, see Box 4.1. The rationale for this approach is stated as:

The efficient use of energy can permanently reduce deprivation in a manner that cannot be achieved by income supports. For example, improving a building energy rating of a home from E1 to B2 can generate annual savings to the household of €2,524 per year (Government of Ireland, 2020: 69).

Reference is also made to the Climate Action Plan and its commitment to review ways to improve how energy poverty schemes target those most in need.

At the most recent Social Inclusion Forum (30th May 2024) energy poverty was raised as an issue to: develop a more targeted approach to address energy poverty, including retrofitting, by focusing on those most at risk of choosing between 'heating or eating'; and adapt all schemes to retrofit and/or improve the energy rating to include Traveller accommodation, and the accommodation of others such as those in direct provision (EAPN Ireland & Community Work Network, 2024).

Box 4.1: Warmth and Wellbeing Scheme

The Warmth and Wellbeing Pilot Scheme was established in 2016 as a joint energy, social and health policy initiative led by the Department of the Environment, Climate and Communications with the Department of Health, the Sustainable Energy Authority of Ireland (SEAI) and the Health Service Executive (HSE). The aim of the scheme was to improve the living conditions of vulnerable people at risk of energy poverty and living with chronic respiratory conditions. The scheme provided free, extensive energy upgrades to eligible homes making the homes warmer and healthier to live in.

The health and wellbeing benefits of energy efficiency are internationally recognised, and this pilot aimed to validate those benefits in an Irish context. For example, the Warm Up New Zealand Scheme (see Appendix 1) showed that the benefits outweighed the costs, and the programme reduced mortality especially for people over 65 years old with a pre-existing health condition by providing warmer, drier, and more comfortable homes. This was particularly the case for lower income households.

The Irish Warmth and Wellbeing pilot targeted three specific vulnerable groups: those with chronic respiratory conditions; those receiving the Fuel Allowance; and households that were owner occupied or rented from local authorities. The initiative took place in a number of disadvantaged areas in Dublin. The scheme opened to applicants in 2016 and closed in February 2022.

The HSE's public health teams identified people in the pilot area who were living with respiratory conditions and who were at risk of energy poverty. These households were provided with free energy upgrades to their homes using SEAI delivery teams. The last of the homes in the pilot were completed in February 2024. Over the course of the pilot, 1,672 homes were upgraded in total.

An independent evaluation of the pilot was undertaken by the London School of Hygiene and Tropical Medicine (LSHTM), in collaboration with University College London (UCL) and the HSE.

4.4 Energy Poverty Action Plan

Ireland's first strategy to address energy poverty was in 2011, followed in 2016 by a *Strategy to Combat Energy Poverty 2016-2019*. The two premises for this strategy was that the state has a duty of care to vulnerable citizens and that reducing energy poverty reduces costs to the state, particularly in health care. Less attention was given to climate change and a just transition though the benefits of energy efficiency were recognised (FoE, 2023).

The Government published its current *Energy Poverty Action Plan* (EPAP) in December 2022. The EPAP was developed on a cross-departmental, cross-agency basis, in response to energy price inflation. The core principles from the earlier strategy still stand, namely:

- Adequate supplies of light, heat and power are fundamental to being able to participate in society and are essential for social inclusion.
- Energy poverty is a function of 3 elements: a household's income, the cost of energy and the level of energy efficiency in the home.
- Energy poverty is strongly correlated with basic deprivation, i.e. that it is a symptom of inadequate resources to cover living costs rather than an energy only problem.

- Energy poverty has long term debilitating effects for individuals and society with growing evidence that it contributes to higher levels of respiratory and cardiovascular disease, excess winter mortality and overall states of mental health and wellbeing (Government of Ireland, 2022a: 5).

There is a focus on short-term actions (to cover the winter of 2022-2023) and medium term actions to improve energy efficiency and support a just transition to a carbon neutral society. The short term actions refer to the additional €600 electricity credit for households and social welfare lump sum payments announced in Budget 2023, reduced VAT on energy bills, plus stronger consumer protection measures under the Commission for Regulation of Utilities (CRU), which includes an extended moratorium on disconnections (FoE, 2023).

Additional measures are also signalled including the establishment of a €10m fund by the Department of Environment, Climate and Communications (DECC) to provide an extra support for people struggling to pay their energy bills. There is an intention to extend the definition of 'vulnerable' customer to include those who are financially vulnerable, such as people in receipt of Fuel Allowance, Working Family Payment, One Parent Family Payment, Domiciliary Care Allowance, Carers Allowance or in receipt of Job Seekers Allowance for more than six months.

The plan sets out actions in four broad areas:

- meeting the cost of energy;
- energy efficiency;
- research; and
- governance and communications (Government of Ireland, 2022a: 5).

On meeting the cost of energy the focus was on helping people with their energy costs in the 2022/3 winter, as outlined above.

A range of energy efficiency measures, funded by Government and delivered by the Sustainable Energy Authority of Ireland (SEAI) and the local authorities are proposed, as stated in the *National Retrofit Plan* (Government of Ireland, 2022b). These commitments relate to retrofitting the equivalent of 500,000 homes to BER B2 and to install 400,000 heat pumps in existing homes by 2030. An additional €208m was invested in the Warmer Homes Scheme to retrofit low-income homes in 2024, with €280m committed for 2025. The Warmer Homes Scheme is partly financed by the European Regional Development Fund (ERDF), with €264m provided for the period 2022-2027. Some €90m has been committed for the local authority retrofit programme in 2025 (Department of the Environment, Climate and Communications, personal correspondence, 2025).

In relation to research there is a commitment to develop a better measure of energy poverty. This work is being led by the ESRI and involves the DECC, the Department of Social Protection, SEAI and the Central Statistics Office.

The fourth area of action on governance and communications focuses on an information and communications campaign in partnership with the Money Advice and Budgeting Service (MABS) and ALONE, a national charity for older people. The *Reduce Your Use* campaign is a general purpose call for energy efficiency to save money, while the *Stay Warm and Well* campaign is targeted at people struggling to pay their energy bills and directing them to sources of support.

The Energy Poverty Action Plan was broadly welcomed, in particular the intention to extend the definition of the vulnerable customer to include those who are financially vulnerable, though this was proposed as a temporary measure. Vulnerable customers are those who are medically vulnerable and they are placed on the Vulnerable Customer Register through a self-declaration process. People may be reluctant to place themselves on the register as they may not see themselves as vulnerable or they may

not be aware of the register. The CRU has been encouraging suppliers to make their customers more aware of the Vulnerable Customer Register. While vulnerable customers do still have to pay for their energy they will never be disconnected if they are dependent on life saving devices or are unlikely to be disconnected if they are otherwise vulnerable. There is a commitment to include people who are financially vulnerable on the register and the government has commissioned research to examine if and how this might work.

There has also been a welcome for the €10m hardship fund especially as it is targeted at pay-as-you-go (PAYG) customers who are outside the moratorium on disconnections because of the nature of paying by meter top-ups. The tightening of regulation is also seen as positive requiring suppliers to put customers in financial hardship on the most economical tariff, extending payment plans to at least 24 months, and reducing the amount of debt allowed to be deducted from PAYG top-ups. Customers engaging with their suppliers are not meant to be disconnected under the Energy Engage Code.¹⁶

However, some shortcomings in the EPAP have also been raised. There is a criticism that it restates existing commitments rather than progressing some of these, and that there is an over-focus on recent energy price increases rather than placing more emphasis on longer term issues associated with energy poverty such as underlying income inadequacy and energy inefficiencies. There is some criticism of the electricity credit being universal rather than targeted at those who needed them most. It is contended that there is a need for a greater focus on tenants in the private rented sector as this is a group with a high risk of energy poverty. There is a view that there should be greater involvement of community and voluntary organisations working with people experiencing energy poverty in the research programme and the Energy Poverty Steering Group (FoE, 2023).

Some of these issues can be considered in the Revised Energy Poverty Action Plan 2025. The Revised Energy Poverty Action Plan will also take into account the EU Recommendation on Energy Poverty which was published in October 2023. The EU Recommendation puts forward 25 recommendations focusing on areas such as the implementation of a legal framework, affordability and access to energy, governance, communications, energy efficiencies, access to renewables, skills and financing to tackle energy poverty (European Commission, 2023).

Implementation of the Energy Poverty Action Plan led by the Department of Environment, Climate and Communications requires inter-departmental collaboration. This is particularly the case in relation to energy efficiency measures which require interaction with the Department of Housing, Local Government and Heritage. One of the main commitments here is to retrofit 36,500 social houses to a B2 BER by 2030. Under the Energy Performance of Buildings Directive (EPBD), which is the EU's main legislative instrument to promote the improvement of the energy performance of buildings within the EU, Article 9(2) requires the establishment of a national trajectory for progressive renovation of residential building stock ensuring that the average primary energy use of the entire residential building stock decreases by 16 per cent compared to 2020 by 2030, and by 20 to 22 per cent by 2035. At least 55 per cent of the decrease will need to be achieved through the renovation of the 43 per cent worst performing residential buildings.

While much progress has been made to meet this target there are ongoing challenges. This commitment mainly requires action by the local authorities and performance is variable across local authorities depending on the financial and workforce resources available and the level of tenant engagement. An associated challenge is the requirement to tackle the worst properties first – which will help to lower the highest risks of energy poverty but cost more per dwelling upgraded. Often a 'blended approach' is taken, improving some of the worst properties but also some of those requiring fewer retrofitting improvements to raise more properties overall to the required standard.

¹⁶ The Energy Engage Code is a voluntary code where all Irish energy suppliers have pledged to ensure that they will take a number of actions to ensure that customers in arrears and/or at risk of disconnection remain connected to their energy supply.

To ensure an adequate standard of accommodation and prevent energy poverty it may be worth considering legislation like the UK's Awaab's Law. This law was enacted following the death of 2 year old Awaab Ishak in December 2020 as a direct result of exposure to mould in the social home his family rented from Rochdale Boroughwide Housing. Awaab's Law was introduced in the Social Housing Regulation Act 2023 and requires social housing landlords to investigate and fix reported health hazards within specific time frames. The new rules form part of a tenancy agreement so that tenants can hold landlords to account by law if they fail to provide a decent home.

4.5 Income Supports

The main income supports for addressing energy poverty in Ireland are the Fuel Allowance and the Household Benefits package.

The Fuel Allowance scheme was introduced in 1988 'to assist qualified households in receipt of certain social welfare benefits with their heating costs. The allowance represents a contribution towards a person's normal heating expenses. It is not expected to meet those costs in full' (cited in FoE, 2023: 8). Currently, the payment is made at the weekly rate of €33 or, if preferred, in two lump sums of €462 each (one paid in September and one paid in January). The winter season extends for 28 weeks from late September to early April. People can qualify for the Fuel Allowance if they are aged 70 or over,¹⁷ or are in receipt of certain long-term social welfare payments. Only one Fuel Allowance is payable per household. In Budget 2023 a more generous means test was introduced for people aged 70 and over, which has been broadly welcomed. Currently, about 400,000 households are in receipt of the Fuel Allowance. To address the recent high cost of energy one-off lump sums have also been paid.

The Department of Social Protection pay an electricity or gas allowance under the Household Benefits package, which is separate from the Fuel Allowance. The Household Benefits package is paid to people aged 70 and over and is not means-tested.¹⁸ The gas and electricity element is paid at a rate of €35 per month, 12 months of the year. Additional Needs payments may also be made to help meet an essential expense that a person cannot pay from their weekly income.

Some households in energy poverty may not qualify for the Fuel Allowance or the Household Benefits package, e.g. some jobseekers and low income workers. As noted by the Vincentian Minimum Essential Standard of Living Research Centre (O'Carroll, 2023) earlier, some of these households showed prevalent and severe energy poverty.

In transitioning to a carbon neutral society consideration needs to be given as to how these energy income supports can best support the transition from fossil fuels to renewable energies. One possibility is including BER information in the criteria for receipt of a carefully calibrated Fuel Allowance, when this information becomes more widely known. However, it could be addressed as part of a transition to an energy guarantee scheme, detailed below.

One way of funding some of these measures is through carbon tax. Carbon taxes are a way of pricing out fossil fuels and making renewable alternatives more attractive. Age Action have called for an such a scheme – an energy guarantee for older people. Under such a scheme all older persons would receive a minimum of energy, paid for by carbon tax revenue. They argue that an energy guarantee for older people would be a sustainable solution to energy price inflation for those households unable to transition away from reliance on fossil fuels for their home heating, and who may not be able to retrofit their homes, and who are therefore unable to avoid a high level of carbon taxes and high prices for

¹⁷ It was announced in Budget 2025 that the Fuel Allowance means test disregard for people aged 66 and over will be €524 for a single person and €1,048 for a couple. Carers Allowance will also become a qualifying payment for the Fuel Allowance.

¹⁸ Certain people under 70 can also get a Household Benefits package if they meet certain qualifying conditions.

home heating. Their proposed energy guarantee would be a transformed version of the Fuel Allowance with three characteristics:

- A cash payment benchmarked and indexed against the price of energy.
- Eligibility would be determined on a home's insulation level as well as its income.
- It would be a banded payment, with persons on lower incomes and/or in more poorly insulated homes receiving a larger income supplement (Age Action Age Equality, 2022).

A key element of this proposal is the need to determine a home's insulation level and this information (BER rating) is not always available. It is envisaged that this information could be collected by way of a short questionnaire which would ask questions about insulation levels, etc., but this would be less satisfactory than having an available BER rating.

While this proposal is promoted by Age Action for older people it could be considered for others living in energy poverty in poorly insulated homes, particularly those who may not be in receipt of a social welfare payment, such as low paid workers. However, low paid workers can potentially increase their income, whereas this is less likely for older people dependent on a fixed income.

Others have argued that an energy credit system might be better where a certain amount of a person's electricity use is paid for. Energy credits were paid to all households during the recent substantive increases in the price of energy, but a more targeted measure could be introduced. This would be paid by electricity providers into a person's account. Drawbacks identified with this proposal include difficulties when changing suppliers and that it would be of limited benefit to those still dependent on oil, coal and turf to heat their homes, particularly in rural areas. While the direction of travel is to reduce dependence on these fossil fuels, such measures as a proposed energy credit would need to be introduced in such a way that those at risk of energy poverty are not 'left behind'.

4.6 Energy Efficiency Measures

Energy efficiency measures are very much in line with climate change policies through reducing energy consumption. Budget 2025 has allocated almost €650m to SEAI and local authority retrofit schemes, with 57 per cent of this funding ring fenced for fully-funded upgrades under the Warmer Homes and local authority retrofit schemes. From the remaining funding lower-income households, such as Approved Housing Body tenants are supported under the National Home Energy Upgrade (One Stop Shop) scheme and the Community Energy Grants scheme (Department of the Environment, Climate and Communications, personal correspondence, 2025). Where additional funding has to be provided by the household many households in energy poverty may find it difficult to avail of some of these SEAI schemes (Dingley, 2023).

The main energy efficiency schemes available in Ireland are summarised in Table 4.1.

The main scheme to improve energy efficiency for low income and vulnerable households is the Better Energy Warmer Homes Scheme. SEAI operates the scheme on behalf of the Department of the Environment, Climate and Communications. The eligibility criteria for the scheme are linked to certain Department of Social Protection payments with those in the least efficient homes prioritised. There are a number of home energy improvements offered as part of the scheme, including attic and wall insulation, plus secondary measures such as draughtproofing. In some cases heating systems and windows can be replaced.

Table 4.1: The Main Energy Efficiency Schemes in Ireland

Scheme	Brief Description
Warmer Homes Scheme (Better Energy Warmer Homes Scheme) (Grant)	Fully funded/free home energy upgrades Targeted at homeowners who receive certain social welfare payments Prioritises the oldest and least energy efficient homes
Better Energy Homes and Solar PV Scheme (Individual Energy Upgrades) (Grant)	For homeowners and landlords who want to do certain energy upgrades on a 'step by step' basis Manage the process themselves
National Home Energy Upgrade Scheme (One Stop Shop Service) (Grant)	For homeowners, landlords and approved housing bodies who want to bring their homes to B2 or higher BER rating Managed by the SEAI One Stop Shop Service
Home Energy Upgrade Loan Scheme (Loan)	Supports households' investment in energy efficiency measures Can borrow between €5,000 and €75,000 at low interest rates
Warmth and Wellbeing Pilot Scheme (Pilot)	Pilot scheme targeted at low income people with chronic respiratory illness Eligible if on Fuel Allowance and living in owner occupied home or social housing For residents in some disadvantaged areas of Dublin Ran from 2016 to 2022
Energy Efficiency Obligation Scheme (Suppliers obligation)	Large energy companies are legally required to achieve a certain amount of energy savings among lower income households at risk of energy poverty Can operate in combination with other SEAI grants
Social Housing Retrofit Programme	36,500 local authority homes to be retrofitted by 2031 To be brought to B2 standard 2,252 local authority homes retrofitted in 2022

Source: Compiled by the author from the SEAI and various Government websites

In 2024, the Warmer Homes Scheme provided 7,743 upgrades for homeowners at risk of becoming fuel poor, with 70 per cent of these receiving deeper renovations. An expansion of the Fuel Allowance eligibility criteria has led to an increase in applications since 2022. The average cost of works for homes upgraded in 2024 was €27,411¹⁹ (Department of the Environment, Climate and Communications, personal correspondence, 2025). Even so, there is a need to ensure that lower income households do not become locked into fossil fuel heating in the longer term.

To improve the uptake of energy efficiency schemes among lower income households the evidence suggests that household level face-to-face advice and support on improving energy efficiencies for low income households is beneficial. The Money Advice and Budgeting Service (MABS) is working with researchers at UCC to provide a set of practical guidelines and case studies to promote greater efficiency through the ENERGISE project, see Box 4.2. Once available, these guides should be rolled out across MABS services, one stop shops, and to other organisations working in the area of energy efficiency measures.

¹⁹ This compares to an average cost of works of €59,734 to private homes under the National Home Energy Upgrade Scheme, with an average cost to the homeowner of €37,489 and average grant of €22,150. Under the same scheme the average cost of works to homes belonging to approved housing bodies was €30,046, with a €14,699 cost to the approved housing body and €15,900 average grant. The average cost of upgrade works under the Better Energy Homes Scheme was €7,300, with an average grant of €3,100 paid.

Box 4.2: ENERGISE Project

This project sets out to:

- Critically review national policy on energy efficiency in the home;
- Explore MABS' service users' attitudes and practices in relation to household energy efficiency, and identify the barriers to increasing household energy efficiencies;
- Identify the measures and supports needed to overcome these barriers;
- Develop guides, infographics and good practice peer group case studies that will enable MABS to support their service users in improving household energy efficiency; and
- Provide policy insights to support MABS in making submissions to government on improving the accessibility of energy efficiency measures to low income households.

The intention is to help reduce energy expenditure and provide financial savings to low income households (UCC, 2024)..

Key policy documents are committed to the installation of 400,000 heat pumps by 2030. The installation of heat pumps is undoubtedly a key element in helping to meet greenhouse gas emission targets. Experience to date indicates that while there are some successes in the installation and operation of heat pumps not everyone is ready for them yet, especially from an energy poverty perspective. New builds can install and operate heat pumps from the outset, but older dwellings with lower BER ratings may not always be suited to their installation. Well insulated and ventilated buildings are required to ensure they work efficiently. One of the main issues is the cost of electricity to run heat pumps vis-à-vis the alternatives, such as gas or oil boilers or coal/turf/wood fires and stoves.²⁰ For example, when you buy a bag of coal/turf/wood to heat your dwelling you know exactly how much you are spending. With an oil heating system you require a lump sum to fill the tank but you still know the cost. With a gas heating system you have some control by reading the meter, but this is less the case with an electric heat pump. People may be reluctant to leave the heat pump running 24/7 in case it is using too much electricity so switch it off, and then it uses more electricity to get it restarted. This is especially the case for people using pre-pay meters. There is also a cultural issue where people may be used to sitting in front of a fire or heating one room and so it takes a behavioural change to make the transition to using a heat pump.

One of the issues raised in relation to the installation and operation of heat pumps, as well as retrofitting to improve energy efficiency more generally, is the need for engagement, information and advice. There are a range of views on how this should be provided, but one successful example is Southend in Wexford, see Box 4.3.

The issue of energy efficiency retrofit measures for private sector renters is often raised. As outlined earlier, people in private rented accommodation have a high risk of energy poverty. They are subject to what is termed a 'split-incentive' situation, also known as the 'landlord-tenant dilemma'. This is where tenants have little control, if any, over the heating systems in their house or apartment. These are decisions made by the owners, i.e. landlords, but the landlords do not necessarily reap the benefits of more energy efficient systems. This is an issue which needs to be addressed from both an energy

²⁰ There are alternative decarbonisation approaches, such as biomethane, hydrogen, and hydrotreated vegetable oil (HVO) but these are currently more expensive than fossil fuels and are thus not considered in detail here. They may become a more viable option for energy poor households in future.

poverty and environmental point of view (CAN Europe, 2024). Research on the 'split-incentive' would be useful, especially from a landlord perspective.

Currently, a package of measures is in place for small scale private landlords. Landlords can avail of grants through the National Home Energy Upgrade Scheme and the Better Energy Homes and Solar PV scheme. They may also be able to avail of the home energy upgrade loan scheme which provides low-cost loans for homeowners whose energy efficiency and renewable energy upgrades are being grant aided by SEAI. Furthermore, a tax relief is available for landlords of rented residential properties. The relief allows landlords to deduct certain expenses incurred on retrofitting such premises in calculating their rental profits. The deduction is only available if the landlord received an approved retrofitting grant from the SEAI, plus the retrofitting works have to be undertaken between 1st January 2023 and 31st December and the relief is only available for a maximum of two premises.

Ireland's *Housing for All* policy contains a commitment to develop a roadmap to implement BER standards for the private rental sector to increase energy efficiency, help alleviate fuel poverty, protect tenants' health, and improve comfort levels in rental homes. This commitment has not yet been implemented mainly because of a shortage of accommodation to rent and the potential to restrict supply through placing specific requirements on landlords, sometimes referred to as 'cold home versus no home'. There are currently 103,000 landlords holding 230,000 tenancies, 52 per cent of which are in houses and 48 per cent in apartments. About 20 per cent of these are large institutional landlords, a growing sector, with mainly newer buildings and relatively good BERs. About 80 per cent are smaller landlords with more variable properties (RTB, 2024).

The current framework of measures to encourage landlords to upgrade their properties, including financial incentives, should be informed by consultation with landlords (SVP & Threshold, 2021). There are proposals that the Warmer Homes Scheme should be expanded to include properties in the private rented sector if the tenant is receiving the Housing Assistance Payment, with eligibility being contingent on the landlord providing a long-term lease (5+ years) to the tenant (FoE, 2024). There are many children in the private rented sector, so that there is an impetus to have minimum energy standards in the private rented sector to prevent children growing up cold (SVP, 2019).

A potential solution to making some energy poor households more energy efficient is district heating. District heating is a network of insulated pipes that carry heat in the form of steam or hot liquid to buildings and carry back the returned cooler liquid. It is an alternative to gas for the heating of space and water in homes. The source of heat for a district heating system can include geothermal, heat pumps and waste heat, e.g. the Dublin Waste to Energy facility at Poolbeg, Dublin has the potential to develop district heating for 50,000 homes. Using efficient thermal storage, district heating can reduce peak demand by availing of cheap nighttime electricity to generate heat, then store it and deliver it to homes when it is needed. District heating has great potential to address energy poverty in the transition to a carbon neutral future, particularly in urban areas, but progress to date has been slow. The potential of district heating is considered in more depth in the forthcoming NESC report on 'The changing relationship between households, energy communities and the energy system'.

Box 4.3: Retrofitting homes in Southend, Wexford

The Wexford Homes project is based in Southend, Wexford and examines the impacts of retrofitting on health and wellbeing. Wexford Town Sustainable Energy Community (SEC) was formed in December 2021, and at that time completed a Southend Home Energy Survey. A key finding was the reliance on back boilers and no central heating in many of the houses, leading to fuel poverty. The SEC was passionate about promoting climate change through a 'just transition' and provided ongoing support to the Wexford Retrofit Homes project.

An Energy Steering Group was subsequently formed in September 2022 comprising the Sustainable Energy Community, Wexford County Council, the Sustainable Energy Authority of Ireland (SEAI), the South East Technological University (SETU), the Department of Health, and the High Performance Building Alliance. In November 2022 a local energy event was held to promote the Warmer Homes Scheme, and a proposed survey by SETU in collaboration with the Southend Family Resource Centre (SFRC).

In February 2023 an energy champion was appointed under the Sláintecare Healthy Community Programme for 2 hours per week to promote energy improvements in the local community. The energy champion is a staff member of the SFRC who lives in the local community and is known and trusted by the families living there. One of their roles is to assist people in completing Warmer Homes Grant applications. SEAI grants for homeowners were promoted at a local energy event in May 2024. Co-designed research led by SETU is an important part of the initiative, to provide an objective evaluation of the project. SETU uses mixed methods to capture the views of key stakeholders, including that of the energy champion in relation to opinions on housing, retrofitting, health and wellbeing. This includes a survey, in-depth individual interviews and a focus group. Also, sensors were put into a small number of households in the Southend area to collect data on temperature in the homes.

To date, more than 25 houses have received retrofit upgrades and feedback has been very positive, including the use of heat pumps. Much of the positive experience is attributed to the role of the energy champion who explained the retrofit process and the behavioural changes that would be required. While the project was undertaken as a pilot, it is now intended to replicate the model in other areas.

Some of the key elements of the model which were seen to make it successful included:

- Collaboration and partnership between all the key stakeholders from the outset. This included the Council, the SEAI, the Department of Health and the local community;
- The availability of funding, albeit from a range of sources – for the retrofits, to engage a local energy champion, to undertake research, and to hold events;
- The employment of a local energy champion who was trusted by the local community, to explain the retrofit process and to assist with applications and subsequent operation of the new systems;
- Hosting local events to inform people about what is happening and answer questions; and
- Undertaking research, co-designed with the local community, to provide an objective evaluation of the project.

Source: Personal communication with project implementers.

4.7 Tackling Energy Poverty in Northern Ireland

The current strategy aimed at eradicating fuel poverty in Northern Ireland, 'Warmer and Healthier Homes', was launched in 2011. It affirms that fuel poverty is a subset of poverty. The strategy focuses on three key factors impacting fuel poverty: income, fuel price and energy efficiency (UK Government, 2011), similar to Ireland's approach. It recognises that energy inefficiency is a key contributor to fuel poverty and identifies its improvement as a key target within the strategy. However, the strategy contains few definitive goals which has inhibited its implementation and monitoring. There is little reference to climate change, decarbonisation and a 'Just Transition'.

The 'Affordable Warmth Scheme', launched in 2014, is Northern Ireland's programme for improving energy inefficiency and thus addressing energy poverty in the private sector. The programme is targeted towards low-income households, providing grants for the improvement of energy efficiency within their homes. In 2021, eligibility criteria within this scheme were expanded through the exclusion of benefits from income calculations and by increasing the income threshold. The Scheme offer grants of up to £7,500 (£10,000 for solid wall measures) (UK Government, 2023).

The Northern Ireland Sustainable Energy Programme is a fund collected from electricity customers through a public service obligation (PSO). The programme helps homes and businesses in Northern Ireland become more energy efficient and reduce carbon emissions. The fund provides grants to low income households and businesses, and there are income thresholds for all schemes. It provides a range of fully funded and part funded schemes that cover the installation of new efficient and less carbon intensive central heating systems along with a package of energy efficiency measures.

In 2023/2024, to address the cost of living crisis the Winter Fuel Payment lump sum was increased temporarily for the winter period by £300 (UK Government, 2023). However, in its August Budget the new UK Labour government said the Winter Fuel Payment would now be means tested and only go to pensioners in receipt of Pension Credit or certain other benefits. To mitigate the impact of this decision for pensioners no longer eligible for the Winter Fuel Payment the Northern Ireland Communities Minister secured funding for a one-off fuel support payment of £100 for pensioners no longer eligible for the Winter Fuel Payment. While some have argued that £100 will not be enough to see pensioners through the winter months, others have welcomed the £100 mitigation measure. In the longer term it will be a more targeted measure, but it may not reach all pensioners at risk of fuel poverty. Over time, it may be possible to raise the threshold for entitlement to Pension Credit to enable more pensioners to receive the Winter Fuel Payment.

Despite these initiatives, Northern Ireland remains the only region within the UK without a statutory fuel poverty target (Fuel Poverty Coalition NI, 2023). At times, energy policy has been a controversial issue in Northern Ireland with the Northern Ireland Executive (NIE) falling in early 2017, with issues relating to the Renewable Heat Incentive green energy initiative a contributory factor.²¹ The collapse of the NIE inhibited the development of policy generally in Northern Ireland, including policies to tackle energy poverty. The Northern Ireland Executive was reinstated in February 2024.

²¹ The Renewable Heat Incentive scheme was launched in 2012 to encourage the use of green energy such as wood chip pellets and boilers. However, unlike in the UK there was no cap on usage and an over-generous subsidy in Northern Ireland led to abuse of the scheme, referred to as 'Cash for Ash'.

The Fuel Poverty Coalition called for a new fuel poverty strategy in 2023, arguing for a cross-departmental approach. This initiative is now being progressed, with the Department for Communities in Northern Ireland gathering evidence and designing a strategy in 2023, and carrying out a series of public consultations, both online and in-person, regarding their approach to a new 'Just Transition' strategy towards decarbonisation and the eradication of fuel poverty in 2024. Three main themes have emerged:

- to make homes more efficient;
- collaboration and capacity building; and
- protecting consumers in relation to decarbonisation.

In December 2024, the Department for Communities launched a 12-week public consultation on a new Fuel Poverty Strategy for Northern Ireland, having a vision of 'a warm healthy home for everyone'.²² The draft Fuel Poverty Strategy builds on information gathered through the stakeholder engagement process and sets out key priorities and actions for government. It is notable that the draft strategy proposes to explore bill support for those groups for whom energy efficiency measures may not be a viable option, and ensuring energy efficiency and low-carbon heating measures should reach a common standard of installation and protection. The draft strategy also proposes a new approach to measuring and reporting on energy poverty, by introducing a basket of indicators to improve the understanding of fuel poverty and help to measure progress towards outcomes. It is planned to finalise the Fuel Poverty Strategy in mid to late 2025.

The focus of a 'Just Transition' remains central throughout this work which places people at the centre of both energy and residential decarbonisation (Department for Communities (NI), 2024). The development of this fuel poverty strategy takes place against the backdrop of the Climate Change Act which was recently legislated (UK Government, 2022). The aim of this new fuel poverty strategy is to implement long-term solutions, working with community and voluntary organisations in a collaborative way to extend their reach to as many eligible participants as possible (Department for Communities (NI), 2024). The Department for Communities also recognises the need to educate society on what a 'Just Transition' will entail for the energy sector and how this can be implemented to progress both energy efficiency and the eradication of energy poverty.

The Department for the Economy in Northern Ireland has been running consultations on support for low carbon heating in residential buildings with a focus on heat pumps, and a consultation on the design plan for the roll-out of smart electricity meters in Northern Ireland. The outcomes of these consultations have relevance for tackling energy poverty in Northern Ireland.

A key issue for addressing energy poverty in Northern Ireland is the huge reliance on oil, with 68 per cent of households relying on home heating oil. Oil is not overseen by the Utilities Regulator and thus the installation and use of oil heaters is not monitored. Oil heating is widely used in rural areas. Thus, in relation to energy poverty there are issues about the ability to pay for refills of oil which can be costly, with the possibility that people dependent on oil heating may be 'left behind' in the transition to a carbon neutral future.

To facilitate the transition to a carbon neutral future people are being encouraged to install heat pumps. However, as in Ireland, many people are not familiar with their use leading to heating inefficiencies.²³ With the high price of electricity in Northern Ireland people are seeing their heating bills rise, with some people switching their heat pumps off or taking them out. It is argued that currently heat pumps are not yet financially viable for many people in Northern Ireland. Heat pumps can be expensive to install with

²² See <https://www.communities-ni.gov.uk/consultations/consultation-new-fuel-poverty-strategy-northern-ireland> [accessed 25/03/25].

²³ An interesting development in the United Kingdom of Great Britain and Northern Ireland is establishment of the <https://www.visitahheatpump.com/> website. This website connects people interested in a heat pump with those who already have one, and has helped people to understand how they work and the potential benefits [accessed 25/03/25].

limited grants available in Northern Ireland and a limited skilled workforce pool available to undertake the work. The main drivers of solutions to tackle energy poverty in Northern Ireland are initiatives to address the price of fuel and low income, as distinct from a focus on energy efficiency which has less prominence.

As in Ireland, energy poverty in the private rented sector is an issue in Northern Ireland. There are limited incentives for landlords to upgrade their properties and often tenants live in poor quality accommodation as there are few alternatives that they can afford.

Given that both Northern Ireland and Ireland are committed to meeting climate targets on decarbonisation, are developing policies on energy poverty, have schemes in place to address energy poverty, and operate a single electricity market (SEM) there is potential for cooperation to address energy poverty on a shared island basis. For example, both jurisdictions place an emphasis on the three specific elements of energy poverty: household income; cost of energy; and energy efficiency. Similar groups experience energy poverty in both Ireland and Northern Ireland, and across the Irish provinces the highest rates of energy poverty are in Ulster (Government of Ireland, 2015).

The ‘Warmer Homes Scheme’ is Ireland’s equivalent to Northern Ireland’s ‘Affordable Warmth Scheme’ which are both energy retrofitting schemes. Both schemes offer assistance to low-income households within the private housing sector. The Irish ‘Warmer Homes Scheme’ is a beneficiary of European Union funding, unlike Northern Ireland’s ‘Affordable Warmth Scheme’. Table 4.2 compares the key eligibility criteria for the two schemes.

Table 4.2: Key Criteria for Eligibility of Energy Efficient Retrofitting Schemes

Ireland’s ‘Warmer Homes’ Scheme	NI’s ‘Affordable Warmth’ Scheme
Must own and live in your own home	Own and occupy your property as your main home or rent from a private landlord
Home was built and occupied before 2006	Have your day/life interest in the house
Beneficiary to least one of a certain list of welfare payments eg: fuel allowance, jobseeker’s benefit, disability allowance, etc	Have a total annual gross income of less than £23,000
Fully funded, with the average cost in 2024 of over €27,000 per home	Grants of up to £7,500 (£10,000 for solid wall measures), though recipients should not have to contribute to the work agreed through the Scheme

Source: (NI Housing Executive, 2024a; SEAI, 2024).

Both jurisdictions are also concerned about the current definitions of energy poverty and its measurement. In relation to the definition, Northern Ireland tends to use the term 'fuel poverty' while both 'fuel poverty' and 'energy poverty' are used in Ireland with an inclination towards the latter. This definitional issue was discussed in Chapter 2.

With regard to measurement, suggestions for extending the expenditure-based metric of 10 per cent of income include: extending the 10 per cent of income to also measuring severe and extreme fuel poverty at 20 and 30 per cent of income respectively; self-reporting energy deprivation; and taking the energy efficiency of the accommodation into account. A case has also been made to consider a basket of energy poverty indicators. These issues could be considered on a shared island basis.

Thus, there are a range of issues from definition and measurement to policy development and implementation to support schemes, benefits and grants to just transition to optimising benefits from the single electricity market which could be explored on a shared island basis.

Community Climate Action programme funding is provided by the Irish Government's Shared Island Fund to support cross-border and all-island projects that contribute to climate and energy targets on the island of Ireland. Funding is provided via local authorities to support partnerships by community groups, with at least one partner in Northern Ireland and at least 40 per cent of the funding allocated for project delivery in Northern Ireland (DECC, 2024). This funding can contribute to the alleviation of energy poverty across the island. There is also the potential for EU funding for border area programmes to support a Just Transition. Cross jurisdictional energy strategies have already been developed, e.g. the North West Regional Energy Strategy between Derry and Donegal. This initiative could be built upon in other areas.

4.8 Summary

This chapter describes the main policy frameworks and schemes relevant to tackling energy poverty in Ireland and Northern Ireland. These relate to the transition to a carbon neutral society, social inclusion and Energy Poverty Action Plans/Strategies which are currently being revised. The Irish Energy Poverty Action Plan (EPAP) focuses on meeting the cost of energy, energy efficiency measures, research on appropriate measures of energy poverty, and the importance of communication in relation to the supports available.

The main income supports in Ireland for those at risk of energy poverty are the Fuel Allowance and the Household Benefits Package. Suggestions for the development of income measures to support energy poor households in the transition to a fossil free future include the addition of a BER rating (when available) as part of the criteria for receipt of a carefully calibrated Fuel Allowance, the introduction of an energy guarantee scheme for households at risk of energy poverty and/or a targeted energy credit. It is important that there is cross departmental working to ensure that income supports to tackle energy poverty are coordinated with energy efficiency measures and other financial supports.

There are a number of energy efficiency schemes, the main one being the Warmer Homes Scheme, along with the social housing retrofit scheme. Further support is required for many low income households to be able to avail of the Warmer Homes Scheme. A key element is the provision of adequate advice for energy retrofits in general and for the installation and operation of heat pumps in particular. While heat pumps will be a key element of our future home heating provision, many households experiencing energy poverty will need additional support through education and advice to make the transition to heat pumps. There are particular issues for private renters who live in some of the most energy inefficient accommodation. Further incentives are needed for landlords to upgrade their properties to meet required BER standards.

Given the poor health outcomes from living in energy poverty the lessons from pilots in Ireland and elsewhere, such as the Warmth and Wellbeing pilot should be rolled out across the country, as appropriate. These include: a customer journey manual, on-hand support with applications; greater communication on the works and timelines upfront; a longer time spent on survey visits; and learning from the health and retrofitting experts. The potential of district heating systems should also be implemented as soon as possible.

The development of an energy strategy in Northern Ireland is also considered, as well as the main income supports and energy efficiency measures operating in Northern Ireland. Many of these measures have similar aims to those in Ireland, even though the specific details may operate differently. Potential links with Northern Ireland can be further developed by optimising benefits from the Single Electricity Market as well as cooperation and learning on policy development and support schemes, and on energy poverty definition and measurement.

Chapter 5 Conclusions

5.1 Introduction

This chapter discusses the overarching issues to be addressed based on the preceding analysis and draws out conclusions.

5.2 Overarching issues and principles

There are a number of overarching issues and principles to be considered before presenting some specific issues. These are as follows:

- ***Energy poverty is complex.*** While at one level it can be said to relate to income levels, energy efficiency and price of energy it is the interplay of these factors along with measures to address them and household characteristics together with a lack of data which can make energy poverty complex to address.
- While the energy system is often focused on the 3 ***principles of climate, cost and competitiveness*** there is a need to include the principles of ***equality and justice***.
- Addressing energy poverty is about the need for a ***focus on people***, in all their various circumstances, as much as it is about improving buildings, networks and reducing emissions.
- As such, there is a ***moral obligation*** to address energy poverty to prevent people from living in cold damp conditions potentially leading to poor physical and mental health outcomes. This is particularly the case for children growing up in poorly heated homes. There is a need to acknowledge energy as a right, and addressing energy poverty as an opportunity to reduce systemic inequality.
- The need for a ***collaborative approach*** involving the relevant public, private and NGO sectors to co-design and co-implement solutions to energy poverty.
- In addressing energy poverty there is a need for ***a short-term (to 2030) and longer-term (to 2050) perspective*** to put in place the appropriate measures to alleviate energy poverty and support people towards a fossil free future.
- In this context it will be necessary to set out appropriate ***pathways*** to lift people out of energy poverty and assist them to move towards a fossil free future. These pathways will vary for people in different circumstances and align with different timescales and sequences.
- The inclusion of ***a shared island perspective*** as climate change and carbon emission reductions know no border, along with the opportunity to share knowledge and experience on energy poverty measurement and effective interventions.

Within these overarching issues and principles the following sections discuss more specific issues.

5.3 Integrated approach required

Given the complex and multidimensional nature of energy poverty there is a need for an integrated approach to tackle energy poverty. A number of government departments and agencies have responsibility for providing support for households experiencing energy poverty and for making buildings more energy efficient in the transition to a fossil free future. There are commitments to tackle energy poverty in the Climate Action Plan and in the National Retrofit Plan. There are committees and groups which bring the respective stakeholders together at national and local level but in order to have a co-ordinated approach it would be beneficial to have an overall government strategy or framework for the transition to a fossil free future where addressing fuel poverty would clearly be part of that, e.g. a series of policy commitments and timelines to ensure progressive reductions in fossil fuel use and supply at domestic level in accordance with climate obligations, which proactively integrates measures to prevent and mitigate energy poverty. It is important that there is cross departmental working to ensure that income supports to tackle energy poverty are coordinated with energy efficiency measures and other financial supports.

All those with a remit for supporting the transition to a zero carbon future should have to consider the impact of their actions on low income households and those in inefficient dwellings. The involvement of community and environmental NGOs will be key as trusted local actors who can work with, and support, energy poor households to engage with energy experts, energy suppliers and government officials.

5.4 Strengthen Income Supports

As described in this report, low-income households are disproportionately impacted by energy poverty. While a number of measures are in place to assist low-income households alleviate energy poverty, such as the Fuel Allowance and the Household Benefits package, consideration should be given to their effectiveness and whether other measures are required to assist low-income households transition to net-zero carbon emissions.

Fuel costs have seen recent substantial increases and are increasingly volatile.²⁴ While initiatives have been taken to support households with energy costs during recent price increases, further consideration should be given to identify how fuel costs can best be targeted to alleviate energy costs among low-income households, especially as we transition to net-zero carbon emissions.

A number of initiatives are proposed. One is an energy guarantee, such as that put forward by Age Action, which would be a transformed version of the Fuel Allowance as a cash payment benchmarked and indexed against the price of inflation. Eligibility would be determined on a home's insulation level as well as its income, using its BER rating. This is not yet available for many homes, and while ideally homes would be assessed, in the interim the information could be acquired through a short questionnaire. The payment could be carefully calibrated with people on lower incomes and/or in more poorly insulated homes receiving a larger income supplement, until their home is improved.

Another initiative is an energy credit system where a certain amount of electricity use is paid for in the case of people in energy poverty. Energy credits were paid to all households during the recent substantive increases in the price of energy, but a more targeted measure could be introduced. This would be paid by electricity providers into a person's account. Shortcomings to be overcome include how the credit would be affected when changing suppliers and how to provide credits for those still dependent on oil, coal and turf to heat their homes, particularly in rural areas. While the direction of

²⁴ The global energy price crisis was particularly acute in Ireland given reliance on gas for not only heating but also for electricity generation. For further information see NESG (2025) *Ireland's Future Power System and Economic Resilience*.

travel is to reduce dependence on these fossil fuels, such measures as a proposed energy credit would need to be introduced in such a way that those at risk of energy poverty are not 'left behind'.

A related element is how to reduce the 'standing charge', and other components on the energy bill, to mitigate the impact of energy bills for those in energy poverty. As the network infrastructure is developed to incorporate renewables the standing charge to customers could potentially increase, at least in the short term.²⁵ Measures should be introduced to alleviate the impact for those in energy poverty.

5.5 More extensive energy efficiency measures

Many homes in Ireland are energy inefficient. The Warmer Homes Scheme is in place to help improve energy efficiency, but some energy poor households may find it difficult to avail of it for various reasons. There is an ongoing need for robust policies, programmes and actions to make the homes of low income households more energy efficient.

As we move towards meeting our net-zero carbon emission targets there will be a need to reduce dependency on fossil fuels and expand access to renewable energy sources. This will be a particular challenge for low income households so that there is a need to make renewable energy options accessible and affordable.

There are a number of dimensions to improving energy efficiency. For owner occupiers grants are available, with 100 per cent grants available to low income householders. However, further support may be required to cover any additional costs associated with retrofitting. There is also a need to shorten the timescale between applying for the grant and getting the work done.

One of the main retrofit improvements is the installation of heat pumps. However, a cautious approach should be taken to the installation of heat pumps in energy poor households as they may not yet be suitable given the household's circumstances and nature of the dwelling. For example, being dependent on electricity they can be more expensive to run than traditional forms of heating, and require well insulated homes to run efficiently. There is also the issue of alternative provision if and when there are electricity supply outages for households fully dependent on electricity for their energy. Households can find it more difficult to budget their energy use using heat pumps especially as they are supposed to run continuously, and can use disproportionate amounts of electricity if they are switched off and then have to be switched on again. This points to the need for the provision of information and advice on the use of heat pumps, as suggested in 5.6. In addition, addressing the high cost of electricity is also necessary, for example, through rebalancing electricity levies to reduce heat pump operational costs, as well as exploring the use of smart meters. In general, the use of heat pumps requires cultural and behavioural change and this will take time. Local energy champions can help in this regard, see section 4.6.

Tenants in the private rented sector are some of those most at risk of energy poverty, yet this is one of the most difficult tenures to improve because of the split incentive problem. To improve the situation for private renters the current package of measures (grants, low cost loans, tax relief) in place for small scale private landlords should be continued, to encourage landlords to upgrade their properties to a satisfactory BER standard, as in France, where landlords are obliged to provide decent accommodation which complies with certain energy performance levels. Where energy efficiency improvements are carried out by landlords there is a need to ensure existing tenants are protected from eviction or significant increases in their rent.

²⁵ Increases in the standing charge at customer level was an issue for some households during the energy price crisis as certain suppliers increased the standard charge without a clear explanation of what costs the increases were covering.

The Warmer Homes Scheme should be expanded to include properties in the private rented sector if the tenant is receiving the Housing Assistance Payment, with eligibility being contingent on the landlord providing a long-term lease (5+ years) to the tenant. Such an expansion would need to take into account the current demand for the Warmer Homes Scheme and its overall cost. Research on the 'split-incentive' would be useful, especially from a landlord perspective.

There is a commitment to retrofit 36,500 local authority-owned homes by 2030. Local authorities need to be adequately resourced to do this within the timeframe, with multi-annual funding suggested. Supports need to be provided to tenants to engage with the retrofitting process and to be able to make best use of the upgrades, see section 4.6. In addition, consideration could be given to the application of a condition like Awaab's Law in the UK, which requires social landlords to investigate and fix reported health hazards within specific timeframes as part of the tenancy agreement.

Traveller families have a high risk of energy poverty, especially those families living in trailers. A new preferential National Caravan Loan Scheme for Traveller families should ensure that trailers purchased are culturally appropriate and meet energy efficiency standards to provide a warm comfortable home. However, the scheme should be kept under review and practical retrofit solutions for enhancing energy efficiency in mobile homes should continue to be developed. The operation of the 'park homes warm homes' discount for the Traveller community in England and Wales should be considered for potential application in Ireland (see Appendix 1).

A further solution to making some energy poor households more energy efficient, especially in urban areas, is district heating and where sources for district heating are available they should be developed as quickly as possible. For example, the Dublin Waste to Energy facility at Poolbeg, Dublin has the potential to develop district heating for 50,000 homes. Using efficient thermal storage, district heating can reduce peak demand by availing of cheap nighttime electricity to generate heat, then store it and deliver it to homes when it is needed.

In addition, support for social enterprises such as EnergyCloud should be considered. EnergyCloud is already operating in a number of areas throughout the country but has the potential to operate at a larger scale. There are clear benefits to low income households of receiving free hot water from renewable wind energy which would otherwise go to waste, and this should be rolled out across the country, especially as the proportion of our energy being provided by wind increases. Consideration should be given to a similar scheme of sharing solar energy along the lines of the Octopus Energy Group in Britain (see Appendix 1).

Energy poverty has been shown to have a detrimental impact on physical and mental health, leading to excess winter deaths, especially in older people. Initiatives such as the Warmth and Wellbeing pilot in Dublin and the Warm Up New Zealand scheme (see Appendix 1) have been shown to have benefits in relation to addressing energy poverty, improving health outcomes and reducing the costs of health to the state. The key components of such schemes should be rolled out more widely, and include: a customer journey manual; on-hand support with applications; greater communication on the works and timelines upfront; a longer time spent on survey visits; and learning from the health and retrofitting experts.

5.6 Prioritise awareness, education and advice

Raising awareness and education about efficient energy use can support households in reducing their energy consumption and costs, and improve the efficiency of their energy use. This is one of the most frequently raised issues in supporting energy poor households making the transition to a fossil free future, which will require cultural change and which will take time.

The Southend retrofitting project is a good example of the type of information and advice that is required to assist in the energy transition, especially for energy poor households. Key to this is funding for a local energy champion who is known and trusted by the local community. The local energy champion needs to be supported by people skilled and knowledgeable about what the retrofit entails, e.g. SEAI personnel, as well as local housing advocates such as the local authority and approved housing bodies. Face-to-face contact is important as many of those at risk of energy poverty are less familiar with, or trusting of, digital information and advice. One stop shops have an important role to play too.

Consideration should also be given to having a network of stakeholders with diagnostic teams that visit the homes of people experiencing energy poverty and putting in place suitable solutions, along the lines of the SHINE project in London (see Appendix 1). This would provide a more holistic energy advice service, that would incorporate support towards retrofitting but also include support with more immediate issues such as addressing arrears, consumer protection awareness, and navigating appropriate tariffs.

Community organisations have a role to play in the provision of information and advice on efficient energy use. Resourcing is required for community-led projects and the development of sustainable energy communities, along with participatory decision-making to support the energy transition to achieving independence from fossil fuels by 2050, while leaving no one behind.²⁶ Suppliers, too, have an important part in advising their customers on efficient energy use, as outlined in the next section.

5.7 A robust regulatory framework

Ensuring a robust regulatory framework that promotes fair energy pricing, consumer protection, and incentives for energy efficient upgrades is critical to address energy poverty. The energy engage code helps to support such consumer protection, and the CRU also has a vital role in this regard. The CRU needs to continue to encourage suppliers to make their customers more aware of the Vulnerable Customer Register. In addition, consideration should be given as to how people who are financially vulnerable could be included on the register following the availability of current research on how this might work.

Currently, tariff offerings from suppliers can appear complex with many households finding it challenging to understand, compare and contrast the different tariff offerings. While certain tools are available online to help with this process, this requires a level of engagement and digital literacy beyond the means of many. There is a need to ensure that suppliers put customers in financial hardship on the most economical tariff, extending payment plans to at least 24 months, and reducing the amount of debt allowed to be deducted from PAYG top-ups.

Smart meters also have the potential to enable households to monitor their energy use and select the best tariff to meet their household needs. This would be of particular benefit to energy poor households who monitor their energy use very closely and budget accordingly. However, these meters would need to be able to provide live 'in house' readings of energy use to be of optimal benefit.

²⁶ For further information see NESC (2025) *Understanding Energy in Households and Communities: Towards a New Relationship*.

5.8 Refine energy poverty definition and measurement

There are a range of energy poverty definitions and measures across a spectrum from expenditure-based definitions, mainly related to households that spend more than 10 per cent of their income on energy services, to a self-reporting approach where households report being unable to keep their households adequately warm.

In Scotland there is fuel poverty legislation containing a legal definition and targets. Scottish legislation describes a fuel poor household as one where:

- more than 10 per cent (20 per cent for extreme fuel poverty) of net income is required to pay for their reasonable fuel needs after housing costs have been deducted; and
- the remaining household income is not enough to maintain an acceptable standard of living, defined as at least 90 per cent of the UK minimum income standard (MIS) once childcare costs and disability or care benefits are deducted.

The statutory targets set by the Fuel Poverty (Targets, Definitions and Strategy) (Scotland) Act 2019 are that by the end of 2040:

- no more than 5 per cent of households will be in fuel poverty;
- no more than 1 per cent of households will be in extreme fuel poverty; and
- the median fuel poverty gap of households in fuel poverty is no more than 250 in 2015 prices before adding inflation (for more details see Appendix 1).

As stated earlier, in the European Commission energy poverty is understood as a multidimensional phenomenon, driven primarily by underlying root causes linked to high energy expenditure in proportion to the household budget, low levels of income and low energy performance of buildings and appliances. These root causes can be further influenced by geographic and climate factors, household characteristics, gender, health, and specific household energy and transport needs. As such, households with higher energy needs, which include families with children, persons with disabilities and older people, are also more susceptible to energy poverty and its effects. Women, in particular those who are lone parents and older women are especially affected by energy poverty due to structural inequalities in income distribution, socio-economic status and the gender care gap.

Ireland is committed to transposing this definition into Irish law. The ESRI has been commissioned to undertake research which tries to capture the measurement of energy poverty using this definition and which will combine information on low income with energy efficiency. The outcome of this research will help to inform the future definition and measurement of energy poverty in Ireland, and which can be considered by the research network on energy poverty that has been established by the Department of Environment, Climate and Communications. The collection of more regular data is crucial. In the interim, consideration should be given to the use of the basket of energy poverty indicators being developed in Northern Ireland, see 5.9.

Consideration should be given to legislating for energy poverty and setting targets for its reduction in light of the need to transition to a future free of fossil fuels. There is the potential to do this on a shared island basis.

5.9 Enrich Shared Island opportunities

Many of the issues to be addressed for energy poor households, especially in relation to a just transition to net-zero carbon emissions, are shared by both jurisdictions on the island. Both jurisdictions are developing policies on energy poverty, have schemes in place to address energy poverty, and operate a single electricity market (SEM). Both jurisdictions place an emphasis on the three specific elements of energy poverty: household income; cost of energy; and energy efficiency. Similar groups experience energy poverty in both Ireland and Northern Ireland, and across the Irish provinces the highest rates of energy poverty are in Ulster.

Both jurisdictions are concerned about the current definitions of poverty and its measurement. With regard to measurement, suggestions for extending the expenditure-based metric of 10 per cent of income include: extending the 10 per cent of income to also measuring severe and extreme fuel poverty at 20 and 30 per cent of income respectively; self-reporting energy deprivation; and taking the energy efficiency of the accommodation into account. A case has also been made to consider a basket of energy poverty indicators. These issues could be considered on a shared island basis.

There is also the potential for EU funding for border area programmes to support a Just Transition. Cross jurisdictional energy strategies have already been developed, e.g. the North West Regional Energy Strategy between Derry and Donegal. This initiative could be built upon in other areas.

Thus, there is a real opportunity to learn from one another on the best way to address issues of energy poverty and to collaborate on relevant issues. This is particularly relevant in the context of the single electricity market and the transition to renewables across the island.

Appendix 1: Examples of International Measures to Address Energy Poverty

A.1 Introduction

Ireland can also learn from international examples on ways to tackle energy poverty. This Appendix outlines examples from:

- European Union;
- England, Scotland & Wales;
- Switzerland; and
- New Zealand.

A.2 European Union

The EU Commission Recommendation on energy poverty (20th October 2023) notes that Member States use a mix of approaches and actions to address energy poverty: price support measures; income support schemes; and investments in energy efficiency.

While emphasising the need for a policy mix, the EU Commission recommends giving priority to energy efficiency measures which tackle the root causes of energy poverty.

This section provides further details on a number of countries.

A.2.1 Germany

In Germany, the Building Energy Act, which came into effect on 1st January 2024, requires all heating systems installed in new buildings to be powered by at least 65 per cent renewable energy. In 'hardship' cases homeowners can be exempt from this obligation. Local authorities have to prepare district heating plans. Funding will be provided by the federal government to make buildings more energy efficient through subsidies and low interest loans.

There are grants for heat pumps, with low income households being able to avail of a higher level of grant. In addition, households can receive energy advice which is provided by federally funded energy efficiency experts. By 2045, when Germany aims for net zero emissions of greenhouse gases, all heating systems must be switched to renewable energy sources.

A.2.2 Spain

The Spanish government introduced emergency energy support measures in response to the economic and social consequences of Russia's invasion of Ukraine. These included electricity and gas subsidies for households and tax reductions. Spain has an 'aids program for energy retrofitting existing buildings' to incentivise energy efficiency and renewable upgrades.

A.2.3 Italy

Italy has three main policy approaches towards eradicating energy poverty by improving energy efficiency, by reducing energy expenditure, and through providing subsidies. The ecobonus and superbonus schemes provide tax reductions (of 65 per cent and 110 per cent respectively) for energy efficiency work. While the superbonus scheme has more stringent criteria than the ecobonus scheme it has been controversial in Italy because of its expensive nature. It has benefited households with high upfront spending capacities, reducing its impact on lower income and energy poor households. The Meloni government has introduced new income conditions to continue the scheme whilst minimising the economic implications.

In relation to the superbonus scheme it has been reported that the scheme has had a 'devastating' impact on the public finances and contributed to a rise in the country's public debt. The scheme was more popular than anticipated, and building costs were expensive as more than 100 per cent of costs were covered, so there was no focus on value for money (<https://www.reuters.com/world/europe/why-italys-superbonus-blew-hole-state-accounts-2024-04-09/>).

The 'physical hardship' bonus is aimed at reducing electricity bills for households reliant on medical equipment to keep them alive, while the 'power/gas bonuses help families facing 'economic hardship' to reduce their power and gas costs as the government provides discounts on their bills. The value of the bonus depends on level of family income and number of family members in the household.

At a more general level, research has shown that energy-poor individuals face greater difficulty in accessing the benefits of Italy's energy transition policies. It is argued that Italian energy transition policies could be deemed unjust as they disregard energy-poor people's socio-economic conditions (Calidori *et al.*, 2025).

A.2.4 France

France has three main schemes to address energy poverty. The Ma Primie Rénov (which is similar to Ireland's Warmer Homes Scheme) has replaced previous schemes and is the main state aid for energy renovation. The income of all household members is taken into account, and dwellings need to be at least 15 years old. The Ma Primie Rénov has seen positive outcomes. Almost 2 million households have applied for the Ma Primie Rénov subsidy since 2020, and the estimated emissions eliminated are equivalent to that of the yearly emissions of the inhabitants of Paris and Lyon combined. The support scheme provides the highest support for low income groups. The support is paid directly to the contractors. As the large upfront costs are a major obstacle to the renovation of low income households' homes, the subsidy can cover the majority of upfront costs. However, reaching out to lower income households is one of the key challenges to increasing renovations for those who need it the most. Local authorities have a strong role to play in this regard (Bajoim, 2023).

The cheque énergie is paid each year to the poorest households to help them pay for their electricity, gas and home heating fuel bills. In France, landlords are legally required to provide 'decent accommodation' which includes complying with minimum energy performance levels. Hence, the rental ban on energy inefficient homes.

A.2.5 Belgium

Within the Brussels region in Belgium the 'ambulance verte' (green ambulance service) is a service which provides a link between the improvements in both energy efficiency and health outcomes. Households can call 'CRIPI' (the regional cell for intervention in indoor pollution) if they are experiencing continued health and respiratory problems. The service involves specialists attending the site, establishing a diagnosis, recommending solutions, and offering advice free of charge. Doctors within

the region can also refer patients to this service if they suspect that their health issue has been caused by their dwelling's indoor pollution or energy efficiency. The 'SAMI' (services d'analyse des Milieux Intérieurs) is a similar service provided in the Walloon region, which also offers free services to childcare centres.

A.2.6 Switzerland

Switzerland has one of the lowest levels of energy poverty in Europe (at 0.2 per cent in 2021). In 2017, Switzerland passed an Energy Act by public referendum, which enshrines various measures aimed at improving energy efficiency across society. This includes financial incentives intended to increase the use of renewable energy sources. The focus of the Act is on the logistics of reaching decarbonisation targets, with less of an emphasis on the impact this might have on lower income households, presumably due to their low levels of energy poverty. The proportion of households renting their accommodation is relatively high in Switzerland, thus the 'Special Programme for large scale building renovations' offers a solution to the 'split incentive' problem experienced by landlords and tenants in the private rental sector. This 'special programme' gives interest free loans to public utility developers to renovate their residential buildings, so that the cost of these homes can remain affordable.

A.3 England, Scotland & Wales

It is also useful to look at schemes operating in England, Scotland and Wales, and comparing them with similar schemes in Ireland and Northern Ireland. The main energy efficiency schemes in the UK and Ireland are presented in Table A.1.

The main energy efficiency scheme in England and Wales which is comparable to the similar schemes in Scotland, Northern Ireland and Ireland is the Great British Insulation Scheme. This scheme offers free or cheaper insulation to reduce a household's energy bills. The scheme is available in England, Wales and Scotland, but not in Northern Ireland.

A Warmer Homes Discount scheme is available in England, Wales, and Scotland. This is a one-off payment of £150 to assist with the cost of energy during winter. The money is automatically added as a credit to a household's electricity account in England and Wales or as a top-up voucher for those who use a pre-payment meter. In addition, there is a 'park homes warm home' discount available for the Traveller community. In Scotland, households have to apply for the warmer homes discount through their energy supplier.

The Octopus Energy Group, a global renewal energy company which was founded in Britain in 2015, helps eligible customers with free solar and battery installations for those facing fuel poverty as part of an extension to the Warmer Homes Discount Scheme. The Octopus Energy Group has also launched the trial of a solar sharing scheme (also referred to as "fund-rays-ing solar style) which allows customers to donate the value of their excess solar energy to fuel poverty charity National Energy Action (NEA) (or Energy Action Scotland in Scotland). There are over 1.4 million homes in the UK equipped with solar panels, and this number continues to grow.

There is an Energy Company Obligation in England, Wales and Scotland which is similar to Ireland's Energy Efficiency Obligation Scheme. As in Ireland, this scheme places a home heating cost obligation on medium and large energy suppliers to promote measures which help low-income/fuel poor/vulnerable households to heat their homes. This scheme is not available in Northern Ireland.

A boiler replacement scheme is offered in England and Wales. This scheme offers grants to households seeking to replace a fossil fuel boiler heating system with a heat pump or biomass boiler. However, there are no specific measures under this scheme for low income households.

Table A.1: Funded energy efficiency schemes in the UK and Ireland

	England & Wales	Scotland*	Northern Ireland	Ireland
Name of Scheme	Great British Insulation Scheme	Warmer Homes Scotland	Affordable Warmth Scheme	Warmer Homes Scheme
Target	Homeowners Tenants Landlords	Homeowners Private sector tenants	Homeowners Private sector tenants	Homeowners Prioritises oldest and least energy efficient homes
Amount	Free or cheaper insulation Includes cavity wall insulation, solid wall insulation & underfloor insulation	Most cases will meet all costs, but in some cases may need to contribute to some of the costs	Grants subject to availability of funding May receive up to £7,500	Fully funded – free home energy upgrades
Eligibility	Energy performance D-G Council tax bands A-D in England & A-E in Wales (& Scotland)	Live in a home with poor energy rating Council tax bands A-F Person over 75 with no central heating or a terminally ill certificate or at least one passport benefit	Total annual gross income of less than £23,000 Own and occupy own home	Home built and occupied before 2006 Beneficiary to at least one of a list of welfare payments

* Great British Insulation Scheme is also available in Scotland

A Winter Fuel Payment is paid to pensioners in England, Wales and Northern Ireland. Until July 2024 the winter fuel payment was paid to all pensioners to help with energy bills during the winter period. The criteria changed in July 2024 and now the winter fuel payment will only be paid to pensioners in receipt of pension credit, which is a state pension top-up, for low income pensioners.²⁷

In Scotland there is fuel poverty legislation containing a legal definition and targets. The fuel poverty strategy sets out policies and proposals for national government, local authorities and third sector partners to help meet the targets set out in the Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act 2019. The strategy sets out 55 actions to tackle what Scotland sees as the four main drivers of fuel poverty:

- poor home energy efficiency;
- high energy costs;
- low household income; and
- how energy is used in the home.

²⁷ Other vulnerable pensioners on certain benefits may also be eligible.

Scottish legislation describes a fuel poor household as one where:

- more than 10 per cent (20 per cent for extreme fuel poverty) of net income is required to pay for their reasonable fuel needs after housing costs have been deducted; and
- the remaining household income is not enough to maintain an acceptable standard of living, defined as at least 90 per cent of the UK minimum income standard (MIS) once childcare costs and disability or care benefits are deducted.

The legislation provides for uplifts to be applied to the MIS for households in rural and island communities to take into account the higher cost of living in these areas.

The statutory targets set by the Fuel Poverty (Targets, Definitions and Strategy) (Scotland) Act 2019 are that by the end of 2040:

- no more than 5 per cent of households will be in fuel poverty;
- no more than 1 per cent of households will be in extreme fuel poverty; and
- the median fuel poverty gap of households in fuel poverty is no more than £250 in 2015 prices before adding inflation.

These targets must be achieved within each of the 32 local council areas and not just in Scotland as a whole. There are also interim targets set for the same metric for 2030 and 2035. However, the interim targets only need to be met at national level (Scottish Government, 2024).

A Scottish fuel poverty advisory panel monitors progress towards meeting the fuel poverty targets. Annual reports are produced in relation to progress and a longitudinal survey of housing and housing quality which includes fuel poverty is reported on regularly.

In Scotland, energy efficiency is designated as a national priority. The Heat in Buildings Bill (currently in the process of being formulated) builds upon actions taken in the Heat in Buildings Strategy. This strategy states that by 2045, homes will be cleaner and easier to heat, and sits within the context of just transition to net zero. It is also envisaged that by 2040 no more than 5 per cent of households will be fuel poor, with no more than 1 per cent in extreme fuel poverty.

The main energy efficiency scheme is the Warmer Homes Scotland scheme, which is similar to the Warmer Homes scheme in Ireland and the Affordable Warmth scheme in Northern Ireland. The scheme offers funding and support to households struggling with energy bills. In most cases, the government will meet all the costs, though in some cases households may need to contribute to the costs. Eligible households can apply for an interest-free loan for potential energy improvements including central heating, renewable sources of heating and wall insulation.

Households who are not eligible for the Warmer Homes Scheme may be eligible for the Home Energy Scotland Grant and Loan scheme. This scheme provides homeowners with a grant, interest-free loan or both for the instalment of clean heating systems and energy efficiency measures. There is also an extra payment for rural and island homes.

The Winter Fuel Payment, paid to pensioners in receipt of pension credit in England, Wales and Northern Ireland, is not available to people living in Scotland, and is being replaced by the Pension Age Winter Heating Payment for winter 2024. The Pension Age Winter Heating Payment will be paid to people of state pension age who are in receipt of certain benefits.

In London, 'SHINE' (Seasonal Health Intervention Network England) is a network of stakeholders from across the public, charity and private sectors. They identify households at risk of, or experiencing, fuel poverty and offer appropriate services such as 'energy doctor' visits and telephone hotlines. It serves as a referral network to connect those struggling with the various partners including the National Health

Service and the energy companies. SHINE also targets households where a member has a long-term health issue which may be worsened by cold, damp conditions.

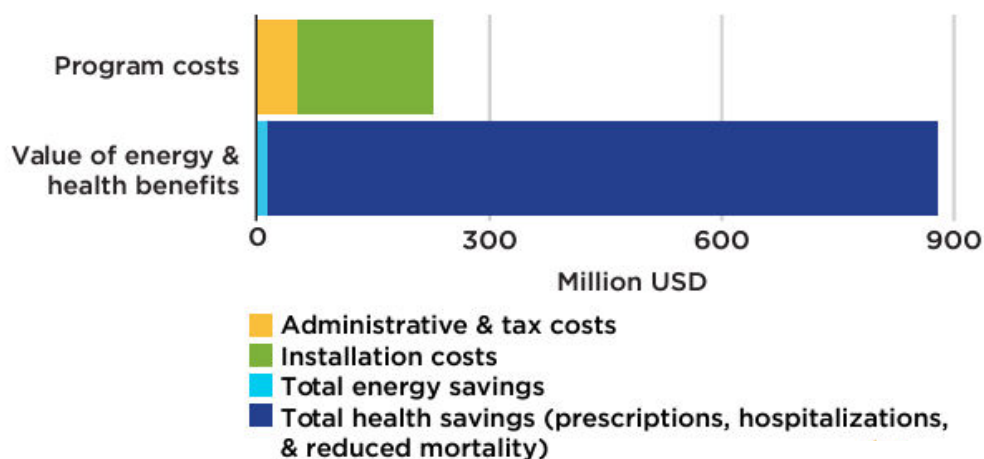
A.4 New Zealand

Internationally, there are a small number of pilot schemes aimed specifically at improving health outcomes for those suffering from respiratory and other illnesses. In general, these schemes tend to receive positive feedback, but do not seem to be implemented on a long-term or more widespread basis.

For example, 'Warm Up New Zealand' is a government subsidised residential energy efficiency and clean air programme which seeks to address respiratory illness and winter mortality rates. The Energy Efficiency and Conservation Authority (EECA) collaborated with home insulation companies, regional councils, energy trusts, and other partners to provide low income households with grants covering 60 per cent of the cost of insulation. From 2009 to 2013 Warm Up New Zealand: Heat Smart focused on homes built before 2000. A positive cost-benefit analysis led to the creation of Warm Up New Zealand: Healthy Homes, which ran from 2013 to 2016. Healthy Homes has been extended targeting homes with low income residents or those with health needs related to cold damp housing. Together these initiatives have insulated over 300,000 houses, reaching 20 per cent of the housing stock, and creating about 2,000 jobs (Sawin *et al.*, 2018).

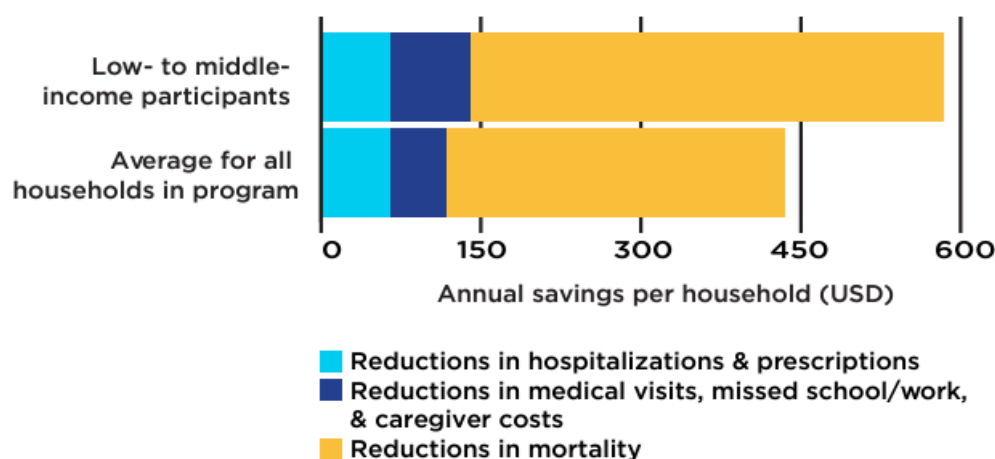
A cost-benefit analysis (Grimes *et al.*, 2012) showed how the benefits of the Heat Smart programme outweighed the costs, see Figure A.1, and that the programme reduced mortality especially for people over 65 years old with a pre-existing health condition by providing warmer, drier more comfortable homes. This was particularly the case for lower income households, see Figure A.2.

Figure A.1: 30-year cost-benefit analysis of heat smart programme



Source: (Sawin *et al.*, 2018), based on work by (Grimes *et al.*, 2012).

Figure A.2: Health savings per household in the heat smart programme



Source: (Sawin *et al.*, 2018), based on work by (Grimes *et al.*, 2012).

A.5 Pointers for Consideration from International Examples

These international schemes provide a number of pointers for consideration in Ireland. In some cases legislation is used to promote energy efficiency measures. Grants and low interest loans are popular, especially for improved insulation and ventilation, and in some cases to replace fossil fuel boilers with heat pumps or biomass boilers. Pilot schemes with a focus on improved health outcomes have been shown to be beneficial, through better insulation or ventilation, but also through referral services. Providing information and advice about energy efficiency measures seems to be critical. Additional initiatives have been taken for rural households and for members of the Traveller community living in trailers. On the income support side, measures include subsidies to households to help them pay their bills, hardship payments for particular circumstances, discounts on energy bills, energy company obligations and winter fuel payments.

For private rented tenants there are initiatives where landlords are legally obliged to provide 'decent accommodation' and interest free loans for landlords to improve their properties while ensuring that they remain affordable for tenants. In an overview of housing exclusion in Europe Fondation Abbé Pierre and Feantsa (2023) found that the private rental sector relies heavily on the relationship between landlords and tenants, determined by individual tenancy agreements. Good practice examples included: providing legal aid to tenants to help them understand and access their rights, particularly against a backdrop of a strained housing market and budget cuts; introducing extra-judicial procedures such as corrective sanctions (the Netherlands), or the possibility for tenants to carry out necessary renovations or repairs at the expense of the landlord (Poland); ensuring that there are effective local bodies responsible for the supervision of housing conditions and providing local authorities with the means to assess the compliance of rental housing, such as unfit for habitation orders (Belgium), rental permits (France) and local sanitation control (France); granting tenants the right to request a health or safety inspection which can be reinforced, as in Belgium, by the right to no longer notify the landlord in advance of the inspectors' visit, or as in the UK through links with the Housing, Health and Safety Rating System (HHSRS) whereby tenants can lodge a complaint with the Local and Social Care Ombudsman if they are not satisfied with the local council's response to their complaint; giving tenants the option of terminating a tenancy agreement without notice if the accommodation has defects that endanger their health or safety (Poland); and establishing legislation to bolster the tenancy agreement of tenants requesting improvement works, i.e. prohibition of eviction of households from the dwelling where there is a request for renovation to ensure the dignity of the dwelling, no rent increase in the event of necessary works, and suspension of the tenancy agreement if the accommodation is unfit or hazardous.

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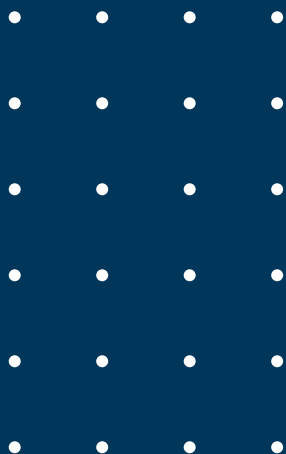
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