



# HOME ENERGY CONSERVATION AUTHORITY

Annual Progress Report  
April 2016 - March 2017

**£18m**

spent on

**3,627**

heating conversions

**1,604**  
new social homes



**27**  
oil buying clubs

**£3m**

spent on

**1,133**

double glazing



**160**

primary schools  
energy efficiency  
programme



**7,024** households received energy advice

**£21m**

DfC spent on

**Affordable Warmth  
Scheme**



**6,017**

tenants  
given  
**HeatSmart  
advice**



**£200k**

annual savings

**1,000**

solar panels



**£2.2m**

spent on

**3,578**

**Boiler Replacement  
Scheme**



## FOREWORD

Significant investment, in the array of energy efficiency programmes, has continued in the past year across the respective government departments, utility agencies and homeowners. With the absence of any new government support for renewable technologies within the domestic sector, there has been a step change approach by the energy efficiency sector. Energy efficiency technology as a commodity is continually becoming cheaper but capital expenditure is still an issue which requires more imaginative solutions.

In terms of the Housing Executive's HECA role, continued progress has been made across both the heating and window replacement programmes. We are currently assessing the savings from energy bills from Northern Ireland's largest Solar PV domestic scheme which completed in summer 2016, as anecdotal evidence suggests over £200 savings annually for householders. For private sector stock, the Housing Executive continues to manage Department for Communities (DfC) Affordable Warmth and Boiler Replacement programmes. In addition, our Research Department is carrying out a cross tenure NI House Condition Survey (HCS) due for publication in March 2018. This will assess the significant improvements in energy efficiency since the last HCS of 2011.

As Northern Ireland has the highest levels of both fuel poverty and home heating oil dependency (68%) in the UK, a 'back to basics' approach to energy efficiency education and fabric first solutions, is the current

direction of travel. All housing providers appreciate the need for cost effective retrofit to improve a home's thermal performance, and support the economics of switching to a low carbon source of heat to meet national climate change targets -the first principle of energy efficiency, to reduce demand.

This Annual Report highlights the progress and investment that has been made in the past year both by the Housing Executive and by other organisations active in the energy efficiency sector. Collaborative working remains the mainstay of both DfC and the Housing Executive's approach to improving energy efficiency and tackling fuel poverty. Since my recent appointment as Interim Chair of the Housing Executive, I have been very impressed by the partnership working across the energy efficiency sector and all housing providers in finding solutions for delivering better well-being for householders while striving to meet our HECA objective, to improve the energy efficiency of housing in Northern Ireland.

A handwritten signature in black ink, appearing to read 'Peter Roberts', written in a cursive style.

Professor Peter Roberts  
Interim Chair, Northern Ireland Housing Executive



## INTRODUCTION

Under the Home Energy Conservation Act (1995), the Housing Executive is Northern Ireland's sole Home Energy Conservation Authority (HECA), and is mandated to produce an Annual Report on energy efficiency progress across all residential sectors.

In doing so, we are required to identify measures we consider to be practicable, cost-effective and likely to result in a significant improvement in the energy efficiency of residential accommodation.

Currently, progress on the energy efficiency target is measured through the House Condition Survey (HCS). The last major results from the 2011 HCS, recorded a 22.5% improvement in the energy efficiency of the occupied housing stock between 1996 and 2011. The Standard Assessment Procedure (SAP 09) measures the energy efficiency of individual dwellings on a scale of 1 to 100 (1 being very poor and 100 being excellent).

"Significant improvement" is defined as 34%, measured against the original statistics, published in April 1996. The Act does not specify any deadline for achievement of savings but suggests that substantial progress towards this target should be made within a 10-year period and requires us to provide annual HECA Reports to show progress towards this target.

The average SAP (09) for Northern Ireland's housing had risen from 35 in 1996 to 60 by 2011 (the average SAP score for England in 2010 was 55). This represents recurrent savings of 2.5m tonnes of carbon dioxide per annum, over 1996 levels. The fieldwork is complete on the latest HCS with the report due in March 2018. This new HCS will help form the evidence base for future energy policies across the residential housing sector.

With our HECA role the Housing Executive supports the Draft Programme for Government (PfG) 2016-2021 Outcomes Framework, to 'reduce poverty' and 'increase environmental sustainability 'through the implementation of our wide-ranging programmes and initiatives'. This 'outcomes-based' approach is galvanised within our community planning role, providing an opportunity to establish indicators to measure our HECA contribution to health and well-being. This approach will inform future reporting within this area.

It should be noted that incremental improvements in thermal efficiency are contributing to reducing fuel poverty. However, within NI, the major issue remains a low wage economy and to a lesser extent fuel prices (which is acutely affected with NI being the most reliant UK region on home heating oil); therefore, an overarching, outcomes based approach will be more effective.



## STRATEGIC CONTEXT

The Draft PfG addresses the issue of ensuring that progress towards reducing fuel poverty measures the impact on the environment and the depletion of our finite natural resources.

The focus of this element of the Draft PfG is to help address the issue of fuel poverty, creating a society that offers everyone, regardless of identity, the opportunity to access decent housing. The drive to encourage increased levels of renewable energy use, to improve security and diversity of energy supply, is intended to contribute to reduced carbon emissions.

Councils have a requirement under the Local Government Act 2014 to participate in community planning and produce a Community Plan document. The legislation states that the Community Plan must contribute to the achievement of sustainable development and identify long-term objectives for improving:

- the social well-being of the district;
- the economic well-being of the district; and
- the environmental well-being of the district.

Energy policies and strategies can improve health and social wellbeing, can develop economic well-being by tackling fuel poverty and improving energy efficiency, and can sustain the environmental well-being by reducing CO<sup>2</sup> emissions.

As a community planning partner, we have worked with council areas to establish energy objectives within Community Plans. Their Action Plans set-out to tackle fuel poverty, improve energy efficiency and to promote the use of renewable energy in order to help achieve legislative requirements.

In addition, we, as a statutory consultee in the Development Plan process, advocate new Local Development Plans (LDP) to promote a holistic approach to developing energy policies. These policies encompass renewable energy development, energy efficiency and a reduction in energy demand. We believe that Community Plans and LDPs will play a significant role in supporting this by: including energy master plans; examining potential locations for renewable energy supply; including policies aimed at reducing energy consumption; improving connectivity; integrating land use and transport; and requiring all new buildings to be developed to high standards of energy efficiency. The Housing Executive has strongly supported a policy within the LDP which includes a minimum BREEAM<sup>1</sup> or EPC<sup>2</sup>/SAP rating for new buildings.

1. Building Research Establishment Environmental Assessment Method  
2. Energy Performance Certificates



## OUR CURRENT POSITION

The key energy efficiency statistics for Northern Ireland's housing stock are as follows:

- 99% of homes had full central heating, 17% with natural gas and 68% oil
- 71% have full wall insulation, 6% partial and 23% have none
- 96% have some loft insulation, and
- 80% have double glazing, 12% partial and 7% have none

The Decent Homes Standard (DHS) was adopted in Northern Ireland (NI) in 2004 (HCS 2011) and was introduced to promote measurable improvements to housing. (11% of homes failed the DHS, and of these, 62% on thermal comfort element.) In addition:

- Over half of homes need loft insulation topped up (to 270mm) and cavity wall insulation may have degraded.
- Households with lower energy efficient ratings remain the most vulnerable groups where the Household Reference Person (HRP) was elderly, retired, or on low income.
- Low income continued to be a significant cause of fuel poverty in 2011; 79% of households with an annual income of less than £10,000 were in fuel poverty, while 75% of all households in fuel poverty had incomes of £14,999 per annum, or less.

- Almost two-thirds (66%) of households headed by an older person (75yrs+) were in fuel poverty in 2011;
- Fuel poverty was higher in households with HRPs unemployed (55%) or retired (62%).
- The type of fuel used for heating is a key determinant of the energy efficiency of a dwelling.
- Households with solid fuel (59%), or electric (46%) central heating were more likely to be in fuel poverty than households with oil (44%) or mains gas (34%) central heating.
- In 2011, 127,000 (17%) of households, were heated by mains gas compared to 113,600 (15%) in 2009.

Energy Performance Certificates will be used by us to investigate and support local actions and meet the ambitious UK carbon reduction target of 57%, by 2030. This will allow for regular recording, improving the energy efficiency of its housing stock. These certificates will help to improve energy efficiency by increasing awareness of a home's poor energy saving performance, providing a source of advice on measures to enhance energy efficiency.

# OUR APPROACH TO ENERGY CONSERVATION

This refreshed approach focuses on the themes of **'People'** and **'Property'** to provide the following outcome:

## Improving people's homes and helping to transform people's lives

Four, inextricably linked, key areas for the improvement of energy efficiency are identified as important. Key areas:

- 1. Improving domestic energy efficiency**
- 2. Reducing fuel poverty**
- 3. Living sustainably - protecting the environment**
- 4. To have a more equal society**



**Fuel poverty in Northern Ireland has consistently been higher than other parts of the UK, mainly due to the lower household incomes.**

# IMPROVING DOMESTIC ENERGY EFFICIENCY

## OUR ROLE

The Housing Executive, alongside Council Local Development Plans, are playing a significant role in improving energy efficiency and therefore tackling fuel poverty in homes across NI. This will require concerted action by a range of other Government bodies and agencies to deal with all three fuel poverty factors:

- Poor thermal efficiency
- Low household income
- Cost of fuel

Northern Ireland households have lower incomes than the UK average, with slightly higher energy costs. Fuel poverty in NI has consistently been higher than other parts of the UK, mainly due to the lower household incomes. As oil is not regulated, government has no control over the fuel which heats 68% of NI homes. The prices of different types of fuels can vary considerably, as can the availability of fuels.

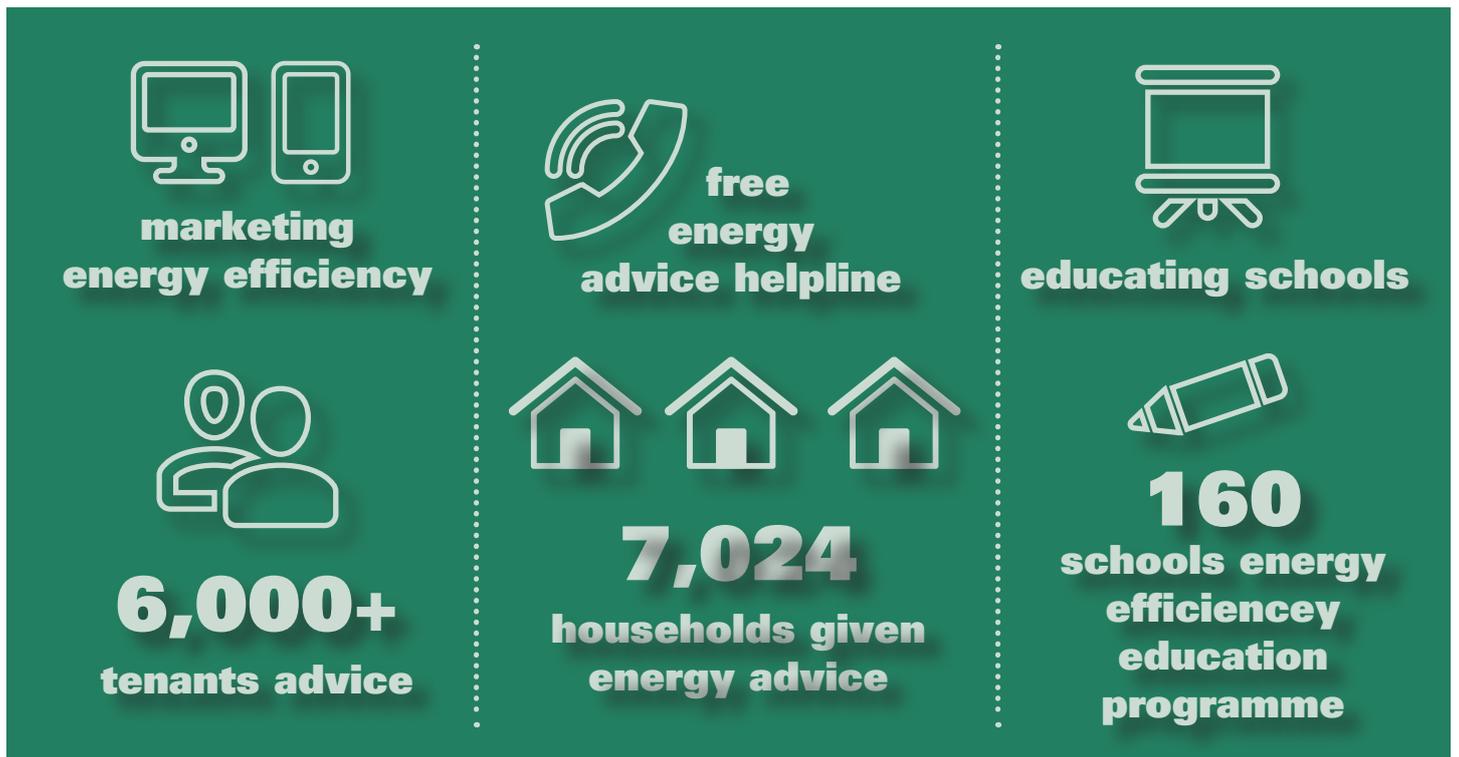
The situation eased in recent years, with lower oil prices leading to lower gas and electricity prices. However, this remains an unpredictable market. Even if a dwelling is given an efficient heating system, and is insulated to the highest standards, it does not mean that the household will automatically be brought out of fuel poverty. The cost of fuel and low income will remain important determinants.

## SOCIAL SECTOR INVESTMENT

Significant investment, particularly in the social sector, in new energy efficiency measures, has had a positive impact on tackling fuel poverty in Northern Ireland.

We invested (2016-2017):

- £3m on 1,133 double glazing installations, and
- £18 million on 3,627 heating conversions, which includes zoning, where practical, and 270mm loft insulation.



### Social Housing Development Programme

Continued investment for new homes built to Decent Homes Standard provided:

- 1,604 new units of social housing accommodation (started by Housing Associations) and,
- 1,387 social homes - completed.

Building Regulations require a SAP assessment to be carried out for all new dwellings and conversions. New build to current Building Standards is delivering average SAP rating of approximately 83 (Band B).

### MARKETING THE ENERGY EFFICIENCY MESSAGE

We actively promote the energy efficiency message through various media. Our staff have taken part in several radio interviews, been guest speakers at key seminars, and advertised energy efficiency in various newspapers.

We promote the energy conservation message to the public through support of regional events; for example, Self-Build Show and the Balmoral Show.

The HECA marketing message is delivered, in part, with Bryson Energy, via the following contracts:

- NI's only impartial, free energy advice line with local specially trained energy advisors, funded by DfC
- Schools Programme, delivering energy efficiency message to 160 NI schools, funded by DfC.
- HeatSmart Programme<sup>3</sup> for 6,017 our tenants to avail of energy advice at change of tenancy stage.

In addition, our Private Grants Department is active in promoting energy efficiency in its role as administrator of both of DfC's Affordable Warmth Scheme and Boiler Replacement Scheme.

We provide funding support to National Energy Action (NEA), the Fuel Poverty Charity, campaigning to raise public awareness to lessen fuel poverty and energy efficiency.

NEA provide much needed energy efficiency training and awareness outreach in Northern Ireland to organisations in rural communities and other specialist organisations.

*3. The HeatSmart programme is delivered in partnership with Bryson Energy and offers our tenants free and independent heating advice, how to make the best use of their heating system and included information on energy efficiency.*



**Raymond Gormley, Bryson Energy Manager, with participating householders in the Oil Buying Club Scheme.**

## REDUCING FUEL POVERTY

### OIL BUYING CLUBS, ACROSS BOTH SOCIAL AND PRIVATE SECTORS

A household is in fuel poverty if, in order to maintain an acceptable level of temperature throughout the home, it would have to spend more than 10% of its income on all household fuel'. Northern Ireland has almost 290,000 fuel poor households.

In 2014, we awarded a contract to Bryson Energy to set up a network of 27 Oil Buying Clubs across Northern Ireland. Clubs offer members monthly deliveries of as little as 200 litres, with at least 7% below the NI average price of delivered home heating oil.

The total membership, 4,600 households, has 4.9m litres of oil delivered. In March 2017, the Housing Executive compiled a survey to assess member satisfaction with the Scheme.

Key Findings include:

- The largest proportion of Housing Reference Persons (HRPs) were aged 65 and above.
- More than two-fifths (43%) of respondents reported a household member with a long-term illness, health problem or disability'.
- Almost one-quarter (24%) of HRPs said their annual household income was between £10,400 and

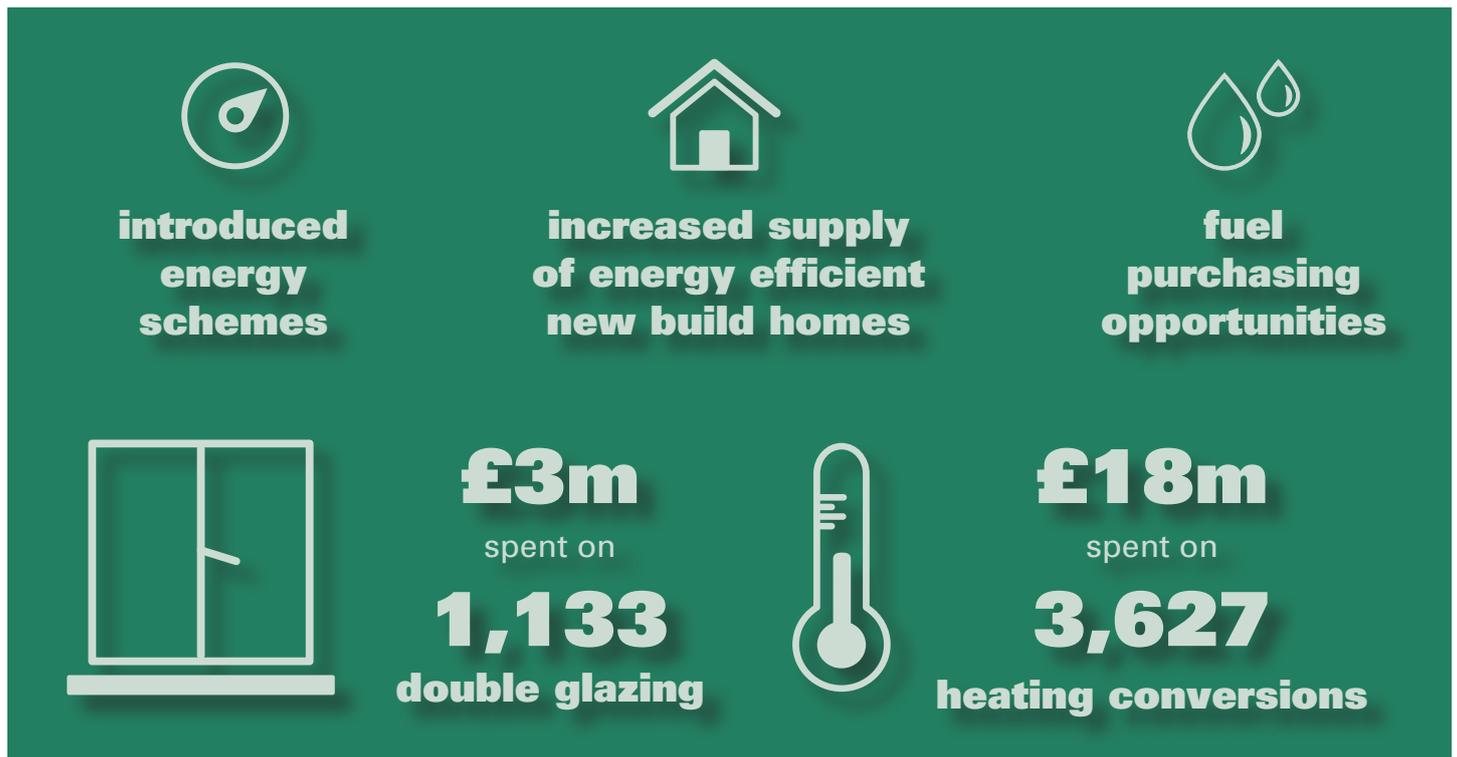
£16,339, with a similar proportion (22%) answering that their income was less than £10,400 per annum.

- Almost two-thirds (30%) of HRPs were in receipt of state pension and equal portions (20%) were in receipt of Housing Benefit and Child Benefit'.
- Approximately 14% of respondents said they had purchased 20 litre emergency oil drums as a way of heating their home prior to joining an oil club. Of these respondents, the majority said, 'since joining the oil club, they no longer needed to buy oil drums as a way of heating their home'.
- Most respondents agreed that they would recommend the Scheme to another person.

### Solar Photovoltaic Schemes

Solar photovoltaic (PV) panels generate electricity from daylight. In summer 2016, we completed a scheme, in partnership with Salis Ltd, to install solar PV panels into 1,000 homes using private finance based on the 'rent a roof' model.

Private companies can recoup investment to make a profit over 20 years from the sale of Renewable Obligation Certificates (ROCs), with any unused tenant electricity going back into the grid. This scheme was the first large scale PV project for residential properties in Northern Ireland.



Assuming tenants use 50% of the electricity produced by the panels, they will save around £200 on their annual bills. We are carrying out a study into the first full year of this Scheme, to provide robust evidence of household savings. Radius Housing recently completed a similar Scheme for 400 homes.

## PRIVATE SECTOR INVESTMENT

In 2016/17, further progress was made improving energy efficiency in private homes. The key achievements were:

- Affordable Warmth Scheme
- Boiler Replacement Scheme
- NI Sustainable Energy Programme (NISEP)

### Affordable Warmth Scheme

DfC's Affordable Warmth Scheme, administered by the Housing Executive, provided 9,963 measures installed in 5,069 homes at a cost of around £21m. This is a targeted Scheme for private sector households, which DfC have identified as within areas where fuel poverty is prevalent. Funded by DfC and managed by the Housing Executive, the Affordable Warmth Scheme provides a range of energy efficiency measures, up to a maximum grant amount of £7,500 (£10,000 for solid wall properties).

- 4,470 approvals for works were issued
- £20.5m value of approvals
- 5,069 homes improved
- 9,963 measures installed - loft insulation 22%, heating 39%, windows 29%, cavity wall insulation 6%, draught-proofing 3% and solid wall insulation 1%
- Expenditure of £21m.

### Boiler Replacement Scheme

DfC's Boiler Replacement Scheme, administered by the Housing Executive, funded 3,578 boiler installations in 2016/17 at a cost of £2.2m.

The Boiler Replacement Allowance provides grants of up to £1,000 to help owner-occupiers (total gross income less than £40,000), with the cost of replacing boilers, which are 15 years or older, improving the energy efficiency of their homes.

Boiler Replacement Allowance 2016/17:

- 3,755 approvals issued
- 3,578 payments authorised
- Expenditure: £2.2m.

### NI Sustainable Energy Programme (NISEP)

This Programme has been successful in targeting homes with no insulation, or inefficient heating systems. Energy saving measures in homes include energy-efficient boilers, heating controls, loft insulation and cavity wall insulation.

NISEP funded £8m on energy efficiency schemes in 2016/17. This funding was given to both private and social housing sectors to provide energy efficiency measures. The Utility Regulator has announced that the current Programme is now open until 30 March 2019.

The scheme is delivered by a range of organisations and managed by the Energy Saving Trust on behalf of the Utility Regulator. Funding comes from a levy paid by all electricity customers.



**Northern Ireland needs much higher levels of renewable energy to decarbonise the system and promote a more sustainable supply.**

# LIVING SUSTAINABLY - PROTECTING THE ENVIRONMENT

## RENEWABLE OBLIGATION

We will seek to support the target of 40% of NI's electricity consumption from renewable sources by 2020. This requires a more diverse energy mix and innovative solutions to utilise renewable technologies. There was 25.4% of total electricity consumption in NI generated from renewable sources (2016).

The success of our renewable solar photovoltaic has been, in part, due to support provided by the Northern Ireland Renewables Obligation (NIRO). The NIRO obliged electricity suppliers to produce Renewable Obligation Certificates (ROC) for each MWh of electricity supplied to their customers.

The scheme closed for new applications in April 2017, and as a result, there are no financial incentives available from the government for generating electricity. Stations accredited before this date, under the NIRO, will continue to receive support at the banding level they were originally accredited for the full 20 years of accreditation, or until March 2037. The closure creates a challenge for the development of NI's renewable energy generation.

## INNOVATION AND ON-SITE RESEARCH TO LIVE SUSTAINABLY

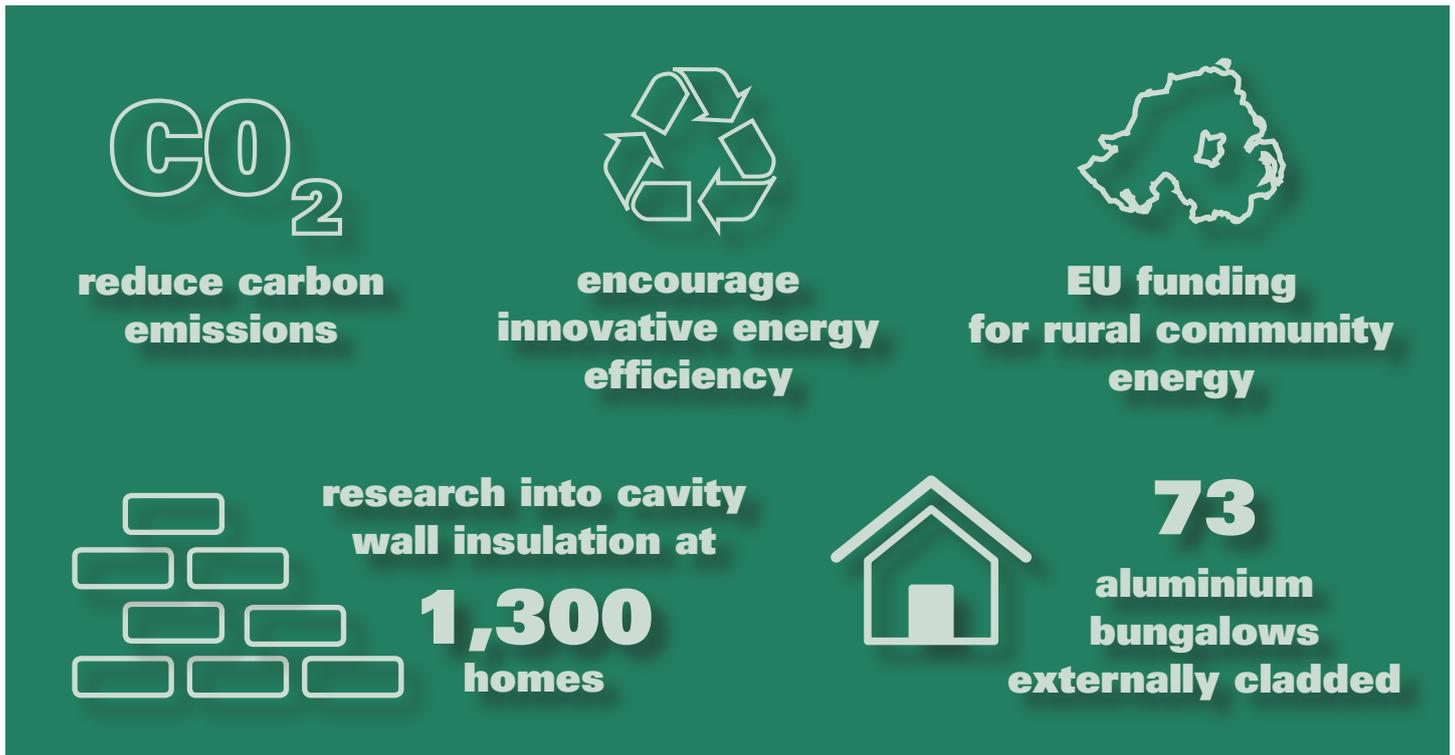
Our 10-year Asset Management Strategy gives new direction to how we plan the improvement and maintenance of our housing stock. The energy efficiency component of this investment strategy is currently being produced. This provides an opportunity to offer new solutions to live sustainably and improve energy efficiency.

### External Wall Insulation within High Rise and Non-Traditional Construction

In 2015, Cuchulain and Eithne House, high rise blocks, both in the New Lodge area, Belfast, had their complete external envelopes thermally improved, involving external wall insulation, new windows, and a new roof. Work is underway at two other high rise blocks, Carnet House in the Ardcarne area of East Belfast and Whincroft House in Braniel. A third scheme provides external insulation to 73 aluminium bungalows in South Region.

### Cavity Wall Insulation Research

There is a current focus on the performance of cavity wall insulation across all residential tenures. We carried out research to 206 properties showing issues with the quality of existing cavity wall insulation in some residential



dwellings.<sup>4</sup> In some cases, the problems were due to poor installation practices. Today's post-inspection methods were not available in the 1980s; however, it is also apparent some dwellings were insulated where it was inappropriate to do so, due to geographic location, construction type or dwelling condition.

We commenced further research into 1000 social housing dwellings and 300 private dwellings (as an annex to the House Condition Survey) to provide an evidence base to influence policy within this area.

It is expected that this research will complete, with a published report, Summer/Autumn 2018.

#### **Newry Retrofit Scheme**

We realise the importance of delivering value-for-money energy efficient retrofit. To influence the Energy Strategy component within our Asset Management Strategy, a retrofit pilot is planned for five homes in Newry. This pilot will deliver a range of energy efficient standards, ranging from post works SAP rating of SAP 69-74 to SAP 86+.

#### **Housing Executive Innovation Call**

In 2017, our Quality Improvement Team started a continual market innovation call to provide an opportunity to highlight innovation within energy efficiency across its full range of house types. We are interested in receiving innovative responses. For further information please contact the Quality Improvement Team.

#### **Community Heating EU Funding Application**

ARC Healthy Living Centre<sup>5</sup>, approached us with a concept of developing an anaerobic digester<sup>6</sup>, to provide

renewable energy for a community district heating scheme in Sally's Wood estate, Irvinestown. ARC Centre, Action Renewables, five European partners and the Housing Executive are applying for EU INTERREG funding to develop a sustainable model, using renewable energy solutions for community district heating in rural locations.

#### **Supporting QUB MSc Leadership in Sustainable Development Student Placements**

In 2017, we provided four placements, April to June, for QUB MSc Leadership in Sustainability students. They organised a series of meetings with electricity industry stakeholders and researched the future of local energy markets and the current energy status of our homes.

A report on employing local wind energy and how this could be used to heat homes, will be shared and discussed with stakeholders, autumn 2017.

Our Quality Improvement Team is developing an affordable energy strategy for upgrading our homes, which will take account of innovation in energy efficiencies and renewable technology.

4. Northern Ireland Housing Executive Cavity Wall Insulation Inspection Final Report - March 2014

5. ARC Healthy Living Centre is the NIHSC 'Social Enterprise of the Year 2015', widely regarded as a model for transformational change.

6. Anaerobic Digester produces a digested slurry (digestate) that can be used as a fertilizer by-product, and biogas that can be used for energy. Using anaerobic digestion technologies can help to reduce the emission of greenhouse gases.



Northern Ireland continues to have a lower level of earning than the UK, with economic recession, rising unemployment and cuts in welfare expenditure, more people are finding it difficult to meet their energy costs. <sup>7</sup>

## TO HAVE A MORE EQUAL SOCIETY

### MEASURES TO SECURE ENERGY MIX

Northern Ireland needs to ensure that new investment providing greater security of energy supply through a range of fossil fuels and low carbon technologies. Securing an energy mix that will help deliver security of energy supply will require action to agree infrastructure plans and financing, develop supply chains and smart grid technologies, without putting an excessive financial burden on consumers.

### NATURAL GAS

In February 2015, the Utility Regulator awarded licenses to Scottish Gas Networks (SGN) and Mutual Energy to bring gas to the west of Northern Ireland. Mutual Energy will build the main high-pressure pipeline heading west from Portadown through County Tyrone and into Fermanagh. SGN will develop the lower pressure pipelines which will develop the network into and around specific towns. DETI has pledged £32m to the project, with these two companies funding the rest. Progress is continuing with natural gas now flowing in Strabane and the gas network will continue to be developed throughout Tyrone and Fermanagh and into 2019.

Across in the east of Northern Ireland, Firmus Energy and Phoenix Natural Gas continue to develop the gas network where they have respective distribution licences.

The Housing Executive's heating policy of installing natural gas, where available, within our homes, ensures that natural gas is preferable to heating oil as a primary heating fuel. A key goal is to reduce Northern Ireland's reliance on heating oil as a primary fuel source (currently 68% of all households).

*7. NI Housing Market Review and Perspectives 2014-2017*



**promote sustainable  
low carbon energy mix**



**gas network  
where available**





# MEASURING OUR INVESTMENT

## MEASURING OUR IMPACT

An Outcome Based Accountability (OBA) approach has been adopted for this year's HECA Report, highlighting how measures provide a positive impact for the Housing Executive.

## OUR INDICATORS

Working with our HECA partners during 2016/17, we invested circa £45m to improving thermal efficiency, influenced and increased strategic action to tackle fuel poverty, and improve access to energy efficiency measures and advice across NI. Our indicators show:

- 22.5% improvement in the energy efficiency of the occupied housing stock between 1996 and 2011.
- Average SAP (09) for NIs housing had risen from 35 in 1996 to 60 by 2011 (the average SAP score for England in 2010 was 55).
- Recurrent savings of 2.5m tonnes of carbon dioxide per annum over 1996 levels.
- 13,041 households received energy efficiency awareness (2016/17).

2016/17 ENERGY EFFICIENCY INVESTMENT VIA THE HOUSING EXECUTIVE	£
Housing Executive Heating Schemes	18,000,000
Housing Executive Double Glazing	3,000,000
DfC Affordable Warmth	21,000,000
DfC Boiler Replacement	2,200,000
Energy marketing, energy advice line and Housing Executive home visits	358,000
Fund NEA	45,000
<b>Total</b>	<b>44,603,000</b>

## OUTCOME: IMPROVING PEOPLE'S HOMES AND HELPING TO TRANSFORM PEOPLE'S LIVES

PLAN	ACTION	PROGRESS 16/17	INDICATORS
Improving domestic energy efficiency	Market the energy efficiency message.	Housing Executive Energy Staff attendance at Balmora, Self-Build Show and Energy Saving Week. Energy advice provided to 7,024 households via Free Energy Advice line. 6,017 Housing Executive tenants received HeatSmart energy efficiency advice. National Energy Action provided energy advice to a range of voluntary organisations. Energy advice provided to 160 primary schools.	Improved access to energy efficiency advice (number of customers) Improved knowledge and understanding of domestic energy efficiency among householders (Annual Customer survey)
Reducing fuel poverty	Implement energy efficiency schemes within social and private housing sectors. Increase social housing supply to 'decent homes' <sup>8</sup> standard. Provide fuel purchasing opportunities for low income families.	3,627 Heating Conversions (£18m Investment). 1,133 Double Glazing Installations (£3m Investment). 1,604 new build social homes commenced. 1,387 new build social homes completed. Solar PV panels completed for 1,400 social homes. 9,963 Affordable warmth measures in 5,069 homes. 3,578 replacement boilers installed (£2.2m Investment). Installation measures for NISEP funding of almost £8m toward energy efficient measures. 4,600 oil buying club members acquiring 4.9m litres.	Energy Ratings increased within N. Ireland Housing stock (NI Housing Condition Survey SAP ratings) Increase of affordable warmth for disadvantaged energy consumers (NI Housing Condition Survey Fuel Poverty average) 34% improvement in the energy efficiency of residential accommodation compared with the situation at 1 April 1996
Living sustainably - protecting the environment	Seek to increase electricity consumption from renewable resources Research and install innovative measures to create more efficient homes	Housing Executive external Wall Insulation with High Rise and Non- Traditional Construction; Cuchulain House, Eithne House, Carnet House and Whincroft House. Housing Executive external cladding for 73 aluminium bungalows. Research on cavity wall insulation standards commissioned for 1,300 homes. Community Heating EU Funding Application for Irvinestown Project. Housing Executive Headquarters Building awarded ISO 14001:2015 certification.	Reduction in household carbon emissions <sup>9</sup> (NHER) Increased levels of renewable generation (HCS)
To have a more equal society	Provide measures to secure energy mix	Gas network extended to West throughout Tyrone and Fermanagh.	Reduction from 68% household reliant on oil based heating systems (HCS)

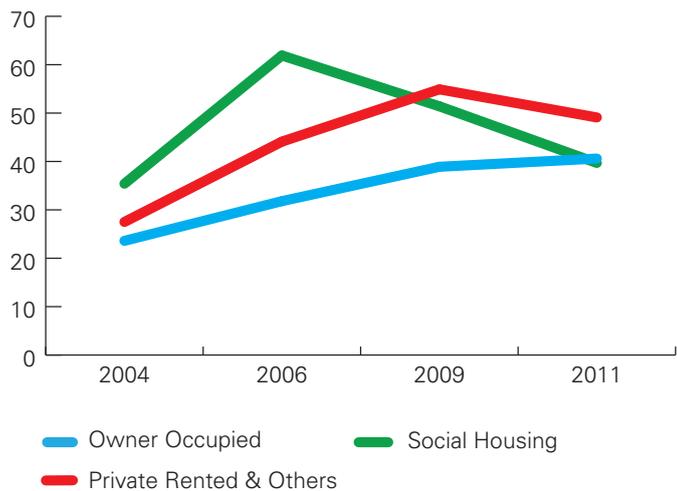
8. Home Energy Conservation Act 1995: Measures will be regarded as "significant" if they lead to 34% improvement in household energy efficiency when compared with 1 April 1996 (Annual energy use within the domestic sector in NI was 94,200 Terajoules).

9. The National Home Energy Rating Scheme (NHER) was the original energy rating system in the UK. This BSI accredited scheme provides tools for in depth energy analysis, stock management and profiling.



**Our continued efforts and investment over this past number of years show a significant impact on improving energy efficiency of households in NI, irrespective of tenure**

**MEAN SAP RATING BY TENURE**



**FUEL POVERTY**





## CONCLUSION

This has been both a challenging yet productive year for the energy efficiency sector across Northern Ireland. We had the cessation of both renewable electric and heating incentives to new applications. However, continued support for existing fuel poverty and energy efficiency schemes from DfC and the Utility Regulator, is welcomed news. There is now a greater focus on the 'hierarchy of energy efficiency', with priority for reducing energy demand, an increased need for energy efficiency education and advice; stressing the importance of greater investment in domestic energy efficiency.

The energy sector is also fixed on the spare capacity of excess renewable technologies, supporting power generation, while investigating how to realise the value of this.

We remain committed to improving thermal efficiency, influencing, and increasing strategic action to tackle fuel poverty and improve access to energy efficiency measures and advice across Northern Ireland, working with our HECA partners.

Partnership and collaboration across the sector produces best results and looks forward to continued excellent work, working alongside our facilitators, sponsoring Department, DfC, and other stakeholders, to reduce both fuel poverty and the carbon liability. The Housing Executive is tracking the potential future of this market. It is keen for the residential sector to benefit from any innovations.



**Sustainable Development Team promoting the energy efficiency message for the Self Build and Improve Your Home exhibition in Belfast, February 2017**

This document is available in alternate formats.

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