

# Delivering Sustainable Homes and Communities



# FOREWORD

**We are delighted to present the Housing Executive's Corporate Sustainable Development Strategy and 5-year Action Plan.**

**We have been providing housing services to the people of Northern Ireland for the past 50 years, re-shaping places and making improvements to housing standards.**

**Just as the Housing Executive was formed as a strategic housing authority and Northern Ireland's largest landlord in order to tackle intolerable housing conditions, we now face another urgent and even more pressing challenge.**





**Professor Peter Roberts**  
**CHAIR**



**Grainia Long**  
**CHIEF EXECUTIVE**

The UK government has set in law a target to bring all greenhouse gas emissions to net zero by 2050. To achieve this, we need to work collaboratively with government and other partners to insulate homes and replace fossil fuel heating systems with ‘clean heat’ technologies, such as heat pumps and heat networks, and encourage other housing providers to do the same.

The United Nations has sounded alarm bells at the rate at which our planet is warming, with UN Secretary-General António Guterres describing the recent IPCC Sixth Assessment Report as ‘a Code Red for humanity’. This, together with soaring wholesale energy prices, has brought the urgency of the climate and energy crisis into sharp focus. As Northern Ireland’s Home Energy Conservation Authority we must play a leading role in reducing greenhouse gas (especially carbon dioxide - CO<sub>2</sub>) emissions in the housing sector, whilst building climate resilience, tackling fuel poverty and developing sustainable solutions in collaboration with our partners.

Decarbonising Northern Ireland’s housing stock is not only an essential part of tackling the climate emergency, it also combats fuel poverty, stimulates the economy, creates jobs, provides warmer homes and cleaner air, and supports biodiversity.

We will support the residential sector to be at the forefront of the energy transition, but the sector is facing a huge challenge: how to cut carbon emissions and tackle climate change, whilst delivering a major programme of safety remediation work and building thousands of new homes. All in the wake of a global pandemic.

This Strategy focuses on the urgency of the climate emergency, but also acknowledges the need to prioritise solutions that benefit both society and the planet. This sets out our ideas and proposals on tackling the planetary emergency, and how we intend to play our part in helping to sustain the environment for future generations.

As we embark on post Covid economic recovery, there are opportunities creatively to challenge the status quo and do things differently. The transition to Net Zero must be fair, just and promote social sustainability<sup>1</sup>. Through the broad range of work streams identified in this strategy and action plan, we intend to drive recovery in local economies by investing in supply chains and jobs. We will also invest in supporting our own staff, our tenants and communities through informed and empowered action that promotes transformational societal change.

As the strategic housing authority and a landlord at scale, we are committed to tackling the climate change emergency: this is the most important inheritance we can leave to future generations.

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*1. Social sustainability is a process for creating sustainable successful places that promote wellbeing, by understanding what people need from the places they live and work.*

# EXECUTIVE SUMMARY

## 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 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 CO<sub>2</sub> Reduction up to 2025/26 (6%)

- End of Decade

Housing (NIHE Landlord) Targets<sup>2</sup>

- Retrofit housing to upgrade energy efficiency to SAP Band C by 2030

- 89,000 tonnes of CO<sub>2</sub> Reduction up to 2030/31 (23%)

Corporate Target (NIHE Business) Target: 25% Reduction in CO<sub>2</sub> emissions by 2030/31<sup>3</sup>

### SHORT TERM

## Housing Target

(Housing Executive Landlord)

# 25,000

tonnes of  
REDUCTION

up to 2025/26 (6%)

# CO<sub>2</sub>

### END OF DECADE

## Housing Target

(Housing Executive Landlord)

### RETROFIT HOUSING

to upgrade energy efficiency

to **SAP Band C** by 2030

# 89,000

tonnes of  
REDUCTION

up to 2030/31 (23%)

# CO<sub>2</sub>

### END OF DECADE

## Corporate Target

(Housing Executive Business)

# 25% CO<sub>2</sub>

## REDUCTION IN

emissions by 2030/31

2. Subject to a sustainable funding solution for stock investment via the Department for Communities' Housing Executive Revitalisation programme.

3. Measured against baseline of FY 19/20, as pre pandemic figures and measured as a whole across all the business areas.

## WE WILL DO THIS THROUGH A MAJOR PROGRAMME OF WORK AND INVESTMENT IN

- Improving energy and water efficiency in buildings
- Switching to low-carbon forms of heat
- Replacing fossil fuel fleet vehicles with low or zero emission alternatives
- Enhancing nature and carbon removal on our estate
- Educating and informing to promote sustainable behaviours
- Encouraging sustainable development through our supply chain
- Support fabric first
- Develop a Climate Adaptation Plan, identifying key climate risks for the organisation and targeted and effective adaptation measures.

## WE WILL WORK COLLABORATIVELY WITH OUR PARTNERS ACROSS THE HOUSING SECTOR TO

- Demonstrate best practice in the decarbonisation of the residential sector
- Test key strategic policy, funding asks and shared learning across the housing sector
- Use our statutory functions to influence our staff, tenants, local communities and supply chains
- Drive collaboration on sustainability across the housing sector through new and existing forums
- Participate in forums for political engagement, or engagement with other key stakeholders across the sustainability sphere.

# INTRODUCTION

This Sustainable Development Strategy and Action Plan sets our strategic approach to balance our responsibility to provide quality, affordable housing and improve 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 and Action Plan will be reviewed and updated every five years in line with a Northern Ireland Climate Change Act. It will have regard to carbon budgets set under a Northern Ireland Climate Change Act and sectoral targets and trajectories, with proposals and plans to support the achievement of the carbon budget for the period set out. Northern Ireland has now its own Climate Change Act which supports the transition to Net Zero and places a legal duty on the Northern Ireland Executive to reduce our contribution to climate change. This Strategy will be updated when the sectoral targets set under the Northern Ireland Climate Act are approved.

Our work on environmental issues spans many decades. However, recognising the vital and increasing role that environment, and especially climate change considerations play in all our lives, in 2018 the Housing Executive's Chair established an Environmental Working Group to give even greater emphasis to the importance of this issue. In April 2021 the Chief Executive took further action and established a project team to embed this topic into all business areas of the Housing Executive.

This strategy is developed around the Corporate Plan's vision to achieve climate-resilience and focuses on the key impact areas of the built environment, the biosphere, sustainable communities and transport, as well as the need for educational empowerment, and improved health and wellbeing through sustainable living.

The Strategy and Action Plan covers every business area within the Housing Executive because climate change impacts our whole organisation, our communities and our supply chains.

## **THIS STRATEGY AND ACTION PLAN IS PREDICATED ON THE SUCCESSFUL OUTCOME OF THE DEPARTMENT FOR COMMUNITIES HOUSING EXECUTIVE REVITALISATION PROGRAMME TO DEVELOP AND DELIVER A FUTURE SUSTAINABLE FUNDING MODEL FOR THE HOUSING EXECUTIVE.**

The Housing Executive believes that as the Strategic Housing Authority and Home Energy Conservation Authority we can support and influence householders and other stakeholders to address climate change. We also recognise that partnership working and collaboration with Councils, Government Departments and agencies, academics, local communities, housing associations, businesses and other stakeholders on a range of social, economic, and environmental issues is the best way to deliver change.

Our Sustainable Development Strategy sets out the strategic context, aims, outcomes, and on-going work streams in line with our vision for everyone to live in an affordable, sustainable and decent home, appropriate to their needs, in a safe and climate-resilient place<sup>4</sup>. The 5-Year Action Plan articulates the actions, timescales and performance measures that will deliver the Strategy. In short, the Strategy sets out 'what we are going to do and why' with the Action Plan focused on 'how to do it'.

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*4. As per the new corporate Vision included in the latest Corporate Plan.*

- We strive to make people's lives better;
- We put our customers first and deliver right first time;
- We build strong partnerships and share great ideas.

## MAKING A DIFFERENCE

- We treat our customers, staff and partners fairly;
- We respect and promote diversity and equality for all;
- We work in an open and transparent way.

## FAIRNESS

## OUR CORE VALUES

## PASSION

- We are professional in all that we do;
- We strive for excellence;
- We look for new, creative, better ways to do things.

## EXPERTISE

- We believe in our people;
- We are constantly learning, developing and innovating;
- We provide strong confident leadership.

# 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

This is our overarching vision for sustainable development across all of Northern Ireland's housing sector. To deliver climate resilience we must sustain the natural environment for future generations, and live within the planet's limits. We recognise the urgency of mitigating the worst impacts of climate change as soon as possible and the need to adapt our assets to inevitable changes in the climate.

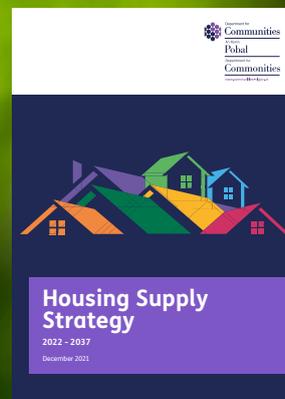
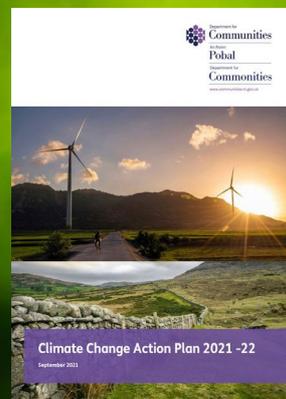
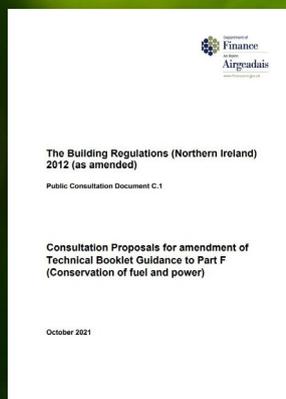
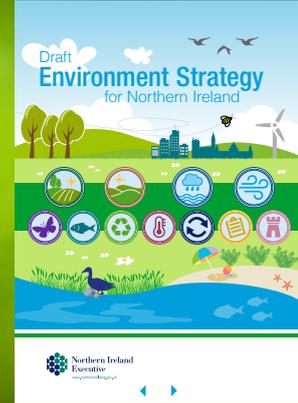
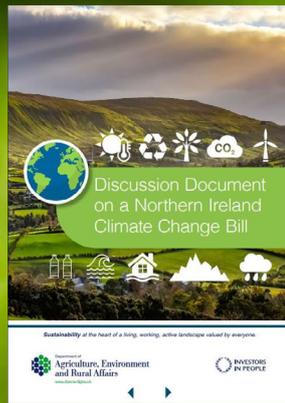
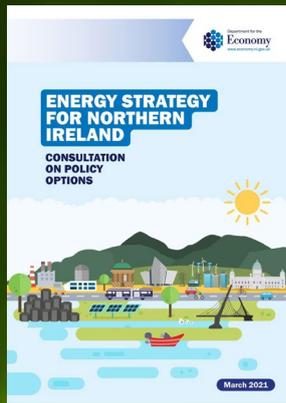
However, environmental problems do not exist in isolation. We will use our unique position as a major landlord and Statutory Housing Authority also to address social problems like poverty and inequality, using the UN Sustainable Development Goals as a blueprint to guide our activities.

This Strategy is about embedding a culture of sustainable thinking and action across the organisation to help us collectively impact all of our business activities and housing stock as well as influence all other housing sectors. Collaborate with our partners and tackle these issues head on so that future generations are not left counting the costs of our mistakes. We will take a long-term holistic approach when making decisions and prioritise solutions that offer maximum benefits to society, the economy and the planet.

The adaptation challenge for the Housing Executive's housing stock includes long term significant risks of flooding, heat stress and storms. An adaptation plan will be established to future proof our estate and protect people from climate shocks and stresses. The development of a Climate Adaptation Plan is therefore a key action within this strategy. It 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.



# STRATEGIC CONTEXT



# POLICY BACKGROUND

Following the adoption of New Decade New Approach, which is a new shared strategic vision for Northern Ireland endorsed by all political parties in January 2020, the Northern Ireland Executive began to develop its Programme for Government.

Despite the challenges brought about by the pandemic, several policies have been launched that are relevant to this Strategy.

These include:

**Department for Communities Climate Change Action Plan (2020-21)**

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.

**Department for Communities Housing Supply Strategy** which sets out a long-term framework for the development of policy, interventions, and action plans to deliver the right homes in the right locations and address housing stress.

**Building (Prescribed Fees) (Amendment) Regulations (Northern Ireland)**

**2022** which set the Department for Finance proposals for minimum standards for new build and retrofit standards with respect to carbon performance and energy conservation measures.

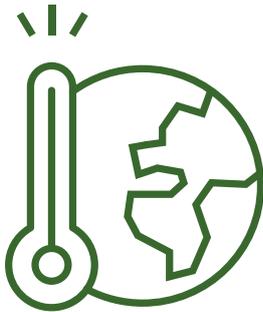
**Draft Environment Strategy for Northern Ireland** developed by the Department of Agriculture, Environment and Rural Affairs (DAERA) will guide how we can preserve, protect and improve our environment for our children and our grandchildren and supports the **Green Growth Strategy**.

**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.

The **Climate Change Act (Northern Ireland) 2022** has now been approved and sets targets for the years 2050, 2040 and 2030 for the reduction of greenhouse gas emissions; 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.

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. We need to urgently reduce our greenhouse gas emissions to reduce the severity of climate change and start preparing for and adapting to the inevitable impacts of climate change.

Excess greenhouse gas emissions are causing the Earth's atmosphere to hold more radiation from the sun which is increasing the temperature of the planet. This change in temperature is altering our climate, and many of the changes are irreversible.

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 million<sup>5</sup>.

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. The third UK Climate Change Risk Assessment Summary Report for Northern Ireland assessed 61 risks and opportunities from climate change to Northern Ireland, including to business, infrastructure, housing, the natural environment, our health and from the impacts of climate change internationally.

The report states that flooding remains the most severe climate risk for the UK. Climate change is also likely to increase the risk to building fabric from damp, high winds and subsidence. Hospitals and other health care services will experience service disruption due to direct impacts from extreme weather, and through the detrimental effects of extreme weather on people's health and wellbeing.

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



## 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 should be established to future proof our estate and protect people from climate shocks and stresses. The development of a Climate Adaptation Plan is therefore a key action within this Strategy. It 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.



## FUEL POVERTY

Around 179,000 households in Northern Ireland are in fuel poverty, based on modelled estimates from 2016-2019 using the 2016 House Condition Survey. This represents an average fuel poverty rate of 24%<sup>6</sup>, 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 affects fuel poverty. We have seen increases in electricity and gas prices due to changes in international wholesale fuel costs. In November 2021 the Utility Regulator commented, 'the cost of fuel has increased significantly on global markets over the past 12 months and unfortunately market analysts predict that these higher prices will be with us for the next 18-36 months.'

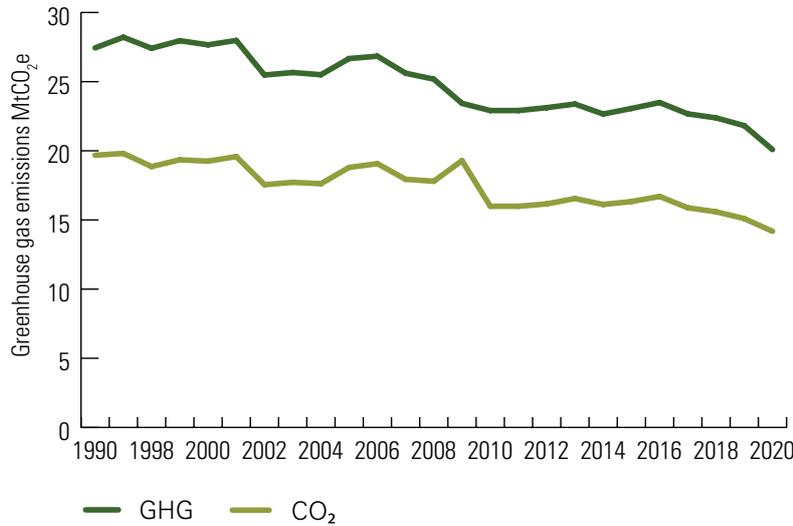
Key strands of the Housing Executive Home Energy Conservation Authority's role are the provision of impartial energy advice and facilitating the reduction in household energy costs.

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<sup>6</sup> The Housing Executive acknowledges that the fuel poverty rate may potentially increase with the current cost of living crisis.

## NI Greenhouse Gas Statistics 1990-2020

2020 NI greenhouse gas emissions have decreased by 24% since 1990\*



**Total greenhouse gas emissions**  
2020 MtCO<sub>2</sub>e



**Carbon dioxide emissions**  
2020 MtCO<sub>2</sub>e



2019-20 % Change

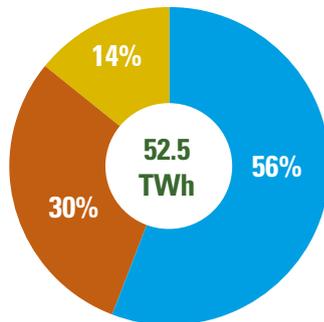


1990-2020 % Change

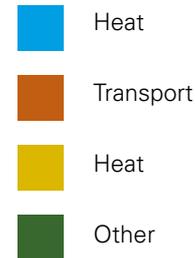
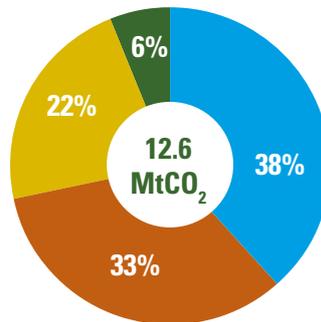


## Emissions and energy across heat, power and transport in 2019

Total energy consumption by purpose



Emissions produced by energy related sectors



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

**27%**

Agriculture

**16%**

Transport

**14%**

Energy Supply

**13%**

Business

**14%**

Residential

**11%**

Land use, land use change and forestry

**3%**

Waste management

**2%**

Other

# CURRENT POSITION

## NORTHERN IRELAND GREENHOUSE GAS EMISSIONS

Northern Ireland has reduced greenhouse gas emissions by 24% since 1990, largely 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.

The largest sectors in terms of emissions in 2020 were agriculture (27%), transport (16%) and residential (14%). 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 (27%).

Within the residential sector improving energy efficiency to reduce energy demand and decarbonising heat is critical

## UK CLIMATE CHANGE ACT

The Climate Change Act 2008 (amended in 2019) set a legal duty on the UK Government to achieve net zero greenhouse gas emissions by 2050. The Climate Change Act (Northern Ireland) 2022 supports the transition to Net Zero and places a legal duty on the Northern Ireland Executive to reduce Northern Ireland’s contribution to climate change. Northern Ireland will need to potentially reduce GHG by approximately three times the rate of reduction over the last 30 years. This highlights the scale of the challenge and will require a step change in all areas of public life.

## CCC SIXTH CARBON BUDGET

Until the sectoral targets of the NI Climate Bill are developed, our Strategy is guided by recommendations from the Climate Change Committee (CCC) and the 6th Carbon Budget (6CB) which outlines a Net Zero pathway for the UK. Under the CCC’s Balanced Net Zero Pathway Northern Ireland is expected to reduce CO<sub>2</sub> emissions by 56% by 2030 and achieve net zero CO<sub>2</sub> emissions by 2050. As the residential and transport sectors generate CO<sub>2</sub> emissions predominantly, Net Zero is therefore the accepted target for these sectors. Meeting these targets represents a significant challenge. The CCC estimate that by the 2030’s Northern Ireland will need to spend £1.3 billion on climate change mitigation measures annually however this will result in operational savings which will become apparent in the 2040’s.

### Possible Targets in a Northern Ireland Climate Change Act

*Excluding agricultural land and waste*

All greenhouse gases contribute to warming temperatures. All GHGs must be reduced in Northern Ireland as part of the fair contribution to UK Net Zero.

The Republic of Ireland is considering a target for all greenhouse gases excluding biogenic methane. Similar targets exist elsewhere in the world.

Methane must not get a ‘free-pass’ by only setting a target that excludes biogenic methane.

	All greenhouse gases	CO <sub>2</sub> only	Excl agri land and waste methane (only excl agri)
2030	48% ↓	56% ↓	52% ↓ (53% ↓)
6CB period (2033-2037)	60% ↓	70% ↓	67% ↓ (67% ↓)
2040	69% ↓	83% ↓	79% ↓ (78% ↓)
2050	82% ↓	Net 0	96% ↓ (93% ↓)

## SCOPE 1

### DIRECT EMISSIONS

#### OWNED ASSETS

- Facilities
- Equipment
- Vehicles
- Onsite landfills

## SCOPE 2

### INDIRECT EMISSIONS

#### ENERGY PURCHASED

- Electricity
- Heating
- Cooling

## SCOPE 3

### ALL OTHER INDIRECT EMISSIONS

#### 3RD PARTY

- Residential housing
- Transportation
- Distribution
- Waste
- Energy and fuel
- Leased assets
- Travel

# OUR SUSTAINABLE DEVELOPMENT PERFORMANCE

## CARBON EMISSIONS

Across our direct, indirect and 3rd party emissions, we have begun to build a comprehensive evidence base which has informed our Strategy and 5 Year Action Plan. Initially we will focus on the main sources of carbon emissions that are within our direct control. This includes office accommodation, transport and residential housing. Over time we will begin to add other sources of indirect emissions such as staff travel and emissions from our contractors and suppliers.

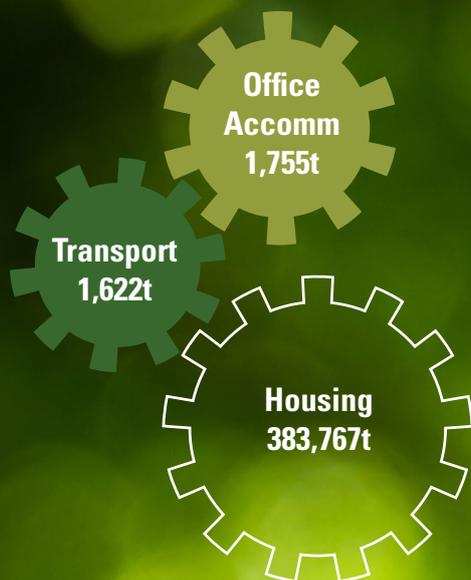
We need to reduce, remove and/or offset at least 387,144 tonnes of CO<sub>2</sub> to support the Housing Executive's long term goal of Net Zero.

Additional Scope 3 emissions - which cover everything the organisation buys, sells, invests in, leases to others, and disposes of as well as commuting and business travel - will be added to this baseline when the data becomes available.

## HOUSING EXECUTIVE EMISSIONS

(scope 1, 2, 3 emissions) 2019/20

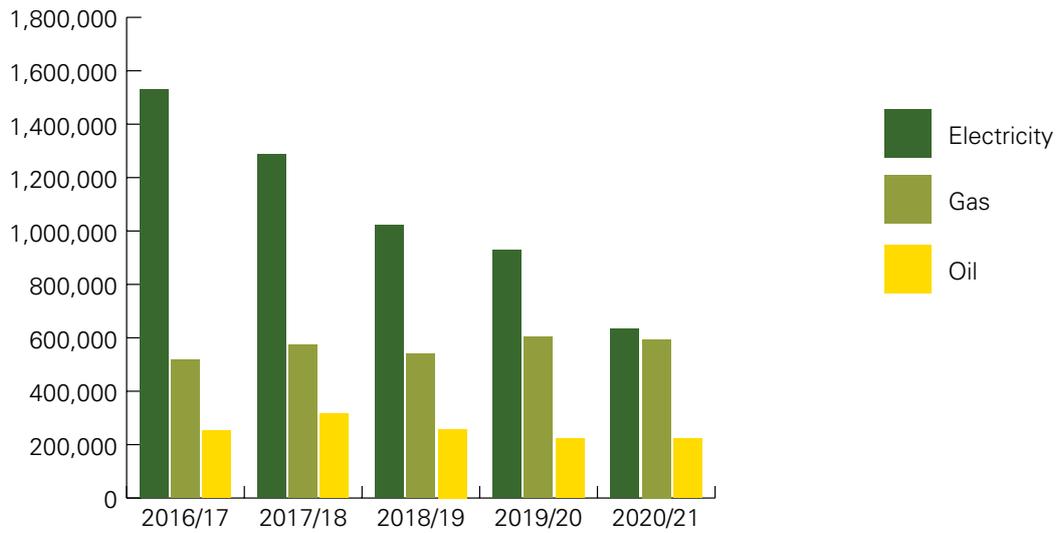
PRE-PANDEMIC =  
**387,144**  
TONNES OF CO<sub>2</sub>



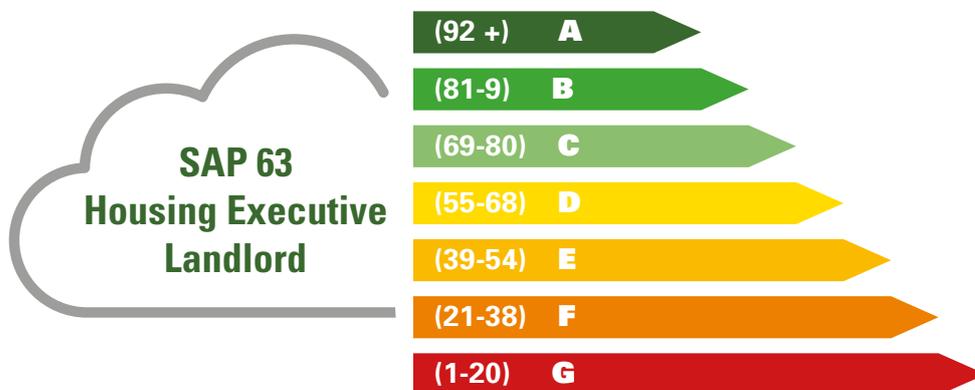
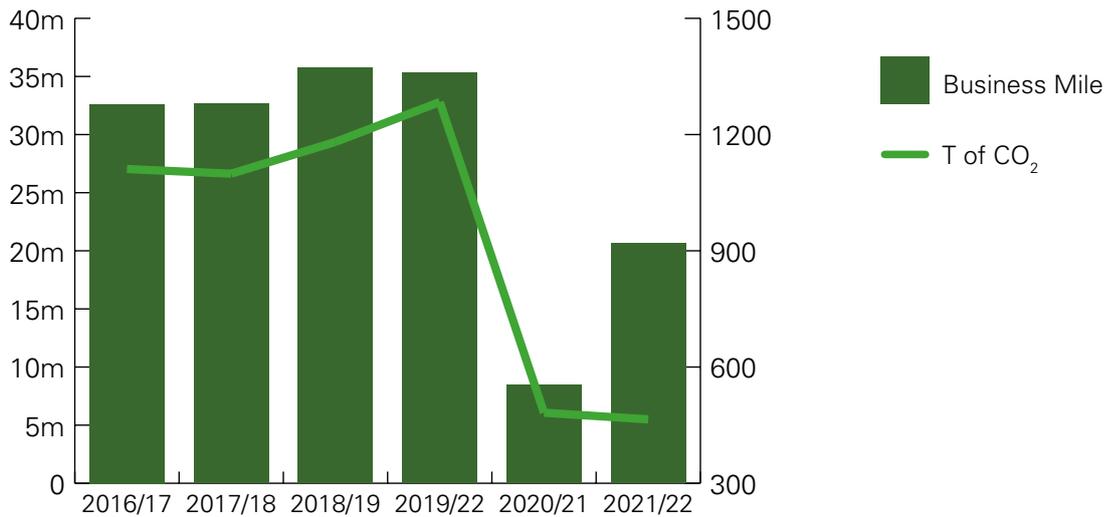
Office Accommodation	Transport (Business mileage & DLO fleet)	Landlord Housing (83,913)
1755 tCO <sub>2</sub>	1622 tCO <sub>2</sub>	383,767 tCO <sub>2</sub> <sup>7</sup>
0.5%	0.4%	99.1%
<p><b>↓23.6%</b></p> <p>CO<sub>2</sub> emissions from office accommodation (electric, gas and oil) fell by 23.6% in the period 2016/17 to 2019/20.</p>	<p><b>↓50%</b></p> <p>CO<sub>2</sub> emissions from business mileage fell by over 50% between 19/20 to 21/22 (largely due to restrictions attributed to Covid pandemic)</p>	<p><b>SAP 63</b></p> <p>Average SAP rating of a Housing Executive property is 63 (Band D) which is below the social housing average of 72.639<sup>8</sup></p>

7. Figure based on modelled data from NIHE Asset Management team.  
8. NI HCS 2016

### Data from Offices, Business Mileage and Existing Housing



### Business Miles & Associated Tonnes of CO<sub>2</sub>





## WATER

As part of its everyday operational activities, the Housing Executive consumes significant quantities of water. Key areas where water is used are in kitchens, toilets, showers and during grounds maintenance activities. The Housing Executive will reduce its water consumption by educating the organisation in awareness of the use of water supplies.



## WASTE

During the period June 2018 - December 2021, a total of 43.31 tonnes of waste was recycled from the Housing Centre, equating to 42.1% of all waste collected.

## GENDER EQUALITY

■ Male    □ Female



Senior Management Team



Housing Executive Board



**NEW  
SOCIAL  
ECONOMIES  
CREATED**

**39**



**EXISTING  
SOCIAL  
ECONOMIES  
SUPPORTED**

**50**



**NEW  
PART-TIME  
JOBS  
CREATED**

**115**



**EXISTING  
PART-TIME  
JOBS  
SUSTAINED**

**94**



**NEW  
FULL-TIME  
JOBS  
CREATED**

**37**



**EXISTING  
FULL-TIME  
JOBS  
SUSTAINED**

**100**



**ADDITIONAL  
VOLUNTEER  
HOURS  
EACH WEEK**

**3663**



**VOLUNTEER  
OPPORTUNITIES  
CREATED  
OR SUSTAINED**

**940**



**TRAINING  
OPPORTUNITIES  
CREATED  
OR SUSTAINED**

**1802**

**EVERY  
£1.00  
INVESTED**

**RETURNED**

**£4.52**

in social benefits  
for communities

# SOCIAL ENTERPRISE

In 2015, the Housing Executive developed its first Social Housing Enterprise Strategy & Programme to acknowledge the challenges our communities face in terms of social disadvantage and exclusion from the wider economy.

Since then our work with the social enterprise sector has expanded significantly. Initiatives include Social Enterprise Plus which proposes supporting social enterprise businesses; individuals who wish to develop as social entrepreneurs and collaborative working in the sector.

**£1.4m  
SOCIAL  
ENTERPRISE  
INVESTMENT**

between 2015 and 2018

**£250k  
PER ANNUM**

SPENT ON SOCIAL  
ENTERPRISE  
INITIATIVES TO DATE

# OUR TARGETS



## CARBON AND ENERGY EFFICIENCY

Within this Strategy we have identified separate targets and timelines for the corporate element of the organisation and separately for housing, due to the complexities and scale of our functions and operations.

### LONG TERM

Our end goal is to achieve Net Zero carbon emissions by 2050 right across all of our activities.

### END OF THE DECADE

By the end of this decade it is our ambition to achieve the following:

**Corporate Target (NIHE Business Activities):**

25% Reduction in CO<sub>2</sub> Emissions by 2030/31<sup>9</sup>

**Housing (NIHE Landlord) Target**

89,000 tonnes of CO<sub>2</sub> Reduction up to 2030/31 (23%)<sup>10</sup>

**Housing (NIHE Landlord) Target**

Retrofit housing to upgrade energy efficiency to an average of SAP Band C by 2030

**CORPORATE TARGET**

*Housing Executive  
Business Activities*

**25%**  
Reduction in  
emissions  
by 2030/31 **CO<sub>2</sub>**

**HOUSING TARGET**

*Housing Executive  
Landlord*

**89k**  
Reduction in  
emissions  
by 2030/31 **CO<sub>2</sub>**

### SHORT TERM (ACTION PLAN HORIZON)

**Housing (NIHE Landlord) Target**

25,000 tonnes of CO<sub>2</sub> Reduction up to 2025/26 (6%)

Our modest short term target of a 6% reduction in carbon emissions up to 2025/26 represents our first step on a pathway to reaching a position of net zero carbon across our tenants' homes. It is considered achievable given our anticipated funding position over the next four years and our other stock improvement and maintenance obligations and priorities, and will be delivered through our current thermal improvement programmes (primarily heating, loft insulation, double glazing, a minor cavity wall insulation programme and the completion of a limited external wall insulation programme).

9. Measured against baseline of FY 19/20, pre pandemic figures, and measured as a whole across all the business areas.

10. Measured against baseline of 383,767 tonnes in March 2022. Carbon reduction based on current Heating Replacement Programme, completion of the ERDF Retrofit programme to 2025/26, a new EWI Programme from 2026/27, a new Decarbonised Heating Programme from 2026/27 (4,500 dwellings p.a.), thermal improvement programmes and existing NIHE solar PV systems.

However, the further decarbonisation of our housing stock to achieve our end of decade and 2050 ambitions will require very significant investment, which will not be available under the current funding regime.

Our maintenance backlog and stock investment funding dilemma are a legacy of underfunding for many years and, therefore, we look to the Department for Communities' Housing Executive Revitalisation programme to develop and deliver a future sustainable funding model to resolve it.

It is also clear that even should sufficient funding become available a number of other pieces of the jigsaw need to fall into place. These include the development of new low carbon heating and insulation systems that will be available at scale and value for money, and the necessary retrofit expertise being available both internally and in the wider construction sector.

Consequently our 2030/31 targets for our housing stock will be reviewed as the issues of funding, technology and sector capacity become clearer towards the end of our initial 5 year Action Plan period.



## WASTE

We will achieve 60% recycling on our office estate by 2030 in line with the Northern Ireland municipal recycling target.<sup>11</sup>



## NATURE

We will promote habitat creation, biodiversity and carbon sequestration by planting 7,000 trees per year (Corporate Plan Target)



## FUEL POVERTY

We will support a range of fuel poverty measures across our existing housing, deliver the Department for Communities' private sector grants programmes and provide energy advice across both public and private sector housing.

## GENDER EQUALITY

**“We will ensure a highly valued, engaged, performance and customer orientated workforce, which is representative of our community, and an environment of dignity and respect and health and well-being, where all employees are enabled to reach their potential and be recognised for their individual contributions”**

*Housing Executive People Strategy*

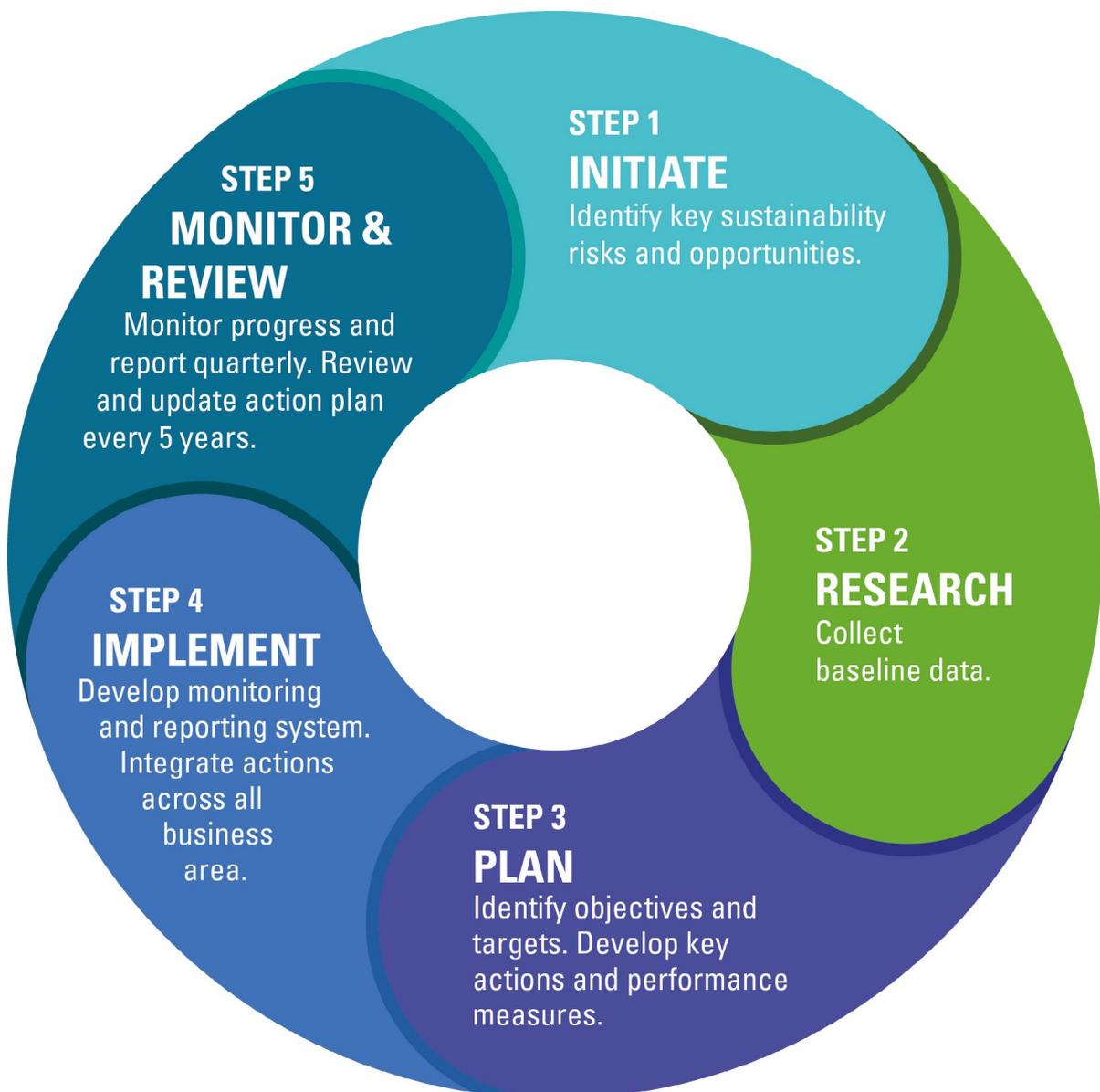
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11. In 2015, the European Commission proposed and adopted the Circular Economy Action Plan. The common target across Member States to reach 65% recycling rates for municipal waste by 2035. (In 2020/21 50% of waste collected by NI councils was sent for recycling, DAERA. In 2018-2021 42% of waste collected from the Housing Centre was sent for recycling)

# OUR APPROACH

## PROCESS

The methodology used to develop our Strategy and Action Plan is based on an internationally recognised Five Milestone Approach that is designed specifically for the development of climate change strategies and plans.



# THEMES AND PILLARS

The Strategy and Action Plan are structured around our four corporate themes of People, Places, Property and Planet and five 'pillars' that relate to our role as both a major social housing Landlord and the Strategic Housing Authority. The diagram below demonstrates the interconnections between these.



Within these five pillars are a series of outcomes based on 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.



This outcomes based approach translates into a number of deliverable actions and work streams that are set out in our Action Plan. These actions and work streams cover all of our business areas, as an integrated holistic approach is required to achieve meaningful action in sustainability.

# SUPPORTING PRINCIPLES

One of the greatest challenges to government and all stakeholders will be ensuring a just transition to Net Zero in a way that delivers fairness and tackles inequality and injustice. The Scottish Government definition of a Just Transition is 'a just transition is both the outcome - a fairer, greener future for all - and the process that must be undertaken in partnership with those impacted by the transition to net zero.' For the Housing Executive this is a realistic ambition.

	Impact	Opportunity	Priority	Overall		Impact	Opportunity	Priority	Overall
	●	✓	●	High		●	✓	●	High
	●	✓	●	Low		●	✓	●	High
	●	✓	●	Medium		●	✓	●	High
	●	✓	●	High		●	✓	●	High
	●	✓	●	High		●	✓	●	Low
	●	✓	●	Low		●	✓	●	Medium
	●	✓	●	High		●	✓	●	Medium
	●	✓	●	High		●	✓	●	High
	●	✓	●	Medium					

## A JUST TRANSITION

The energy transition must not deepen pre-existing social inequalities. The economic burden of the transition should be weighted towards the most polluting industries and manufacturers, not consumers. For these reasons we support just transition principles as guidance on our pathway toward achieving our carbon reduction targets and overall vision i.e.

1. Provide skills training and education that helps to secure good, high value jobs in green industries like low-carbon manufacturing, renewables and green technologies.
2. Provide homes that are energy efficient and help to reduce fuel poverty.
3. Build infrastructure, transport and communities that support our efforts to decarbonise, to enhance biodiversity and which are resilient in the face of the impact of climate change that we are already feeling.
4. Make sure the costs do not burden those least able to pay and the benefits of our transition are shared equitably.

## COLLABORATION

We recognise collaboration and partnership working will best deliver change and we have extensive experience of working with Councils, Government Departments and agencies, academics, local communities, and other stakeholders on a range of social, economic, and environmental issues.

Through this Strategy and Action Plan, the Housing Executive will strive to positively influence other stakeholders to address climate change and embed a culture of sustainable thinking across the housing sector.

## WE WILL DO THIS BY

- Demonstrating best practice in the decarbonisation of the residential sector
- Testing out key strategic policy, and funding asks
- Using our statutory functions to influence our staff, tenants, local communities and supply chains
- Driving collaboration on sustainability across the housing sector through new and existing forums
- Participating in forums for political engagement, or engagement with other key stakeholders across the sustainability sphere.

2021	2022	2023	2026	2027
Review data and establish baseline across key sectors of housing, offices and transport	Launch Strategy and Action Plan, develop implementation plans for work streams and commence Low Carbon Programme	Commence workstreams in Action Plan and monitor	Evaluate pilot projects and programmes. Implement Decarbonised Heating Policy to achieve Net Zero	Review first Action Plan, and publish Action Plan for next phase of work (2028-2033)



**To enable societal transformation through education and empowerment and behaviour change so that householders understand how to take full advantage of new sustainable technologies and solutions.**

# EDUCATION AND EMPOWERMENT LEADING TO BEHAVIOUR CHANGE

## WHY IS THIS IMPORTANT?

The Climate Change Committee (CCC), in its 2021 progress report to Parliament (June 2021), considered the impact of behaviour change on UK emissions. The report found that people and public engagement are key enablers for achieving the UK's net zero target. Earlier findings concluded that societal and behaviour changes are required in 62% of actions put forward to meet the UK's net zero greenhouse gas targets. This is compared to just 38% of actions which involved low-carbon technologies or fuels alone. (Source: The role of energy in meeting the UK's net-zero greenhouse gas targets, Climate Change Committee).

## COVID-19 AND BEHAVIOUR CHANGE

Despite the difficulties brought about by the worst global health pandemic in 100 years, some positives have emerged. We have experienced a willingness to work in new ways, harnessing innovative technologies and using them to best advantage to ensure business continuity and to find more efficient ways of working and travelling. We will embrace this spirit of change by informing and empowering our staff, our tenants, and our supply chain to make the necessary changes in behaviour to make more sustainable choices and take full advantage of emerging low-carbon technologies and solutions.



## STRATEGIC OUTCOMES:

### **Outcome 1.1: Our staff, tenants and supply chain will be aware of the impact of everyday activities on the climate and encouraged to take action to become more environmentally responsible as individuals and organisations.**

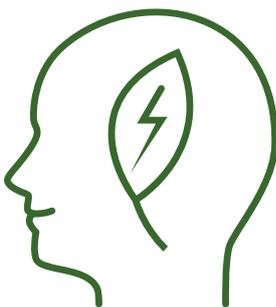
The Housing Executive is currently investing in education and awareness both as a landlord and strategic housing authority. Through collaboration with the Carbon Literacy Project and the National Energy Action (Northern Ireland) we aim to have a better understanding for staff, tenants and local communities. We are working to provide a greater reach to enhance energy advice and signposting within the NI Energy Advice Service, Northern Ireland's only free impartial advice service for all householders as the "one stop shop" in Northern Ireland.

We will continue our collaboration with Keep Northern Ireland Beautiful and the education sector to provide awareness of climate change within the housing sector, and support young people as influencers for future change. We will continue to partner and collaborate with a wide range of stakeholders to maximise the message of sustainable living.

Engaging young people and students in climate change discussions is essential to understand how the world is changing and what our human impact is on the climate, as well as setting out a plan for how society can adapt and take the necessary steps to ensure a sustainable future.

### **Outcome 1.2: The technical skills shortage in the construction industry will be addressed with greater capability and competency in the industry to facilitate sustainable construction and retrofit works.**

The Housing Executive will continue established partnerships with the local construction industry and academia to develop decarbonised heating solutions across the NI housing sector.



### **Outcome 1.3: Equal gender representation, participation and leadership across all business areas in the Housing Executive.**

We recognise that employment, job quality and raising incomes, can boost individual wellbeing. Objective 2 of our People Strategy states, "We will ensure a highly valued, engaged, performance and customer orientated workforce, which is representative of our community, and an environment of dignity and respect and health and well-being, where all employees are enabled to reach their potential and be recognised for their individual contributions".

This is further supported by a comprehensive Affirmative Action Plan which seeks to promote gender equality (in addition to other forms of diversity including religion and faith, race, sexual orientation and age) , address under representation, promote a more culturally sensitive and welcoming workplace where difference is valued and cultivated.



**Improve the health and wellbeing of staff, tenants, and communities through promoting the positive outputs of Sustainable Living.**

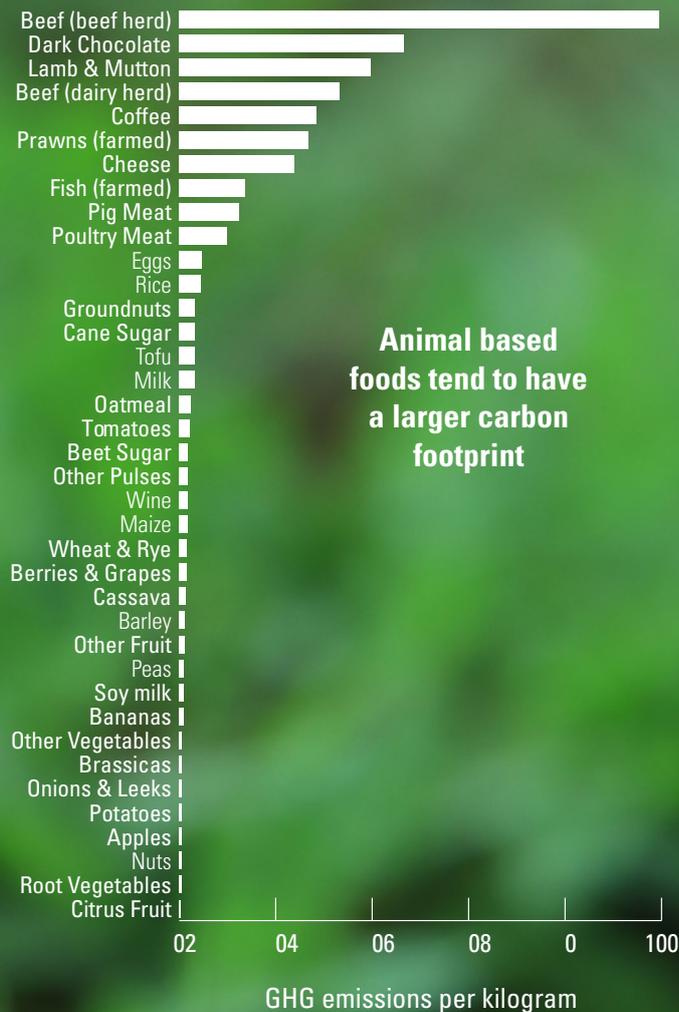
# **IMPROVED HEALTH AND WELLBEING THROUGH SUSTAINABLE LIVING**

The World Health Organisation describes health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or illness. Good mental health is a state of wellbeing that allows individuals to cope with the normal stress of everyday life and positively contribute to society.

During Covid-19 we have seen an awakening sense about the things considered most important in life: people's health and happiness. Sustainable Living can provide a positive framework to complement and improve health and wellbeing, whilst delivering benefits to the environment and cost savings.

## **WHY IS THIS IMPORTANT?**

The health and wellbeing of our staff, tenants and communities is a priority.



**Outcome 2.1: More sustainable dietary choices, including lower meat consumption, improve health outcomes.**

The Housing Executive will initially focus on the following campaigns:

- 1. Reduce your meat consumption**
- 2. Conserve water:**
- 3. Reduce, Reuse, Repair, Recycle:**
- 4. Reduce your plastic footprint and stop Single Use Plastics**

*Source: Carbon Brief, 'Climate impact of eating meat & dairy' 2020*

**Outcome 2.2: More green space on our estate.**

Green space helps absorb carbon dioxide, cools overheated urban centres in summer months, reduces flood risk, alleviates stress, stimulates social cohesion, supports physical activity, and reduces exposure to air and noise pollution.

The Housing Executive is currently developing a biodiversity strategy to create more nature-positive communities. As a large landlord the Housing Executive will demonstrate leadership to promote rewilding, based on community consultation.

The Housing Executive values the benefits of enhanced tree planting, principally to support carbon sequestration but also to enhance biodiversity and deliver social benefits such as cleaner air.

*The Conservation Volunteers (TCV) plant trees at Forthriver Road Woodland in Belfast on behalf of the Housing Executive to mark the launch of its NI Energy Advice Service. This initiative compliments the Housing Executive's ambition to plant 7,000 trees per year and the Belfast One Million Trees Programme to plant one million native trees across Belfast by 2035.*





**Reduce carbon emissions from our own fleet by phasing out fossil fuel vehicles and switching to Ultra Low or Zero Emission Vehicles.**

**We also aim to support a modal shift from transport by car to active forms of transport and promote hybrid working patterns, where applicable.**

# SUSTAINABLE TRANSPORT SOLUTIONS

## WHAT DO WE MEAN BY SUSTAINABLE TRANSPORT SOLUTIONS?

Examples of sustainable transport include walking, cycling, taking public transport and using ultra low emission vehicles. Walking and cycling are the most efficient and environmentally friendly modes of transportation for short to moderate distances. Flying is the least environmentally friendly mode of transportation.

## WHY IS THIS IMPORTANT?

Within our business focus, after the built environment, transport is the second largest carbon emitter in Northern Ireland accounting for approximately 33% of emissions. Due to our relatively large rural population and limited public transport network the majority of journeys in Northern Ireland are by car. Shifting preferences from private car travel to active travel, such as walking and cycling, and public transport is important for decarbonisation, air quality, congestion, and public health.

The pandemic demonstrated how behavioural changes can occur when there are incentives and reduced barriers in moving from one pattern of living and working to another. In the light of the changes necessary during the pandemic, such as working from home and pop-up cycle lanes, there are now significant opportunities to lock in and build on positive changes in behaviour seen during the pandemic.

## WHAT WILL WE DO?

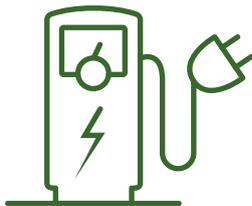


### **Outcome 3.1: More active travel by providing support for walking, cycling and e-bikes.**

Active travel will encourage staff to leave the car at home and the Housing Executive will work with strategic partners to promote this message, initially through its staff.

### **Outcome 3.2: People are encouraged back onto public transport, where there has been a shift to car travel**

The Housing Executive supports schemes to promote the use of sustainable transport for travelling to and from work, thus contributing to a reduction in the carbon footprint.



### **Outcome 3.3: Increased ownership of EVs and a phase out of petrol and diesel vehicles.**

The Housing Executive are committed to delivering an incentive scheme to encourage EV ownership within its staff. We are investigating the feasibility of providing charging facilities for staff, tenants and other householders through the potential of EV charging at our key offices (for staff only) and within the locality of Housing Executive schemes.

### **Outcome 3.4: Business mileage is significantly reduced and flying is considered the exception rather than the norm.**

#### **How can we achieve this?**

We will deliver a flexible working policy to deliver the needs of our customers and reduce the commuting and business mileage within targets.



### **Outcome 3.5: Investigate the feasibility of renewable fuel options (hydrogen) for our DLO heavy and medium transport fleet.**

Collaborate with industry, government and similar ALB's to explore synergies to utilise this technology.



**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.**

## **BUILT ENVIRONMENT**

This section will focus on the retrofit of energy reduction technologies to housing. Our office accommodation estate within the Housing Executive is also highlighted in this theme.

### **WHAT DO WE MEAN BY THE BUILT ENVIRONMENT?**

The built environment is the man-made structures, features, and facilities viewed collectively as an environment in which people live and work. For the Housing Executive this is our estate, which comprises office and residential accommodation, depots and commercial properties.

### **WHY IS THIS IMPORTANT?**

It is estimated that 70% of buildings in use in 2010 will still exist in 2050. Many of these houses were built to low energy efficiency standards and use fossil fuel-based heating systems. The Climate Change Committee has warned that legally binding climate change targets will not be met without almost complete elimination of greenhouse gas emissions from all UK buildings. The technology and knowledge to create high quality, low-carbon and resilient homes exists, but current policies and standards are failing to drive either the scale or the pace of change needed.

Based on 2019 DAERA greenhouse gas statistics, Northern Ireland emits 14.6 million tonnes of carbon dioxide annually, of which 14% comes from the residential sector. This demonstrates the opportunity that retrofit has the potential to significantly reduce Northern Ireland's carbon's footprint. (Image from CCC Housing Fit for the Future 2019).

## What does a low-carbon, sustainable home look like?

Current technology, and measures aimed at preparing for the impacts of climate change, can help new and existing homes to become low-carbon and ultra-efficient as well as adapted to flooding, heat and water scarcity.

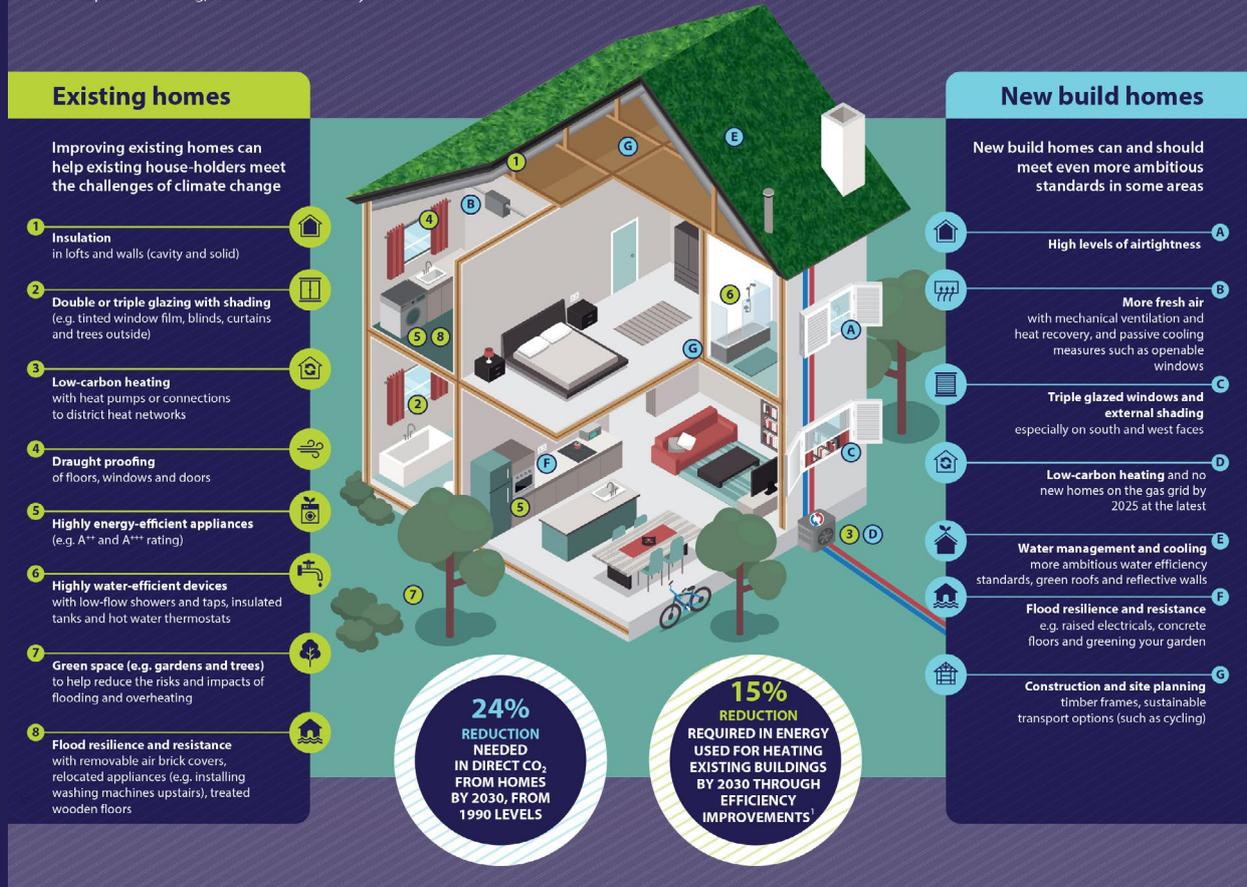


Illustration courtesy of UK Housing: Fit for the future? Committee on Climate Change February 2019

## WHAT ARE THE CHALLENGES AND CONSTRAINTS?

1. A step change is required as current rates of retrofit are too slow. The 'Future of Energy Efficiency Policy in Northern Ireland' 2020 report<sup>12</sup> highlighted: 'In order to align with 2050 net zero commitments, it is estimated that policies would need to drive an annual peak of retrofits for over 50,000 buildings within the next decade. By comparison, current energy efficiency programmes in Northern Ireland deliver measures for approximately 16,500 buildings per year, indicating that a doubling or trebling is needed. Deeper levels of retrofit per building are also required, with our modelled high scenario indicating peak annual energy savings that are 14 times higher than the historic annual figures for the current Northern Ireland programmes.'

12. Research into the Future of Energy Efficiency Policy in Northern Ireland (Arup)

2. NIHE/BRE Cost of Carbon. Through the Housing Executive's role as Northern Ireland's Home Energy Conservation Authority we commissioned the Building Research Establishment (BRE) research to highlight the capital cost, householder energy costs and carbon savings associated with future energy efficiency retrofitting plans in the medium to long term across all Northern Ireland's housing.<sup>13</sup>

**Medium Term:** Generally, traditional improvement measures, which focus on installing fabric insulation and upgrading heating systems, should be sufficient to improve dwellings to a SAP band C.

The total cost to improve the approximately 390,000 eligible dwellings in Northern Ireland to at least a SAP band C is £2.4 billion, with a mean cost of £6,200 per dwelling. The overall impact of improving dwellings in Northern Ireland to Band C would be to provide mean energy cost savings of £500/year, mean CO<sub>2</sub> savings of 3.2 tonnes/year and a mean SAP rating increase of 14 points.

**Long Term:** To reach the target SAP band B threshold however, further measures were required in the majority of cases. Specifically, the installation of photovoltaic (PV) panels was essential in improving a significant proportion of the stock to a SAP band B. The total cost to improve the approximately 586,000 eligible dwellings in Northern Ireland to at least a SAP band B is £9.2 billion, with a mean cost of £15,600 per dwelling. The overall impact of improving dwellings in Northern Ireland to Band B would be to provide mean energy cost savings of £700/year, mean CO<sub>2</sub> savings of 3.7 tonnes/year and a mean SAP rating increase of 18 points.

If all existing Northern Ireland housing was retrofitted to a SAP Band B Northern Ireland would reduce carbon emissions by 2.2 million tonnes annually. Based on 2019 DAERA statistics, NI is producing 14.6 million tonnes of carbon annually. This BRE report demonstrates that NI housing can significantly reduce NI's carbon footprint.

3. Rising energy prices and energy market volatility is both a challenge and an opportunity. Rising costs of wholesale energy prices from imported fossil fuels increases fuel poverty. However, a key lever to mitigate against high energy prices is to substantially improve energy efficiency performance of homes through innovative funding programmes across the public and private sector. This will provide better insulated homes, and affordable low carbon heating which will improve thermal comfort and the overall health and wellbeing of householders.
4. There is a skills gap in sustainable housing design, construction and in the installation of new low-carbon technologies. Industry needs clear policy direction and investment to plug this gap; by investing in new programmes to train retrofit co-ordinators, designers, energy assessors, technicians to improve energy and water-efficiency, ventilation, thermal comfort and property-level flood protection.
5. Inadequate funding and incentives for renewable and energy efficiency projects. There are urgent funding gaps which must be addressed, including access to secure Government funding for energy efficiency retrofit programmes and low-carbon sources of heating. There are many funding opportunities available elsewhere in the UK/ROI which are not available in Northern Ireland, e.g. Social Housing Decarbonisation Fund, Sustainable Warmth Competition, Heat Network Investment Project. The Government should work with the private finance sector to explore use of green mortgages and green loans to cover the upfront costs of home sustainability improvements. It should also look to widen the scope of these measures, for example including water efficiency, flood and heat resilience in 'green building passports', and resilience surveys - to flooding, for example - alongside energy ratings.
6. Fairer tariffs and use of consumer data. Consumer data is now a commodity which has commercial value, therefore if shared there should be equity of benefit. For example, agile electricity tariffs provide improved data to suppliers which delivers an end benefit to consumers. The Housing Executive has been keen to explore this and Power NI were granted a special licence from the Utility Regulator to facilitate a pilot led by the Housing Executive and Ulster University to trial 'time of use' and 'agile' tariffs in tandem with low carbon heating and energy efficiency measures in ten Housing Executive houses in Omagh

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13. Cost of carbon savings in Northern Ireland's housing stock (Housing Executive)

## WHAT WILL WE DO?

**Outcome 4.1: Energy efficiency is a major infrastructure priority which has led to large-scale energy efficiency retrofitting and reduced energy demand.**



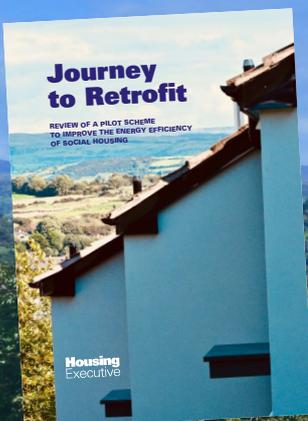
## WHAT HAVE WE DONE TO SUPPORT THIS?

'Journey to Retrofit' pilot in Newry: The Housing Executive has published a report of its retrofit pilot project in Newry that was designed to improve five houses to different energy efficiency standards. The scheme was completed in 2018, followed by two years of post-occupancy evaluation. The purpose of the pilot was to understand the benefits and challenges of implementing various retrofit measures, which would then inform the strategy for future retrofit schemes on a much larger scale. Following completion, the temperature and humidity of the dwellings were monitored for a period of two years, and this was compared to the data collected during pre-retrofit monitoring. Pre and post retrofit fuel costs were also compared, and SAP reports were analysed to determine the reduction of carbon emissions and fabric heat loss. Below is a list of measured improvements showing that major reductions have been made to harmful emissions and wasted energy, as well as significant increases to the time spent at a comfortable temperature and humidity:

1. Two out of five properties reached SAP B and three properties reached SAP C.
2. Building Research Establishment (BRE) carried out monitoring between October 2018 and March 2019 and compared this with pre retrofit monitoring recorded between December 2014 and May 2015. The results show the houses spend an average of 63.3% of time between 18-21°C, an improvement of 43%. Whilst the humidity levels sit between 40-70% for 97.2% of the time, a 22% improvement of the pre retrofit data.
3. 45.3% average decrease in total fabric heat loss.
4. Air permeability results range from 2.66 m<sup>3</sup>/h/m<sup>2</sup> to 8.57 m<sup>3</sup>/h/m<sup>2</sup> with an average of 6.75 m<sup>3</sup>/h/m<sup>2</sup>.
5. CO<sub>2</sub> emission rate decreased by an average of 75.5% with individual houses ranging from 69.9% to 84.2%.
6. £748 average reduction in fuel bills.

In terms of the wider community, the Housing Executive is already applying some of the techniques and measures trialled in this scheme in larger retrofit programmes. In particular, external wall insulation is being rolled out to communities across the province, incorporating the optimal details identified in the Newry scheme that reduced thermal bridging and increased airtightness. Ventilation is also now a major focus, with systems being upgraded where insulation is installed.

This scheme received the inaugural Net Zero Carbon Award from National Housing Maintenance Forum in January 2022 in recognition of the innovation work which the Housing Executive are currently developing to provide improved thermal comfort and low carbon heating to achieve Net Zero.

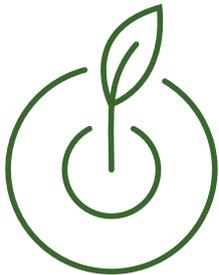


## ENERGY EFFICIENCY IN SOCIAL HOUSING PROJECT

Energy Efficiency in Social Housing project is a multi-million-pound investment programme to improve the energy performance of almost 2,700 of its homes. This has been made possible by funding of c. 23 million secured from the European Regional Development Fund (ERDF) through its Investment for Growth and Jobs Programme for Northern Ireland 2014-2020. A further 22 million of funding is being invested by the Housing Executive.



This six-year 45 million programme is expected to be completed by September 2023. Several schemes have already been completed or are currently underway. The schemes include improving thermal efficiency in aluminium bungalows and No Fines non-traditional stock through the provision of new external wall cladding, new double glazing, and improved insulation and ventilation measures.



**Embodied Carbon and the Priority of Retrofit:** The 'retrofit first' agenda is currently a consideration in local authorities, e.g. in the Greater London Authority Whole Life Carbon principles guidance is given for assessing whole life carbon in the pre-application stage. The first principle states: **Reuse and retrofit of existing built structures: Before embarking on the design of a new structure or building, the retrofit or reuse of any existing built structures, in part or as a whole, should be a priority consideration as this is typically the lowest carbon option.** Significant retention and reuse of structures also reduces construction costs and can contribute to a smoother planning process.

**Housing Executive Office Accommodation:** An Energy Management Programme for the central government estate was devised by the Department for Economy and the Strategic Investment Board<sup>14</sup>. It targets 30% energy savings by 2030 and provides an established target for office accommodation. The Housing Executive will deliver a flexible working policy to deliver the needs of our customers and reduce our commuting mileage thereby reducing the burden of the office estate, which will be a necessary element to achieve a 20% reduction in carbon across the estate. Initial analysis has shown the estate may need rationalised, unless a programme of decarbonisation of heating, energy savings measures or energy generation on site is introduced. Our Facilities Department will investigate the options and incorporate into a new Office Accommodation Policy.

14. <https://sibni.org/app/uploads/2019/03/Energy-Management-Strategy-March-2019.pdf>

## **Outcome 4.2 A transition to low and zero carbon heating systems in new build and retrofit.**



The Housing Executive's current heating policy is to replace the existing central heating systems at the end of their useful life with new gas fired central heating where available, or oil heating where there are no mains gas connections available. The better efficiency and controllability help achieve a substantial reduction in carbon emissions while also reducing harmful air pollution. However, switching to gas boilers will not, in itself achieve a net zero target.

Whilst acknowledging technology is evolving, the Housing Executive believes that future decarbonisation choice is based on

- **affordability,**
- **the supply of carbon free energy,**
- **sustainability of supply.**

Policy decisions and measures should offer maximum benefit to society and the environment. The use of kerosene and natural gas should be phased out as they release CO<sub>2</sub> emissions into the atmosphere. Whilst natural gas emits less carbon than kerosene, they are both not sustainable compared with renewable sources of heat, e.g., heat pumps running off 100% renewable electricity generation.



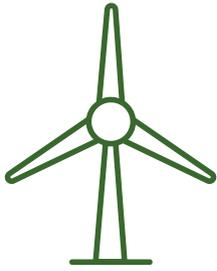
**The Housing Executive is currently investigating zero carbon options to replace natural gas and kerosene. Green hydrogen could replace natural gas in the long-term, on the gas grid, and elsewhere Hydrated Vegetable Oil could replace kerosene in the short to medium term. As stated, these will be considered based on affordability, carbon free and sustainability of supply. 'On the gas grid' the use of bio-methane injection into the natural gas grid could be a plausible short to medium term option to reduce carbon.**



## **SPOTLIGHT ON HANDIHEAT**

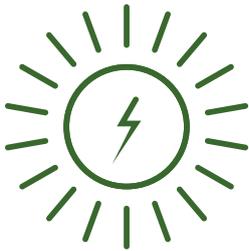
**This demonstration pilot is an EU project which aims to explore the potential benefits of hybrid electricity generation and storage solutions.**

**The pilot will evaluate a combination of hybrid installations in six Housing Executive properties in Lisnaskea, including oil/electric boilers; air source heat pumps; solar photovoltaic panels; and battery storage systems as well as energy efficient insulation measures.**



## DEMAND FLEXIBILITY AND TARIFF CHANGE

We believe energy storage has a key role in the decarbonisation of heat and power. Current pilots and future programmes are utilising a combination of energy generation, storage and export from housing to provide greater flexibility on the grid and reduce the cost of network reinforcement. Tariff changes, primarily through a better range of ‘time of use’ tariffs moving to ‘agile’ tariffs when there is more localised sustainable power generation, and less exposure to the global fossil fuel price fluctuations.



The Housing Executive is considering a range of options for new build and retrofit, depending on whether properties are on or off the gas grid. We want to support consumer choice where possible and will not prioritise different forms of fossil fuels over others, but the clear end state is to phase out fossil fuels. Our aim is to bring the following four key elements together to provide a low/zero carbon heating future:

- **improved energy efficiency measures,**
- **low carbon heating,**
- **electric tariff changes,**
- **improved education to effect householder behaviour change.**

The Housing Executive recognises the need for low-carbon heating solutions in the short-term and net-zero options in the longer-term. In the interim the Housing Executive is undertaking pilot projects to identify the best renewable energy systems to use in the future. These consist of heat pump systems, and solar photovoltaic panel systems which can heat hot water using zero carbon renewable electricity. Restructuring electricity tariffs and charges for heat pump systems would enable them to be deployed more widely, while remaining affordable for users.

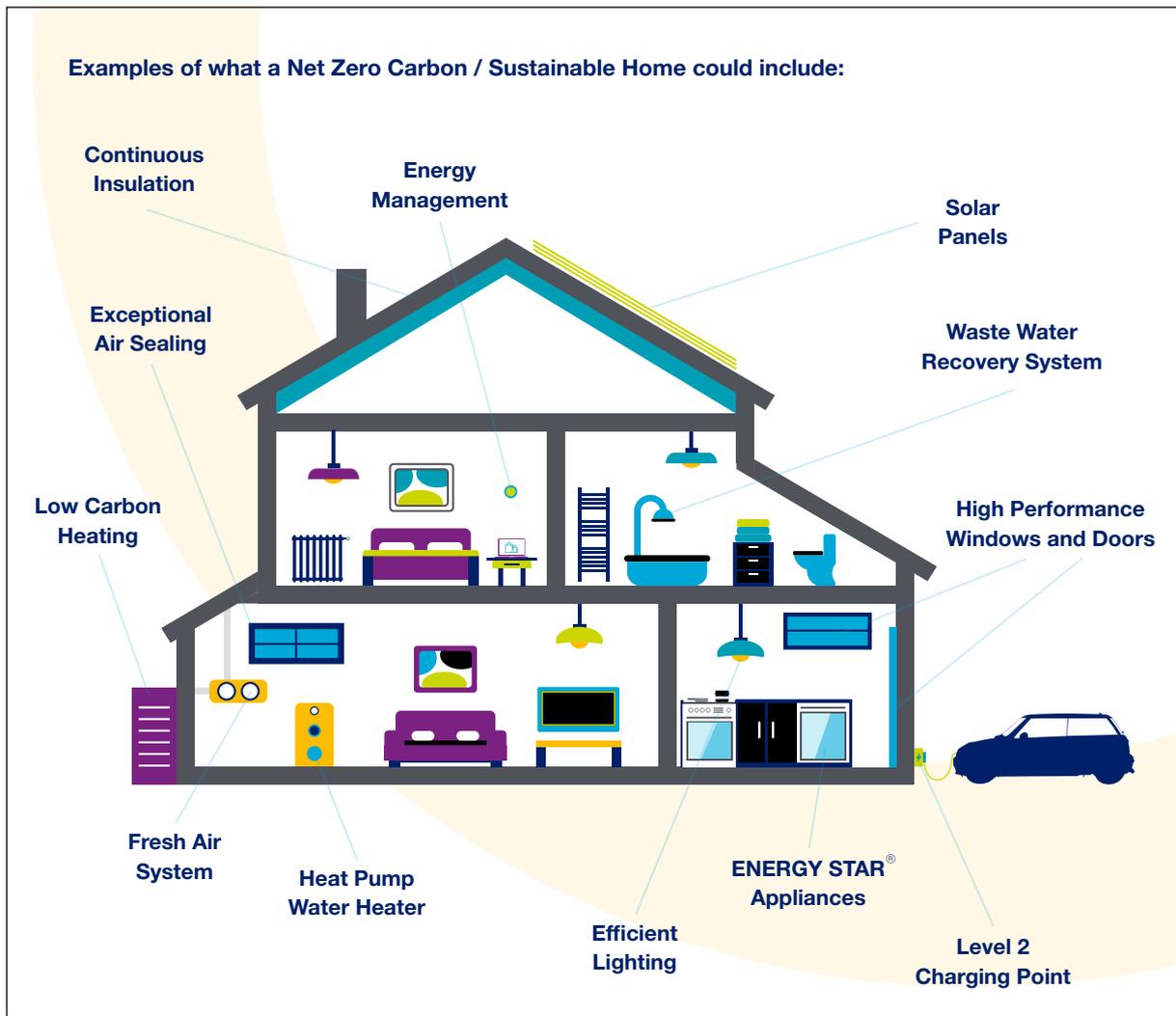
Initial planning by the Housing Executive is based on electrifying heating, especially in rural areas, and in urban areas, have a mixture of electrification and bio methane/green hydrogen blended with natural gas in the short term, hopefully leading to green hydrogen in the medium-term, if affordable.



### **Outcome 4.3. New builds, if needed, are built to be low-carbon, energy and water efficient, and climate resilient.**

We support a ‘whole life carbon’ approach to building decisions. It is estimated that construction accounts for approximately 10% of the UK’s carbon footprint. The Royal Institute of Chartered Surveyors (RICS) reports that the carbon emissions associated with constructing a building (‘embodied carbon’) is around 45% of the building’s total emissions over its lifespan, on average. The construction industry’s carbon footprint and consumption of resources could be significantly reduced by limiting demolition and rebuilding, in favour of the retrofit and refurbishment.

The Climate Change Committee is clear that new builds must be built to higher standards, noting that the costs of building to tight specifications are not prohibitive, and that getting the design right from the outset is far cheaper than retrofitting later. From 2025 at the latest, no new homes should be connected to the gas grid. They should be heated using low-carbon energy sources, have ultra-high levels of energy efficiency



*Illustration courtesy of Orbit to Zero, Our Net Zero Carbon Roadmap*

alongside appropriate ventilation, and be timber-framed where possible. Stricter building regulations are needed to reduce overheating risks in new buildings, as well as greater focus on ambitious water efficiency, property-level flood protection, green spaces (for example, trees on streets, vegetation on roofs, sustainable drainage systems) and provision for pedestrians, cyclists, public transport users and electric vehicle owners.



**Outcome 4.4. Education and empowerment of householders to understand new technology and systems and encourage environmentally responsible behaviours.**

The Housing Executive understands householders are central to the transformational change which is forthcoming in our homes over the coming years and will ensure their involvement during the design and delivery of future decarbonisation, with close liaison through existing partnerships with tenant and householder community groups.



**To support the development of Sustainable Communities as places in which people want to live both now and in the future; improving the quality of life for all whilst safeguarding the environment for future generations.**

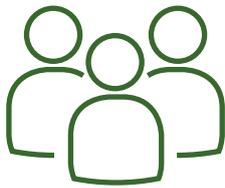
# SUSTAINABLE COMMUNITIES

## WHAT DO WE MEAN BY SUSTAINABLE COMMUNITIES?

A sustainable community takes into account, and addresses, multiple human needs, not just one at the exclusion of all others. It is a place where people of diverse backgrounds and perspectives feel welcome and safe, where every group has a seat at the decision-making table, and where prosperity is shared. Climate change, income inequality, and social injustice are the biggest threats to building strong, sustainable communities and hence these challenges define our actions in this theme.

## WHY IS THIS IMPORTANT?

This theme focuses on the need to collaborate with a wide range of stakeholders to provide vibrant communities and a sustainable local economy. As the largest landlord in Northern Ireland we are responsible for shaping places and communities through the housing we provide and the areas we are responsible for. We collaborate with local councils in many ways to achieve a shared objective of sustainable communities, namely shared administration of the Affordable Warmth Scheme (AWS), close working practices with Social Housing Development Programme team, with Housing Executive Place Shapers and the Housing Executive as a key consultee in Community Planning.



## WHAT WILL WE DO?

### **Outcome 5.1: Increased social, economic, and environmental wellbeing of districts and the people who live there through Community Planning.**

The Housing Executive as a key statutory consultee within the Community Planning Partnerships can promote environmental improvements, sustainable new build and collaborate to develop low carbon heat networks.



### **Outcome 5.2: More social value being delivered through the social enterprise sector.**

The Housing Executive has developed a Social Enterprise Strategy with an overarching purpose to improve wellbeing for all, by tackling disadvantage and driving economic growth.

### **Outcome 5.3: Local communities working together to secure low-cost energy.**

The Housing Executive has strong relationships with all local communities, typically through the Central Housing Forum with facilitation from Supporting Communities NI, who recognises the benefit of reducing household energy costs and developing community energy.



# DRAFT CORPORATE SUSTAINABLE DEVELOPMENT ACTION PLAN (2022-2027)



# 1. EDUCATION AND EMPOWERMENT LEADING TO BEHAVIOUR CHANGE

**Outcome 1.1: Our staff, tenants and supply chain are aware of the impact of everyday activities on the climate and encouraged to take action to become more environmentally responsible as individuals and organisations.**

## **How can we achieve this?**

- Local Offices Energy Awareness and Carbon Literacy training for all front line Housing Services staff (Patch Managers & Team Leaders)
- Carbon Literacy Training for Direct Labour Organisation staff and third party contractors. By enabling all Housing Services frontline staff to be competent in carbon management which can provide basic training and support behaviour change among staff and tenants.
- Energy Awareness and Carbon Literacy training for community groups facilitated by Supporting Communities NI.
- Home energy visits provide specialist on-site energy advice for Housing Executive tenants on how to operate household heating systems, energy efficiency and a review of energy bills. Tenants will gain an understanding of energy efficiency, how to use their heating system and find out options for switching energy supplier.
- Develop an improved website offer for householders to support the Housing Executive's Energy Advice Service. NI Energy Advice Service (NIEAS) launched in 2020. The service provides free and impartial advice to all NI households. It is the only 'one stop shop' for energy advice and information such as energy efficiency grant signposting, renewable energy advice, energy saving tips, how to switch energy provider, debt assistance, fuel poverty advice and oil-buying club signposting. This will significantly improve the efficiency and accessibility of the service.
- Develop a network of Student Climate Change Champions in collaboration with local youth organisations to develop ideas and thinking on how young people can take action individually and collectively to tackle climate change.
- Develop and deliver a communication plan to encourage staff and householders to reduce their environmental footprint. Encourage householders to conserve water by fitting a water meter at their property. Encourage staff and householders to follow the waste hierarchy of Reduce, Reuse and Recycle to reduce waste and thereby avoiding the emissions created during the production, transportation and processing of waste. Encourage staff and householders to reduce their plastic footprint and avoid Single Use Plastics by making simple changes like taking a reusable shopping bag to the shops.

**Outcome 1.2: The technical skills shortage in the construction industry will be addressed with greater capability and competency in the industry to facilitate sustainable construction and retrofit works.**

## **How can we achieve this?**

ARTES: This initiative will provide a platform for the Housing Executive to work in partnership with contractors, tenants, schools, colleges and universities to develop skills, create employment and provide learning and development opportunities within Housing Executive Maintenance Contracts.

The initiative will bring together the procurement, management and monitoring of all contract social clauses and requirements, provide training and support to apprentices, graduates, work placements and tenants through its partners. It will develop a web portal to share job opportunities, information on best practice and monitor the progress of the contracts in respect of training and social value.

By delivering a best-in-class carbon neutral environment to provide educational leadership across the retrofitting of the residential sector with our proposed Innovation and Centre of Excellence, we are aiming to continually develop our people, our contractors and identify partners through tailored learning and development solutions in support of our vision and values.

## Outcome 1.3: Equal gender representation, participation and leadership across all business areas in the Housing Executive.

### How can we achieve this?

- Affirmative Action Plan which seeks to promote gender equality
- Showcase all within the organisation who are driving business success

### Education and Empowerment leading to Behaviour Change

No	Action	Lead	Timescale	Performance measure	Strategy Outcome
EE1	Deliver energy awareness and carbon literacy training for 22 members of staff across 11 Local Offices so that they become green champions.	Sustainable Development Unit	Business Case Qtr 4 2021/22 ET paper Q1 2022/23 to commence	# of green champions in local offices	1.1
EE2	Deliver Carbon Literacy training to 350+ Patch Managers and Team Leaders within Local Office Housing Services.	Sustainable Development Unit	Business Case Qtr 4 2021/22 ET paper Q1 2022/23 to commence.	# / % of frontline staff trained	1.1
EE3	Deliver Energy Awareness and Carbon Literacy training to 22 community groups in partnership with Supporting Communities NI.	Sustainable Development Unit	Business Case Qtr 4 2021/22 ET paper Q1 2022/23 to commence	# community groups trained	1.1
EE4	Deliver home energy visits to 5,000 - 6,000 tenants through the NI Housing Executive Home-Advice Service.	Sustainable Development Unit	Business Case Qtr 4 2021/22 ET paper Q1 2022/23 Commence Project: Qtr 2 2022/23 Mobilise service Qtr 4 2022/23	# home energy visits (noting demographics with the highest demand and focus resources)	1.1
EE5	Enhance the NI Energy Advice Service through improved website functionality to provide energy advice and signposting.	Sustainable Development Unit	Ongoing Complete Qtr 3 2022/23	# increased users via website and other channels	1.1
EE6	Develop a network of Student Climate Change Champions in collaboration with local youth organisations.	Sustainable Development Unit	Develop Plan Q4 2022/23	# of youth climate champions	1.1
EE7	Develop and deliver a communication plan to encourage staff and householders to reduce their environmental footprint.	Sustainable Development Unit	Develop Plan Q4 2022/23	# tenants / staff engaged	1.1
EE8	Implement Year 1 of our Construction Skills and Learning Partnership (*ARTES) (PfG 6) and a carbon neutral Innovation and Centre for Excellence.	AM Programme Delivery	Develop Plan Q2 2022/23	Operational zero carbon training facility	1.2
EE9	Affirmative Action Plan which seeks to promote gender equality - NIHE Peoples Strategy.	Equality Unit	Ongoing monitoring	#Gender equality	1.3

## 2. IMPROVED HEALTH AND WELLBEING THROUGH SUSTAINABLE LIVING

### Outcome 2.1: Improved health and wellbeing of staff and tenants due to sustainable lifestyle choices

#### The Housing Executive will:

- Run staff campaigns to increase awareness and understanding about the health and environmental benefits of a range of sustainable lifestyle choices, from eating less meat to walking and cycling more.
- Introduce sustainable food criteria in our corporate catering policy

### Outcome 2.2: More green space on our estate

Green infrastructure delivers a range of environmental and social benefits and services including helping absorb carbon dioxide, cooling overheated urban centres in summer months, reducing flood risk, alleviating stress, stimulating social cohesion, including intergenerational opportunities, supporting physical activity, and reducing exposure to air and noise pollution.

#### The Housing Executive will:

- Develop a Biodiversity Strategy to create more nature-positive communities.
- Promote rewilding on our estate to enhance habitat provision, subject to community education and consultation.
- Deliver a programme of tree planting in partnership with the voluntary and community sector.
- Maintain our amenity gardens, lawns and grounds in ways that promote biodiversity and minimise environmental impact, for example by hand weeding shrub beds to minimise chemical use.

### Improved Health and Wellbeing through Sustainable Living

No.	Action	Lead	Timescale	Performance measure	Strategy Outcome
HW1	Provide a Green Page in Gateway to support staff engagement and facilitate staff feedback.	Orgn Dev (support from Sustainable Dev Unit and Comms Dept)	Q3 2022/23	# page views	2.1
HW2	Develop internal staff campaigns to: <ul style="list-style-type: none"> <li>• Reduce meat consumption</li> <li>• Conserve water</li> <li>• Reduce, Reuse, Repair, Recycle</li> </ul>	Orgn Dev (support from Sustainable Dev Unit and Comms Dept)	Start to deliver campaigns from Q3 2022/23	# staff engaged Staff wellbeing	2.1
HW3	Develop a Single Use Plastic Policy.	Sustainable Development Unit	Q2 2022/23	# or % reduction in SUP items purchased	2.1
HW4	Develop a Nature Positive Strategy for the organisation.	Housing Services	Q3 2022/23	# nature positive communities	2.2
HW5	Plant a mixture of approx. 7,000 native trees and whips per year, where possible subject to supply.	Housing Services (in Corporate Plan)	Q4 2022/23	# trees planted	2.2
HW6	Develop a Plan to deliver community nature initiatives in partnership with Supporting Communities NI.	Housing Services	Q3 2022/23	# community nature initiatives	2.2
HW7	Minimise the removal of healthy trees unless there is a health and safety or dev/betterment rationale which out ways the benefit.	Housing Services	Develop Policy by Q3 2022/23	Updated Grounds Maintenance Policy	2.2
HW8	Develop plan for nature positive solutions across approx. 25% of grassland on our Estate subject to satisfactory community consultation.	Housing Services	Develop Plan in line with Nature Strategy Q3 2022/23	% grassland	2.2

## 3. SUSTAINABLE TRANSPORT SOLUTIONS

### **Outcome 3.1: More active travel by providing support for walking, cycling and e-bikes.**

#### **How can we achieve this?**

- Staff Cycle to Work Scheme: As part of the Health and Wellbeing Initiative the Housing Executive will fund the up-front cost of the bike and any safety equipment with staff paying the hire amounts periodically from gross pay. At the end of the hire agreement colleagues can have the opportunity to buy the bike at market value.
- Encourage bicycle and e-bike use through the provision of cycle training, bike maintenance and e-bike loans for staff and tenants.
- Work with strategic partners and encourage local schemes for a healthier and more environmentally friendly commute.

### **Outcome 3.2: People are encouraged back onto public transport, where there has been a shift to car travel.**

#### **What are we already doing?**

- 'aLink' (formerly known as Annual Commuter Card) which provides unlimited travel for 12 months between two chosen points at a saving of up to 20% discount on the normal monthly bus/rail fare.

### **Outcome 3.3: Promote the ownership and use of EVs and a phase out of petrol and diesel vehicles.**

#### **How can we achieve this?**

- EV Salary Sacrifice Scheme to help staff to purchase or lease low emission vehicles.
- Develop a plan for EV's to replace our 300+ fleet of fossil fuel vans with low emission vehicles (electric and hybrid) over time, where suitable and affordable. This would incorporate robust analysis and evaluation to allow a longer-term transition plan to a "Green Fleet" to be developed and identification of a date by when the Housing Executive will stop purchasing fossil fuel vehicles.
- Increase the number of EV charging points for our staff and customers at our office sites.
- Provide fleet charging solutions at our DLO premises.
- Develop a plan to pilot the installation off-street EV charging equipment in domestic properties and within our Landlord properties.
- Develop a plan to pilot the installation of communal EV charging for both tenant and public use in suitable parking areas.

### **Outcome 3.4: Business mileage is significantly reduced and flying is considered the exception rather than the norm.**

#### **How can we achieve this?**

- Implement changes in corporate policies to discourage air travel and limit business mileage.
- Encourage home working and virtual meetings to reduce the need for travel.

## Sustainable Transport Solutions

No.	Action	Lead	Timescale	Performance measure	Strategy Outcome
ST1	Develop Plan to reduce commuter mileage in order to reduce carbon emissions by minimum of 25% by 2030, based on baseline of FY21/22.	Orgn Dev (support from Finance Support Services)	Develop Plan Q3 2022/23	# miles from staff commuting % reduction CO2 emissions	3.1
ST2	Develop Plan to support use of e-Bikes across some office locations.	Quality Improvement Unit	Develop Plan Q3 2022/23	# e-bikes in use	3.1
ST3	Develop partnerships to promote active travel with Dfl and Arm's Length Bodies.	Sustainable Dev Unit (support from Orgn Dev and Comms Dept)	Establish Partnerships Q4 2022/23	# active travel partnerships	3.1
ST4	Implement EV Salary Sacrifice Scheme for staff.	Finance Support Services	Subject to ongoing ET discussions, Implement scheme by Q3 2022/23	# employees using EV salary sacrifice scheme	3.3
ST5	Develop a plan for EV's to replace our 300+ fleet of fossil fuel vans with low emission vehicles (electric and hybrid).	DLO	Develop Plan Q4 2022/23	#Plan to convert to a green fleet	
ST6	Subject to external funding, provide a pilot of 12-15 EV charge points across NIHE housing stock to increase EV charging infrastructure for tenants.	Quality Improvement Unit (support by Sustainable Dev Unit)	Ongoing collaboration with D&SC Aim to deliver by Q4 2022/23 (subject to external funding)	# EV charge points installed	3.3
ST7	Transition from fossil fuel medium sized vehicles for DLO fleet by 2028.	DLO	Develop Plan based on evaluation of EV pilot Q4 2023/24 No further fossil fuel medium sized vehicles after April 2028	% fossil fuel vehicles in fleet	3.3
ST8	Develop Plan to reduce business mileage in order to reduce carbon emissions by 25% by 2030.	Finance Support Services	Develop Plan Q4 2022/23	Reduction in business miles CO2 savings	3.4
ST9	Develop a flexible working model to reduce communal mileage and reduce the need for a large office estate.	HR	Planning has commenced, and implementation will depend of public health guidance.	Reduction in communal miles and demand for office estate CO2 savings	3.4

## 4. BUILT ENVIRONMENT

### **Outcome 4.1: Energy efficiency is a major infrastructure priority which has led to large-scale energy efficiency retrofitting and reduced energy demand.**

#### **How can we achieve this?**

##### *Strategic Housing Authority*

Within our role as Strategic Housing Authority the Housing Executive delivers the role of Northern Ireland's Home Energy Conservation Authority and the delivery of the home energy efficiency grants schemes on behalf of the Department for Communities.

##### *Affordable Warmth Scheme*

The Affordable Warmth Scheme was introduced in September 2014, replacing the previous Warm Homes Scheme. It is funded by the Department for Communities and is the Domestic Energy Efficiency Improvement Programme for vulnerable low income households. The Affordable Warmth Scheme is a central element in the NI Executive's 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. 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. The Housing Executive works with the Department for Communities, local Councils and the Ulster University to ensure that assistance is targeted in areas where fuel poverty is prevalent.

##### *Home Energy Conservation Authority (HECA)*

The Housing Executive, through its HECA role, continues to provide leadership with research and innovation in energy efficiency and decarbonisation best practice, with the focus on householder affordability and functionality.

Within its HECA role the Housing Executive will provide influence and collaboration and share key learning of retrofit pilots across social housing sector via meetings, seminars and case studies.

##### *Housing Executive Landlord Energy Efficiency Strategy*

We are currently developing an Energy Efficiency Strategy for our housing stock. This will be based on a 'fabric first' approach and will take cognisance of evaluations of recent and ongoing pilots in which we are investigating the best way of prioritising future investments and achieving value for money, targeting the correct measures to individual housing archetypes.

However, as previously noted, the thermal performance of our stock is poor and we are starting from a low base, and, therefore, it must again be emphasised that delivering the energy efficiency programmes that will be required to achieve significant decarbonisation is predicated on the development of a sustainable funding model that will allow us to obtain the significant level of funding that will be required.

##### *Office Accommodation*

We aim to develop an Energy Management Programme in line with the Strategic Investment Board's Energy Management Strategy<sup>15</sup>. It targets 30% energy consumption reduction by 2030 and provides an established target for office accommodation (owned premises only):

- Establishing effective energy management processes that unlock value; and
- Lowering net energy consumption by 30% by 2030 across Government (from a 2016/17 baseline year as specified by SIB).

The Office Accommodation Policy is aimed at delivering a flexible working policy to deliver the needs of our customers and reduce commuting and business mileage within targets.

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15. <https://sibni.org/app/uploads/2019/03/Energy-Management-Strategy-March-2019.pdf>

## **Outcome 4.2 A transition to low and zero carbon heating systems.**

### **How can we achieve this?**

Our view on a potential pathway to 'decarbonise' domestic heating is as follows:

- New Build housing: Heat Pumps in the medium to long term for all new properties in Northern Ireland, and potentially green hydrogen supply for those on the gas network.
- Existing 'Off Grid' housing: Medium term transition to hybrid heat pumps/oil boiler (with Hydrotreated Vegetable Oil, if supply is sustainable) and eventually to stand alone heat pumps, with improved energy efficiency, better electric tariff options and improved householder education.
- Existing 'On Grid' housing: Aspiration to begin to replace natural gas with green hydrogen by 2026, based on feasibility and availability<sup>16</sup>. Alternative option to incrementally electrify heating 'on the gas grid' based on suitable funding and satisfactory outcomes from ongoing pilots and programmes. Regardless of heating type 'on the gas grid' will require improved energy efficiency, better tariff options and improved householder education.
- Low-carbon heat networks. Support the development of low-carbon heat networks, or 'district heating', particularly in urban and new build scenarios.

### **What are we already doing?**

Rural-Led Energy Transition (RULET) Pilot is a joint initiative between the Housing Executive and Ulster University, within SPIRE 2 which is an EU funded project to retrofit ten houses in Omagh. The outcome is aimed at reducing the risk of low-income households being left behind in the energy transition.

### **What else can we do?**

300 Unit Low Carbon Programme: Based on the learning from other pilots the Housing Executive will collaborate with industry, academia, government, regulator and householders to deliver a thermal improvement programme focused on:

- improved energy efficiency measures,
- low carbon heating,
- electric tariff changes,
- improved householder education to effect behaviour change,

The aim is to commence the programme in winter 2022/23, complete installations by winter 2023/24 and monitor until 2024. The aim is to provide a comprehensive suite of data and key learning that will inform the development and introduction of a new Heating Policy for our housing stock in 2025.

## **Outcome 4.3. New builds, if needed, are built to be low-carbon, energy and water efficient, and climate resilient.**

### **What are we already doing?**

Social Housing Development Programme: The Social Housing Development Programme delivered 1,626 completed homes in 2020/21 (against a target of 1,500). 67% of these completions (1,088) 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.

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<sup>16</sup>. BEIS Heat & Buildings Strategy, Oct 2021 notes a strategic decision on green hydrogen for heating should be made by 2026.

Social Housing Development Programme Energy Efficiency Multiplier: The Department for Communities Housing Association Guide offers an optional Energy Efficiency Multiplier which supports sustainable and energy efficient design beyond the existing statutory minimum SAP ratings for new build homes delivered via the Social Housing Development Programme. In September 2021 the Department in collaboration with the Housing Executive reviewed the funding available for the 'Energy Efficiency Multiplier'. This will increase the level of funding available for any housing associations who wish to deliver new social housing to the higher Energy Efficiency standards (i.e. SAP A and min. FEES as above).

Housing Executive MMC/Low Energy Re-provision Pilot Scheme: The Department for Communities has asked us to explore the viability of Modern Methods of Construction and Low Energy technology with the intention of developing an exemplar social housing scheme that could be used to inform future new build standards. The scheme involves the construction of six 2-bed 3-person semi-detached dwellings at a site in north Belfast, and will incorporate the following elements:

- Modern Methods of Construction (MMC)
- Ultra-low energy building techniques
- Mechanical ventilation and heat recovery system with integral heat pump.

We are looking to explore if a building can produce net zero greenhouse gas emissions in use, known as 'zero carbon in use'. Embodied energy can also be reduced by using low-carbon building materials and construction methods. The standards explored in this pilot far exceed current building regulations. The hope is that building to high energy standards now will futureproof new builds, as there will be no need to retrofit to achieve Net Zero.

### **What else can we do?**

Prioritise retrofit solutions first; ensuring that reuse of existing buildings is explored as the first option. In capital projects we can use sustainability and embodied carbon as a criterion for tender competitions in building and refurbishment work. Third party accreditation schemes can be stipulated in the specification, e.g. BREEAM or House Quality Mark.

## **Outcome 4.4. Education and empowerment of householders to understand new technology and systems and encourage environmentally responsible behaviours.**

### **How can we achieve this:**

- Provide leadership and support. Share key learning from our retrofit work across the social housing sector via series of meetings, seminars.
- Establish a Climate Working Group with our Central Housing Forum to develop guidance for tenants and leaseholders as new energy efficiency measures and technologies are introduced

## Built Environment

No.	Action	Lead	Timescale	Performance measure	Strategy Outcome
BE1	Develop Landlord Housing Stock Energy Efficiency Strategy.	Quality Improvement Unit	Q1 2022/23	Deliver EE strategy	4.1
BE2	Retrofit landlord housing to upgrade energy efficiency to an average of SAP Band C by 2030/31 [subject to funding].	Quality Improvement Unit	Based on timelines of BE1 & BE2 Monitor average SAP change at Q1 2023/24 and annually afterwards	# homes at SAP Band C or above	4.1
BE3	Office Acc: Dependent on the outcome of the Office Acc Strategy and the outcome of hybrid working arrangements the aim is to reduce energy consumption and upgrade energy efficiency and low carbon heating across NIHE owned office accomm to deliver 30% energy consumption reduction target as per SIB Energy Management Strategy.	Facilities and Acc	As per SIB Energy Management Strategy to reduce energy consumption by 30% by 2030 across offices owned by NIHE.	% reduction in energy consumption	4.1
BE4	Office Acc: Dependent on the outcome of the Office Acc Strategy and the outcome of hybrid working arrangements the aim is to reduce carbon reduction targets within this strategy.	Facilities and Acc	Develop an Office Acc Policy, which includes carbon reduction, by Q1 2023/24 (subject to dev of hybrid working arrangements)	% reduction in carbon emissions	4.1
BE5	Deliver RULET Pilot Project to test energy efficiency, electric heating, tariff and behaviour change in ten homes.	Quality Improvement Unit (support by Sustainable Dev Unit - joint pilot with Ulster University)	Complete monitoring Q4 2022/23	Evaluation report	4.2.
BE6	Deliver 300 unit low carbon retrofit programme to test energy efficiency, low carbon heating, tariff and behaviour change.	Quality Improvement Unit (support by Sustainable Dev Unit )and Ulster University	Develop Plan Q2 2022/23 Commence onsite Q4 2022/23 Complete onsite Q4 2023/24 Complete Monitoring Q4 2024/25	# homes retrofit	4.2
BE7	Develop new Housing Executive Landlord Heating Policy.	Quality Improvement Unit (support by Sustainable Dev Unit)	Q1 2025/26		4.2
BE8	Implement a pilot low carbon new build project.	Quality Improvement Unit	Commence on site Q1 2022/23	# low-carbon units constructed	4.3
BE9	Provide support and share key learning points of retrofit pilots across social housing sector via series of meetings, seminars and case studies.	Sustainable Dev Unit	Commence Q1 2024/25	# learning events delivered # case studies	4.4
BE10	Establish a Climate Working Group via the Central Housing Forum.	Housing Services (support by Sustainable Dev Unit)	Commence Q4 2021/22	# Climate Working Group meetings	4.4

## 5. SUSTAINABLE COMMUNITIES

### **Outcome 5.1: Increased social, economic, and environmental wellbeing of districts and the people who live there through Community Planning.**

#### **How can we achieve this?**

- Work with local councils and community planning partners to support the development of net zero housing and large scale energy projects such as heat networks at local level.

### **Outcome 5.2: More social value being delivered through the social enterprise sector.**

#### **How can we achieve this?**

- Ensure compliance with sustainable procurement policy guidance (PPN 01/21) to promote social value within our contracts. Initially to award a minimum of 10% of the tender score to social value, but with the ambition to exceed the statutory ambition of 20% by 2023.
- Work with the social enterprise sector and other public bodies to seek opportunities to actively integrate social enterprise into works and service provisions to support social cohesion, health and well-being, social enterprise, local job creation and the circular economy.

### **Outcome 5.3: Local communities working together to secure low-cost energy.**

#### **How can we achieve this?**

- Collaborate with local community groups to partner in developing community energy projects
- Encourage new members to join the Housing Executive operated NI Oil Buying Club Network (NIOBC) which facilitates competitive rates of home heating oil through collective ordering whilst also encouraging budgeting.
- Offer members of the Oil Buying Club impartial energy advice and funding signposting via the NI Energy Advice Service.

## Sustainable Communities

No.	Action	Lead	Timescale	Performance measure	Strategy Outcome
SC1	Train Place Shaping staff to provide leadership on low carbon best practice for inclusion in Local Development Plans and Community Planning Partnerships.	Sustainable Dev Unit	Deliver Plan Q3 2022/23 Commence Plan Q4 2022/23	# employee trained	5.1
SC2	Establish working groups with urban councils and HAS to identify and develop heat network opportunities and retrofit best practice pilots.	Sustainable Dev Unit, (support by Quality Improvement Unit & Place Shapers)	Commence WG Q4 2022/23	# low-carbon heat projects identified	5.1
SC3	Produce and Implement a Sustainable Procurement Policy initially to comply with recent Social Value CPD policies and longer term to consider Scope 3 Emissions.	Central Procurement Dept, (support by Sustainable Dev Unit)	Deliver Policy Q2 2022/23 for Social Value Implement Sustainable Procurement Policy Q2 2023/24, subject to new NI Procurement Policy on Scope 3 Carbon emissions.	# compliance with Social Value CPD guidance # procurement processes which reference sustainable outcomes	5.2
SC4	Establish working group to advance social sustainability with NIHE Social Enterprise Unit to benefit local communities.	Sustainable Dev Unit, (support by Social Enterprise Unit)	Commence WG's Q2 2022/23	Annual spend on social enterprise sector (£)	5.2
SC5	Develop funding application to EU Peace Plus for a community energy project in collaboration local social enterprises.	Sustainable Development Unit	Commence collaboration Q1 2022/23 (subject to EU Calling Notice)	Funding application for community energy projects via EU Peace Plus	5.3
SC6	Maximise membership of the NI Oil Buying Club Network to enhance household budgeting and energy affordability.	Sustainable Development Unit	Develop Growth Plan Q2 2022/23	# oil buying club members	5.3

# GOVERNANCE

The Housing Executive has established a high-level working group to develop and embed environmental sustainability leadership across the organisation. The Sustainable Development Strategy Working Group oversees the development and introduction of this strategy to reduce the organisation's impact on the environment. The group also raises the profile of environmental sustainability internally and encourages participation in initiatives by staff and tenants.

## Statutory Compliance of Sustainable Development

The NI Housing Executive, as a public body, is required to comply with a statutory duty, established by Section 25 of the Northern Ireland (Miscellaneous Provisions) Act 2006, applicable from 31st March 2007, to promote the achievement of sustainable development in the exercise of its functions.

This means that all areas of the business must consider the climate and sustainability impacts of their work. To ensure compliance, we intend to introduce mandatory sustainability and climate screening for all policies, plans and senior level decisions (director and above) as part of our commitment to Section 25. In the short term, screening will focus on capital projects and high-risk, long-term investments, before being extended to all senior decisions. It will be used to flag sustainability risks, prevent carbon lock-in and reduce the risk of stranded assets in future.

Although this legislation has been available, it is the advent of the climate crisis which has provided renewed focus on sustainable development. The vision here is to ensure the sustainability screening is on an equal footing to the Housing Executive's compliance with Section 75 of the NI Act 1998 and The Rural Needs Act NI 2016.

## Monitoring and Reporting

The Action Plan follows a 5-year timeline, which resonates with the national carbon budget timelines and targets. There will be an annual progress update to senior management and the NI Housing Executive Board on the actions and work streams identified in this Action Plan.

The organisation already undertakes an annual environmental audit and benchmarking exercise with third party certification; however an annual assurance statement will be required to record the progress of this Action Plan.

## Resourcing

The Sustainable Development Unit (SDU) currently delivers and oversees compliance with our Home Energy Conservation Authority (HECA) functions, including delivery of the NI Energy Advice Service. The SDU also provides cross divisional support across all areas of the organisation and externally with our partners to achieve the shared goals of net zero and sustainable living.

Going forward, the Unit will be responsible for overseeing and coordinating the implementation of this Strategy and Action Plan, including sustainability compliance, monitoring and reporting, securing sources of funding for energy efficiency and carbon reduction, and providing ongoing cross-departmental advice and support. The SDU has identified there will be additional resource requirements to carry out these functions effectively, including a requirement for an embedded communications lead, and support staff to help with monitoring and reporting, and general oversight of the Strategy.

## Governance

No.	Action	Lead	Timescale	Performance measure	Strategy Outcome
G1	Develop a Climate Change Adaptation Working Group to lead the development of a Climate Adaptation Plan, identifying key climate risks for the organisation and targeted and effective adaptation measures.	Sustainable Development Unit, (support by Risk Governance & BC Planning Unit)	Appoint third party supplier in Q4 2021/22  Complete Q3 2023/24 (21months duration)	# climate risks at red/amber status  Climate Change Adaptation Plan	N/A
G2	Ensure all policies, procedures and decisions consider sustainability implications, including our statutory duty to comply with Section 25. All investment decisions must consider our carbon targets and prevent carbon lock in.	Sustainable Development Unit, (support by Risk Governance & BC Planning Unit)	Deliver Implementation Plan Q3 2022/23  Implement Q1 2023/24	# or % of policies and plans that have identified Sustainable Development and Climate Change implications	N/A
G3	Ensure Sustainable Development Unit has sufficient resources to coordinate and support the delivery of this Action Plan.	Land & Regeneration	Review SDU structure Q1 2022/23	# employees in SDU  Quarterly reports	N/A
G4	Internal Audit to provide an annual assurance statement regarding strategy compliance across the business areas and SDU's monitoring function.	Internal Audit Dept.	Prepare audit plan Q4 2022/23	Audit plan	N/A



This document is available in alternate formats.

For further information on the **Corporate Sustainable Development Strategy and Action Plan (2022-2027)** please contact:

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