

**North East Derbyshire District Council**

**Council**

**14 September 2020**

**Climate Change Update**

**Report of Councillor J Kenyon, Portfolio Holder for Leisure, Transformation & Climate Change**

This report is public

**1 Report Details**

- 1.1 In July 2019, the Council declared a climate change emergency and adopted the Climate Change Plan. This report provides the Council with an update on actions and initiatives that the Council has undertaken in order to meet its climate change objectives. The update is based upon the themes of the Climate Change Plan. Some actions directly relate to the impact of Covid19 lockdown measures. Whilst all of these may not be reoccurring, they are worth noting at this stage and present future opportunity for sustainable reductions in carbon emissions.

**Theme 1 – Sustainable Buildings and Workplaces**

- 1.2 Energy efficient boilers at Mill Lane - The old boilers were non-condensing and as a result 40%-60% of the heat was being lost. Despite efficient flow-altering pumps and modern heating controls, this was an area where a significant saving could be made in carbon and cost.

By replacing the existing 'D' rated boilers with 'A' rated condensing units, the council is set to save at least 30% on its energy consumption and carbon emissions. This is due to the new boilers using water vapour to recycle the heat back into the building rather than losing the heat via the systems exhaust gases.

Gas use for 2018/2019 under old boilers  
£10,599 – 376,738kWh – 106,643kg Carbon.

Projected gas use for new boilers 2020/21  
£7,419 – 263,717kWh – 74,650kg Carbon.

Insulation to Eckington Pool - The Council invested in the region of £200k in the replacement and insulation of Eckington Pool roof. The works included the addition of 4" of insulation across the whole roof area which is anticipated to save 25% of heating costs. This equates to approximately £10,000 per annum cost saving and a 30 Tonne reduction in CO2 emissions.

Mill Lane, Council Offices – A number of smaller improvements have been made at Mill Lane including Energy efficient hand driers to replace using disposable paper towels, solar film on all windows and significant reduction in single use plastic.

Covid19 Energy – The lockdown measures, in particular the closure of the leisure facilities, has resulted in a one off 50% reduction in energy usage for the period April to July. This equates to approximately 194 Tonne CO2 emissions.

Covid19 Paper – The period April to June 2019, the Council used on average 260 reams of paper per month. Over the same period in 2020, that average was down to 55 reams per month, a 79% reduction. The cultural shift to home working will ensure that paper usage remains significantly lower than that of 2019.

## **Theme 2 – Renewable Energy**

- 1.3 As outlined in the Council's Recovery Plan and Climate Change Group, Property and Estates are about to commission a full feasibility assessment which considers all options and technologies, including but not restricted to, improving insulation, air source heat pumps, combined heat and power [CHP] type installations. The assessment will provide:
- A detailed feasibility study to assess the potential and suitability of all corporate buildings for a programme of carbon reduction measures.
  - RAG rated options in terms of suitability, with clear identification of any opportunities or potential risks.

## **Theme 3 – Low Carbon Fleet**

- 1.4 A demonstration of a BEV (Battery Electric Vehicle) was undertaken during 2019 to establish suitability for utilisation in the Council's shared courier service.

The demonstration of this small car derived van established suitability in meeting the Council's shared Courier Service requirements and should be further progressed. A further trial of a BEV vehicle has been undertaken which offers greater vehicle range to that of the earlier demonstration and has Pool Car potential.

The above testing informs future procurement decisions when fleet renewal is required. However, procurement was affected by Covid-19 with motoring manufacturing and distribution shut-down along with DVLA registration of new vehicles suspended within the lock-down period; further to which, procurement may be now undertaken along with establishment of 'fast charge' facilities at key operating facilities.

Grounds maintenance operations now utilise battery powered chainsaws\pole-saws. Trials continue to be undertaken with hedge cutters which have not proven successful due to size and weight of battery pack. Further consideration of battery hand tools will be given 'as and when' operational plant falls due for replacement and suitability\availability of battery\electric powered tools.

## **Theme 4 – Transport**

- 1.5 Covid19 Travel - While the seismic changes in how the Council operates were obviously not planned, the disaster recovery planning and infrastructure allowed the

Council to react and support the mass migration to home working. The scale of the shift to home working is from 7% of office staff frequently working from home pre-Covid19 to around 90% now.

The subsequent reduction in travel associated with this presents both short-term and long-term benefits. With 90% of the workforce at home for the period April-July, the CO2 emission savings are in the region of 60 Tonne however, this could be considered unsustainable in the long term. A more sustainable approach could be, if the workforce worked from home half of the time and continued to use virtual meetings, the potential CO2 savings will be in the region of 100 Tonne per annum.

In addition to the carbon savings made, there have been improvements in our digital services to residents such as face-to-face video appointments (Revenues and Housing Options) and a growth in the number of accessible services available online. Whilst difficult to measure, this further reduces the need to travel and subsequent CO2 emissions.

Clearly this has been driven by short term need, but it has clearly demonstrated what can be achieved, and a major strategic project for the next 12 months will be to embed this and ensure it is a win-win scenario for carbon reduction, customer satisfaction, staff work-life balance and quality of service.

## **Theme 5 - Planning**

- 1.6 The most significant way to reduce lifetime emissions from new buildings is to reduce the energy needed to heat and cool a house, and that is primarily down to better design and insulation. Other passive elements reduce water usage and overall impact of housing on our environment. Our planning and building control departments are involved throughout the planning process in ensuring these items are all addressed.

The emerging Local Plan sets out a distribution of development across the district that supports sustainability principles. Larger settlements with the most services, public transport infrastructure and employment opportunities form the base for the most significant developments. These developments will deliver new and support existing infrastructure that improves sustainable connectivity for people between their homes and services.

Through the Local Plan other sustainable living aspirations will also be achieved. Access to public open space, managed storm waters, tree planting and good management, delivery of affordable housing are all requirements of new housing developments where necessary.

It should be noted that the Council is constrained by national legislation, and also has to balance the need to provide housing for a growing population with the need to improve housing efficiency.

## **Theme 6 – Community Collaboration**

- 1.7 Declaration of a Climate Change Emergency – In July 2019, the Council declared a climate change emergency in order to raise the profile and to act as a ‘call to action’ for the community.

Parish Council Climate Change Advice Pack – In June 2020 an information pack was distributed to all Parish Councils to assist them in making carbon reduction savings of their own.

Derbyshire County wide Climate Change Group – In 2019, NEDDC joined the Climate Change Officer Working Group to consider and develop large scale carbon reduction and air quality improvements focusing on transport and travel infrastructure. This partnership is further developed through the Vision Derbyshire climate change objective.

Support and Advice for Residents - During 2019/20 we have undertaken the following activity to support residents:

- 414 one to one visits across to discuss heating controls and energy efficiency issues (NEDDC & BDC)
- 370 boiler and heating visits (NEDDC & BDC)
- NEDDC/BDC 82 households received heating systems worth £302,346 From DCC Warm Homes Scheme
- Accessed £159,182 to fund gas connections in NEDDC/BDC Cadent Affordable Warmth sheltered scheme projects.

In addition, the council has worked with Acis Housing to install a fully funded gas connection to Eyam Close, North Wingfield via Cadent Affordable Warmth scheme. This estate has had a failing and inefficient communal heating system. This work was essential and has ensured that all vulnerable residents will get brand new efficient boilers.

Electric Vehicle Charging point – An EV charging station has been installed at Dronfield Civic Centre as part of the council's efforts to support the community to reduce carbon emissions and improve air quality. The charging station is a rapid charging point which can charge vehicle batteries up to 80% in only thirty minutes.

Climate Change Grants - In the last 12 months, 11 eco grants were given to local schools to work on a wide variety of projects, all helping to raise awareness of climate change.

### **Rykneld Homes**

The Council's housing stock is the biggest contributor and opportunity to carbon reduction. As such the Council's strategic housing partner, Rykneld Homes are directly working with the Council's on its Climate Change ambitions. The Council's housing stock includes approximately 40% (3200) of homes of a non-traditional construction type which have no wall insulation. These homes do not have cavity walls and therefore are classed as hard to treat homes.

In the 12 months up to the end of June 2020, 60 non-traditional construction homes located across Pilsley and Heath have benefitted from the installation of external wall insulation (EWI), which combined with new roofs, windows and heating systems, where required, have significantly improved the thermal performance of the homes, reducing the risk of fuel poverty. Energy performance ratings (EPC) typically improve from band F to band C.

During the same period Rykneld Homes have also replaced 24 solid fuel heating systems with gas fired “A” rated systems as well as upgrading 264 “D” rated gas boilers to new “A” rated gas boilers. All heating boilers (Approx. 7850) receive an annual safety inspection and service which includes checks to ensure that boilers continue to work efficiently.

Also, work to upgrade the lighting in the communal areas of blocks of flats to high efficiency LED lighting has been completed to 35 buildings in the last 12 months delivering improved light levels, lower energy consumption and improved safety for residents.

Work to reduce the carbon footprint of the housing stock continues to be a key priority for both Rykneld Homes and the Council with further projects in the pipeline to further improve the efficiency of the homes.

### **Theme 7 – Biodiversity**

- 1.8 Recycling - The Council’s combined recycling rate is above the national average of [43.5%](#) achieving a recycling rate of 47% in 2019/20.

The Government (Defra) has recently consulted on its new UK Waste & Resource Strategy which has two overarching objectives to (a) Maximise the Value of Resource Use and (b) Minimise Waste and its Impact on the Environment.

Consultations closed 12th May 2019; it is anticipated further consultations will be undertaken during 2020. Following new legislation, a re-modelling of the Council’s waste collection service, particularly around food waste. This is anticipated to result in a further ‘increased stepped change’ in our combined recycling performance.

Carbon Sequestration and Biodiversity – The Council are working with Sheffield Hallam University on a project to improve the biodiversity and carbon sequestration of marginal parts of green and open spaces in the ownership of the Council.

Internal funding was agreed by the university with a planned start in May 2020. Unfortunately, this has been delayed due to Covid19 and will now be considered again by the university in the new academic year.

### **Theme 8 – Procurement**

- 1.9 A revised procurement policy has been agreed with carbon and climate considerations embedded. Until this time, since summer 2019, a supplementary questionnaire regarding carbon emissions is being sent out with the standard tender documentation.

This change in policy ensures that environmental sustainability is at the heart of decision making when selecting the right product and/or supplier.

It should be noted that much of the procurement work is directly aimed at procuring green technology, whether efficient vehicles, heating systems, building improvement work, or electric hand driers.

## Future Key Carbon Reduction Projects

- 1.10 The Council have drawn up a series of strategic projects that directly contribute and deliver the Council's own carbon reduction targets and contribute to the wider carbon reduction of the community.

Covid19 has advanced cultural change around digital transformation and agile working by many years and created an opportunity to advance the climate change benefits accordingly. The scale of the opportunity is indication in the Working from Home survey undertaken in June 2020, and rapidly capitalising on the huge number of opportunities now available is vital.

### 1.11 Strategic Projects:

- Home/agile working - Embedding home/agile working and video conferencing to reduce the need to attend the workplace and ultimately reduce the number of desks required by both organisations. The vision is to consider work as something you do, rather than a place you go.

Financial improvement = £34k/annum

Carbon Reduction = 100Tonne/annum

- Reduce our office space use by agile working – Consideration needs to be given to the existing facility and if it is 'fit for purpose' given the future aspirations of home working.

Financial improvement = £190k/annum

Carbon Reduction = 413Tonne/annum

- Sharley Park – In delivering the Council's Leisure Subsidy Reduction Plan, Sharley Park is the facility where investment should be considered. The facility currently accounts for a large proportion of the overall leisure subsidy. A new Sharley Park Leisure Centre will support the regeneration of Clay Cross, improve the customer experience, promote a healthier lifestyle in a community with significant health deprivation and deliver significant carbon and financial savings.

Financial improvement = £200k/annum

Carbon Reduction = 300 Tonne/annum (Based upon Eckington, below)

- Eckington Pool Efficiencies Project – Capital renewal of Air Handling Unit, Glazing and the installation of other carbon/cost reduction measures such as air source heat pump, pool cover, pool infill, combined heat and power.

Financial Improvement = £47k/annum

Carbon Reduction = 300 Tonne/annum

- Corporate Asset Carbon Reduction – The Council has two major contributors to its carbon footprint, its fleet and its buildings. This project deals with the buildings to procure advice and solutions to significantly reduce the Council's carbon footprint.

Financial improvement = Still to be determined  
Carbon Reduction = Still to be determined

- Climate change awareness campaign - A campaign to combine a survey of residents with the promotion of active support schemes to assist residents and businesses alike in saving money whilst reducing their carbon footprint.

#### Partnership Projects:

- Derbyshire County wide Climate Change Group – continue to support this key strategic approach to deliver carbon reductions across NE Derbyshire.
- Working with residents to ensure that maximum use is made of government schemes to encourage home insulation and make use of renewable energy initiatives.
- Continuing to work with Rykneld, Parish and Town Councils and Schools, to encourage direct carbon reductions, and to work together on raising awareness of carbon reduction possibilities with residents at a local level.
- Undertake an annual review of the Climate Change Plan to ensure it remains relevant, is based upon the most up to date data/legislation and aligns with the scale of the challenge and opportunities that are presented.

- 1.12 Whilst the above figures for strategic projects should be considered indicative at this stage, the collectively impact of the above projects aim to achieve improvements in the region of:

Financial = £560k per annum  
Carbon Reduction = 1000Tonne per annum

- 1.13 These strategic projects, if successful, will exceed the council's own carbon reduction target (725 Tonne). They will also continue the wider work to reduce carbon emissions across NE Derbyshire. This is all in addition to unlocking strategic development sites, improving the customer experience and enabling significant capital receipts.

## **2 Conclusions and Reasons for Recommendations**

- 2.1 The report summarises the progress to date on the Councils own climate change objectives and estimates CO2 emission savings of 316 Tonne (194 Tonne from the Leisure Centre closure) as well as how it is working with partners to provide community leadership on the subject. This doesn't include the significant contribution of Rykneld Homes.
- 2.2 According to the Tyndall data the district has dropped 4ktCO2 emissions, between 2015 and 2018, across all sectors, with the Council accounting for 0.3ktCo2 of the figure, resulting in a 0.8% contribution. Tyndall data is published with a 2 year delay however, the current trend suggests the district is 'on track' to achieve Tyndall's 2020 figure of 0.53Mt (2020). The reductions required are significantly greater over the next 5 years and the Council needs to work with all partners to remain 'on track'.

- 2.3 The report goes on to identify strategic projects which, if successful, will deliver further carbon emission savings forecast to be in the region of 1000 Tonnes (Not including Rykneld Homes) along with other initiatives to promote climate change action to the wider community and partners. This is all in addition to unlocking strategic development sites, improving the customer experience and enabling significant capital receipts.
- 2.4 It should be recognised that Tyndall data/targets consider the district as a whole, rather than the district council. The Council have control over its own CO2 emissions and projects identified to make significant reductions. In order to meet the district wide Tyndall targets, all levels of government, businesses and residents alike need to work together to achieve. The carbon reduction challenge that we face is not easy and if it is to be achieved, requires us all to change how we do things and investment from the public sector, private sector and individuals alike.
- 2.5 The report demonstrates that the Council is committed to investing and leading the community in addressing Climate Change in the district. It is acknowledged that there is much more to do and we continue to seek to better understand the scale of the challenge and ensure actions meet it.

### **3 Consultation and Equality Impact**

- 3.1 There are no consultation and equality impact implications from this report.

### **4 Alternative Options and Reasons for Rejection**

- 4.1 There are no recommendations, the report is to update the Council on progress to date on this key priority.

### **5 Implications**

#### **5.1 Finance and Risk Implications**

- 5.1.1 None arising directly from the report

#### **5.2 Legal Implications including Data Protection**

- 5.2.1 None arising directly from the report

#### **5.3 Human Resources Implications**

- 5.3.1 None arising directly from the report

### **6 Recommendations**

- 6.1 That Council acknowledge the update report.



## 7 Decision Information

<b>Is the decision a Key Decision?</b>  A Key Decision is an executive decision which has a significant impact on two or more District wards or which results in income or expenditure to the Council above the following thresholds: <i>BDC:       Revenue - £75,000   <input type="checkbox"/></i>  <i>Capital - £150,000   <input type="checkbox"/></i> <i>NEDDC:   Revenue - £100,000 <input type="checkbox"/></i>  <i>Capital - £250,000   <input type="checkbox"/></i> <input checked="" type="checkbox"/> <i>Please indicate which threshold applies</i>	No
<b>Is the decision subject to Call-In?</b> (Only Key Decisions are subject to Call-In)	No
<b>Has the relevant Portfolio Holder been informed</b>	Yes
<b>District Wards Affected</b>	All
<b>Links to Corporate Plan priorities or Policy Framework</b>	All

## 8 Document Information

Appendix No	Title	
<b>Background Papers</b>		
<b>Report Author</b>		<b>Contact Number</b>
Head of Service – Organisation & Transformation		01246 242210