

**Home Energy
Conservation Act
Progress Report
2017**

March 2017

Contents	Page
1 Introduction	3
2 National and regional drivers behind energy efficiency	3
Legislative requirements	3
National initiatives	4
Regional initiatives	4-6
Northumberland Housing Strategy	6
Private Sector Housing Strategy	7
3 Where are we now?	7
Energy Use and CO ² emissions	8
Percentage decrease in CO ² emissions	8
CO ² emissions composition	8
Domestic carbon emissions	9
Fuel poverty	9-11
Heath	11
4 Where do we want to get to?	12
Fuel poverty and energy efficiency indicators	12
Ready to Switch	13
Warm Up North	13-14
Homes for Northumberland Solar Photovoltaic Panels	15
5 How will we get there?	16
Action Plan and Progress Report	17-21
Appendix 1: Northumberland properties with a SAP rating of less than 35	22

1 Introduction

- 1.1 The Home Energy Conservation Act 1995 (HECA) emphasises the crucial role Local Authorities play in improving the energy efficiency of all residential accommodation in their respective areas. In July 2012 the Department of Energy and Climate Change (DECC) published a requirement under HECA for all local authorities in England to report on the measures they propose to undertake to achieve this. DECC has now been abolished and energy efficiency initiatives now fall under the remit of the new Department for Business, Energy & Industrial Strategy (BEIS)
- 1.2 In this regard, BEIS now require a HECA Progress Report to be submitted by 31 March 2017 and additional reports to be submitted in two yearly intervals at 31 March 2019 and 2021 up to and including 2027. This document sets out the work Northumberland County Council (NCC) are undertaking to improve the energy efficiency of residential properties.
- 1.3 The Progress Report also provides an update on the progress made against the objectives outlined in the 2015 Progress Report and the Council's ongoing energy efficiency partnership work with registered providers and other local authorities.

2 National and regional drivers behind energy efficiency

Legislative requirements

- 2.1 The requirement to improve the energy efficiency of residential properties stems from the legal obligations to reduce carbon dioxide (CO₂) emissions set out in the Climate Change Act 2008 and the Government's Carbon Plan, published in 2011. The Carbon Plan sets the following targets in relation to housing:
 - To reduce greenhouse gas CO₂ emissions by 29% by 2017, 35% by 2022, and 50% by 2027 – for buildings this means a reducing 2009 levels by between 24% and 39% by 2027;
 - To insulate all cavities and lofts, where practical, by 2020;
 - By 2030, between 1 – 3.7m additional solid wall installations and between 1.9 - 7.2m other energy efficiency installations;
 - By 2030, 1.6m - 8.6m building level low carbon heat installations such as heat pumps (Government modelling suggests that 21 - 45% of heat supplies to buildings will need to be low carbon); and
 - By 2050 emissions from UK buildings to be “close to zero”.
- 2.2 On a national level, there are a number of key drivers and policy levers designed to facilitate energy efficiency improvements in residential properties.

National initiatives

- 2.3 The key funding streams to improve the energy efficiency of residential properties on a national level include:
- Ongoing support through the Renewable Heat premium payment and the domestic Renewable Heat Incentive;
 - The requirement for Energy Performance Certificates (EPC) on the sale, rent or construction of a building;
 - The Energy Act contains a provision to introduce a minimum energy efficiency standard (likely to be EPC band E) for private rented housing from 2018; and
 - Smart Meters to be installed in every home between 2016 and 2020.
- 2.4 The delivery of energy efficiency improvements to residential properties on a regional level are predominantly driven by these national funding streams.

Regional initiatives

- 2.5 One of the cornerstones of Northumberland County Council's commitment to energy efficiency was its decision to become a signatory to the [European Covenant of Mayors](#) in January 2009. All Local Authorities in the North East of England have signed up to the EU Covenant of Mayors agreement, which makes the region the first in Europe to achieve this degree of political leadership and consensus.

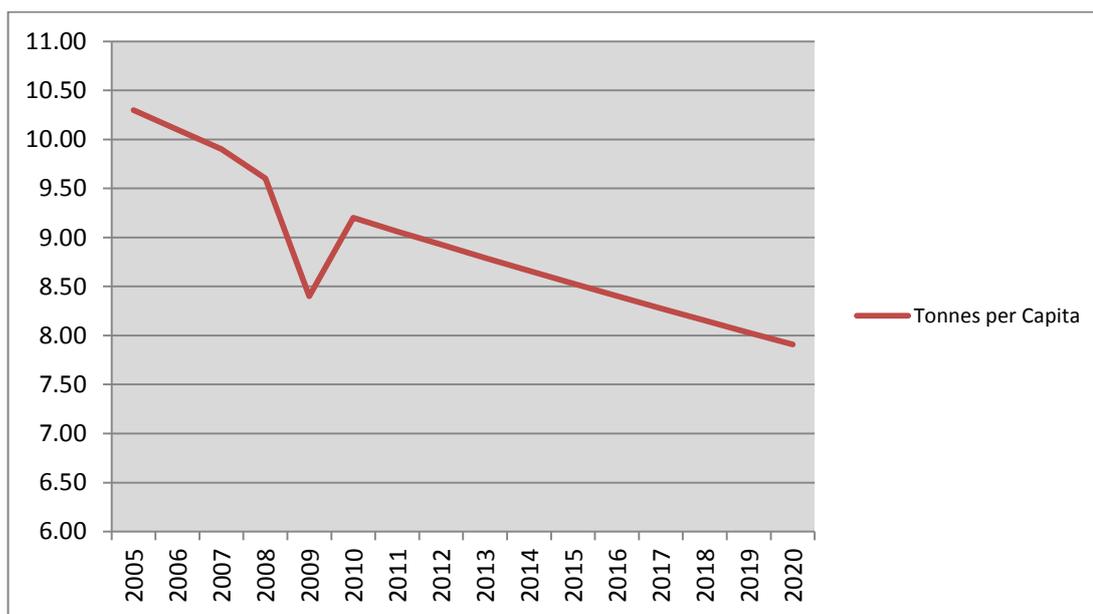
This commitment required the Council to produce a [Sustainable Energy Action Plan](#) (SEAP) outlining in detail how it intends to deliver reductions in greenhouse gas (GHG) emissions by at least 20% by 2020^[1]. The graph below outlines the annual rate of reduction required to meet this target.

^[1] These reductions are based on 2005 as the baseline year.

1

http://www.google.co.uk/url?url=http://committees.northumberland.gov.uk/aksnorthumberland/images/att5853.doc&rct=i&frm=1&q=&esrc=s&sa=U&ei=CpisVPiqO6Tn7ga_1oDYAw&ved=0CBYQFJAA&sig2=0HpoN9n0zr_9m0vLTGlqeq&usq=AFQjCNFKvGkOPgkQX-hpEJteWTatV_1x4A page 1

Figure 1: County wide per capita CO² emissions



2

- 2.6 The SEAP is symbiotic on a number of other Council documents such as the [Sustainable Community Strategy](#), the [Climate Change Action Plan](#) and the Strategic Framework for Climate Change Planning in Northumberland. The SEAP is informed by these strategy documents and provides a compelling vision for reducing carbon emissions on a countywide basis including energy efficient measures in residential properties.
- 2.7 In addition, Northumberland Council is also a signatory of the [Nottingham Declaration](#), which seeks to progressively address the causes and impacts of climate change in accordance to local priorities by securing maximum benefit for communities. When the Council became a unitary authority in 2009 it reaffirmed its commitment through its Climate Change Action Plan, which commits it to:
- Progressively reducing carbon dioxide emissions and other greenhouse gas emissions;
 - Assess the impact climate change will have on the estate and services and seek adaptations to future impacts and opportunities; and
 - Stabilise and progressively reduce the Council's environmental footprints.

² This data is internally collated by Northumberland County Council

³

http://www.google.co.uk/url?url=http://committees.northumberland.gov.uk/aksnorthumberland/images/att359.doc&rct=i&frm=1&g=&esrc=s&sa=U&ei=fZjsVMijOIWS7AbUvoGQCQ&ved=0CBkQFjAB&sig2=CmbRfrjOgn3BCn-pEya_PA&usg=AFQjCNGUaAPaY1z26Gkicmp14WE8OypsOw page 3

- 2.8 In order to fulfil this commitment, Northumberland County Council has pledged to work in collaboration with partner organisations to ensure properties meet the Decent Home Standard and introduce a range of energy efficiency measures that will reduce carbon emissions.
- 2.9 Northumberland County Council's commitment to improving the energy efficiency of residential properties is enshrined in its Housing Strategy.

Northumberland Housing Strategy 2013-2018

2.10 The Northumberland Housing Strategy (2013-2018) is used by the Council to identify the present and future housing needs for the area and outline the strategic approach it will take to address these issues. The Council has identified the following priorities, which contribute to improving the energy efficiency of housing stock⁴.

1. **Affordable and Quality Housing** – Northumberland has a higher than average rate of fuel poverty, which requires a concerted programme of investment in the area's existing housing stock to ensure it is up to standard. In addition to the focus on the existing stock, the document also contains a commitment to safeguarding the energy efficiency standards of new build properties.
2. **Healthy People** – This approach aspires to give vulnerable people the housing related support they need. For people who require specific support related to a disability the Council have pledged to deliver 21,750 adaptations to households. The Council will seek to re-house disabled people where necessary, and support people to live independently wherever possible. It will also work to ensure that people are given access to advice and information on energy efficiency measures to increase their take up.
3. **Sustainable Economies and Communities** - Northumberland County Council is committed to ensuring that the County is a prosperous place for residents and businesses and that people are attracted to live here. The Council will work with local communities and partner organisations to achieve these aims. This will include supporting new housing developments that will provide decent homes for people to come to live in Northumberland, including provision for properties that are energy efficient.

⁴ <http://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Housing/PRIVATE-SECTOR-HOUSING-STRATEGY-2015-Final.pdf>

Private Sector Housing Strategy

- 2.11 Northumberland County Council has recently adopted a Private Sector Housing Strategy to tackle a variety of issues with private housing stock across the county⁵. The main aim of the Private Sector Housing Strategy is to ensure that:
- 2.12 “The population of Northumberland have access to a home that is safe, warm, and affordable, and that help and support is available to those that are unable to meet their own housing need”.
- 2.13 To deliver this aim, the strategy identifies the following key objectives, which are as follows:
- Encourage and enable owner occupiers to maintain and repair their homes;
 - Maximise the use of the existing housing stock in the private rented sector;
 - Improve energy efficiency in the private sector; and
 - Bring empty homes back into use.
- 2.14 With regard to the issue of improving energy efficiency in the private rented sector, the Council has pledged to undertake the following actions:
- Continuing the work with Warm Up North, a partnership between nine Local Authorities and British Gas which delivers energy efficiency measures across all tenures;
 - Continuing to promote energy switching through a coordinated communications plan;
 - Exploring funding options to provide new heating to a number of properties through the Domestic Renewable Heat Incentive Scheme;
 - Engaging with landlords through the multimedia communications plan, to ensure they are aware of the new energy regulations around Energy Performance Certificates; and
 - Offering incentives as part of the membership of the Private Rented Sector Accreditation Scheme to tackle fuel poverty and energy inefficient properties.
- 2.15 Further to this, the Council has also conducted detailed analysis into the energy efficiency issues on a Countywide basis to provide a clear picture of the scale of the challenge.

3 Where are we now?

- 3.1 This section provides an overview of current trends in Northumberland in terms of energy use and CO² emissions, fuel poverty and health indicators relating to excess winter deaths.

⁵ <http://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Housing/PRIVATE-SECTOR-HOUSING-STRATEGY-2015-Final.pdf>

Energy use and CO² emissions

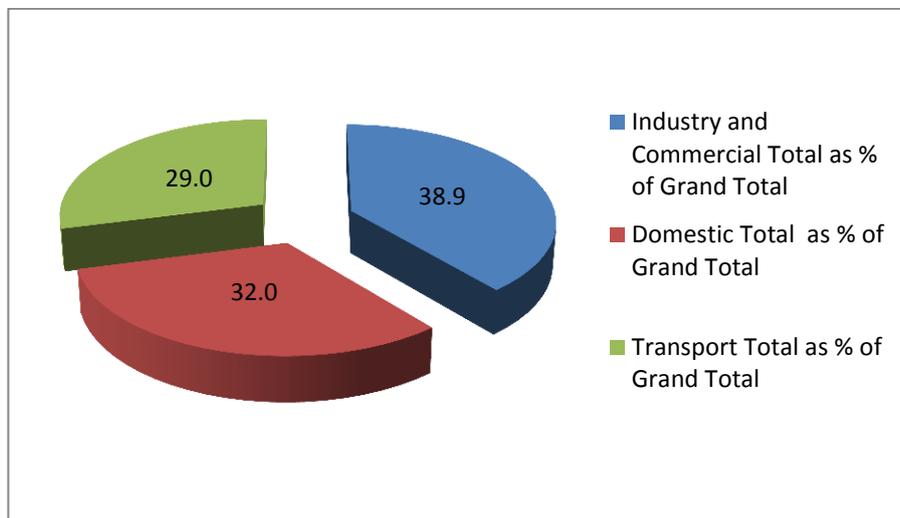
Percentage decrease in CO² emissions

- 3.2 CO² emissions have experienced a marked decline across Northumberland. The County has seen a higher than average decrease in CO² emissions of 61% between 2005 and 2014⁶. This is significantly higher than the North East average at 28.3%, and the average for England at 24.4%⁷.
- 3.3 The underlying trends behind the total decrease in CO² emissions in Northumberland over this period reveals some interesting findings. The percentage decrease in domestic carbon emissions of 11.4% is less than in other sectors. The 78.2% fall in industrial and commercial emissions has acted as the key driver behind the overall rate of decrease⁸.

CO² emissions composition

- 3.4 Industrial and commercial production emits the greatest proportion of CO² emissions in Northumberland, making up 38.9% of the total in 2014. This is marginally lower than the average for England at 40.7% and significantly lower than the North East average at 62.7%.
- 3.5 In Northumberland, domestic housing is the source of 32% of CO² emissions with transport emitting 29% (See Figure 2).

Figure 2: CO² emissions in Northumberland by sector in 2014



⁶ The measures used for figures in this section include emission with the scope of influence of local authorities This is based on energy consumption from the business and public sector and residential housing within the boundaries of the local area

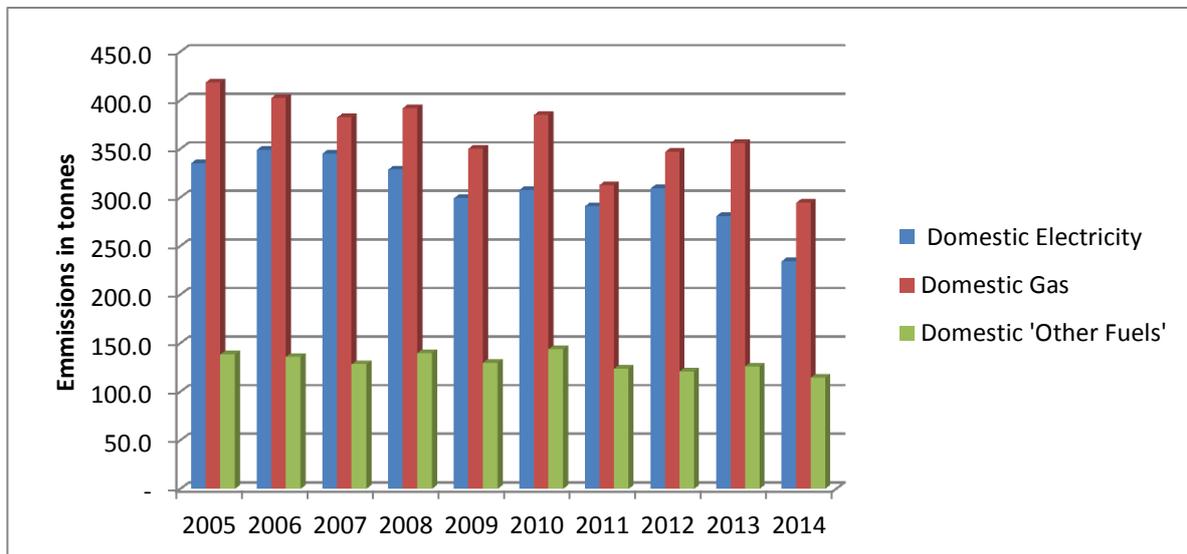
⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/532949/2005-2014_UK_local_authority_and_regional_CO2_emissions_data_tables.xlsx

⁸ Ibid

Domestic carbon emissions

- 3.6 The overall fall in domestic CO² emissions is predominantly driven by a combination of the fall in domestic gas emissions and domestic electricity emissions. Between 2005 and 2014, emissions associated with domestic electricity fell by 30.2%, domestic gas fell by 29.7% with other domestic fuels falling by 17.4%.
- 3.7 These findings mirror national trends with the fall in domestic gas and electricity emissions acting as the key driver behind the overall reduction in domestic CO² emissions. However, the rate of decrease in domestic electricity emissions is on par with the North East average of 30.1% slightly higher than the average for England at 29%⁹. In the case of domestic gas emissions, the decrease is slightly lower than the North East average of 31.4% and slightly higher than the average for England at 28.3% (See Figure 3)

Figure 3: Domestic emissions in Northumberland 2005-2014



Fuel Poverty

- 3.8 The Government has taken the decision to change the definition of fuel poverty. This change has significant implications for how fuel poverty is measured and its areas of greatest prevalence regionally and nationally.
- 3.9 Under the previous system, a household was defined as fuel poor if it spends 10% of its disposable income to heat its home to an adequate standard.¹⁰ The new Low Income High Costs (LIHC) definition classifies a household as fuel poor if:
- people have required fuel costs that are above average (this is defined as national median level); and,

⁹ Ibid

¹⁰ An adequate standard of warmth is usually defined as 21°C for the main living area, and 18°C for other occupied rooms.

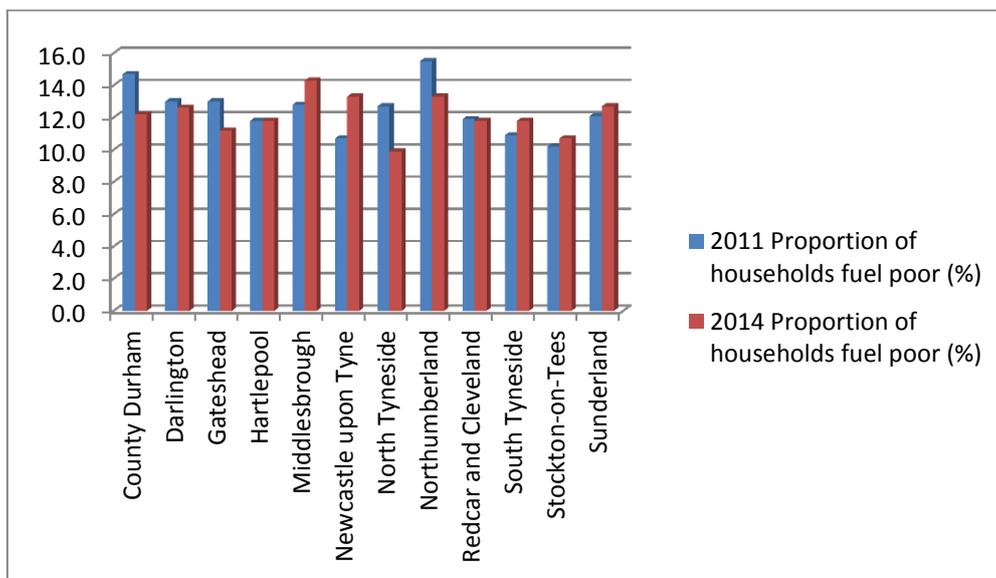
- ii. if they were to spend that amount, they would be left with a residual income below the official poverty line. This is defined as being 60% less than the national median income.

3.10 When the change was first made the Government published LICH and 10% definition data sets, which enabled the comparison to drawn between the different measures. However, due to changes in data publishing practices the 10% definition data sets are no longer published. It is therefore no longer possible to compare the two for the period beyond 2012.

3.11 Under the LICH definition of fuel poverty, Northumberland has the joint second highest level of fuel poverty in the North East with Newcastle at 13.3%¹¹. Middlesbrough has the highest level of fuel poverty out of the twelve North East local authorities at 14.3%. Under this measurement, Northumberland's fuel poverty levels are significantly higher than the North East average at 12.2%. They are also 3.4% higher than North Tyneside, which has the lowest levels of fuel poverty at 9.9%¹².

3.12 This measurement also shows that fuel poverty decreased in six out of the twelve North East local authorities between 2011 and 2014. Of the five local authorities that showed an increase in fuel poverty, Newcastle had the highest increase at 2.6% followed by Middlesbrough at 1.5%. South Tyneside, Stockton and Sunderland Gateshead also had nominal increases in their fuel poverty levels. For the majority of local authorities, which showed a decrease in fuel poverty, North Tyneside exhibited the greatest decline at 2.8%, closely followed by County Durham at 2.5%. Northumberland has the third highest rate of decrease at 2.2%¹³.

Figure 4: LHC definition of fuel poverty 2011-2014



¹¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/533212/Sub-regional_fuel_poverty_2014_data.xlsx

¹² Ibid

¹³ Ibid

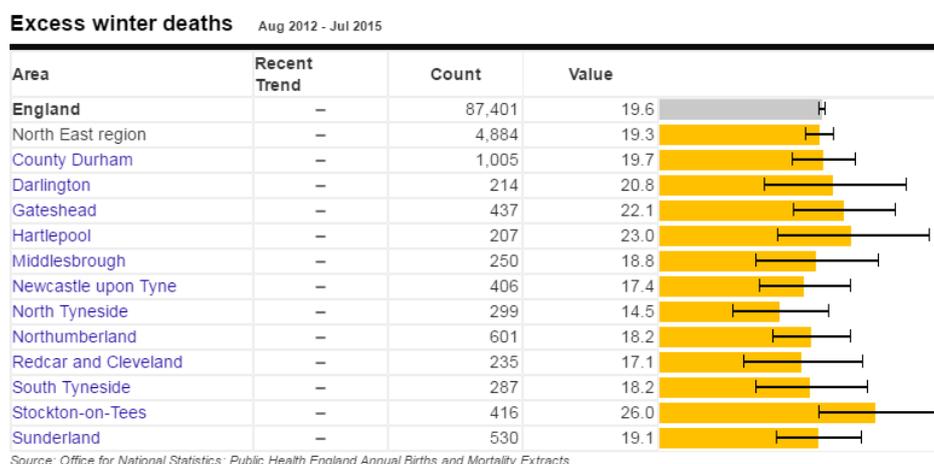
3.13 It is clear from these figures that fuel poverty is a significant issue for Northumberland as a local authority, albeit one that has been decreasing in prevalence over recent years. Further initiatives and interventions will be required to tackle this issue.

Health

3.14 Excess winter deaths are often related to underlying social issues such as fuel poverty. The number of excess winter deaths in Northumberland reveals a mixed picture. Data provided by the Public Health England indicates that between August 2012 and July 2015 there were approximately 601 excess winter deaths in Northumberland, which is the second highest number in the North East. County Durham has by far the highest level at 1,005.

3.15 However, the value¹⁴ of excess winter deaths for Northumberland is merely average out of twelve North East local authorities at 18.2. This is slightly lower than the North East value of 19.3 and the value for England at 19.6. The value for Northumberland is 7.8 lower than Stockton, which has the highest value of winter deaths 26.¹⁵ (See Figure 5)

Figure 5: Excess winter deaths



3.16 This analysis of the energy efficiency issues in Northumberland has informed and influenced the Council's strategic approach to tackling fuel poverty and carbon emission reductions.

¹⁴ Value calculates the number of excess winter deaths as a proportion of an area's population

¹⁵ <http://fingertips.phe.org.uk/profile/health-profiles/data#gid/1938132696/pat/6/ati/101/page/3/par/E12000001/are/E06000057>

4 Where do we want to get to?

Fuel poverty and energy efficiency indicators

- 4.1 In response to the acknowledged levels of fuel poverty and poorly insulated homes, the Council has agreed three indicators that will measure progress towards reducing fuel poverty and improving the existing housing stock which are:
- To improve at least 3,000 properties per year following energy efficiency measures being installed¹⁶;
 - To improve the energy efficiency of at least 120 properties in the former Berwick Local Authority area¹⁷; and
 - To achieve a SAP rating of 57.5 following improvement works to the properties in the former Berwick local authority area¹⁸.
- 4.2 In addition to the above, the Council will also report against the assumed levels of CO2 savings on an annual and lifetime basis following energy efficiency works.
- 4.3 There are over 6,000 properties that have been assessed across Northumberland that have a SAP rating of less than 38. Of the 38 there are 1,116 properties that, at the time of the assessment, were occupied by a vulnerable person base on the former National Indicator NI187 definition. As part of its ongoing monitoring work, the Council will track the number of properties with a SAP level of less than 38 and direct its activities, where possible, towards those properties.
- 4.4 The variation in levels of properties with a SAP rating of less than 3510 is shown across Northumberland in Appendix 1. There are a variety of initiatives that Northumberland County Council are taking advantage of on a regional level to improve the energy efficiency of their properties based on these national funding streams. These include:
- **Ready to Switch** - A collective energy switching scheme with other North East local authorities which uses the power of collective bargaining to reduce people's energy bills (See section 4.5 - 4.8);
 - **Warm Up North** - A strategic partnership between Northumberland Council, British Gas and other North East local authorities which harnesses funding streams such as Energy Company Obligation to improve energy efficiency (See section 4.9 - 4.13);
 - **The Renewable Energy Heat Incentive** - This is led by the Council's former Arm's length Management Organisation, Homes for Northumberland (HfN), and makes use of funding from Renewable Heat Payment Premium to deliver energy saving property adaptations (See section 4.14 – 4.17).

¹⁶ [A Housing Strategy for Northumberland 2013-18](#) page 16

¹⁷ <http://committees.northumberland.gov.uk/aksnorthumberland/images/att15012.pdf> page 4

¹⁸ Ibid

Ready to Switch

- 4.5 One of the Council's key initiatives to tackle fuel poverty on a regional level is the Ready to Switch scheme. The scheme was one of the UK's first collective switching initiatives organised by local authorities to save households money on their gas and electricity bills.
- 4.6 Ready to Switch uses collective switching, which combines the buying power of residents across the community to negotiate cheaper prices with energy companies.
- 4.7 In 2013, Ready to Switch was set up as the UK's largest collective energy switching auction led by local authorities, in which 160,000 households from across the country came together to get a better deal on their energy bills.
- 4.8 The scheme is intended to reduce energy bills for all Northumberland residents, particularly targeting those who are considered vulnerable or those who are in fuel poverty.

Warm Up North

- 4.9 The Council is one of the key delivery partners in the Warm Up North scheme. This is a region wide initiative to deliver energy efficiency measures to homes across the North East. The scheme works in partnership with British Gas as the main private sector delivery partner. It is focused on installing key energy efficiency measures to combat fuel poverty such replacing energy inefficient boilers and installing loft and cavity wall insulation.
- 4.10 Warm Up North provides an important opportunity for the Council and its partner organisations in Northumberland to deliver real benefits for its residents in a number of areas. The key aims of Warm Up North are to try to assist through:
 - providing access to renewable home energy solutions;
 - providing energy tips so you can start reducing bills straight away; and
 - help with energy company obligation (ECO) funding.
- 4.11 One striking example of Warm Up North's recent work is the Central Heating Fund, which facilitated the installation of free central heating systems subject to meeting the eligibility criteria.
- 4.12 In order to be eligible for support applicants were required to meet the following conditions:
 - The household has a gross total income of less than £26,000, including any benefits;
 - The property does not have, and never has had, a central heating system;
 - The main method of heating the property is the use of solid fuels;
 - The property uses electric storage heaters; and
 - The installation of a new central heating system must improve the energy rating.

4.13 The chart below shows the property installations that took place using the Central Heating Fund between February and March 2017. The figures clearly show that out of a total 461 installations the majority took the form of oil based heating system interventions (See figure 6).

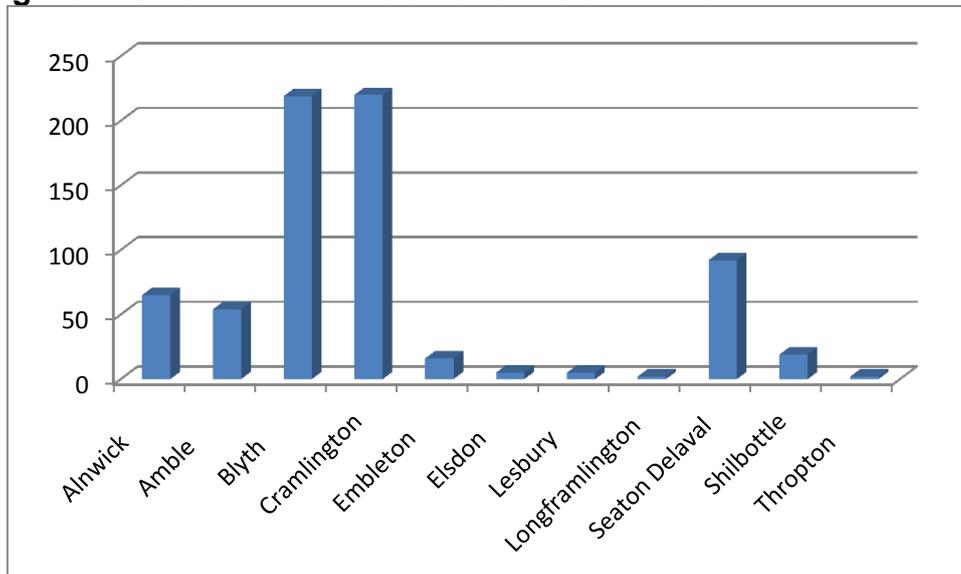
Figure 6: Warm Up North Installations

Local authorities	Air Source Heat Pumps	Gas	Oil	Total
County Durham	5	306	89	400
Darlington	7	73	3	83
Gateshead	0	13	0	13
Hartlepool	1	39	0	40
Middlesbrough	24	4	0	28
Newcastle Upon Tyne	2	88	1	91
North Tyneside	0	61	0	61
Northumberland	17	172	272	461
Redcar And Cleveland	13	157	11	181
South Tyneside	0	45	0	45
Stockton On Tees	1	24	0	25
Sunderland	0	27	0	27
TOTAL	70	1009	376	1455

Homes for Northumberland

- 4.14 Homes for Northumberland (HfN) is a former Arms Length Management Organisation, which has recently been brought back in house and is now under the council's direct control. This area of the business is directly responsible for managing council homes and dealing with repairs and maintenance. It manages over 8,500 council homes in the former districts of Alnwick and Blyth Valley along with new build properties in Allendale. HfN successfully completed its Decent homes programme in 2007, and all of its properties now meeting the Decent Home Standard¹⁹.
- 4.15 HfN works across Northumberland on range of energy efficiency measures. One such area is the installation of solar photovoltaic panels to improve the energy efficiency of its properties. As part of this project, HfN installed Solar Photo Voltaic Panels on 706 domestic properties between August 2014 to February 2016 (See figure 7). However, due to the reduction in Feed in Tariff rates, no further installations are planned because they are no longer financially viable.
- 4.16 The key areas of focus include Blyth, Cramlington, Embleton and Seaton Delaval, which is where the majority of HfN's stock is concentrated in the south east of the County. However, a concerted effort has been made to expand their availability in the north of the county in Alnwick and Amble.

Figure 7: Solar Photo Voltaic Panel Installations



- 4.17 Moreover, HfN has also been actively involved in the installation of Air Source Heat Pumps in a number of properties in Northumberland. Air Source Heat Pumps absorb heat from the outside air and be used to heat radiators and hot water in residential properties. They have an important role to play in improving domestic property's energy efficiency. Between 2012 and 2016, 68 pumps were installed across the county.

¹⁹ Data obtained from Homes for Northumberland

5 How will we get there?

- 5.1 The trends outlined above highlight the scale of the challenge of retrofitting Northumberland's homes to meet the Council's strategic objectives. The action plan and progress report below sets out details of how the Council will begin to address the challenges through improving data, accessing funding and working with partners to facilitate the delivery of energy efficiency projects.
- 5.2 The support available via Feed in Tariffs to support the installation of Solar Photo Voltaic panels on residential properties has now been suspended due to reductions in the FIT rate, which no longer make them a financially viable option.
- 5.3 The cancellation of the Green Deal and Zero Carbon Homes initiatives has also affected the Council's domestic energy efficiency priorities.
- 5.4 The procurement system with British Gas to deliver Energy Company Obligation (ECO) through the Warm Up North partnership presents continuing opportunities. This Progress Report will be updated to reflect subsequent developments.

Action Plan and Progress Report

i) LOCAL ENERGY EFFICIENCY AMBITIONS AND PRIORITIES			
Challenges	<p>The Council recognises that:</p> <ul style="list-style-type: none"> • There are over 6,000 properties that have been assessed across Northumberland that have a SAP rating of less than 38; • Northumberland has a fuel poverty rate of 13.3% under the LIHC definition; • Domestic carbon emissions make up 32% of total CO² emissions in Northumberland; and • Between August 2012 and July 2015 there were approximately 601 excess winter deaths in Northumberland. 		
Ambitions and priorities	<p>The Council is committed to:</p> <ul style="list-style-type: none"> • Reducing its greenhouse gas (GHG) emissions by at least 20% by 2020; • Delivering over 3,000 energy efficiency intervention measures a year as part of its partnerships based approach; • Improving the energy efficiency of 120 properties in the former Berwick Local Authority area; and • Tracking the number of properties with a SAP level of less than 38. 		
ii) MEASURES THE COUNCIL ARE UNDERTAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL PROPERTIES			
Action	Description	Responsible	Timescale
Warm Up North	<p>Northumberland County Council will continue to deliver domestic energy efficiency initiatives in Northumberland with partners through the Warm Up North scheme.</p> <p>The Central Heating Fund aspect of the scheme has achieved the following in Northumberland between February and March 2017:</p> <ul style="list-style-type: none"> • A total of 461 measures installed. <p>This included:</p> <ul style="list-style-type: none"> • 17 air source heat pumps; • 172 gas installations; and • 272 oil installations. 	<p>NCC</p> <p>British Gas</p>	2013-2018

Feed in Tariffs	<p>Homes for Northumberland (HfN) are involved in the installation of Solar Photo Voltaic panels²⁰ in Northumberland.</p> <p>The following objectives have been achieved so far:</p> <ul style="list-style-type: none"> • 706 panels have been installed between August 2014 and February 2016. 	<p>NCC</p> <p>Homes For Northumberland</p>	<p>2018</p>
Renewable Heat Incentive (RHI)	<p>Homes for Northumberland have installed a number of measures as part of the Renewable Heat Incentive.</p> <p>Their achievements include the installation of:</p> <ul style="list-style-type: none"> • 68 Air Source Heat Pumps²¹. 	<p>NCC</p> <p>Homes For Northumberland</p>	<p>Ongoing</p>

²⁰ A method of generating electricity by converting solar radiation into direct current electricity using solar panels

²¹ Air source heat pumps absorb heat from the outside air. This heat can then be used to heat the home.

Energy Performance Certificates (EPC)	<p>Bernicia Homes monitor the energy efficiency of their dwellings by carrying out an EPC assessment on its whole stock every month. Their assessment work has found the following:</p> <ul style="list-style-type: none"> • The stock in Northumberland area produced 5,830 ratings out of a total stock of 6,367; • The average SAP rating was 71.56 and average CO² emissions 2.28 tonnes; and • Bernicia's Affordable Warmth Strategy set targets to achieve an average SAP rating of 70 by 2018, which have already been met²². 	Bernicia	2018
Minimum standards in the private sector	<p>The current legal requirement is that any property to be marketed for sale or rental is required to have an EPC.</p> <p>From 2018 all private sector landlords will be required to have a rating level of E or above for a rental property.</p>	NCC Private Sector Landlords	2018
Smart Meters	<p>The government requires energy companies to install smart meters for their customers, and has set out rules to ensure that they do this in a way that is in the interests of consumers.</p>	DCC and energy providers	2016 – 2020

²² Data from Bernicia Homes

Ready to Switch	<p>Ready to Switch harnesses the combined buying power of residents across Northumberland to negotiate cheaper prices with energy companies using a process called collective switching.</p> <p>Since the scheme launched, over 10,000 Northumberland residents have signed up to it and those that have accepted the contract have saved an average of £283 (2015 data) per year on their bills. The County Council also works with community groups to hold drop in sessions where residents can come in to discuss any issues they may be having with their energy and register for the scheme.</p>	NCC	Quarterly auctions
Local Carbon Frameworks	<p>In January 2010 Northumberland was selected as one of only nine pilot areas in England for a new Government sponsored pilot project called 'Local Carbon Frameworks'</p> <p>The aim of the projects is to explore the role that local government can play in enabling communities to take action on carbon reduction.</p> <p>A crucial part of this is extending existing funding provided by Northumberland County Council for 'hard to treat' properties. This involves trialing innovative technical approaches on eleven 'hard to heat' properties in Northumberland.</p>	DECC and DCLG	Ongoing
iii) MEASURES THE COUNCIL PROPOSES TO COST EFFECTIVELY DELIVER ENERGY EFFICIENCY IMPROVEMENTS IN RESIDENTIAL ACCOMMODATION BY USING AREA BASED/STREET BY STREET ANALYSIS.			

The Council will:

- Continue to work with its partner organisations such as HfN to introduce solar thermal heating systems and Air Source Heating Pumps as part of the Renewable Energy Heat Incentive;
- Progress the work of the Warm Up North partnership and make use of funding streams such as ECO to deliver energy efficiency savings for residential properties across the county.

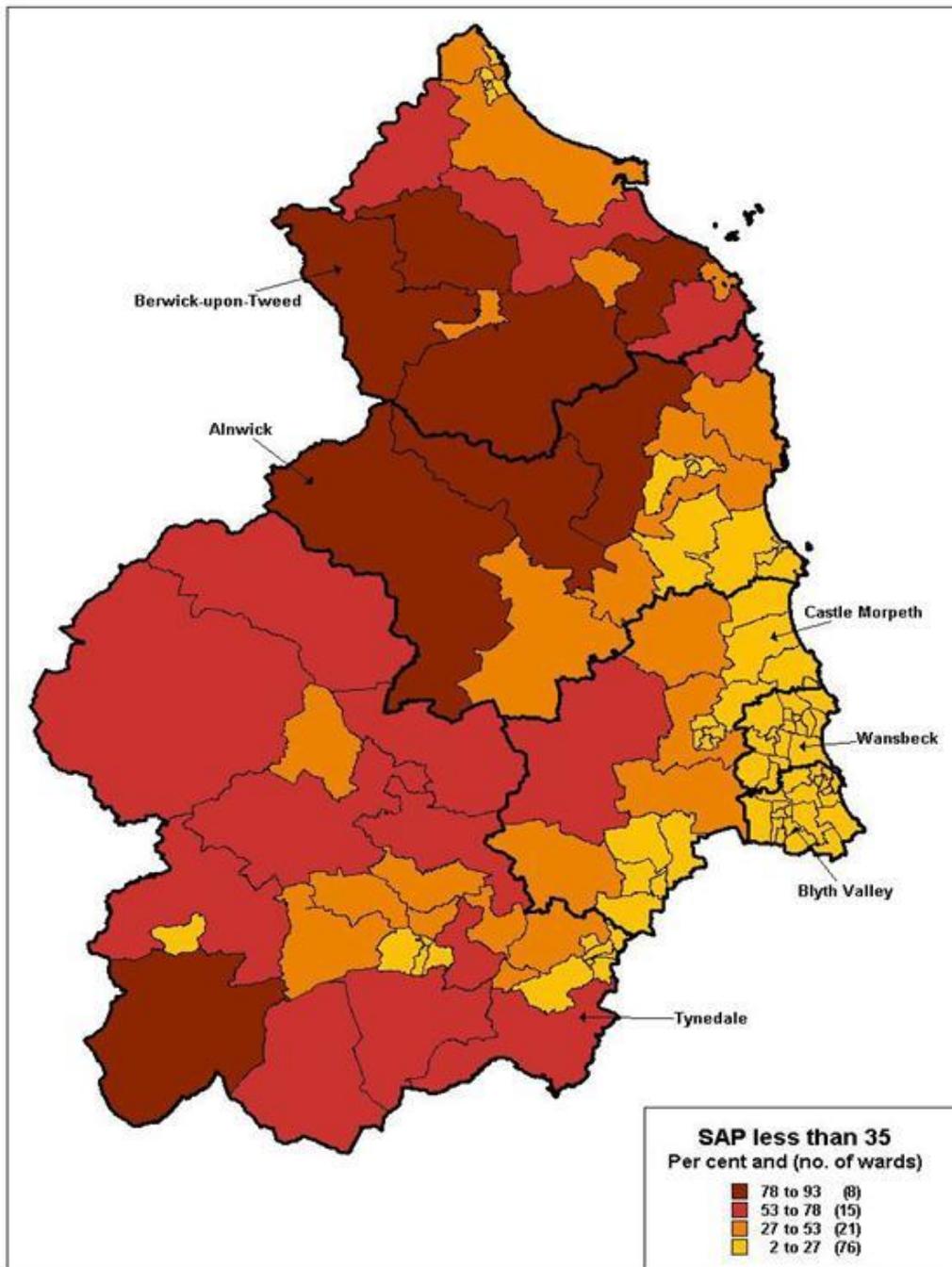
iv) TIME FRAME FOR DELIVERY AND NATIONAL AND LOCAL PARTNERS

- Northumberland County Council are actively involved in the Warm Up North partnership on an ongoing basis.
- This involves working in collaboration with the other local authorities listed below and makes effective use of ECO to fund energy efficiency measures.
- The Warm up North partnership is scheduled to run between 2013 and 2018 with the possibility of further extension.

Warm Up North Partners

- British Gas
- Northumberland County Council
- Darlington Borough Council
- Newcastle City Council
- Durham County Council
- Sunderland City Council
- Gateshead Council
- South Tyneside Council
- Hartlepool Borough Council
- Redcar and Cleveland

Appendix 1: Northumberland properties with a SAP rating of less than 35



Name of Local Authority	Northumberland County Council
Name of contact within the Local Authority	Strategic Housing Services
Address	Northumberland County Council County Hall Morpeth Northumberland NE61 2EF
Telephone	01670 623091
E mail	rachel.gagliano@northumberland.gov.uk