









As the Strategic Housing Authority for Northern Ireland, the Housing Executive delivers a number of statutory functions in collaboration with Housing Associations, voluntary and community sector partners. One of these statutory functions is Northern Ireland's Home Energy Conservation Authority under the terms of the Home Energy Conservation Act (1995). This requires the Housing Executive to prepare an annual report setting out the practical and cost-effective energy conservation measures (which includes information, advice and education, promotion, making grants and carrying out works), and subsequent greenhouse gas reduction across all the Northern Ireland housing sector.

Throughout 2023, energy prices have continued to impact households and remains a key ingredient to the continuing 'Cost of Living' crisis. Although retail energy prices have returned to levels last seen before the invasion of Ukraine, the outlook doesn't indicate we will return to historic pre COVID energy prices which had been the norm for over a generation. The Housing Executive is focused on alleviating energy costs for householders through energy advice and education to influence behaviour and improved energy efficiency measures, resulting in reduced energy demand and lower household energy bills. Going forward, the Housing Executive plans to decarbonise household heating with sustainable carbon free fuel sources.

During 2022 we launched our Sustainable Development Strategy with ambitious targets to ensure householders "live and work sustainably" while protecting the environment. In 2023, we commenced our first new build in more than 24 years through a pilot scheme of 6 houses with an ultra-low energy building design. We also completed our Retrofit Programme for over 1,400 houses by investing a total of £31.7million over the last 6 years through European Regional Development Funding and Housing Executive match funding, as well as commencing our Low Carbon Programme to provide a whole house retrofit solution to over 300 houses across Northern Ireland at a cost of over £10m. Both new build and retrofit programmes are designed to reduce householder energy bills, improve thermal comfort and reduce carbon emissions, whilst providing a stimulus for the construction industry.

During 2022/23, the Housing Executive, in conjunction with the Department for Communities, invested a record £53.56m (with an additional £13.44 of EU funding) on energy efficiency measures through a wide range of planned programmes, including enhancing thermal efficiency, window and heating replacement schemes. The housing association sector provided a further £6.1m of investment through a range of energy efficiency measures, including heating, improved insulation and renewable technologies. The NI Sustainable Energy Programme invested an additional £7.4 million in energy efficiency and heating programmes across the private and public sector housing.

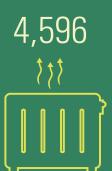
When we factor in the Social Housing Development Programme (including private finance) and maintenance across our landlord stock over £600m was invested into the Northern Ireland economy, drawing on resources from the Department for Communities and the housing association sector alongside our own resources.

Collaboration and partnership across the housing and community sectors has delivered positive change for householders. We would like to thank our colleagues from across central and local government, the energy supply sector, leading energy charities and social enterprises, who all support our HECA stakeholder panel, which has continued to meet regularly throughout the year.

As Northern Ireland's Strategic Housing Authority and a public landlord at scale we are committed to our vision that everyone should live in affordable, sustainable and decent homes, appropriate to their needs, in a safe and climateresilient place.

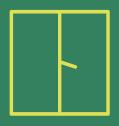
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Heating and boiler conversions

£21.3m
invested in Housing
Executive homes
(completions)



2,322

Double glazing installations

£6.1m invested in Housing Executive homes (completions)



Affordable Warmth Scheme

£16.3m
of expenditure for 3,308 sector
private sector homes (funded
by DfC and managed by the
Housing Executive)



Boiler Replacement Scheme

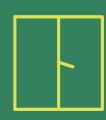
£0.6m funded for the installation of new energy efficient boilers in private sector homes



NI Sustainable Energy Programme (NISEP)

£7.4m

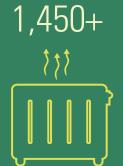
on energy efficient schemes to help public and private householders implement energy saving measures to their homes



ERDF Retrofit Scheme

£8.96m

Housing Executive spend, with a further £13.44m ERDF Funding within manageable budgets



Boiler upgrades

£6.1minvested in Housing
Association homes in the installation of energy efficiency measures

2022/23 Investment

Strategic Context

Despite the many challenges, Northern Ireland has a Climate Change Act and a suite of enabling policies to deliver our ambitious net zero by 2050 targets, whilst ensuring no one is left behind.

These include:

The Climate Change Act (Northern Ireland) 2022 has now been introduced and sets targets for the years 2050, 2040 and 2030 for the reduction of greenhouse gas emissions. This Act sets a range of requirements including; to provide for a system of carbon budgeting; to provide for reporting and statements against those targets and budgets; to confer power to impose climate change reporting duties on public bodies; to provide for reports and advice from the Committee on Climate Change; and for connected purposes. During the last year the Department of Agriculture, Environment and Rural Affairs consulted on the development of new regulations that will place climate change reporting duties on specified public bodies, including housing bodies. Currently the sectoral leads are preparing Climate Action Plans to provide pathways for decarbonisation within the targets set out in the Climate Change Act.

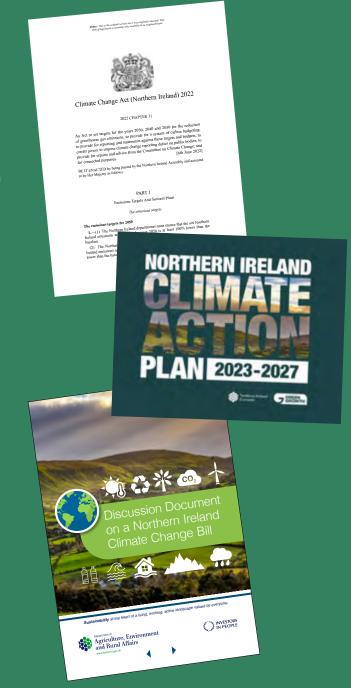
Department for Communities Climate Change Action Plan which outlines the scale of the challenge of climate change and the actions the Department will take to reduce its impact across its diverse responsibilities.

Building (Prescribed Fees) (Amendment) Regulations (Northern Ireland) 2022 that set the Department for Finance (DoF) proposals for minimum standards for new build and retrofit standards with respect to carbon performance and energy conservation measures. During 2023, DoF consulted in the proposed evolution of building regulations, in particular to prepare for quite significant changes, including moving away from conventional boilers using the highest carbon intensity fuels to low-carbon heating.

The Environment Strategy for Northern Ireland developed by the Department of Agriculture, Environment and Rural Affairs (DAERA) will guide how we can preserve, protect and improve our environment for our children and our grandchildren and supports the Northern Ireland Executive's **Green Growth Strategy**.

Energy Strategy for Northern Ireland is the Department for Economy's pathway to 2030 to help achieve its long-term vision of net zero carbon and affordable energy for Northern Ireland. The Strategy will support the highest levels of energy efficiency, thus reducing the amount of energy we need whilst making sure the energy we do use comes from clean renewable sources. The Housing Executive is working closely with DfE as a delivery partner to achieve the vision of net zero, in line with its annual Energy Strategy Action Plans.

These policies provide the strategic framework for the Housing Executive to support the delivery of sustainable communities with social, environmental and economic benefits through green growth, health benefits, reducing fuel poverty and sustainable living.



Drivers for Change

Climate Change

Our climate is changing. In Northern Ireland, we will experience warmer. wetter winters and hotter, drier summers. However, cold snaps, drier winters and wet summers will occur, therefore we need to be prepared for a much greater range of extremes. We are already experiencing increased frequency and intensity of extreme weather events, and this trend is expected to continue for years to come. Even if all global emissions stopped immediately, we have already locked-in a certain amount of climate change.

Climate Risks

According to the Northern Ireland Flood Risk Assessment 2018, approximately 45,000 properties (c. 5%) are currently at major risk of flooding with expected annual damages for residential properties on average of £21.2 million¹.

Socially vulnerable groups are disproportionately affected and experience more flood and other climate related risks than other groups. Belfast is one of 10 UK local authority areas which accounts for 50% of the socially vulnerable people living in areas at flood risk.

Climate Change Adaptation

Climate change poses considerable challenges to the everyday working and asset management of large organisations. It is important that we understand the risks facing us and take steps to prepare. This is called 'climate change adaptation planning'. The adaptation challenge for the Housing Executive involves significant risks of flooding, heat stress and storms. An adaptation plan is established to future proof our estate and protect people from climate shocks and stresses. The Climate Adaptation Plan will cut across all of the Housing Executive's business areas and provide a detailed action plan to increase the resilience across our estate and operations. This adaptation plan also creates opportunity to deliver new economic activities, skills and jobs; this is an essential part of a just transition and will help to reinforce community income and cohesion.

In this last year Northern Ireland has hit new climatic records as a consequence of climate change:

- Six storms in the last four months of 2023 into 2024, Storm Ciaran led to devastating floods in Newry and parts of Antrim, Armagh and Down all experienced some degree of flooding also, with some rivers reaching record heights.
- 2023 was the wettest year in the last two decades, and the third wettest since 1886
- Northern Ireland also experienced the warmest year on record in 2023
- In July 2023, Northern Ireland had its wettest July on record when 185.4mm of rain fell within the month, beating the previous record of 185.2mm set back in July 1936.

Fuel Poverty

Around 179,000 households in Northern Ireland are in fuel poverty, based on modelled estimates from 2021 using the 2016 House Condition Survey. This represents an average fuel poverty rate of 24%², which is predicated on a high dependency of imported fossil fuels and low household income rates.

There is an urgent need to reduce fuel poverty through energy efficiency and low carbon heating, which will improve the health and wellbeing of householders. Fuel poverty is a key driver of refurbishment and energy efficiency improvements in the housing sector and can result in a climate social welfare dividend. Household income, energy prices and market volatility also impact fuel poverty.

https://www.ukclimaterisk.org/ wp-content/uploads/2020/07/Future-Flooding-Main-Report-Sayers-1.pdf



Sustainable Development Strategy & Action Plan (2022-2027) progress update

In 2022 the Housing Executive launched its Sustainable Development Strategy and Action Plan which sets out the strategic approach to balancing the provision of quality, affordable housing and improving on our social and environmental impact. The strategy is guided by current policy and is built on the principles

of sustainable development. It provides a framework for tackling environmental and social challenges over the next five years, including responding to the climate emergency.

The Strategy's Vision aligns with the corporate Vision that: 'Everyone is able to live in an affordable, sustainable and decent home, appropriate to their needs, in a safe and climate-resilient place'.

The long-term goal of the Strategy is to achieve Net Zero carbon emissions by 2050 right across all of our activities. To help achieve this, a number of shorter-term targets have been set:

- Housing (NIHE Landlord) Target: 25,000 tonnes of CO₂ Emission reduction up to 2025/26 (6%)
- Corporate Target (NIHE Business Activities): 25% Reduction in CO₂ Emission reduction by 2030/31;
- Housing (NIHE Landlord) Target: 89,000 tonnes of CO₂ Emission reduction up to 2030/31 (23%);
- Housing (NIHE Landlord) Target: Retrofit housing to upgrade energy efficiency to an average of SAP Band C by 2030

The Strategy and Action Plan are structured around our four corporate themes of People, Places, Property and Planet and five pillars that align with our role as both a Landlord and the Strategic Housing Authority:

- a. Education & Empowerment leading to Behaviour Change
- b. Improved Health and Wellbeing through Sustainable Living
- c. Sustainable Transport Solutions
- d. Built Environment
- e. Sustainable Communities

Summary of Progress against the Action Plan

The Action Plan for the period 2022-2027 is underway across all five of the above five pillars and some of the highlights include:

Education & Empowerment

- 1,650 staff have undertaken Carbon Literacy Training to date (mixture of facilitated sessions and e-learning package);
- NI Energy Advice Service launched an online Energy Savings Toolkit in November 2023.

Improved Health & Wellbeing

• Over 11,000 trees planted in the 2022/23 planting season against a target of 7,000.

Sustainable Transport Solutions

- Direct Labour Organisation have started with a pilot of 10 electric vehicles in their fleet.
- Collaborating with local Councils on pilot EV charging points across 100+ site in Northern Ireland

Built Environment

- RULET pathfinder retrofit pilot project of 10 houses is now into its second year of monitoring.
- Pilot low carbon new build project for 6 homes underway in November 2023.
- 300-unit low carbon retrofit programme approved in 2023, with phase one (100 dwellings) of this whole house retrofit due to be on site in January 2024.

Sustainable Communities

- Application for Peace Plus funding for 4 geothermal demonstrator sites across NI/ROI (two in NI) submitted to EU funding body.
- £200k budget allocated for social enterprise grants in 2023-24.
- Oil Saving Network has facilitated 10,729 weekly heating oil orders, an increase from 3,700 weekly orders over the heating season before the strategy launch.

Governance

Organisational Climate Adaptation Plan is underway.





Our Vision

Everyone is able to live in an affordable, sustainable and decent home, appropriate to their needs, in a safe and climate-resilient place

Our Goal

Net Zero in all our operations by 2050

Our Targets

On the pathway to our Goal we aim to achieve the following:

- Short Term
 - Housing (NIHE Landlord) Target: 25,000 tonnes of ${\rm CO_2}$ Reduction up to 2025/26 (6%)
- End of Decade

Housing (NIHE Landlord) Targets

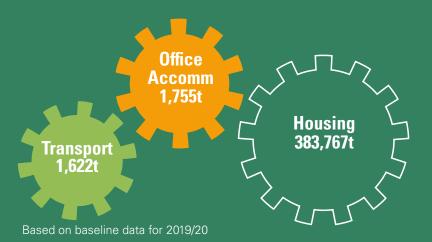
- Retrofit housing to upgrade energy efficiency to SAP Band C by 2030
- 89,000 tonnes of CO₂ Reduction up to 2030/31 (23%)

Corporate Target (NIHE Business) Target: 25% Reduction in ${\rm CO_2}$ emissions by 2030/31

Sustainable Development Strategy & Action Plan (2022-2027)

The vision of this strategy is built upon the United Nations' 17 Sustainable Development Goals that provide an internationally agreed performance framework designed to achieve a better and more sustainable future by 2030.

Office Accommodation	Transport (Business mileage & DLO fleet)	Landlord Housing (83,913)
1755 tCO ₂	1622 tCO ₂	383,767 tCO ₂
0.5%	0.4%	99.1%
123.6%	150%	SAP 63
CO ₂ emissions from office accommodation (electric, gas and oil) fell by 23.6% in the period 2016/17 to 2019/20.	CO ₂ emissions from business mileage fell by over 50% between 19/20 to 21/22 (largely due to restrictions attributed to Covid pandemic)	Average SAP rating of a Housing Executive property is 63 (Band D) which is below the social housing average of 72.639



Cost of Living Crisis-What is it and what are the Housing Executive doing to alleviate the rising cost of living?

The COVID global pandemic and the ongoing war in Ukraine has created a cost-of-living crisis, which still continues with the effects of inflation and energy prices impacting householders. Inflation hits those on lower incomes disproportionately hard, Northern Ireland fares worse than other UK regions, it has the UK's highest proportion of low-paid jobs (almost one in five), the lowest discretionary disposable income, and therefore local households spend disproportionately higher amounts of their income on energy, food and fuel relative to the rest of the UK.

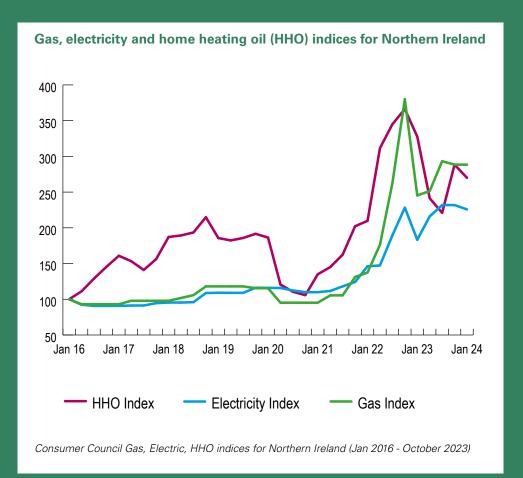
Home heating oil and natural gas prices have settled from the surge caused by the Ukraine invasion and spikes from the ongoing conflicts in the Middle East, but they are still well above the pre COVID prices, and no indication of a return to these levels. With the UK more reliant on Liquefied Natural Gas post the Ukraine invasion we have more carbon in the system, as LNG is more carbon intensive than pipeline natural gas.

The chart shows the peak through the 2022/23 Cost of Living (CoL) period, as a consequence of the uncertainty of gas supply due to the Ukraine invasion which exposed the over-dependence on Russian gas across Europe. To counter the raising energy prices a range of initiatives were launched by the government and local authorities, including the Housing Executive. As the energy costs have reduced from the spike during the CoL crisis these initiatives have now closed.

The Housing Executive work with the Department for Communities, alongside local Councils across Northern Ireland, in the delivery of the Affordable Warmth Scheme. In 2022/23, we spent £16.3m in providing 3,308 energy efficiency measures in 5,591 homes.

As the Home Energy Conservation Authority (HECA) we provide impartial and free energy advice to households across Northern Ireland, via the NI Energy Advice Service. This service manages over 10,000 householder queries per year, with a focus on energy efficiency advice, signposting to grant schemes and an oil saving network.

As the strategic housing authority and as a landlord, in 2022/23, we invested £53.56m¹ in our homes, of which approximately £29.861m directly benefitted our tenants via double glazing, heat and loft insulation schemes.



^{1.} This includes an investment of £8.96m retrofitting up 886 Housing Executive homes in year, as part of our Housing Executive-European Regional Development Fund funded retrofit programme (Total investment £31.7m)

Improving domestic energy efficiency

Home energy



Reducing fuel poverty

Fuel poverty



Living sustainably, saving the environment

Environment



To have a more equal society

Equality



How to save energy

Measurable outcomes - baseline, actions and progress



Advice

Improved access to advice, improved connectivity with residential customers



Reduce

Implement energy
efficient schemes
within social and
private housing sectors



Protect

Increase electricity consumption from renewable resources, research and install innovative measures

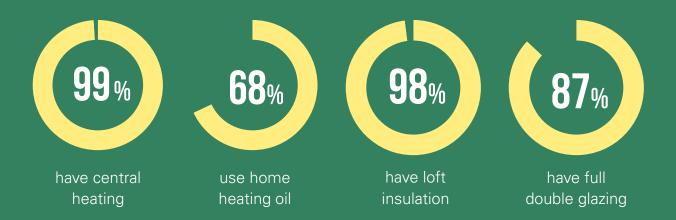


Measure

Energy mix, reduce oil dependency, gas to the west

Improving domestic energy efficiency

Measuring progress across all dwellings



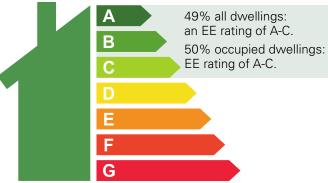
SAP ratings

The Northern Ireland House Condition Survey (HCS) is the primary data source for assessing progress of energy efficiency across the NI residential sector. HCS site surveys were undertaken across Northern Ireland during 2023, however findings are not yet available.

The Standard Assessment Procedure (SAP) is the Government's standard method of rating the energy efficiency of a dwelling. The overall SAP rating for Northern Ireland in 2016 was 65.83, using the latest SAP model.¹ Social housing had the highest SAP Mean rating (72.63) and vacant dwellings had the lowest SAP rating (51.78). During the 5-year period from 2011 to 2016 there was total investment of £300m in the provision of energy efficiency measures, which contributed significantly to achieving higher SAP ratings.²

During 2023, the Department of Energy Security and Net Zero released a consultation to present the UK government's new Home Energy Model, which is a calculation methodology designed to assess the energy performance of our homes. The Home Energy Model will replace the Standard Assessment Procedure (SAP). Like SAP, the Home Energy Model will underpin a large number of government policies, making it of critical importance to the delivery of both our housing and climate objectives. Noting Energy Performance of Building Regulations are devolved in Northern Ireland, we use an adapted version of SAP and this consultation indicates a potential future change.

The Energy Efficiency Rating (EER) uses an A-G banding system





64%

Households with children were most likely to live in dwellings in EER bands A-C



38%

of older households had an EE rating of A-C

EE rating of A-C



79%

Social housing



45%

Owner occupied



43%

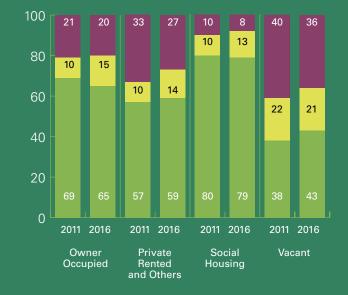
Private rented and others

^{1.} The SAP model was modified between 2011 and 2016 in order to improve the accuracy of energy efficiency ratings.

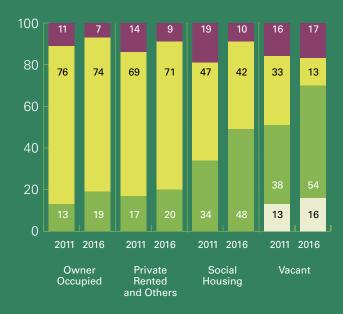
^{2. 2016} Northern Ireland Housing Executive HCS.

Home Insulation

According to the 2016 HCS, the proportion of housing stock with full cavity wall insulation is 65%; this figure has remained static since the findings of 2011 HCS. As the 2016 HCS noted, 'this was expected, as there hasn't been the same level of investment in cavity wall insulation as there has been in loft insulation, double glazing or the replacement of solid fuel heating.'







Gas

Domestic Heating

At present, Northern Ireland has the highest level of dependency on high-carbon fossil-fuel across the UK- with 68% of households dependent upon home heating oil. With the significant hike in energy costs in recent years posing a risk to the vulnerable, the Housing Executive is not only focused on the immediate energy costs but the sustainable solutions which will insulate householders from the volatility of the world energy market.

The Housing Executive is currently delivering low carbon pilot programmes to provide medium to long term solutions which can inform Northern Ireland housing in its role as the Strategic Housing Authority and NI's largest housing landlord.

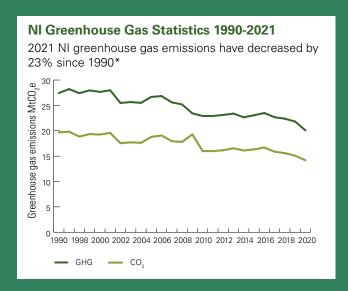
The Housing Executive's indicative planning assumption of a future Decarbonised Heating Pathway could be based on: New Build housing (heat pumps in the medium/long term and potentially bio methane in the short on the gas network) Off the Gas Grid: Medium term transition to heat pumps, dependent on improved retrofitting. On the

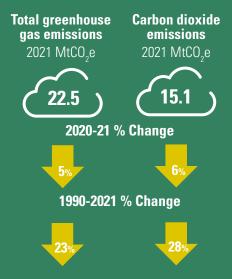
Gas Grid: Housing on the natural gas grid to potentially transition to use of gas boilers which can be future proofed for bio methane in the short term and potentially green hydrogen in the long term, dependent on economic assessment. Electrification of heating is also a clear option for retrofit on the gas grid. Regardless of the heating type, improved retrofitting should promote a fabric first approach. Low-carbon heat networks: The Housing Executive supports the development of Low-carbon heat networks, particularly in urban and new build scenarios. It is often said there are 'no silver bullets...' and therefore we believe 'a rich tapestry of options to deliver heat' is a sensible approach. For the Housing Executive role as landlord, future improvements is based on a revitalised funding model and sustainable rents.

DAERA-Northern Ireland greenhouse gas inventory1990-2021 statistical bulletin

This annual statistical bulletin provides headline figures on greenhouse gas emissions for Northern Ireland both by source sector and end-user. The latest publication covers the period 1990 to 2021. In 2021, Northern Ireland's greenhouse gas emissions were estimated to be 22.5 million tonnes of carbon dioxide equivalent (MtCO₂e) (Figure 1). This net figure of 22.5 MtCO₂e represents an increase of 5% compared with 2020.

- The largest sectors in terms of emissions in 2021 were agriculture (27.6%), transport (16.7%) and residential (12.4%). Most sectors showed a decreasing trend since the base year.
- The Residential and Transport sectors are the largest source of greenhouse gases that relate to the Housing Executive's functions, however, influencing people's behaviour to reduce meat consumption will have an impact on the agriculture sector. Within the residential sector improving energy efficiency to reduce energy demand and decarbonising heat is critical
- The largest decreases, in terms of tonnes of carbon dioxide equivalent, were in the energy supply, waste management and residential sectors.
 These were driven by the energy sector fuel switching from coal to natural gas, a move replicated within the residential sector and the introduction of methane capture and oxidation systems in landfill management.





Agriculture was the largest emitting sector of NI greenhouse gas emissions in 2020

28%	17%	14%	14%
Agriculture	Transport	Energy Supply	Business
12%	10%	4%	2%
Residential	Land use, land use change and forestry	Waste management	Other

NI Energy Advice Service

As the Home Energy Conservation Authority (HECA) for Northern Ireland, part of the Housing Executive's Development strategy is to deliver its statutory responsibilities and to promote energy efficiency and advice to all NI households. Since its launch in 2020, the refreshed Northern Ireland Energy Advice Service (NIEAS) has helped our community with over 25,500 unique queries.

The NIEAS is Northern Ireland's only one-stop-shop for information on energy efficiency, grant availability, cost savings and renewables. Advice is provided on a range of topics including; reducing fuel bills; energy grants- such as the Affordable Warmth Scheme; damp & condensation insulation; managing home heating; reducing home energy use; switching energy providers; renewable energy; Oil Savings Network: and offering financial advice on fuel bills.

This advice offers vital help via energy cost saving information to vulnerable householders, older people and those on low incomes. The NIEAS team annually signposts almost 50% of their calls to available energy grants. helping over 11,230 customers in 2023.

- Affordable Warmth Scheme is managed by the Housing Executive, with the entry point through the NI Energy Advice Service. This grant is aimed at those in fuel poverty. The most vulnerable in our society can receive a full grant.
- Utility Regulator's Northern Ireland Sustainable Energy Programme (NISEP) grant allows for higher income criteria, also with a whole house approach to retrofit

Empowering NI households with relevant up-to-date energy advice. Energy Advisors provide high quality written and telephone advice, which engages customers and is actionable. This advice helps customers to save money on energy bills and reduce their carbon footprint. You can 'Get in Touch' now to find the most appropriate help.

Customers can complete the eForm at The Housing **Executive - Northern Ireland Energy Advice**

NI Energy Advice Service Freephone: 0800 111 4455

NI Oil Saving Network

Energy costs and the cost-of-Living crisis remained through 2023, with a persistent risk to the vulnerable in our community, and we have continued to provide negotiated oil savings. Our membership is growing, with weekly January 2023 orders triple those of winter 2022.

The Oil Savings Network is now an integral part of the NI Energy Advice Service, and Oil Savings Network members also receive updates regarding grant availability, energy efficiency advice with Energy Advice contact details, and an offer to call the Service to go over their home energy efficiency and how to save on costs and carbon.

Our key objective is tackling fuel poverty. We encourage customers to buy smaller amounts to make regular use of the weekly savings. Ordering 200 to 300 litres with the discount code, can greatly reduce the one-off cost for a larger amount, creating manageable payments.

The team carryout a daily Pricing Matrix. This allows them to predict price hikes and to interpret changes to this

volatile market. This also offers a plus for negotiating with suppliers.

Our purpose is to reach more vulnerable people through scaled promotion of the service. In 2023, members requested 13,887 orders. Average 2023 savings were £20.49 on 200ls, with an overall savings of £400,879 across all orders.

Members can now order through a dedicated oil inbox. text, or call our Freephone number.

Home Heating Oil Price Checker-The Consumer Council NI gauge NI-wide weekly average cost of oil on Thursday's and publish these on their website.

Become a member:

Send first name, postcode and mobile number to: oilsavings@nihe.gov.uk

Text: 07507 301 980 OR Freephone: 0800 111 4455

2023 Annual Total (Jan to Dec)



13,887 orders

£400,879

total savings

£20.49



average 200l savings



£2,662,220

membership spend

3,772,595

total litres negotiated





Home Energy Savings Tool

The Housing Executive has launched a new interactive tool in collaboration with Energy Saving Trust using local data. This tool will help householders lower their energy bills and make their home more comfortable. This easy-to-use tool will help determine:

- how energy efficient a home is.
- what changes would make a home more energy efficient?

This tool is very user friendly.

A householder will answer a few basic questions about their home using guidance for each question if needed.

The home energy improvement plan can be refined based on energy needs on:

- house type
- insulation
- boiler age

The tool will produce report with tips on how to reduce home energy use and save money.

The action plan will include:

- ideas for energy saving home improvements,
- the costs of energy saving measures,
- potential yearly savings,
- current and potential Energy Performance Certificate (EPC) rating
- estimated reduction in CO2 output



To use the tool, visit our website:

https://energyadvicetool.nihe.gov.uk/

Schools' Energy Efficiency Awareness Programme (SEAP)

Over the past four years, the Sustainable Development Unit (SDU) has sponsored the Energy Topic, one of ten Eco-Schools Topics of the Schools Energy Efficiency Awareness Programme. Teacher and pupil resources are offered under this topic, reaching 1,143 schools and over 320,000 pupils.

SEAP encourages pupils' awareness of energy use, and under 'The World Around Us', an area of learning in the primary school curriculum, seeks to encourage action through informative presentations, activities and learning

The Housing Executive's ongoing relationship with Keep Northern Ireland Beautiful (KNIB) is part of a NI-wide Environmental Awareness Programme network, which covers 11 major environmental topics.

These topics are supported by DEARA and partnering with: Translink; Mars Wrigley; Granville Park; Trocaire; our 11 local Councils, and a host of associated sponsors and support organisations.

L to R Emma Stubbs, Asst. Director Private Sector Investment and Sustainable Development, Cillian Campbell, P7. St Malachy's PS Armagh, Nikki Sinclair, Energy Advisor, Gemma Cowles, Project Manager

Annual SEAP Eco-Competition

The annual Eco-Competition is organised by the Housing Executive, in partnership with Keep Northern Ireland Beautiful's Eco-Schools NI and is open to all primary and post primary schools. In 2023, five winners across NI scooped a prize in a fun competition to design a 'Day in the Life of an Eco-hero/villain'. Primary 3 to Year 9 pupils were invited to take part to help highlight issues such as energy efficiency in the home and school, renewable energy and climate change. Each winner received their own eco-laptop and £500 for their school to use toward an eco-project.

Energy Topic Sponsorship and Green Flag Awards

The Housing Executive sponsored 2023 trophies for School Eco-awards- Green Flag Awards and Eco-teacher of the year. Eco-Schools NI awarded and encouraged 217 Green flags to a vast assortment of Northern Ireland schools, across 8 Council ceremonies, covering all 11 councils. The Housing Executive are delighted that almost a quarter of these flags applications concentrated on the Energy Topic.



Shea Lagan (P7, 2023), St Mary's Maghera, L'Derry/Derry, Cian McCleary., (P4 2023) St Malachy's PS Bangor, Cillian Campbell, P7. St Malachy's PS Armagh



CEO lan Humphreys Keep Northern Ireland Beautiful, Nikki McKee (Energy A CEO Ian Humphreys Keep Northern Ireland Beautiful, Nikki McKee (Energy Advisor NIHE) Teacher of the Year 2023 Lisburn Area. Gemma Cowles (Project Manager).

Young Reporters for the Environment

In addition, Keep Northern Ireland PENESS PROGRAMM Beautiful deliver Young Reporters for the Environment (YRE), an international programme operated by the Foundation for Environmental Education in 34 countries involving over 330,000 young people. The programme invites young people aged 11-25 to identify a local environmental issue, investigate and suggest solutions. By providing sponsorship for this programme, the Housing Executive can support a wider age range of young people across Northern Ireland.

In 2023, the local project had:

- 8 entries into the Young Reporters for the Environment International Competition
- 103 schools downloaded the 'GCSE YRE' controlled assessment support resource, which the Housing Executive contributed into



Architects of Change Phases I & II (AOC)

Background

Architects of Change is a sustainable research project that focuses on bridging the Green Skills generation gap in Belfast. Conceived in 2020, Phase 1 of the project, funded by Belfast City Council sought to encourage environmental education, putting the younger generation at the heart of educating local business leaders on issues such as net zero emission buildings, zero emission neighbourhoods, renewable technology, retrofit and reducing material emissions.

This ambitious project launched in March 2021 and brought together Master of Architecture Students, PhD researchers and leading academics from Ulster University's Belfast School of Architecture and the Built environment, as well as engaging a full-time Research Assistant to manage the project.

A sustainable manual was developed, collating various strands of research to define and inform physical workshops delivered in March 2022.

AOC Phase 2, funded by the Housing Executive, places children and young people at the forefront of a new sustainable cross community engagement programme,

with critical support and collaboration from Ulster University's Schools' Outreach team

AOC Phase 2 was delivered during 2022-23 and targeted Belfast children and young people aiming to develop meaningful, purposeful, and sustainable cross-community engagement. The year-long training programme, with an element of fieldwork, provided pupils with real-world experiences, enabling them to make connections between what is happening at school (theory) and in the 'real-world' (practice). This approach closed the research loop between the higher-level training for business leaders to an entirely new training programme for those at a much younger age.

AOC Phase 2 Outputs

23 workshops- North and West Belfast schools plus a one-day event hosted on Ulster University's Belfast campus.

P7 (90 pupils) Key Stage 2 (7-11yrs)

- Currie Primary School (Limestone Road)
- St. Marv's Primary School (Divis Street)
- St Kevins (Falls Road)

Year 8 (25 pupils) Key Stage 3 (11-14yrs)

• Boys' Model, (Ballysillan Road)

Workshop Topics- included topics as diverse as Becoming Architects of Change, Lessons Learned from Other Countries; Caring About Carbon; Remembering our 3 R's: Reducing, Reusing and Recycling; Building a Better Belfast; Figuring Out the Future-Together; Climate Change; Natural Catastrophes; Pollution of All Kinds; Decrease In Flora And Fauna: Deforestation.





In the Early
Stages of Their
Sustainable
Journey - Our
school children
becoming
Architects for
Change





National Energy Action (NEA)

NEA is a charity working to end fuel poverty across the UK. Supported by Housing Executive funding, it also provides essential energy efficiency training and awareness outreach in Northern Ireland to householders and community groups. It raises public awareness through an extensive range of activities, including accredited training courses which cover fuel poverty, fuel debt, affordable warmth and delivering practical energy advice.

Fuel Poverty and Health Certified Training

In response to the pandemic, NEA continue to utilise technology as a means of delivering training programmes in respect of Fuel Poverty and Health awareness. This training examines the causes and impacts of fuel poverty with a focus on health issues and solutions. It aims to help delegates identify those likely to be at risk from fuel poverty and to signpost them towards appropriate assistance.

Webinars are delivered live by expert tutors to small groups to ensure a good level of interaction and support for learners. The webinars are designed for anyone wanting to learn more about fuel poverty, its causes and links with physical and mental wellbeing.

Fuel Poverty Awareness Day 30 November 2023

In 2023, the Housing Executive supported National Energy Action's flagship event, Fuel Poverty Awareness Day on 30th November 2023 with other partners from our HECA stakeholder panel.

Energy Saving Trust

Energy Saving Trust were delighted to be leading the annual energy awareness campaign Energy Saving Week in Northern Ireland for the 23rd year from Monday 27 November to Friday 1 December 2023.

The theme of the week was **Wee changes**, **big differences!**

The aim was to promote energy efficiency to homes throughout Northern Ireland and encourage households to take action and change habits to save energy during the campaign week and in the longer term. This effort would result in positive change not only to reduce household bills but to also decrease carbon emissions.

The campaign delivered by Energy Saving Trust is supported by the Housing Executive and in collaboration with organisations from across the Northern Ireland energy sector including Power NI, SSE Airtricity, firmus energy, Phoenix Energy, Evolve, NEA NI, Bryson Energy, Consumer Council NI, Apex Housing Association, Radius Housing, Clanmil Housing, Choice Housing, and NIFHA. Throughout the week the campaign shared simple and effective tips to save energy, reduce bills and limit impact of our energy use on the environment. Energy Saving Trust provided a range of resources and toolkits highlighting daily themes throughout the week which focused on various low-cost measures to save energy and money in the home which was shared on social media by the organisations within the energy sector.

Energy Saving Trust also engaged with primary schools and special schools across Northern Ireland to take part in an energy saving challenge in partnership with the Housing Executive and Eco Schools NI. Primary School pupils were encouraged to save energy at home and reduce their carbon footprint throughout five days by completing a range of energy saving tasks, to support Energy Saving Week. The school with the most amount of carbon saved were awarded a prize sponsored by Power NI of £1000 to contribute to a sustainability project to benefit the school. SSE Airtricity sponsored a second prize of tickets to visit W5 in Belfast. Every school that enters received a certificate, which they can proudly display to highlight the amount of carbon saved by contributing to the challenge.

Energy Saving Week Impact



71,214

social media reach



1,458

visits to the Energy Saving Week (Energy Saving Trust) website



Week

36

primary school entries







Love Your Home (LYH)) Friday 9-11 June 2023

450-500 visitors to our kiosk 210 (follow-up Energy Grant and advice queries)

Theatre style open seminar to the LYH audience of attendees, where NIEAS and stakeholders NEA, Energy Saving Trust, and Consumer Council answered questions from those seeking general energy information.



Reducing fuel poverty

% In Fuel Poverty

(10% definition) against gross income



<£10,399



£10,400-£15,599



£15,600-£20,799

Fuel Poverty Data

In 2016, the Northern Ireland House Condition Survey (NIHCS) estimated that there were 160,000 households in fuel poverty. representing 22% of all households in Northern Ireland. Modelling estimates, released in October 2023 have now placed that figure at 179,000 households or 24% of all households in Northern Ireland. This is following the adjustment of fuel prices. household incomes and simulating the installation of energy efficiency measures within the Northern Ireland housing stock.

Applying the updated fuel prices to the 2016 data resulted in different rates of changes in fuel costs, dependent on the fuel type used. The changes to fuel prices led to the following changes in the average annual household fuel expenditure in Northern Ireland: Between 2016 and 2020, the mean household fuel costs increased by 10%, from £1,530 in 2016 to £1,680 in 2020: the mean household fuel costs were increased further to £1,700 in 2021, equivalent to an 11% increase since 2016.

In total, following the allocation of energy efficiency improvements (cavity wall insulation, loft insulation and heating system upgrades), the mean household fuel costs for households in Northern Ireland decreased by 3% in both 2020 and 2021. Overall, the combined effect of fuel price increases and energy efficiency improvements increased the mean household fuel costs by 7% between 2016 and 2020, and 8% between 2016 and 2021 (from £1.530 in 2016 to £1.630 in 2020. and £1,640 in 2021).

Nevertheless, similarly to incomes, the number of measures applied was not enough to compensate for

the increase in fuel prices between 2016 and 2020, and between 2016 and 2021. Overall, the impact of energy efficiency improvements was to reduce the number of households in fuel poverty by two percentage points in 2020, and by three percentage points in 2021, when compared with fuel poverty with adjusted fuel prices and incomes only.



£20,800-£31,199

£31,200-£46,799



2006 2011

226.000

34%



294.000 42%

2016



160.000

2017*

Households in Fuel Poverty (10% definition)* Estimated figures from 2016 HCS model

128.000

17%



131.000 18%

2018*

2019*

194.000

24%



180.000

24%

2021*

179.000 24%

£46.800+

Source: HCS 2016

^{*}Estimates of Fuel Poverty in Northern Ireland 2020 & 2021

Northern Ireland Housing Executive New Build-Building for the future

During 2023, the Housing Executive commenced its first home construction scheme in more than 24 years. The scheme will see the construction of six semi-detached dwellings at Sunningdale Gardens, North Belfast. Part of a new build pilot, the six homes will be built using Modern Methods of Construction (MMC) and ultra-low energy building techniques, to Passive House standard.

The aim of the scheme is for the Housing Executive to:

- deliver a New Build Pilot that consists of social housing units constructed to Passive House standard, by utilising modern methods of construction and ultra-low energy building techniques, whilst including the incorporation of passive building systems;
- help address new international/ national targets regarding the reduction in carbon emissions/ greenhouse gases and constructed to an EPC A standard beyond that of the current Building Regulations of Northern Ireland.

It is hoped that this pilot will realise the benefits of ultra-low energy building methods including:

- Improved energy efficiency and reduction in carbon emissions;
- Lower heating bills/ savings from reduced fuel costs thereby helping to reduce the risk
 of fuel poverty;
- The attainment of comfortable and healthy indoor environments for occupants;
- The provision of wider societal benefits from the likes of improved health and well-being for occupants.

The external envelope of the properties will comprise of:

- External walls constructed using aerated blockwork, as a rapid build technique or onsite MMC, with 225mm EPS external wall insulation with a rendered finish.
- Dual pitched trussed roof construction with concrete interlocking roof tiles with solar PV on timber battens and a polypropylene roofing membrane, with a cold roof build up consisting of 600mm mineral fibre insulation.
- Ground floor build-up of sand/ cement screed on suspended concrete slab on 300mm EPS insulation.
- Triple glazed, Passive House standard doors and windows are incorporated along
 with specialist materials to act as thermal breaks at junctions such as at the entrance
 canopies, sills and thresholds to all properties.

Due to the high level of air tightness, a mechanical ventilation system is required. This has been designed into the incorporation of passive building systems. This consists of a combined whole house heating and ventilating system which has an air sourced heat



pump, with integrated mechanical ventilation heat recovery unit (MVHR) and hot water cylinder.

The other main elements of work being carried out are as follows:

- Front and rear gardens incorporating hard and soft landscaping and external drying areas. Terraces to be provided to rear, enclosed by low level brickwork plinths with mild steel balustrading.
- Boundary treatments and associated evergreen hedging/ slow growing trees, with a combination of facing brick walls to the front and side elevations and timber fencing between the units and at the rear.
- The provision of three new on-street car parking spaces, along with new pedestrian footpaths and modification to existing highway, all in accordance with DFI Roads and Private Streets Determination requirements.

It is anticipated that the houses will be completed and occupied by August 2024.













ERDF/Housing Executive Funded Retrofit Programme

The Housing Executive is in the final stages of completing the Energy Efficiency in Social Housing project, which is part-funded by the European Regional Development Fund (ERDF) through the Investment for Growth and Jobs Programme for Northern Ireland 2014-2020.

Upon completion of this programme the Housing Executive will have carried out works to improve the energy performance of 1,406 homes across Northern Ireland. With an approximate spend of £31.7million, £19 million will be provided by the ERDF, and the remaining costs invested by the Housing Executive.

Taking a fabric first approach to non-traditional housing stock, the work includes a variation of; external wall insulation, window/door replacement, cladding and roofing work, roof and floor insulation, replacing canopies, renewing rainwater goods/fascia/barge and providing ventilation to kitchens and bathrooms, where required. These improvements will assist tenants in managing the cost of living crisis and reduce carbon emissions from Housing Executive stock.





Small Business Research Initiative (SBRI)

The SBRI offers businesses the opportunity to work directly with the public sector to develop new technologies and processes, helping to meet efficiency targets and improve public services.

The Housing Executive has a duty under the Climate Change Act (Northern Ireland) 2022 to report on carbon emissions, and the Department for Communities has a duty to produce sectoral plans to support Climate Action Plans, requiring a significant reduction in carbon emissions to ensure NI meets its net zero target by 2050.

It is anticipated that significant capital investment will be required by the Housing Executive and energy network providers to achieve these targets, with a huge variety of technical options already on the market or in development. Currently, low carbon heating systems are more expensive than fossil fuel boilers. The Housing Executive faces large investment requirements to decarbonise the supply of heat to homes, and therefore needs to ensure the effective use of limited resources. The Housing Executive also wishes to ensure safety for tenants and is therefore also seeking to assist tenants in limiting humidity and in maintaining good internal air quality in homes.

This SBRI challenge therefore meets two key corporate objectives:

- 1 Supporting the Housing Executives efforts in cutting and reporting on carbon emissions, whilst reducing its capital and operating costs, by providing information on prioritising and evaluating innovative low carbon systems for investment, knowing 'what works' in terms of physical or behavioural interventions. Ensuring homes are adequately heated and ventilated reduces maintenance costs, reduces instances of poor air quality and damp, thus sustaining tenancies and rental streams. It will be important for the Housing Executive to choose the right combinations of low carbon upgrades to avoid excessive installation and maintenance costs and to limit fuel poverty.
- 2 Improving information for tenants to help them to manage their energy consumption themselves, while keeping heating available and homes dry enough to avoid mould. For example, if provided with live humidity data, tenants may be able to limit mould formation in their home by operating existing fans or opening windows, or by operating their heating system to limit damp by providing low level background heating or preheating.

As part of phases 1 and 2 of the SBRI project, a range of home-based sensors were installed in a small number of tenants' homes. Data including room temperature; hot water temperature, surface temperature, humidity and heating fuel use has been monitored. Suppliers have developed their analysis and remote communication of this data, including the ability to provide advice hints to tenants' Smart Phones on energy budgeting and damp risk reduction.

A final phase 3 got underway in 2023 to develop an innovative and cost-effective product and service offer for householders and/or to help property owners to improve their estate management. The Housing Executive has agreed access to 86 homes for the 3 Research & Development suppliers until at least the end of March 2024.

At the conclusion of Phase 3 the Housing Executive will evaluate their effectiveness, and if applicable, consider a range of procurement and investment options to roll these monitoring and advice systems out to a larger number of dwellings.



Grants for Owners and Private Rented Tenants

Affordable Warmth Scheme

The Affordable Warmth Scheme was introduced in September 2014 and is funded by the Department for Communities' (DfC) 'Being the Domestic Energy Efficiency Improvement Programme' for vulnerable low-income householders, the Affordable Warmth Scheme is a central element in the NI Executives' Fuel Poverty Strategy.

The Housing Executive's Private Sector Improvement Services (PSIS) unit is active in the promotion of energy efficiency in its role as administrator of the Affordable Warmth Scheme, on behalf of DfC and throughout 2022-23 worked in partnership with all 11 Councils in Northern Ireland.

Affordable Warmth is designed to help reduce the effects of fuel poverty in the private sector, offering a range of measures for households with a gross annual income of less than £23,000. In 2022/23, The Affordable Warmth Scheme facilitated improvements in 3,308 homes at a cost of approximately £16.3m.

This in turn involved the installation of 5,591 measures in these properties:



990 boiler installations



£0.6m

expenditure via the Boiler Replacement Scheme

Boiler Replacement Scheme

The Boiler Replacement Scheme was for owner occupiers whose annual total gross income is less than £40,000 and was designed to help with the cost of replacing outdated oil or gas boilers. In order to be eligible for replacement, the current boilers must be at least 15 years old. A grant of up to £1,000 was available to assist with the cost of installing new boilers and controls, including installing a wood pellet boiler if desired.

In 2022/23, a total of 990 boilers were installed at a cost of £0.6m. This scheme closed to new applications during 2023.



1,152

loft insulation



2,724

heating



1,272

windows



337

cavity wall insulation



102

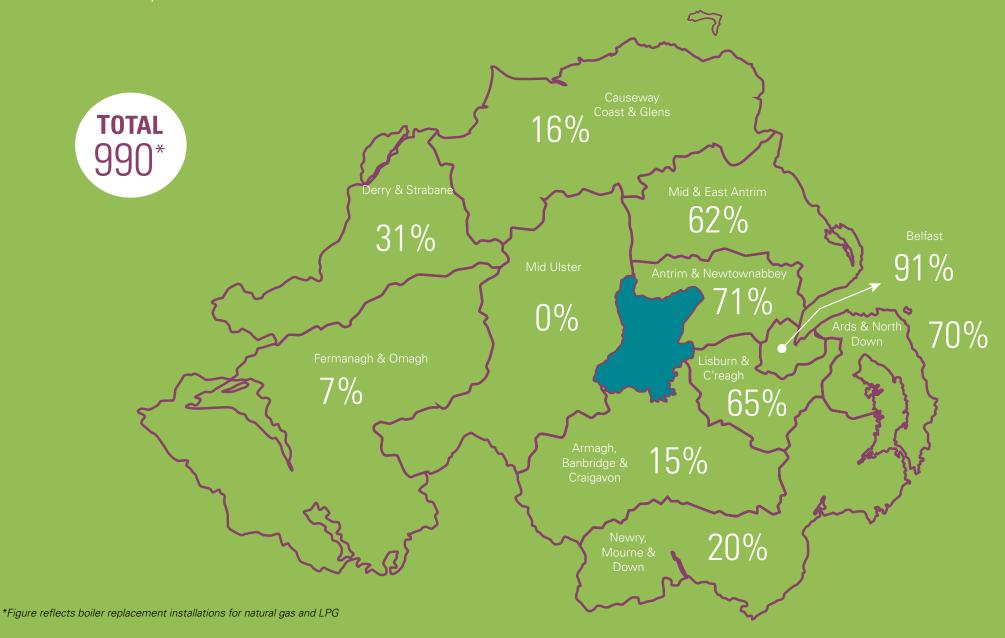
draught-proofing measures



4

solid wall insulations

Proportion of gas installations by Council Area within Boiler Replacement Scheme 2022/23





Energy Efficiency refurbishment across the Housing Association movement

During 2022/23, the Housing Association movement invested over £6.1m installing the energy efficiency measures including:

1,450+
high efficiency boilers



650

loft insulation and draught proofing

measures



Northern Ireland Sustainable Energy Programme

NI Sustainable Energy Programme (NISEP)

The Energy Saving Trust acts as the programme administrator for the Northern Ireland Sustainable Energy Programme (NISEP) on behalf of Northern Ireland's Utility Regulator. They manage schemes that are delivered by a range of organisations across NI, to reduce energy and carbon by installing energy efficient measures.

The NISEP fund comes from a levy on electricity bills paid by both domestic and commercial customers throughout Northern Ireland and 80% of funding is ring-fenced for vulnerable customers. The programme provides energy efficiency measures to homeowners, private tenants and housing association properties across Northern Ireland through prescribed eligibility criteria based on gross annual income.

NISEP, which runs on a year-on-year financial basis, has been successful in targeting homes with no heating or inefficient heating systems in addition to installing energy saving measures in homes such as loft insulation, cavity wall insulation, smart heating controls and draught proofing measures.

Energy Saving Trust administered £7.4 million of funding in energy efficiency domestic schemes during 2022/23 which included domestic Air Source Heat Pumps and solid wall insulation, delivered as part of a whole house solution package.

Domestic measures installed via NISEP during 2022/23



1,706

loft insulation measures



1,405

wall insulation measures (CWI/SWI)



1,145

*including
15 Heat Pumps

Housing Executive Energy Efficiency measures within Planned Maintenance Works

In 2022/23, the Housing Executive invested approximately £53.56 million in energy efficiency measures within its planned maintenance programme across its own housing stock.



£6.1m on 2,322

double glazing installations (providing A-rated double glazed units)



£21.3m on 4,596

heating conversions (energy efficient boilers) which includes zoning where practical and 270mm loft insulation

Housing Executive Demonstration Pathfinder Pilots

Rural-Led Energy Transition (RULET)

The Rural-Led Energy Transition (RULET) is an initiative retrofit whole house approach pilot with ten similar social houses, led by the Northern Ireland Housing Executive and Ulster University. The pilot's overarching aim was to reduce the risk of low-income households being left behind in the transition to clean, smart, integrated energy systems. Domestic electrical heating systems, when combined with energy storage and smart controls and operated at scale, have the potential to create significant system value which can benefit the householder and landlord.

RULET builds on the work of the previous pathfinder pilots which tested low carbon heating and improved thermal performance). RULET is a collaboration of partners across the energy system, namely NI Utility Regulator, NIE Networks (DNO) Energia/PowerNI (energy supplier), heating manufacturers Grant & Sunamp, and smart heating control developer Climote.

Retrofit measures were installed in spring 2022 to test the deployment of:

- a) Improved energy efficiency measures
- b Low carbon heating systems focused on electrification
- c) Tariff change, initially focused on time of use and dynamic tariffs

This innovative whole house approach had the desired outcome of improved fabric first energy efficiency measures, reduced heating demand/carbon emissions and improved thermal comfort, all undertaken without the need for the tenant to decant.

RULET completed a second season of monitoring during 2023, and next winter will complete the monitoring exercise of this pilot.









300 Low Carbon Retrofit Programme:

The development of Low Carbon Retrofit Programme workstreams at scale will be key for the Housing Executive and statutory partners in delivery against the Sustainable Development Strategy and the Climate Change Act (Northern Ireland) 2022. The programme will target circa 300 NIHE homes, spread across Northern Ireland, investing circa £10 million. Phase 1 (circa 100 units) is due to commence on site in January 2024 and finish three months later. Phase 2 (the remaining circa 200 units) will commence following Phase 1, with a completion deadline of March 2025.

The aim of the 300-unit low carbon retrofit programme is to:

- Provide a clear evidence base and key learning points to ensure the Housing Executive
 will provide decarbonised retrofitted solutions via its Landlord and Private Sector
 Investment business areas. This will align with the Climate Change Act (Northern Ireland)
 2022 and is anticipated to be part of the first Residential Climate Action Plan for the
 period 2023-2027. It will help address fuel poverty by reducing household energy bills
 and provide healthier homes.
- This evidence-based pilot over 2 years to inform the proposed Landlord Decarbonised Heating Policy by 2026 in order to commence delivery of decarbonised retrofit at scale by 2026/27 in line with the Sustainable Development Strategy and Action Plan. The Low Carbon Retrofit Programme will trial whole-house solutions with energy efficiency measures, decarbonised heating (principally with air source heat pumps, hybrid heat pumps and biomethane via the gas network), renewable technology to provide power generation and storage, electric 'time of use' tariffs, and an improved education to effect behaviour change. The interventions will also include data monitoring systems and 3rd party research to provide the tenant and NIHE with qualitative and quantitative analysis.

For many of our contractors this will be the first work of this type at scale. This programme will offer the opportunity for contractors and their supply chain to skill up in readiness for similar work to be carried out to all suitable NIHE housing stock and the wider NI housing stock.



Choice Housing scheme, Park Avenue, Belfast (Pic-RPP Architects)

Social Housing Development Programme

The Social Housing Development Programme delivered 1,449 completed homes in 2022/23 (against a target of 1,400). 80% of these completions (1,160) were newly constructed units. New build homes are constructed by housing associations in compliance with current Building Regulations, which produce an average SAP rating of approximately 83 (Band B). This level of SAP rating is a contributing factor for the higher mean SAP of 72.63 for social housing in comparison to the mean SAP of 65.11 across all tenures of occupied dwellings.

Providing support to housing associations to deliver higher standards in energy efficiency for new social homes is viewed by DfC and the Housing Executive as a vital way of mitigating the effects of climate change, reducing fuel poverty and improving health.

The Housing Executive is also aware that some housing associations are investigating small-scale pilot proposals for delivering new social homes to 'Nearly Zero-Energy Buildings' standards, and information from these pilots will be shared with DfC in due course.



Choice Housing scheme, Park Avenue, Belfast (Pic-RPP Architects)



Choice Housing scheme, 173 Lisburn Road, Belfast

Living sustainably - protecting the environment



























Aim: Reduce energy demand, principally through a fabric first approach to reduce fuel poverty and deliver net zero heating in order to reduce carbon emissions in line with the national target of Net Zero





195%

average improvement on pre-retrofit SAP scores



20.3°

average post retrofit temperature (3.4° increase on pre retrofit)



£748

average reduction in fuel bills



45.3%

average decrease in total fabric heat loss



75.5%

average reduction on CO₂ emissions rate



Focus on Energy Efficiency activity undertaken by Local Councils and the Housing Association sector





Derry City & Strabane District Council Climate & Energy Initiatives

Derry City & Strabane District Council continue to strive towards achieving the Climate Pledge for the City & District.

Working in collaboration with Donegal County Council the North-West Regional Energy Strategy was published in 2020 identifying five main themes:

- Energy Efficiency
- Low Carbon Heating
- Low Carbon Transport
- Renewable Energy Generation & Energy Storage
- Smart Energy Management

Recent energy projects include the North-West Decarbonization Feasibility Study funded by the Shared Ireland Fund. The project delivered public sector building energy audits in Derry, Strabane and Donegal alongside identification of biodiversity, and sustainable transport opportunities. The consultant team carried out fifty-six level one audits in public sector buildings across the four Decarbonization Zones (DZs). Detailed level two energy audits were carried out in thirty buildings across the two council areas with recommendations made regarding building fabric upgrades, heating upgrades and renewable energy potential. Costs for individual recommendations, energy efficiency savings, carbon emissions savings, energy expenditure savings for each building were set out in the level two audit reports.

The report has been instrumental in setting the direction for decarbonisation of public sector infrastructure including the anticipated costs, energy saving and emission reduction potential of future investment.

Net Zero Carbon Roadmap

Council have also established a greenhouse gas emission baseline and net zero roadmap for the City & District. This provides the basis for further action planning to reduce emissions including decarbonisation of our energy and transport infrastructure as well as improved land use.

Net Zero - Derry & Strabane - From Ambition to Action

Derry City & Strabane District Council have successfully secured £300,000 of funding from Innovate UK to deliver the Net Zero Derry & Strabane project. Delivered from 2023-2025 the project will see the development of a Derry Strabane Sustainability & Climate Commission, Climate Action Plan, Green Finance & Investment Plan and Climate Data Repository. Additional outputs include climate screening tools, sustainable procurement strategies and project pipelines.





Newry, Mourne & Down Council

Sustainability and Climate Change

Newry, Mourne and Down District Council declared a climate emergency in 2019 and took measures to effect dramatic short-term changes in every area under its control, drawing on local and international case studies to mitigate the impacts of Climate Change within our district.

Council has invested in sustainability measures for years, with a team working across a range of related areas, including sustainability, environmental education, energy management, biodiversity and sustainable foods. The importance of responding to the climate emergency and taking action to deliver sustainability and environmental improvements, has also been reflected as part of a recent Council restructuring, through the creation of a Sustainability and Environment Directorate.

We are in the process of developing a number of important strategies and policies, which will be published in 2024,

including a Sustainability and Climate Change Strategy and Action Plan, which will outline action across a range of areas, such as buildings and energy, transport and waste.

A Local Climate Adaptation Plan is also being developed, as part of Council's Climate Action Programme, which identifies the impacts of climate change on all its operations including extreme flooding, storms, extreme heat and drought, coastal erosion and extreme cold in winter. It also informs training which Council staff receive on climate change to enable them to take adaptation and mitigation actions within their sectors.

Investing in green infrastructure and technology is a crucial step in the council's journey towards sustainability. We are working to reduce the environmental impact of new and existing buildings through energy management practices, including enhanced building fabric, considering lower carbon heating solutions for new building projects and decarbonising existing buildings. We are also committed to environmental sustainability as a key underpinning principle for the design and construction of our City Deal facilities, using policy levers to integrate inclusive, sustainable growth.

Council is continuing to consider options to invest in renewable energy, with solar PV systems already installed at 21 of our sites. Based on data collected in 2022/23, we estimate that we have generated around 155,000kWh of renewable electricity, with around 75% of this used within our buildings. This investment has both reduced our carbon footprint and delivered financial savings to reduce the running costs of some of our leisure centres, community buildings and offices.

Collaboration with other governing bodies, environmental organisations, and local businesses is integral to the success of sustainable initiatives. Recent work has continued with other councils on topics such as fleet decarbonisation and carbon offsetting, and we are one of three local authorities to install high speed, public charging points for electric vehicles, as part of the FASTER Project, which has received €6.4m through the INTERREG VA programme. Further public electric vehicle charging is also planned, as part of the collaborative On-street Residential Chargepoint Scheme.

Energy Efficiency activity within the Housing Association Sector

Good housing design has a key role in meeting the aspiration of delivering sustainable communities and protecting our environment, stimulating economic growth, maximising wellbeing and achieving social inclusion. Local housing associations play a central role in the construction of high quality, energy efficient new homes throughout Northern Ireland.



Arbour Housing Association

Arbour Housing, own and manage over 1,200 homes throughout Northern Ireland, with larger concentrations of stock in the main towns of Portadown, Lurgan and Newry. Arbour continue to help their tenants live sustainably, reduce their fuel bills and ease fuel poverty.

Clean air and cosy feet: An air source heat pump pilot scheme

Arbour recently undertook a substantial retrofit of two semidetached bungalows in Fort Street, Banbridge, replacing the old oil-fired central heating systems with outdoor 6kW air source heat pumps connected to an indoor compressor unit and hot water tank. The work was part-funded by the Department for Communities.

The two homes were vacant before the new system and other elements were installed. This allowed for the works, which included laying underfloor heating throughout, to be carried out without inconveniencing sitting tenants.

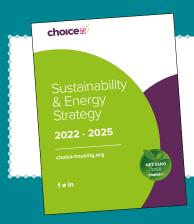
In addition to the air source heat pumps, both of the properties have benefited from new cavity wall, floor, and roof space insulation, and have had solar panels installed. In due course, these will provide a renewable source of electricity to power the air pumps. Both properties are now occupied, with tenants receiving one-to-one training on the system controls and room settings at the start of their tenancies.

The system generates real-time data via room sensors and other monitoring equipment. In addition to collecting this information ourselves, we are sharing it with the Department for the Economy. Collection of the data is done remotely (although the tenant also tracks his own consumption on a weekly spreadsheet), which allows us to diagnose any system faults and, crucially, identify opportunities to improve efficiency and optimise the system for future roll-out.











Choice Housing Ireland Ltd

Choice is one of the largest independent housing associations in Northern Ireland providing high quality homes and care and support services to help meet the diverse needs of a wide range of customers, including older people, families, mature singles and people with complex needs.

Choice understands that energy cost is a concern for tenants and have put various measures in place to ensure that the homes they provide are some of the most energy efficient in the country

2022/23 marks the first year of Choice's 2022-25 Sustainability & Energy Strategy. The central aim of the new strategy is to establish an interim 2030 net-zero trajectory. Therefore, Choice effort this year was centred on developing institutional expertise and establishing relationships with stakeholders that can guide them on the path to 2030. This includes training staff in PAS2035, Passivhaus and BREEAM, as well as conducting study visits to ongoing retrofit projects in GB/ROI. In addition, Choice have continued to undertake initiatives in respect of energy management, investment and tenant engagement to support their long-standing fuel poverty goals.

Key achievements in 2022/23:

- Delivered £302,000 savings from energy procurement practices.
- 2. Reduced landlord energy consumption by £242,000.
- 3. Adopted 'Energy Elephant' smart energy invoicing software.
- 4. Generated £65,000 of free, renewable electricity for tenants.
- 5. Reduced our operational CO₂ emissions by 356,000kg.
- 6. Invested £1,297,442 in reducing tenant heating bills.
- 7. Completed our first six retrofit projects.
- 8. Increased our average EPC from 76 to 77- Social Housing Average NI 73.
- 9. Adopted innovative retrofit modelling software-Sava Intelligent Energy."

Case Study

Choice complete their first six retrofits as part of the Victoria Homes refurbishment project.

Per Choice's Sustainability & Energy Strategy we are committed to: Achieve a minimum EPC Band C energy efficiency rating across 65% of our E, F & G properties.

In 2022-23 Choice completed a validation exercise of our existing EPC Band E-G properties. In this exercise Choice discovered that 64% of E, F & G properties had received sufficient works via our Planned Maintenance Programme to achieve a higher rating (2% B / 58% C / 40% D).

Of the remaining 78 Band E-G, Choice completed retrofit works on 6 properties in 2022-23. Our first six retrofits were completed as part of our ongoing refurbishment project for legacy Victoria Homes properties.

In all six instances Choice made energy efficiency improvements that increased the EPC Band from E or F to a Band C.

Measures taken:

- 1. Cavity wall insulation fill.
- 2. Increased loft insulation.
- 3. Windows and doors replacement.
- Condensing gas boiler install with dual zone and heating controls
- 5. 100% low energy LED lighting.

These measures resulted in:

- 74% reduction in operational CO₂ emissions
- 18.98 Tonnes CO₂ emissions per annum.
- 45% improvement in energy efficiency.
- Average energy usage of 377kWh/m2 /Year reduced to 206kWh/m2 /Year
- Average EPC increase of 25 points.

In 2023/24, Choice's retrofit focus will be to perform three deep retrofit trials and prepare a wider programme of both shallow and deep retrofits into 2024/25 whilst adding the measures above into all remaining Victoria Homes refurbishments as a minimum.



Clanmil Housing

Clanmil is one of the largest independent housing associations in Northern Ireland providing high quality homes and care and support services to help meet the diverse needs of a wide range of customers, including older people, families, mature singles and people with complex needs.

Clanmil participated in NI Energy Week during November 2023 providing scheme information, delivering 8 information sessions and producing information leaflets on:

- Compare energy suppliers
- Heating Control Guides
- Managing & Preventing Condensation
- Storage Heaters



Radius Housing

Radius provides quality and affordable housing in 80 towns and cities throughout Northern Ireland. We provide sheltered housing for over 55s and general-needs housing for families and single people. We also offer a range of specialist care and support facilities for the frail elderly, people with dementia, people with learning disabilities and people with complex needs, such as homeless people and victims of domestic violence.

- Through all planned maintenance works/projects, roof and cavity wall insulation is upgraded. Where feasible Radius is enhancing properties with an EPC Rating of D or below to at least a C rating.
- From 2022/23 period onwards Radius have adopted EPC 'A'
 as standard for new build schemes in design, and where
 possible have pushed this to include the fabric energy
 efficiency standard (46kwh/m2 p.a. for semis, end terraces,
 and detached, and 39kwh/m2 p.a. for apartments and midterrace houses).
- 84% of Radius traditional new build units designed in 2022/23 have EPC A ratings- this was not 100% because there were some issues with apartment blocks not being able to meet the 'A' rating without prohibitive costs incurred. 99% of Radius traditional new build units designed in 2023/24 will have EPC A ratings.
- The updated Building Control regulations energy efficiency requirements, along with building to EPC 'A', have meant that from 2022/23 onwards virtually all Radius houses are designed with PVs as standard.

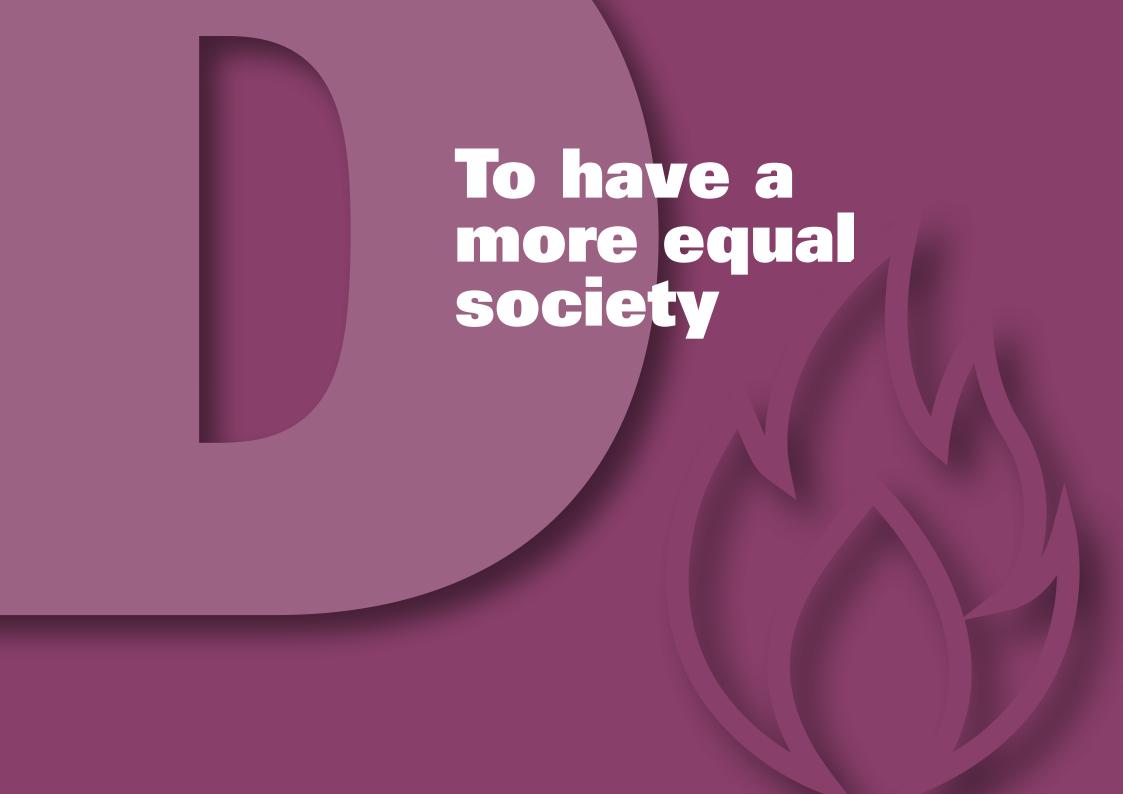
Case Study - St John's Close, Belfast

This £4.5 million investment project is due to commence 2023/24, however most of the investigation, design and consultation took place in 2022/23. St Johns Close is a three storey, 48 unit apartment block in Belfast City Centre with an EPC rating between D and E bands.

This project aims to adopt a more holistic approach to retrofitting and decarbonisation, taking into consideration energy usage, carbon emissions, affordability and health & well-being of the residents.

Surveys of individual residents capturing their daily activities and energy usage, which included a tenant workshop, helped develop a baseline model and retrofit solution encompassing: external wall and roof insulation, new windows, improved air tightness, enhanced air quality through mechanical ventilation, more efficient lighting systems and PV panels on the South facing roof.

Taken together the upgrades will reduce CO₂ emissions by 75% and regulated costs by as much as 64%. The EPC rating is expected to rise to a high B rating.



Ways that Housing Executive tenants save money and reduce fuel poverty

Financial Inclusion Strategy

In 2023, the Housing Executive board approved a new five-year Financial Inclusion Strategy developed in consultation with frontline staff and team leaders, the Financial Inclusion Managers, other Housing Executive policy teams, and members of the Housing Community Network who represent the needs of our tenants.

The new strategy embeds financial inclusion at the heart of as many customer services as possible and has a robust action plan which enables Housing Executive staff to help tenants maximise their income, achieve financial flexibility, and access financial services and information. All Housing Executive tenants and customers are offered Making Your Money Work/Financial Inclusion services at every stage of their customer journey, from application and an offer of tenancy to sign-up, anytime they fall into arrears, if there is a change in their circumstances, and more.

Over 2023, some of the strategy actions which have been helping our tenants with the cost-of-living crisis are:

- Maintaining and further developing connections with food and fuel banks to refer tenants in crisis.
- Establishing a proactive project to encourage uptake of rate rebate so this does not need to be paid out of pocket.
- Working with external agencies to sign-post employment and training opportunities.
- Working closely with Advice NI to assist tenants who are struggling with debt.
- Holding outreach clinics in the community where tenants can drop in and speak to a Financial Inclusion Manager who can assist with finances or refer them to other services for help.
- Promoting the Housing Executive Oil Saving Network.
- Working collaboratively to sign-post to accessible alternatives to illegal and high-cost lending.
- Proactively developing pathways to find and assist tenants in need who are not presenting with rent arrears.



Making your money work

In delivering the Financial Inclusion Strategy, Housing Executive frontline staff provide the 'Making Your Money Work' service which aims to assist tenants to improve their financial wellbeing through provision of:

- Advice and assistance with simple household budgeting and benefit entitlement. This element of the
 service has been enhanced with the introduction of the Benefit & Budgeting Calculator. The calculator
 enables staff to help tenants check they are in receipt of the correct benefits for their circumstances and
 access tips to increase financial resilience.
- · Referrals to independent specialist advice providers for tenants with serious or complex debt issues.
- Referrals to floating support services for tenants with perceived vulnerabilities.
- Direction to further advice and assistance via the Department for Communities "Make the Call" service.
- Information regarding the Housing Executive's Oil Saving Network.

Over the 12 months to December 2023, Housing Executive staff offered over 8,500 Making Your Money Work services. Over half were accepted by tenants. The majority of acceptances were referrals to the Financial Inclusion team. However, frontline staff performed 227 Benefit and Budget Calculations, and referred 109 tenants to Make the Call.

Where Making Your Money Work services were provided by frontline staff to tenants over the 12 months to December 2023, those tenant's rent accounts saw a positive impact in 55% of cases, six months post-intervention. Further, over the same 12 months, extra Housing Cost benefit payments were evident in 60% of cases.

During 2023, we strengthened our relationship with Advice NI who provide confidential accredited debt advice to tenants. Over the last 12 months, frontline staff referred 287 tenants for debt advice. Making Your Money Work triggers are also an opportunity for staff to identify extra support needs and over the past 12 months frontline staff referred 174 tenants for floating support.

The Making Your Money Work service is currently being expanded under the new Financial Inclusion Strategy. This expansion builds upon the existing service to further enhance provision by facilitating access to further advice and assistance regarding bank account options, credit unions, energy suppliers, media packages, and employment opportunities.









The Housing Executive's Financial Inclusion Managers

Over the course of 2023, the Housing Executive embedded an expanded Financial Inclusion Team. There are now a total of seven Financial Inclusion Managers and three Deputy Financial Inclusion Managers working within the Housing Executive.

Three of the Financial Inclusion Managers work as part of Housing Solutions providing much needed financial advice, assistance, and support to customers from the moment they first contact the Housing Executive.

The other seven team members work directly with our tenants to provide in-depth benefits and money advice. Niamh (South Region), Michael (North Region except West Area), Sinead (Belfast Region), and Donna (West Area) are here to:

- Carry out benefit checks, and help tenants to resolve complex benefits issues;
- Help with household budgeting;

- Provide impartial advice to help reduce any debts and ensure tenants can make the most of their household income;
- Help tenants to access other services to help alleviate immediate financial hardship (e.g. charitable organisations, grants etc);
- Support frontline staff in delivery of the Making Your Money Work service.

Throughout 2023, the team assisted just over 4,000 tenants who were referred to them by frontline staff- an average of 333 per month. This is an increase of £1,500 on the previous year. During this period, the Financial Inclusion Managers also unlocked just over £1.8 million in extra benefits for Housing Executive tenants. Over the 12 months to December 2023, where the Financial Inclusion team had a positive impact on the rent account, those rent accounts saw a collective reduction in rent arrears of £421k six months post-intervention.

Deputy Financial Inclusion Managers

Pension Credit is one of the most underclaimed benefits in the UK; the UK government estimates £1.7 billion goes unclaimed each year. Pension Credit is a passport benefit, meaning those who are entitled can also access other help such as Housing Benefit and winter fuel payments. In 2023, on top of normal duties, the Deputy Financial Inclusion team began proactively contacting pension aged tenants in receipt of nil or partial Housing Benefit to offer a benefit check. Over the last 12 months the team have contacted over 850 tenants helping them to boost their income during this challenging economic time and facilitating access to Cold Weather Payments. Some sample outcomes have been included below:

The Financial Inclusion team proactively contacted a pension age tenant to offer a benefit check. The tenant lives alone and prior to contact was paying full rent and rates from their state pension of £181 per week, widow benefit of £90 per month and Attendance Allowance of £92.60 per week. Following a benefit check, the tenant was found to be entitled to pension credit of £64.71 per week and consequently, housing benefit of £56.72 per week. The Financial Inclusion team helped the tenant to apply for both. This tenant's income has now increased by £6,314.36 per year.

The Financial Inclusion team proactively contacted a lone pensioner who, prior to contact, was paying full rent and rates (£88.88) and in receipt of state pension £716.76 per month, attendance allowance (higher rate) and a private pension of £271 per month. The tenant had a small amount of savings but following a benefit check, they were found to be entitled to full housing benefit and rate relief. The team helped the tenant apply for both and their income has increased by £4,621.76 per year.

Prior to proactive contact, a mixed-age couple had been forced to move to Universal Credit (UC). They were receiving full help with rent and rates but not in receipt of any payments for living costs from UC due to their state pension income being deducted. The Financial Inclusion team checked through their entitlement statement and advised the tenant should have been claiming carer's element for his wife who receives PIP. He stated he had been told by an advice organisation he could not claim the carer's element due to being state pension age. The Financial Inclusion team helped the tenant to request this via his UC journal, and also requested the claim be backdated for 18 months from start of UC claim. This couple's income has now increased by £2,230 per year and if the backdate is awarded, an underpayment of £3,345 will also be due to the tenant.

Transition of the Natural Gas Network to a more sustainable energy mix



Evolve (formerly SGN Natural Gas) - Biomethane Injection:

It has been an exciting and momentous year for Evolve, formerly known as SGN Natural Gas. This rebrand signifies more than just a change in name - it embodies our commitment to fully decarbonising our network and our dedication in supporting the Northern Ireland Executive's Path to Net Zero Energy Strategy.

The true highlight of our year was successfully facilitating the ground-breaking injection of biomethane directly into the Northern Ireland gas grid. This historic milestone, which took place in Dungannon, Co. Tyrone, within the Evolve network, marked the first-ever direct-to-grid injection of this fully renewable energy source on the island of Ireland. In an era characterised by escalating environmental concerns, this achievement is a testament to our commitment to sustainable energy solutions and the broader mission to decarbonise the west of Northern Ireland. Biomethane, produced from organic materials via anaerobic digestion, has gained significant traction due to its potential to reduce greenhouse gas emissions and promote energy independence. This initiative, spearheaded by Evolve, not only represents a transformative step for our company but also contributes to the broader energy industry for the region. Plans are already in motion to bring further anaerobic digestion facilities on board, propelling us toward the exciting prospect of fully decarbonising the remainder of our network by as early as 2028.

Amidst these milestones, our commitment to developing the gas network across the counties of Derry/Londonderry, Tyrone, and Fermanagh has remained steadfast. In areas where oil and solid fuel use remains prevalent, Evolve has proudly achieved c.4,000 connections to date. With more infrastructure to be installed, we're excited to continue our expansion into 2024 and beyond, bringing the benefits of gas to more homes and businesses throughout the network.

As we move forward, we emphasise the critical importance of strategic collaboration across all facets of the energy industry. A just transition demands cooperation, partnership, and coordinated efforts from government bodies, businesses, researchers, customers and communities. By uniting our collective expertise and resources, we can navigate the complex challenges ahead, ensuring that no one is left behind in the pursuit of a sustainable and equitable future.



Phoenix Natural Gas

Phoenix Energy transformed the local home heating market when it was established to bring natural gas to Northern Ireland for the first time in 1996. Phoenix is responsible for the safe and secure supply of natural gas to its 250,000 customers already connected to its 4,000km pipeline network. The company continues to grow its customer base by around c.6000 new connections per annum and has further extended its network into a number of new areas including East Down and Whitehead.

Having played a crucial role in the delivery of lower carbon fuel choice for consumers, Phoenix is now playing an instrumental role, working with industry, academia, energy users and policy makers to develop market frameworks to accelerate the production of renewable gas solutions in NI, providing sustainable, ingeniously sourced energy supplies that support the decarbonisation of NI's energy system.

In October 2023, Phoenix in conjunction with all NI Gas Network operators, launched a set of near term, 2030 commitments, that target the development of no regret solutions that will support NI's Climate Action Plan and associated carbon budget targets.



Firmus Energy

Firmus Energy currently has natural gas available to almost 200,000 homes and businesses throughout its network area, which stretches from Newry through the central corridor in NI to Derry-Londonderry. Firmus continue to connect around 4,000 homes and businesses each year. The Firmus network, and indeed all of the natural gas networks in NI, are suitable to transport biomethane and hydrogen which means that the natural gas industry is in a great position to transition to net zero carbon. Existing boilers can accept biomethane and a 20% blend of hydrogen so every new connection can facilitate renewable gas when it becomes available.

The future has now already started with Biomethane being recently injected into the gas network in Dungannon with many other producers finalising to inject as soon as they can. This is the first injection into the gas network in Ireland and is a major milestone for net zero in NI.

Carbon Reduction Grant

Action Renewables have partnered with Phoenix Energy to deliver a new Carbon Reduction Grant in Northern Ireland. The grant is available to households that switch from oil/solid fuel to natural gas. The grant is in the form of £400 cashback once your installation is complete. This applies to households with a total income below £55,000 per annum. This figure includes all household income- salaries, benefits, pensions etc.

Action Renewables is undertaking the assessment of income eligibility on behalf of Phoenix Energy. It is an extremely streamlined and simple process to apply online, with applicants having the ability to upload documents into their application as proof of income in one go.

Once received, applications will be assessed, and applicants will receive a notification from Action Renewables regarding the outcome of their application within 2-3 weeks.

To find out more about how to apply please read the How to apply document or to receive an application form by email please email: grants@actionrenewables.co.uk. Alternatively, please contact the team on 02895 901180.

Summary of Scheme:

- Open to **domestic properties** within the Phoenix License Area, **connecting to the network for the first time**.
- Connections requested from 1/1/24 31/3/24 (to be reviewed mid-March)
- Must be a homeowner, permanently residing at the connecting address.
- Total household income must be <£55k per annum.
- Customer must employ a Gas Safe registered installer who is also registered with Phoenix to offer the grant
- The grant **CANNOT** be used with any government supported central grant (e.g. Affordable Warmth or NISEP)
- Can be used with government supported Insulation Only Grant
- Property must be converting from Oil or Solid Fuel to Gas
- No specific Boiler Age Criteria (targeting older inefficient boilers)
- No "installer boiler form" to complete.
- Customer completes an Income Eligibility check with Action Renewables and obtain an Income Eligibility Authorisation Code

Utility Regulator

The Utility Regulator is developing a new Corporate Strategy for 2024-2029. A public consultation on the draft strategy was launched in October 2023. The draft strategy, called Protecting Consumers on the way to Net Zero, makes delivering a Just Transition to Net Zero a priority. The new strategy will be in place from April 2024.

Since 2019, the Utility Regulator has approved £163.5 million of electricity network investment to support growth in low carbon technology. Investment in low carbon

energy technology has played a part in helping Northern Ireland meet its commitments on energy generation from renewable sources. The Utility Regulator carries electricity and gas network price control reviews that facilitate millions of pounds of investment in these networks to help achieve decarbonisation.

Work continues with the Department of Communities, Department for the Economy, CCNI and other key partners to help identify any measures that can be brought forward to help consumers.

NI Consumer Council

During the 2022/23 financial year, the Consumer Council continued to provide free independent support and advice to consumers and businesses throughout Northern Ireland.

The energy crisis saw increased demand for the Consumer Council's energy price comparison tools. These help consumers save money on their home and small business energy bills by comparing different prices and tariffs.



117,108

consumers used the Consumer Council's energy price comparison tools (electricity and gas) 91,316

consumers viewed the home heating oil price checker

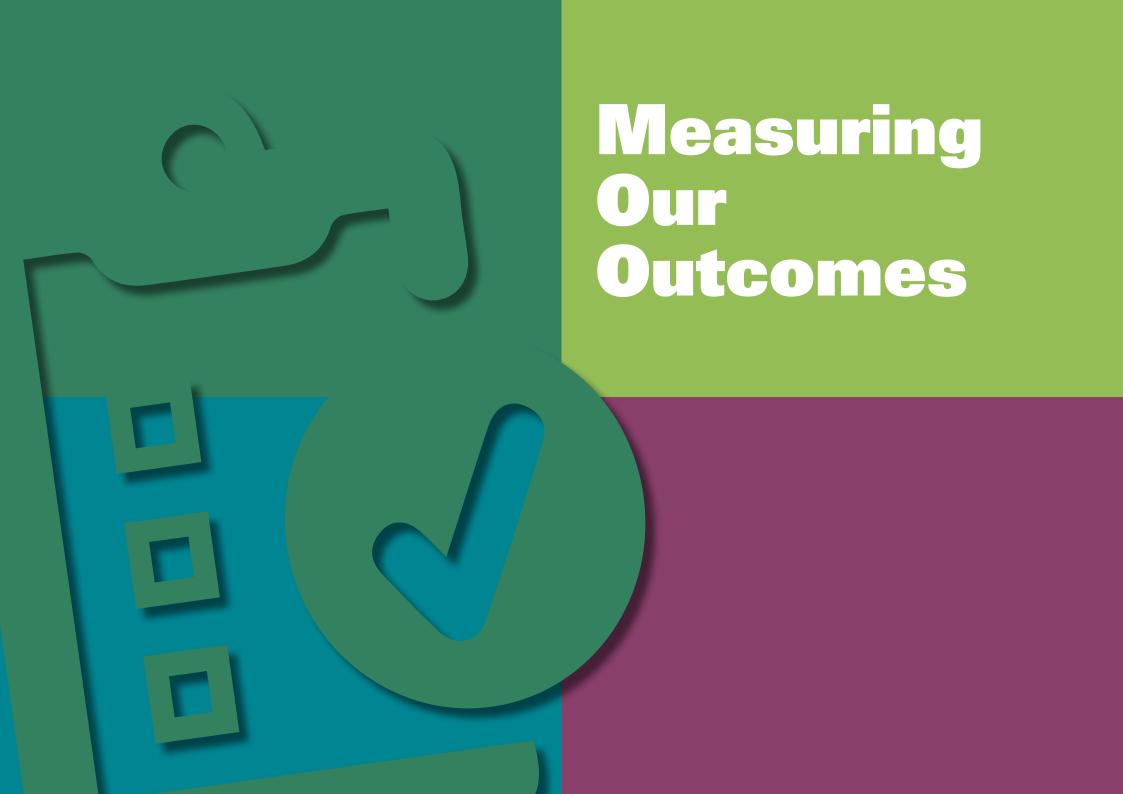


Measuring energy efficiency investment

During 2022/23, the
Housing Executive invested
approximately £53.56m in
order to improve thermal
efficiency, influence and
increase strategic action
to tackle fuel poverty and
improve access to energy
efficiency measures and
advice across Northern Ireland
working with the Department
for Communities.

2022/23 Energy Efficiency Investment via the Housing Executive	£
Housing Executive Heating Schemes	21,395,000
Housing Executive Double Glazing	6,166,000
ERDF Retrofit Programme*	8,960,000
DfC Affordable Warmth	16,331,000
DfC Boiler Replacement	611,000
Energy Marketing, advice and education to schools	71,000
Fund NEA	26,000
TOTAL	£53,560,000

*£8.96m NIHE funding in year on ERDF Retrofit Programme, with additional EU funding of £13.44m.



Area of Activity	Position at the end of 2021/22	Indicators	Action	Progress during 2022/23
Improving Domestic Energy Efficiency	The work for the NI HCS is still ongoing but publication has been delayed until after next financial year.	Initiatives/ Measures to improve energy efficiency	Evaluate/ Review data	The fieldwork for the NI House Condition Survey 2023 is substantially completed.
	Housing Executive staff promoted and engaged in various events, both virtual and in-person throughout 2022 Housing Executive participated in the National Energy Action (NEA) UK-wide Fuel Poverty Awareness Day 2nd December 2022 The Northern Ireland Energy Advice Service continues to provide advice to households via 0800 111 4455 and the get-in-touch on NIHE website, with over 5,000 queries in 2021/22. The Housing Executive has continued its partnership with Keep Northern Ireland Beautiful to deliver our schools energy efficiency awareness programme (SEEAP)	Improved access to energy efficiency advice (number of customers)	Market the energy efficiency message	 Housing Executive supported: Outreach events at both community, regional an national level. Support Love Your Home event 9-11 June 2023. Support Fuel Poverty Awareness Day 30 November 2023. Support Energy Saving Week November 2023. Fund Energy Topic with Eco Schools Programme Deliver Eco Schools Competition. Fund Young Reporter for the Environment. Fund the Architects of Change Programme.

Outcomes: Improving People's Homes and Helping to Transform their Lives				
Area of Activity	Position at the end of 2021/22	Indicators	Action	Progress during 2022/23
Reducing Fuel Poverty	2,092 boilers installed through the Boiler Replacement Scheme £1.3m investment Affordable Warmth Scheme expenditure £11.8m NISEP contributed funding of almost £7.5m towards the installation of energy efficient heating systems and insulation measures.	Measured within NI House Condition Survey Increase of affordable warmth for disadvantaged energy consumers (NI Housing Condition Survey Fuel Poverty average)	Provide fuel purchasing opportunities for low income families	990 boilers installed through the Boiler Replacement Scheme £0.6m Affordable Warmth Scheme expenditure £16.3m NISEP contributed funding of £7.4m towards the installation of energy efficient heating systems and insulation measures.
	The Oil Buying Network continues to grow its membership & help people save money on their oil, with 1.95m litres of oil brokered.	Implement energy efficiency schemes within social and private housing sectors	Provide fuel purchasing opportunities for low income families	The Oil Buying Network continues to grow its membership & help people save money on their oil.
	4,585 Affordable Warmth Measures in 2,841 homes.	Increase of affordable warmth for disadvantaged energy consumers (NI Housing Condition Survey Fuel Poverty average)	Implement energy efficiency schemes within social and private housing sectors	5,591 Affordable Warmth measures 3,308 homes improved

Area of Activity	Position at the end of 2021/22	Indicators	Action	Progress during 2022/23
Living Sustainably - Protecting the Environment	ERDF A reduced target (due to Covid) means that a total of 1,597 properties will be completed by September 2023. The Cavity Wall Insulation Action Plan was launched in March 2022.	Increased innovation in sustainable energy efficiency	Research and install innovative measures to create more efficient homes	ERDF has now completed with a total of 1,406 homes improved at a cost of £31.8m- £18.3m of which was funded by ERDF.
	Housing Executive retained Platinum in the Business in the Community Environmental Benchmarking Survey 2022. ISO 14001:2015 Environmental Accreditation was awarded to the Housing Centre and DLO Offices in Portadown.	Increased innovation in sustainable energy efficiency	Seek to increase electricity consumption from renewable resources	Housing Executive once again retained Platinum status in the Business In the Community Environmental Benchmarking Survey 2023. ISO 14001:2015 Environmental Accreditation was awarded to the Housing Centre and DLO Offices in Portadown.

Outcomes: Improving People's Homes and Helping to Transform their Lives				
Area of Activity	Position at the end of 2021/22	Indicators	Action	Progress during 2022/23
To have a More Equal Society	New natural gas connections. Phoenix Natural Gas c.6000 SGN c.3,000 (total connections made) Firmus 5,000	Reduction from 68% household reliant on oil based heating systems (HCS)	Provide measures to secure energy mix	New natural gas connections. Phoenix Natural Gas c.6000 Evolve c.4,000 (total connections made) Firmus c. 4,000

Conclusion

2023 has been a year of records. It was the warmest year on record, in which greenhouse gas levels continued to increase, we experienced record sea surface temperatures and sea level rise, record low Antarctic Sea ice and extreme weather continued to cause death and devastation, all demonstrating the impact of the climate emergency.

Our task within the built environment is to live within our sustainable footprint and within the housing sector that means rapid decarbonisation of home heating. As the UN Secretary-General António Guterres noted in his message to the first International Day of Clean Energy, "It is my firm belief that fossil fuel phase out is not only necessary, but also inevitable." As we transition toward decarbonisation, within a low wage economy and we must protect the most vulnerable, leaving no one behind in this 'just transition.'

In the past year the Housing Executive, in partnership with Department for Communities (DfC), has spent £53.56m (with an additional £13.44 of EU funding) to deliver warmer homes with a lower carbon footprint, which reduces householder bills. This year we

commenced our first new build scheme in over 24 years and a large-scale whole house retrofit programme which puts the householder at the centre with localised power generation and decarbonised heating. These will all inform our new policies as we plan to meet our ambitious targets to provide affordable, sustainable and decent homes, appropriate to their needs, in a safe and climate-resilient place.

The Housing Executive will continue to work in close collaboration with the Department for Communities, as well as the Utility Regulator, local Councils and other key stakeholders, to secure further reductions in energy consumption; deliver improvements in energy efficiency and to conduct research which will help to inform the development of de-carbonised heating solutions and improved energy efficiency. All of this work will assist in the on-going effort to alleviate fuel poverty and minimise carbon emissions across all households in Northern Ireland.

References

Northern Ireland House Condition Survey 2016 (HCS)

The Housing Executive Corporate Plan. 2022/23-2024/25

The Housing Executive Corporate Sustainable Development Strategy and Action Plan (2022-2027)

BRE/Housing Executive Estimates of Fuel Poverty in Northern Ireland in 2020+2021

Acknowledgements

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This document is available in alternate formats. For further information on the HECA Progress Report please contact:

Robert Clements
Head of Sustainable Development
Housing Executive
The Housing Centre
2 Adelaide Street Belfast
BT2 8PB

Tel: 03448 920 900

Email: robert.clements@nihe.gov.uk



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