

RESPONDING TO CLIMATE CHANGE: A STATEMENT OF INTENT June 2019

Introduction

- 1. In 2015, the UK Government signed the Paris Agreement as part of the United Nations Framework Convention on Climate Change. It marked a major step in tackling climate change by strengthening the commitments to limit global temperature increases to 1.5 degrees Celsius above pre-industrial levels. This went further than the current UK Climate Change Act and makes a national low carbon economy an absolute necessity to comply with the Agreement.
- 2. To meet this commitment, the Government set five-yearly carbon budgets which currently run until 2032. These restrict the amount of greenhouse gas that the UK can legally emit in a five year period with the overall target being a reduction in emissions of 57% on 1990 levels.
- Four years on, the Government asked the independent Climate Change
 Committee (CCC) to reassess the UK's long-term emissions targets based on
 the carrying out a detailed analysis as to the impact on global warming of each
 sector of the economy.
- 4. The subsequent *Net Zero* report recommends that the Government should legislate as soon as possible to ensure that the UK reaches net-zero greenhouse gas emissions by 2050. This is considered achievable with known technologies, alongside improvements in people's lives, and within the expected economic cost that Parliament accepted when it legislated the existing 2050 target for an 80% reduction from 1990. However, it is also clear that it will only be possible if stable and well-designed policies to reduce emissions further are introduced across the economy without delay.
- Within this, the County Council fully acknowledges that it has a significant role to play in maximising its contribution to the reduction of greenhouse gas emissions
 both in reducing its own carbon footprint and in promoting and facilitating wider behaviour change through its local leadership. This paper sets out the

commitment and approach the Council will take to ensure its contribution is successfully maximised.

PART A: REDUCING THE COUNCIL'S CARBON FOOTPRINT

6. In 2010, the Council's¹ emissions was the equivalent of 53,924 tonnes of carbon dioxide. By 2018, this had dropped to 36,176 carbon dioxide tonnes equivalent (CO2te) - equating to a reduction of almost 33%.

Type of emissions	C0 ₂ te		Percentage
	2010 (est)	2018	change
Scope 1 all direct emissions owned or controlled by the council, including gas, coal, oil as well as council owned and controlled fleets, including school transport.	27,434	23,367	-14.8%
Scope 2 all indirect emissions from purchased electricity, heat, steam and includes street lighting	23,399	11,752	-49.7%
Scope 3 other indirect emissions from business travel	3,109	1,228	-60.5%
Total	53,924	36,347	-32.5%

- 7. This has been achieved through a combination of:
 - improving the efficiency of our fleet operations through route optimisation, driver training and investment in new more efficient vehicles
 - improving, insulating and rationalising our properties, including through the use of combined heat and power systems, the installation of solar photovoltaics, and the introduction of low carbon heating with County Hall acting as the showcase exemplar - the ground source heat project alone has resulted in the identification of 1,228 KW of heat provision with an estimated lifetime savings of over 7,000 tonnes of carbon

¹ The Council is defined as including the Fire & Rescue Service, Active Northumberland, and state-maintained schools. It does not include Advance Northumberland or academies as they operate as independent organisations.

2

- introducing LED lighting to both our buildings and our streets the conversion of over 40,000 columns on the street lighting project to LED has saved over 6,000 tonnes of carbon in the process
- applying agile working and undertaking continued IT efficiencies that reduce the need to travel
- progressively shifting to the purchasing of climate-friendly supplies (such as recycled paper) and the removal of single-use plastic products from our operations

Our Carbon Management Reduction Commitment

8. The Council's plans to accelerate and expand this programme of investment and behaviour change with the target being, by 2025, to have reduced its carbon footprint by 50% from the 2010 baseline.

	2010	2025	% change
Scope 1	27,434	22,200	-19.0%
Scope 2	23,399	3,874	-83.4%
Scope 3	3,109	897	-71.1%
Total	53,924	26,962	-50.0%

- 9. The realisation of this target will also require the Council to be at the forefront of testing and introducing new technologies and approaches. This process has already been started with the Council currently exploring the potential of:
 - micro hydro electricity generation, with initial feasibility tests being undertaken on the river Wansbeck (Morpeth) and the Wooler water
 - small-scale wind generation, with the first phase exploring the scope to supply power to our depots in Blyth and Stakeford
 - solar carports installation, with the County Hall car park acting as the initial pilot
 - heat from mine water, with the former Bates colliery site in Blyth potentially providing a new, clean heat source for a district heating scheme

If successful and as the technology develops and becomes more affordable, these schemes will be scaled up and applied in wider community-based settings. Over time, there will obviously be many other emerging opportunities

- which the Council will continue to monitor and investigate as they mature and come forward.
- 10. Within this, it should also be noted that there are some causes of greenhouse gas emissions where there is currently no viable low carbon option that the Council can readily deploy. For example, for some heavy duty vehicles requiring medium to long range travel there isn't yet a commercial alternative to a petrol or diesel engine which can meet our service requirements. The Council is continuing to monitor this, and will seek to explore the opportunities to initially introduce new EV vehicles to south east Northumberland once the technology is proven. School transport also represents a commissioned service which isn't yet in a sustainable position for the current network of providers to completely move to a low carbon solution. In both cases, we will continue to schedule and route these services in a way that minimises emissions whilst maintaining our committed level of service provision.
- 11. Given this, the Council will keep this target under annual review with a view to accelerating the pace and scale of the ongoing shift to low carbon whenever that becomes feasibly possible.

PART B: ACTING AS A COMMUNITY LEADER AND PLACE-SHAPER

Our pledge for carbon neutrality

- 12. The Council has considerable scope to act as a local champion for promoting a wider response by the county's residents and businesses to the effects of global warming. To this end, it has committed to working with the Government to achieve carbon neutrality for the county of Northumberland by 2030.
- 13. This is an aspirational target that reflects the need to address climate change urgently as an emergency. To meet it will require a considerable shift to our day to day living, as well as further significant advancements in the development of low carbon technologies. This innovation will also need to include the development of a transparent methodology by which our collective progress to meeting this objective can be effectively tracked.
- 14. Nonetheless, there are still a number of areas where the Council can make a difference in the short to medium term and thereby build a momentum for our local action to be increasingly driven by a respect for and a desire to protect the environment for future generations to enjoy.

Promoting sustainable decision-making

15. The Council controls a number of decision-making and fiscal processes, which carry significant weight in increasingly ensuring that low carbon and climate-friendly choices are made across Northumberland.

Planning

- 16. The draft Local Plan, for example, identifies climate change as a central consideration with one of its strategic objectives being: to ensure the delivery of sustainable development which mitigates climate change, whilst acknowledging and anticipating the likely impact of a changing climate on Northumberland and adapting to its effects.
- 17. In this regard, the key outcomes from the application of the Plan are as follows:
 - A sustainable pattern of development will have been delivered, including the focusing of the provision of housing, employment, education, healthcare and retail particularly within Main Towns and Service Centres resulting in a reduction in the need to travel;
 - The supply of energy and heat from renewable and low carbon sources will have contributed towards meeting national targets and helped to address fuel poverty;
 - New development will have incorporated sustainable building practices which reduce emissions through their construction and use and where possible will have contributed to improving the existing building stock;
 - High energy efficiency will have been incorporated into new development;
 - New developments will have been effectively assessed for the risk of flooding and if appropriate will have incorporated sustainable drainage systems for surface water to reduce flood risk or have been sited elsewhere;
 - New developments will have incorporated multifunctional green infrastructure, which can assist in the mitigation and adaptation of climate change.
- 18. The draft Local Plan also recognises that Northumberland is rich in energy resources. Its minerals provide the raw materials that are necessary to deliver the infrastructure, buildings, goods and energy that both society and the economy needs. There is also potential for further renewable energy development, however it is recognised that there is a limit to the scale of wind energy development that can be accommodated in Northumberland without significantly adversely affecting the special landscapes and cultural heritage of

- the County, or impacting on residential amenity. Alternatives to onshore wind energy are increasing in prominence as technology advances.
- 19. In addition, the Plan sets out a policy framework to maximise the efficient use of land and buildings with the aim being to create, through sustainable design and construction, high quality developments that are cheaper to run, consume less energy and minimise their environmental impact. The Plan also makes provision for Northumberland to continue to have a well-established and spatially distributed network of waste management facilities, with sufficient capacity, whereby recycling and recovery rates are maximised.
- 20. Finally, the Plan will ensure that a range of viable, efficient sustainable transport alternatives are provided to reduce reliance on the private motor vehicle, although it is recognised that in rural areas reliance on the private car will remain extensive. As part of this the County highways and Highways England roads will have been improved to incorporate safe, comfortable and convenient standards for cycling, facilitating increased travel by cycle and reduced car dependence.

Procurement

- 21. The Council has a considerable buying power, with millions of pounds worth of goods and services procured every year.
- 22. As such, whilst procurement legislation restricts our ability to directly favour local businesses, the Council provides support and help to local suppliers whilst still ensuring good value for money. This includes carrying out supplier engagement workshops and events as and when appropriate; packaging contracts and dividing them into 'lots' to encourage suppliers of different scale and type to tender where possible; specifying more sustainable products; and introducing social clauses where possible.

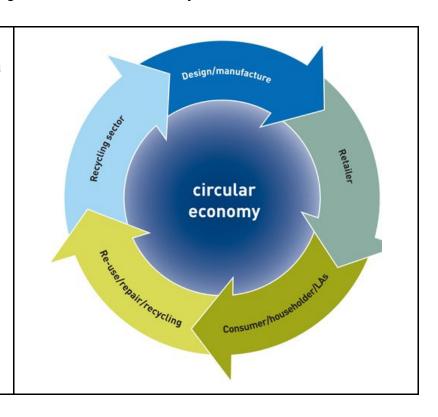
23. The Council also:

- works collaboratively with the regional and national market, together with other public sector commissioners, to encourage the market to shift operations and supply chains to our area;
- explores a range of commercial opportunities that can be taken advantage of to create new economic opportunities for the county; and
- promotes sustainable procurement with our main target criteria being: investment in communities; ensuring good value for money; impact of

community business; socially responsible decisions; community resilience; volunteers; reducing demand for public services; and fairness and transparency.

- 24. Responding to climate change and carbon management are inherent within this policy but the Council will review this to further strengthen its explicit significance and weighting by ensuring that:
 - sustainability impact assessments are undertaken for all procurement activity
 - tenders are evaluated to include a minimum carbon reduction requirement/assessment training and support is offered to commissioners to re-think goods and services specifications to ensure carbon reduction is fully considered
 - procurement activity is aligned to the Public Sector Buying Green Handbook
- 25. This will then be used as a stepping stone to better understanding the role it could play in promoting a more circular economy.

A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.



Promoting healthy, responsible living

26. The Council has considerable convening authority whereby it can drive change and incentivise different behaviours aimed at improving the wellbeing of residents and communities across Northumberland.

Digital connectivity and online services

- 27. Access to fast broadband services and an understanding of how to use online services are just as fundamental to our response to climate change as they are to driving our economic growth and productivity. Properly equipped with the appropriate digital capability, residents and businesses will generate less journeys. Whilst this needs to be balanced against the loss of local services around which communities can interact and socialise, it provides a powerful tool for addressing rural accessibility and isolation.
- 28. The Council is therefore utterly committed to securing full 4G coverage to the whole of Northumberland whilst also being at the forefront of the national 5G rollout. Our involvement in both the Borderlands Inclusive Growth Deal and the North of Tyne Combined Authority are instrumental in achieving this. As a result, a rural location will no longer present such a big barrier or challenge to accessing many of the things we need to on a day to day basis. Within this, we recognise that issues of digital inclusion may still persist and that as the infrastructure is installed, complementary measures are put in place to ensure that residents and businesses are equipped to tap into the full range of digital capability that will be open to them.

Smarter travel

- 29. The Council shares the Government's commitment to ensure that all walking or cycling are the natural choice for all shorter journeys. Good progress is already being made in this regard with a notable success being the recent rise in the number of pupils of primary school age who are now walking or cycling to school. As such, the Council will continue to invest in maintaining existing and developing new footpaths and cycle tracks. This will particularly focus on improving the travel conditions for pedestrians and cyclists in our major towns, including how they connect to rail stations where appropriate.
- 30. The extent and frequency of public transport services are always going to be a significant challenge in a county that covers a large area and is characterised by a very dispersed population. Nonetheless, the Council will continue to work with bus and rail operators to optimise the commercial network and to improve the quality of the passenger journey through timetable consistency, real time information, quality low emission vehicles, and wifi connectivity. This will be complemented with an ongoing dialogue with local communities to maintain critical rural services through the Council's subsidy regime, and to help protect

local services such as shops, pubs, banks, post offices and libraries in order to reduce the need to travel.

- 31. Within this context, it should be noted that one of the Council's top priorities is to reopen passenger train services to the Northumberland to Newcastle line with the ultimate objective being to provide a half hourly service between Ashington and Central Station with connections at Shiremoor and Northumberland Park to the Tyne and Wear Metro system.
- 32. The car will inevitably have a role to play in the future, particularly for longer journeys and for those residents living in the remote parts of the county. The Council will accelerate and expand its rollout of electrification points starting with more dedicated places within our car parks whilst lobbying Government for additional resources to create a viable, pan-county network, investigating the potential for energy trading to reduce emissions and driving costs. As a result, car park investment will continue with the maintenance of sufficient spaces to ensure the vitality of our town centres, complemented with the potential installation of solar carports.
- 33. Improvements and additions to the road network will also still be considered albeit in the light of future anticipated demand within a low carbon context. In the immediate future, priority will be given to removing pinch points and addressing congestion where there is a detrimental impact on air quality. Cowpen Road in Blyth is one example where the flow of traffic is such that the air quality levels at peak times reaches unacceptable levels. Various traffic management solutions have been introduced but the problems persist. The Council therefore considers it necessary to ease traffic flows through the construction of a new relief road.

Waste management

- 34. The Council has already invested heavily in the provision of more sustainable waste management services via:
 - the provision of a comprehensive network of Household Waste Recovery Centres across the county at which residents can deliver unwanted items for reuse, recycling, composting, energy recovery or disposal;
 - the provision of kerbside recycling services to virtually every household;
 - the promotion of home-composting, including using its purchasing power to provide access to low cost home composting bins;
 - the option for a modest charge of a regular garden waste collection service to households, and commercial waste recycling services to businesses;

- the promotion of a number of "sustainable lifestyle" campaigns under the 'Love Northumberland' banner, including 'Love Food, Hate Waste, etc'; and
- the holding of anti-littering and community clean-up events, together with a schools waste education and awareness raising programme.
- 35. The Council has also invested in an Energy from Waste facility that uses the non-recyclable waste as a fuel to generate 9.6MW of electricity to the National Grid each year, minimising the amount of waste disposed of to landfill to less than 15% in 2018, and in doing so, minimising the generation of methane, a significant contributor to climate change.
- 36. However, the Council is committed to doing more and is currently reviewing its own waste strategy with the aim of achieving a +50% recycling target. Detailed options appraisal modelling work is already underway to identify how the Council can best expand the range of materials collected for recycling at the kerbside, to include glass and a wider range of plastic packaging materials (pots, tubs and trays), as well as identifying how the Council could implement the provision of a new separate collection service for food waste for processing via anaerobic digestion technology. The Council has already stated its intention to implement a pilot kerbside glass recycling collection scheme during 2019, and will aim to roll this out across the county during 2020.
- 37. The review will be undertaken to fully comply and embrace the Government's national waste management strategy (published in December 2018) as the various ambitions are developed into tangible policies and actions following public consultation. This will place the Council in a much stronger position when lobbying for or bidding to Government for additional funding to support their implementation.

Affordable warmth

- 38. In Northumberland there are in excess of 18,000 households living in fuel poverty which equates to almost 13% of all households. A household is considered to be fuel poor if It has required fuel costs that are above average (the national median level) and, if the residents were to spend that amount, they would be left with a residual income below the official poverty line. In such cases, three interlinked issues are prevailing a low household income, poor energy efficiency of the property, and high fuel prices.
- 39. The Council has supported the alleviation of fuel poverty through a number of grant funded schemes in the past and will continue to look for opportunities to

- address fuel poverty and particularly those with warmth related health conditions.
- 40. As part of this, Northumberland currently has approximately 240 households that are not connected to the mains electricity grid. Most of the properties are currently running diesel or petrol generators to power their properties. Due to the incredibly high cost of heating and powering the households these properties are likely to be considered in fuel poverty and to have higher emissions. The Council is looking to support these properties in finding economic solutions. This would involve developing, in conjunction with the large power suppliers, a working model of a fully managed maintenance contract approach that could subsequently be managed through the Borderlands Inclusive Growth Deal
- 41. The paying of fuels costs can often result in residents falling into debt. The Council works closely with the Citizen Advice Bureau Service, Community Action Northumberland and the Northumberland Community Bank to provide a range of ethical financial support services to help prevent this from happening and/or escalating. This also includes ensuring that the residents involved access all the benefits and offers that they are entitled to.
- 42. Smart meters present a further opportunity to reduce emissions as they illustrate virtually in real time the cost of the fuel being used and whether it is high, medium or low. However, residents should not find themselves underheated as a result of making poor heating choices based on this information. The Council will work with residents to ensure that these meters are used appropriately and a minimum standard of warmth is maintained, in conjunction with ensuring houses are energy efficient. This will help in increasing their installation within homes.

Flood management

43. The Council will continue to work with the Environment Agency, Northumbrian Water and local communities to improve our knowledge and understanding of flood risk, promote sustainable development to reduce local flood risk with consideration of the anticipated impact of climate change, actively manage flood risk and drainage infrastructure to reduce the likelihood of flooding, encourage communities to become more resilient to flooding by increasing public awareness and understanding and continue to review and improve plans to be prepared for flood events and post flood recovery.

Promoting clean growth

44. The Council has considerable scope to put the principle of clean growth at the heart of its extensive economic development and regeneration programme and thereby ensure that more of the jobs created across Northumberland are better and proofed for the future.

Green Business

- 45. The Council is supporting the business community to consider and effect change in its emissions impact and productivity through the Council's investment into the Business Energy Saving Team (BEST) programme.
- 46. BEST is a project, receiving up to £670,700 of funding from the England European Regional Development Fund (ERDF) across a range of local authorities in the North East. The project will provide 250 SMEs with a free energy audit and offer grants to around 100 SMEs towards the costs of implementing the changes. The project aims to achieve reductions in Greenhouse Gas emissions of 1000 tonnes.
- 47. The Council will use this initiative as a foundation in exploring the scope, through Advance Northumberland, to develop some form of "Northumberland Green Business Charter Mark which could also act as an extension of our procurement policy.

Land-based productivity

- 48. The magnificent and diverse landscapes and coastlines of Northumberland underpin the county's prosperity and wellbeing. They supply a number of ecosystem services (clean air, water and power, flood prevention, recreation, food and fibre) as well as providing the fabric of the local economy (farming; forestry; fishing; food and drink; tourism; and energy). And, just as importantly, they are critical to the quality of life of local communities, and to the expectations and experience of visitors.
- 49. However, the planning and coordination of the different facets of these considerable assets is fragmented with the consideration of potential environmental benefits separated from the consideration of the equivalent socio-economic benefits. The Council is therefore actively engaging with Government to act as a test bed to develop an integrated and place-based approach to optimising the economic and social value of our extensive natural capital assets whilst protecting and enhancing their environmental quality.

50. Within this tourism is an important part of our economy - and our ability to offer a sustainable destination for residents from across the UK that is founded on a suite of attractive environmental pursuits that can be readily accessed by electric cars presents a significant opportunity to lengthen the season; generate more spend; and create better jobs as well as providing a carbon neutral visit or holiday. This offer is further strengthened by our extensive range of local produce. The Council-sponsored "Produced in Northumberland" affords access to authentic, quality products that are audited by our public protection officers. The Council wants everyone to "Discover Our Land".

Growing the energy sector

- 51. Northumberland has a thriving energy sector with a significant presence in offshore wind and subsea. This cluster is built on a long heritage of pioneering innovation with Blyth being the location for the UK's first offshore wind farm in 2000 and more recently adopting new offshore wind technology for the 41.5Mw Blyth Offshore Wind Demonstrator project. In addition, Blyth is home to the Catapult for Offshore Renewable Energy (CORE), which is a national asset offering the most comprehensive open access and independent test and research facilities and expertise anywhere in the world.
- 52. In recognising the significance of this growth sector to the local economy, the Council is a founding member of Energy Central a unique partnership consisting of the Offshore Renewable Energy Catapult, Advance Northumberland and the Port of Blyth. The partnership works together to encourage investment and support the growth of the offshore renewable energy and cluster linked to the Northumberland.
- 53. The county's energy credentials also extend beyond offshore renewable energy with Northumberland being recognised as England's second highest producer of hydroelectricity; second highest for onshore wind generation; and sixth for the number of solar PV sites in the UK.
- 54. The opportunity to further attract energy sector companies and supply chains is being proactively explored in partnership with Advance Northumberland, Invest North East England, the North of Tyne Combined Authoritythe North East LEP, academia and businesses. This potential is also being explored within the context of the forthcoming Borderlands Inclusive Growth Deal, mindful of the need to protect our unique landscapes.

