

Climate Change Evidence Paper for the Development of the Local Housing Strategy 2016-2021

Housing Development Section

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North Lanarkshire Council
Local Housing Strategy 2016-2021
Climate Change Evidence Paper

1. Introduction

- 1.1 The Climate Change (Scotland) Act 2009 created a statutory framework for reducing greenhouse gas emissions by 42% by 2020 and at least 80% by 2050. Scottish Ministers are required to set annual emissions targets as well as include measures relating to adaptation, energy efficiency and waste reduction.
- 1.2 To achieve these targets the Scottish Government recognises that a concerted and co-ordinated approach to action is required across both public and private sectors, central and local government and at an individual and community level. North Lanarkshire Council therefore has a key role to play in achieving a shift towards a more sustainable, low carbon economy.
- 1.3 Scottish Government Local Housing Strategy Guidance (August 2014) requires local authorities to consider how they can contribute to reducing household greenhouse gas emissions and to identify future climate impacts on housing as well as the vulnerability of different groups to climate risks and set out and prioritise what needs to be done to manage climate risks.

2. National Policy and Legislative Context

- 2.1 The Kyoto Agreement 2005-2012 (United Nations Framework Convention on Climate Change) was the first international agreement to reduce carbon dioxide and other greenhouse gas emissions. This led to Scottish Government introducing legislation and policies to encourage the reduction of domestic carbon emissions, including:
- Climate Change (Scotland) Act 2009
 - Housing (Scotland) Act 2001
 - Housing (Scotland) Act 2006
 - Housing (Scotland) Act 2010
 - Homes Fit for the 21st Century (2011)
 - Energy Efficiency Action Plan (2010)
 - Energy Efficiency Standard for Social Housing
 - Sustainable Housing Strategy (2013)
- 2.2 Section 44 of the Climate Change (Scotland) 2009 Act places duties on public bodies relating to climate change and requires public bodies, such as North Lanarkshire Council, to carry out their functions:
- In a way that will contribute to delivering the 2009 Act's emission reduction targets
 - In a way best calculated to delivery an statutory adaptation programme
 - In a way that considers most sustainable

- 2.3 This echoes the declaration made by North Lanarkshire Council who signed Scotland's Climate Change Declaration in 2007, committing to working with communities to mitigate and respond to climate change.
- 2.4 The Public Bodies Climate Change Duties recognise the importance of housing in achieving the climate change targets. Climate change should be addressed through Council's main planning activities and the Local Housing Strategy and Fuel Poverty Strategy play an important role in delivering actions in relation to climate change in relation to housing. It is estimated that greenhouse gas emission from housing accounted for 13.7% (excluding electricity) and 25% (including electricity) of Scotland's total emissions¹. The factors influencing this include property condition, energy efficiency, heating type and household energy usage behaviour.
- 2.5 The Scottish Government 2020 vision, as detailed in 'Homes Fit for the 21st Century' is 'by December 2020, improved design and greater energy efficiency in housing will have made a contribution to Scotland's commitments to reduce our energy consumption by 12% and our greenhouse gas emissions by 42%'.
- 2.6 Furthermore the 'Sustainable Housing Strategy' strategic vision for Scotland is for warm, high quality, affordable, low carbon homes and a housing sector that helps to establish a successful low carbon economy across Scotland.
- 2.7 North Lanarkshire Council aim to contribute to delivering the Scottish Government National Outcome to reduce the local and global environmental impact of our consumption and production through delivery of our Local Housing Strategy 2016-2021 and our Fuel Poverty Strategy 'North Lanarkshire's Warm Homes Statement'.
- 2.8 The effects of climate change, rising temperatures and more frequent extreme weather events mean we need to adapt. This means adjustment to economic, social or natural systems in response to actual or expected climate change, to harmful consequences and to exploit beneficial opportunities. The Scottish Government's Climate Change Adaptation Programme sets the direction for adaptation across all sectors.

3. Local Policy Context

- 3.1 The Council approved a Sustainable Development Statement and Action Plan in September 2006 which includes actions to:
- Develop a Climate Change Strategy to include a Carbon Management Programme and Adaptation Programme that would take account of Building Standards and issues identified within North Lanarkshire's Local Development Plan

¹ Scottish Government Local Housing Strategy Guidance, August 2014

- Minimising Global Impact through reducing green house gas emissions, awareness raising, minimising Council's ecological footprint, minimising resource consumption, encouraging renewable and minimising fuel poverty
- Protecting North Lanarkshire's Environment and Natural Heritage by minimising generation of waste through encouraging reduction, re-use, recycle, recovery and disposal of waste
- Improving Health and Wellbeing by addressing lifestyle factors and life circumstances that can create poor health and reduce life expectancy and enabling access to services
- Ensuring Sustainable Procurement
- Developing and Maintaining Sustainable Communities
- Development implementation of North Lanarkshire's Low Carbon Strategy 2015-2018 through implementation of A Warm Welcome: A Brighter Future, securing £7m funding to increase energy efficiency domestic housing since 2013, carbon reduction commitment reduced and focusing on improving energy efficiency and investing in renewable energy technologies

3.2 In 2007, North Lanarkshire Council signed Scotland's Climate Change Declaration which made provisions for the Council to respond effectively to the implications of climate change. North Lanarkshire Council responded to this through the Single Outcome Agreement by committing to:

- Improve the quality and energy efficiency of homes, which contributes to meeting the climate change target
- Improve energy efficiency and reduce CO2 emissions

3.3 Policy and Resources Committee approved the Low Carbon Strategy 2015-2018 which replaces the Corporate Energy Strategy and the Council's Carbon Management Plan. The strategy focuses on improving energy efficiency, investing in renewable energy technologies and improving low carbon travel and transport. The Strategy highlights that 'A Warm Welcome: A Brighter Future' will assist to deliver these three core objectives through investment in domestic properties.

3.4 Furthermore the 'A Warm Welcome: A Brighter Future' Action Plan vision is to meet the energy needs of residents in North Lanarkshire by improving the energy efficiency of homes and developing solutions to allow them to heat their homes at a reasonable cost, this will be achieved by meeting the following outcomes:

- Increase the domestic use of Renewable Energy Technologies and contribute to meeting the climate change target
- Households can afford to heat their homes to a suitable level
- Improve the information we provide, helping to reduce our residents' energy bills

- 3.5 Through the Housing Performance Plan (previously the Service Plan), Enterprise and Housing Resources directly contribute to the Fuel Poverty and Climate agendas. The Strategic Housing Outcomes within the previous Local Housing Strategy 2011-2016 that contribute to delivering the outcomes outlined above were:
- All people at risk of experiencing fuel poverty have a warm and affordable home
 - The quality and energy efficiency of homes across all tenures is improved and this contributes to meeting the climate change target
- 3.6 There is a corporate commitment within North Lanarkshire's Community Plan to improve the quality and energy efficiency of homes which contributes to meeting the climate change target and improve energy efficiency and reduce CO2 emissions.

4. Climate Change Evidence for North Lanarkshire

- 4.1 North Lanarkshire Council is the fourth largest local authority in Scotland with an estimated 148,000 households. The tenure distribution of households affected by fuel poverty across North Lanarkshire indicates that a greater proportion of social rented tenants (35%) are fuel poor in comparison to owner occupiers (31%). This generally indicates that there is a relationship between fuel poverty, wider poverty and low incomes as the social rented sector has higher levels of energy efficiency than other tenures.
- 4.2 Housing Services contribute to the Council's Low Carbon Strategy by improving the condition of our own stock and encouraging and assisting owners to improve the energy efficiency of their own properties and educating all households on effective energy usage. The majority of North Lanarkshire Council housing stock is over 50 years old, however, 100% of stock meets the SHQS and only 21% fails the new Energy Efficiency Standard for Social Housing. Council stock performs above the Scottish average in terms of NHER (7.6) and average SAP rating (75.6) with 98% of all properties having full heating systems. Across all tenures the stock characteristics that affect carbon emissions and energy efficiency are insulation, draught proofing, efficient heating and hot water systems and controls, lighting and appliances and usage.
- 4.3 The Council spend around £300k per annum on energy efficiency measures for Council stock and £7.5 per annum is invested in heating replacement and boiler renewal/servicing and maintenance. The majority of Council stock is post war housing (76%) constructed between 1945 and 1964, with 44% being built after 1964. It is significant that 44% of Council stock is now in excess of 70 years old, which has required and will continue to require substantial investment as building elements go beyond their useful life. Council stock is diverse in terms of property type with the majority of dwellings being houses and a quarter being flats. Over half of the flatted properties are within towers which have received investment of over £13,000 per property over ten years.

This has contributed to the energy efficiency of the properties and has reduced incidences of condensation and damp.

- 4.4 The private sector appears to be behind in terms of energy efficiency improvements despite initiatives available to owners such as Green Deal and Big Switch. The aim is to therefore encourage owners and private landlords to take action to assist themselves out of fuel poverty by provision of advice and assistance and financial inclusion.
- 4.5 The Scottish House Condition Survey 2012-14 estimated 50,320 (34%) of households in North Lanarkshire are living in fuel poverty despite significant investment in social rented stock and availability of advice and information within the private sector. Furthermore North Lanarkshire is the 4th best performing authority across Scotland (July 2015) in terms of Eco Measures per 1,000 population according to Department of Environment and Climate Change.
- 4.6 Scottish Government recently commissioned Cardiff University, Manchester Metropolitan University and Manchester University to undertake Mapping Flood Disadvantage in Scotland, 2015. The research indicates that less than 0.5% of properties in North Lanarkshire are exposed to surface water flooding and less than 2% exposed to river flooding. Flooding can affect households' well-being through social and environmental circumstances and closer links are required between flooding and health policies to help reduce impact of flooding. The information on concentrations of residential properties likely to experience acute and extreme flood disadvantage can be used by local authorities to prepare for emergencies and inform future Local Development Plans.

5. Health and Wellbeing

- 5.1 North Lanarkshire appears to perform favourably in comparison to the whole of Scotland in relation to poor energy efficiency by dwelling characteristics with 1% of all dwellings across the authority having an F or G rating compared to 4% for Scotland. This may be due to North Lanarkshire having a smaller proportion of properties built before 1945, being off the gas grid and with less than 100mm loft insulation and a greater proportion of properties with full central heating systems. It is widely recognised that better energy efficiency improves life circumstances yet North Lanarkshire has a significantly higher proportion of households with one or more person who is long term disabled or sick compared to the whole of Scotland.
- 5.2 Given that the number of households in North Lanarkshire with Long Term Illness/Disability appears to be increasing year on year², it is likely that the energy requirements for this group will also increase as they spend longer periods of time at home and therefore consume more energy and due to being more likely to have fixed incomes it also suggests that this group are vulnerable to fuel poverty and this could also be on the increase.

² Scottish House Condition Survey 2011-2013

5.3 Climate change has affected temperatures and has increased incidences of freak weather such as prolonged periods of cold weather and snow as well as flooding. These are extreme events, however, and the long term trends suggest warmer drier summers, warmer wetter winters with increase incidence of intense precipitation. It is therefore important to ensure homes are as energy efficient as possible and households can heat their homes to the required levels to remain healthy. The council contribute to the climate change agenda and households' health and wellbeing by mitigation through retrofit of energy measures, improving newbuild standards and developing initiatives such as 'The Big Switch'.

6. Consultation

6.1 The Council have carried out considerable consultation with the tenants and residents of North Lanarkshire and our wider stakeholders and partners. Fuel Poverty and Climate Change has been a cross cutting theme, however, a specific Thematic event was held on 4th August 2015 to consider the issues associated with Climate Change and consider what the priorities should be going forward in the Local Housing Strategy 2016-2021 and how these can be delivered.

7. Identifying the Key Issues and Recommendations

7.1 The Council has mitigated the impacts of Climate Change to date by assisting households to work towards reducing their energy consumption by targeting resources effectively, delivering energy solutions for inefficient systems, installing new technologies and implementing 'The Big Switch'. It is important that the Council take a flexible approach going forward to ensure homes can adapt to changing climate and be sustainable in the future.

7.2 For Housing Services this means considering what can be done to stop things getting worse and planning for the future. This includes continuing to invest in and improve the energy efficiency of our own stock to meet EESSH requirements and providing advice and assistance to the private sector to encourage energy efficiency improvements. Education and awareness raising is extremely important and the Council should continue to develop the work undertaken by the Energy Unit. Furthermore developing our understanding of the feasibility of District Heating, Biomass and PV units and more control over energy suppliers is essential in assisting the Council mitigate impacts of climate change.

7.3 Increasing temperatures will have an impact on the design of homes in the future. It is important to consider now how properties can be future proofed to meet requirements in the future e.g. ventilation and management of invasive species.

- 7.4 An increase in rainfall and incidences of adverse weather will impact on infrastructure such as roofs, gutters, drain pipes and water run offs which has the potential to lead to damp and condensation issues for properties.
- 7.5 Furthermore there is a need to identify properties and areas susceptible to flooding and where sewage systems would be unable to cope. A partnership approach with Scottish Government and Scottish Water would be essential to achieving solutions in this area.
- 7.6 Mono blocking within the owner occupied sector in some instances appears to lead to water run-off and dampness, it may be necessary to educate households on possible drainage issues that can be associated with mono blocking.
- 7.7 Households living in the private rented sector are often adversely affected and have been identified as a potentially vulnerable group from anecdotal evidence from Citizens Advice and the Council's Energy Unit. Many households in this sector are at the mercy of their individual landlord when it comes to energy improvement measures and problems such as aluminium frame windows, poor double glazing, inefficient boilers or flat roofs that collect water.
- 7.8 The Council has no control over how owners or private landlords maintain their property in general, however, it is worth considering developing a scheme whereby the private sector can set aside money to invest in maintenance of their homes, particularly where their property is within an area with Council housing or in a mixed tenure block. Issues are particularly prevalent in ex right to buy stock, where improvements have not progressed at the same rate as surrounding Council stock. There is therefore a requirement to continue to develop and implement energy efficiency programmes that encourage private owners to improve the energy efficiency of their homes
- 7.9 Energy companies have CO2 emissions targets to meet and they need to invest in energy measures, however, often the households assisted are not households in fuel poverty or households on benefits. The Council should consider how they can work in partnership with energy providers to assist households in fuel poverty and contribute to meeting CO2 emissions targets.
- Greenhouse gases contribute to climate change which affects weather and results in changes in domestic energy use
 - Focus on enabling energy improvements within private sector which accounts for majority of stock and has poorer ratings
 - Consider use of renewables such as district heating systems
 - Achieve EESSH Council Stock
 - Develop and improve access to advice and assistance across all tenures in relation to energy
 - Ensure all newbuild affordable homes meet minimum energy efficiency standards and consider feasibility of renewable energy technologies

- Encourage sustainable living – reduce, reuse, recycle

- 7.10 Greenhouse gases contribute to climate change which affects weather and results in changes in domestic energy use. It is essential that the Council work towards reducing energy consumption of households across North Lanarkshire by targeting resources effectively, delivering energy solutions for inefficient systems, installing new technologies and consider use of renewable to reduce Carbon Emissions.
- 7.11 In order to meet Climate Change targets the Council should implement the Fuel Poverty Strategy 'A Warm Homes Statement'

