

North Yorkshire County Council

Executive

5 July 2022

Carbon Reduction and Climate Change Update

Report of the Assistant Director Policy, Partnerships and Communities

1.0 Purpose of report

- 1.1 To update the Executive on NYCC Climate Change actions and future proposals.

2.0 Background

- 2.1 On 24 July 2019 [the Council committed](#) to produce its own carbon reduction plan and to aspire to achieve net carbon neutrality by, or as close to, 2030, which is significantly in advance of the Government's target of 2050:

“This Council recognises that some districts within North Yorkshire have already passed motions committing to carbon reduction measures with the aim of becoming carbon neutral. It also acknowledges and supports the Government’s announcement that it would aim for the UK to be carbon neutral by 2050. North Yorkshire County Council has already formed an Executive sub-group and Scrutiny task Group concentrating on climate change and the Authority has made progress in reducing carbon emissions. This Council now commits to produce its own carbon reduction plan. As part of this plan, the Council will invite the relevant representatives from the district councils to discuss how working together, we can aspire to achieve net carbon neutrality by, or as close to, 2030.” (Minute 104)

- 2.2 The original motion that was considered by the Council also highlighted the need for any actions or changes in policy to be fully costed, both financially and in service delivery terms, in the interests of ensuring an ambitious but achievable plan and that the plan would be reviewed annually and a carbon reduction report would be presented to full council annually by the Leader of the Council or an executive member nominated by him to champion carbon reduction.
- 2.3 The Carbon Reduction Plan [agreed by the Executive](#) on 13 July 2021 following the work of the Climate Change Scrutiny Joint Sub-Committee, identifies the actions required to move towards that ambition.
- 2.4 The Council also supports the York and North Yorkshire Local Enterprise Partnership's ambition to be the UK's first carbon negative region - carbon neutral by 2034 and carbon negative by 2040. These ambitions were endorsed by the Leaders of the Councils of York and North Yorkshire through the submission of devolution asks in December 2020 aimed at achieving a carbon negative region.
- 2.5 The Council's Beyond Carbon (BC) transformation programme steers delivery of the Council's carbon reduction approach. The BC officer board is chaired by Assistant Director Policy, Partnerships and Communities and meets monthly to review progress on delivering the plan. A £1m BC pump-priming fund is available to support new deliverable projects that

are over and above the use of existing service budgets. Just under half of the fund has been allocated to date and a number of potential additional investments are outlined in this report.

- 2.6 The Council had agreed carbon reduction investments prior to development of the Carbon Reduction Plan, for example the investment of £13m to replace 50,400 streetlights across North Yorkshire with energy-saving LED lamps. This work was completed in 2021 and, together with part night lighting, has decreased energy usage substantially over the last four years.
- 2.7 The Council has also successfully bid for external funding, for example nearly £2m in 2021 from the Government's Public Sector Decarbonisation Scheme to fund improvements to buildings, particularly the replacement of windows, which improve energy efficiency and reduce carbon emissions.
- 2.8 Following the changes in working patterns forced by the Covid pandemic, the Council is developing new ways of working that contribute to reducing carbon emissions including hybrid working, reducing travel and property requirements.
- 2.9 Since January 2022, the Council has employed a Climate Change Policy Officer to support and co-ordinate climate change work across the Authority.
- 2.10 The report is an update on progress and outlines an approach to the development of a Climate Change Strategy for the new North Yorkshire Council. No decisions are required at this time.

3.0 Report

3.1 Operational Carbon Footprint

Carbon Accounting figures for the 2021/22 financial year have been compiled using the nationally recognised Local Government Association (LGA) tool and a summary is attached as annex A. This is based on the services over which we have complete financial and operational control and therefore does not include Brierley Group, Yorwaste or schools. The LGA tool calculates emissions from NYCC property energy consumption, fleet mileage and business travel.

The data indicates a continuing downward trend in our operational carbon emissions compared with both last year and a pre Covid 'control' year. The trajectory is not sufficient to anticipate that the ambition of operational carbon neutrality will be reached. However, there are several projects currently underway and proposals identified to support a greater understanding of our potential to further reduce operational carbon emissions. These are outlined below.

3.2 Current activity to reduce the carbon footprint

- i. Property Services have submitted 10 properties to the Net Zero Hub to undertake a decarbonisation survey and are preparing to bid for the next round of Public Sector Decarbonisation Scheme (PSDS) funding applications due to open in September 2022. They are delivering several energy reduction projects currently, alongside 'business as usual' workload and capacity to capitalise on this 'new' area of work is limited. This could be the subject of a pump-priming bid in the near future.

It is important to note that property decarbonisation proposals may also be restricted due to electric grid capacity. This will limit the number of EVCPs or Air Source Heat Pumps

for example, which can be provided at various sites. We are also experiencing delays in existing PSDS scheme delivery due to national supply chain shortages.

- ii. Fleet Management have commissioned the Energy Saving Trust to prepare a report on fleet decarbonisation options. This is due in September 2022 and includes North Yorkshire Highways' vehicles. They are also awaiting the outcome of trials into 'HVO' which is a biofuel alternative to diesel, utilised in a pilot scheme by Scarborough Borough Council.
- iii. Business Mileage - 10 EV Pool cars are due to be delivered in November 2022, with corresponding EV Charge Points at County Hall. An innovative pilot study is underway to provide domiciliary care workers with EVs and home EVCPs. However, further work is required on the business mileage element, particularly around behaviour change to ensure that this component of our carbon footprint does not increase our carbon emissions as we transition into post-Covid recovery.
- iv. A risks and dependencies log is being created by Programme Management colleagues to support the implementation of the Carbon Reduction Plan. This will identify any barriers to delivery and will be presented to the BC Board in July.

3.3 Other activity in the Carbon Reduction Plan

- i. Procurement emissions (from the goods, works and services that we buy) are significantly higher than operational emissions and are not included in the carbon footprint calculation due to the extreme difficulty in collecting this information, but a 'high level estimate' completed in 2021 showing the emissions were 15 times greater than our operational emissions. Further work that is underway includes:
 - a. Options and considerations for the supply chain and how a Procurement and Contract Management Strategy can assist in delivering carbon neutrality and wider sustainability issues.
 - b. Reviewing procurement documentation to support low carbon commissioning, purchasing and contract management.
 - c. A pump-priming funded project to engage with suppliers to engage with them to decarbonise their offer.
- ii. Research by the University of York in partnership with NYCC is due to conclude in the Autumn which includes:
 - a. A review of Council plans and policies to identify low carbon opportunities.
 - b. A questionnaire for staff around behaviour change linked to the 'return to the office'.
- iii. Community Engagement activity including:
 - a. Developing an e-newsletter to share and connect climate actions around NY.
 - b. Supporting the Library Service to become a local hub for climate change information and activity.

- c. Youth Engagement project – currently awaiting results from the ‘Growing up in North Yorkshire’ survey in September, which included questions relating to this area.
- iv. Electric Vehicle Charging Points (EVCPs):
 - a. The North Yorkshire EVCP strategy will be completed in July 2022.
 - b. An application has been made to the Government’s LEVI pilot fund to deliver innovative solutions to rural charging point deployment.
- v. Carbon Sequestration (mainly tree planting):
 - a. Working with White Rose Forest to ensure a joined up approach to woodland planting
 - b. LGA funded ‘Tree Planting Supply Chain’ project due to complete in autumn 2022 which will identify the component parts required to increase tree cover whilst supporting the local economy.
 - c. An application is currently being prepared for a DEFRA programme to create additional capacity to enable NYCC to support increased woodland planting.
 - d. A study is proposed on NYCC owned tree health stock in response to Ash Dieback and its implications for sequestration.
 - e. Additional work is needed around ‘sequestration’ to identify the potential for tree planting on NYCC owned land (the majority of which is tenanted farmland) and this would be appropriate for the pump-priming fund.
- vi. A bespoke Climate Change Awareness Training module is now available on the Learning Zone platform. All staff and Elected Members are encouraged to take this one hour learning to better understand how their role can support the 2030 ambition.
- vii. There are several examples of good practice across the Council services, including capital funding bids to support decarbonisation and use of public transport and a national award for plant based school meal provision. The Schools Energy and Sustainability service won the APSE service award for combining environmental education with running energy efficiency buildings in 2021 and have a portfolio of activity to offer to schools, including the COP26 workshop which attracted over 2000 young people. Officers are supporting the emerging Shared Prosperity Fund to foster the transition to a low carbon economy. These types of examples are highlighted in the Quarterly Performance Report.
- viii. We are working with partners across the region to develop larger scale interventions. This includes the development of a Local Area Energy Plan and Yorwaste have undertaken large scale solar farm feasibility study which has identified potential opportunities for renewable energy generation. North Yorkshire Highways has produced a Carbon Plan and have implemented small scale renewable energy generation on site. The Rural Task Force is also supporting areas such as energy transition and rural transport, following the Rural Commission report in 2021.

3.4 Future Proposals

i. Local Government Reorganisation and Devolution

- a) NYCC is facilitating the LGR Climate Change Working Group to support all LGR workstreams embed the climate change design principle in all proposals and decisions. This includes all eight councils bringing together their climate strategies to ensure that we pull through actions into future work. Workstreams will also be identifying future property and fleet requirements and we will focus on plans to decarbonise these as a priority.
- b) We are also supporting Devolution process, which has the ambition to become a carbon negative region at its core, through the YNYLEP's Routemap to Carbon Negative document due to be concluded in July 2022.
- c) There are particular capacity challenges emerging in the domestic housing retrofit sector due to this being a new area of work for local authorities and therefore a lack of capacity to develop, bid for and implement complex housing retrofit schemes at scale. We are working with YNYLEP and partners to develop a resilient approach both to bid development and local supply chain engagement across the region. Other capacity challenges include EVCP deployment for similar reasons.

ii. North Yorkshire Council Climate Change Strategy

Officers are preparing a development pathway for a new Climate Change Strategy for the North Yorkshire Council. This will include not only operational carbon reduction, but also include the Council's wider sphere of influence to ensure that all of its services are contributing towards the 'carbon negative region' goal in collaboration with partners and communities. The BC Board endorsed this approach whereby the strategy would include:

- Mitigation - continuing the carbon reduction approach
- Adaptation - preparing for the known impacts of climate change and risk management
- Sequestration - scaling up our ability to capture and store carbon (including Energy from Waste)
- Biodiversity - closing the link between climate change and natural capital resources

The Strategy will determine the principles and ambitions for the Council's approach to the climate change agenda. The consequent delivery plan will be developed at service plan level to ensure that practical actions are embedded within service delivery and provide proposed timescales for delivery based upon the outcomes of the actions outlined in the report above. This process is currently being supported by the LGR Climate Change design principle.

It is anticipated that community engagement activity will commence over the summer period (working closely with District colleagues to ensure a confident transitional relationship), and a 'consultation draft' strategy can be prepared for autumn 2022. Consequently, a Climate Change Strategy could be adopted by vesting day.

4.0 Conclusion

- 4.1 The data indicates that NYCC operational emissions are decreasing. This trajectory will need to be closely monitored to ensure that the post-Covid recovery period does not lead to an increase in energy consumption and business mileage.
- 4.2 Recognising that we need to put in place further actions in order to reach our 2030 carbon neutral ambition and to contribute to the regional 2034 ambition, we have identified a number of specific areas to develop delivery pathways which will result in business plans for each action. This may entail a financial cost in both feasibility (which can be supported by the pump-priming budget) and delivery (for example higher electricity consumption to operate heat source pumps). In some cases, a reduction in energy usage will ultimately result in a decrease in revenue costs in the future. However, it is anticipated that there will be some projects which will not generate a saving and may result in higher ongoing costs, or may be difficult to deliver due to global market volatility.
- 4.3 In addition, the capacity of officers to deliver new or expanded activities against the backdrop of significant other delivery pressures will need to be accommodated. We have a good working relationship with our District and Borough Council partners which can support capacity through reducing duplication from vesting day. Our relationships externally with City of York Council, YNYLEP and partner organisations, including community groups and businesses, will enable us to work collaboratively, each playing to their strengths to strive for the regional carbon reduction ambitions. To direct our contribution, the proposed North Yorkshire Climate Change Strategy will identify key principles and actions required by the new Unitary Authority.
- 4.4 There are no simple solutions to the difficult challenge of getting to net carbon neutrality by, or as close to, 2030. Nor an unlimited financial pot to make the necessary investments. The work identified above is helping the Council to understand the actions that are needed and identify deliverable solutions. Investments need to be made wisely, to ensure value for money against capital and revenue budgets.

5.0 Financial implications

- 5.1 Investing in feasibility and business plans through the BC pump-priming fund has enabled external financial bids to be made by creating an evidence base. It is likely that NYCC internal funding will be required to take forward prioritised schemes, either in full or as match funding with others and these would be the subject of future decision making as the opportunities are identified and evaluated. Such schemes will need to be robustly assessed to determine that the carbon impacts represent good value for money. All schemes will need to be considered in light of the financial environment and alongside other council priorities.

6.0 Legal implications

- 6.1 There are no legal implications at this stage. The report is for information only.

7.0 Climate change implications

- 7.1 There are no climate change implications at this stage. The report is for information only. However, the issues identified in the report have direct relevance to the activities we take to reduce greenhouse gas emissions.

8.0 Equalities implications

- 8.1 There are no equalities implications at this stage. The report is for information only.

9.0 Reasons for recommendation

- 9.1 To ensure Members are aware of our current carbon reduction activity, carbon footprint, and proposals for meeting the ambition to be carbon neutral by, or as close to, 2030.

10.0 Recommendation

- 10.1 To note the report and consider what further actions need to be taken by this Council.

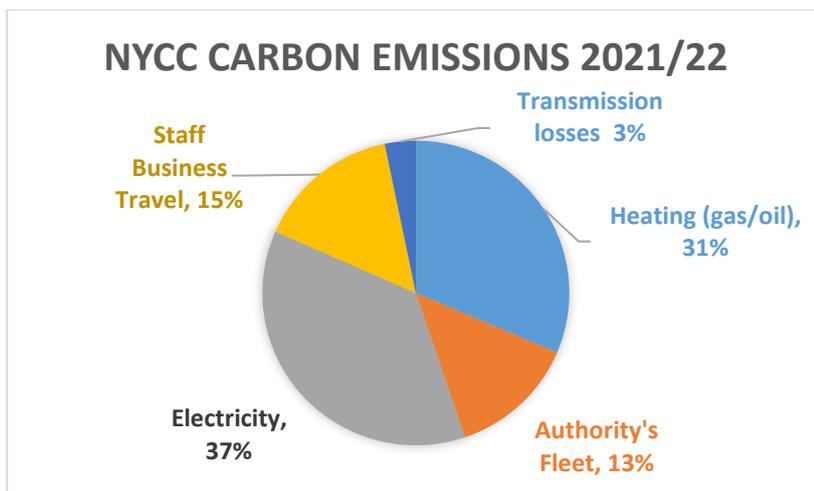
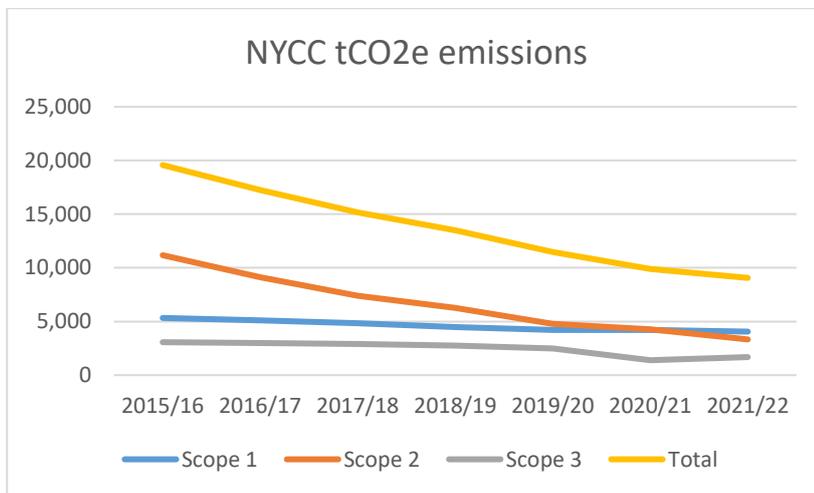
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29 June 2022

Annex A - NYCC LGA Carbon Accounting Tool 2021/22 outcome summary
Annex B - Glossary

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The table shows emissions in tCO₂e (tonnes of carbon dioxide equivalent).

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Scope 1	5,330	5,096	4,850	4,477	4,211	4,218	4,055	Scope 1- direct emissions released straight into the atmosphere through activities owned or controlled by the council, for example gas boilers in council buildings and use of council owned vehicles (fleet)
Scope 2	11,174	9,133	7,400	6,268	4,789	4,274	3,328	Scope 2 indirect energy emissions through the consumption of purchased electricity.
Scope 3	3,069	3,006	2,913	2,747	2,473	1,390	1,678	Scope 3- business travel using staff's own cars
Total	19,573	17,235	15,163	13,492	11,473	9,882	9,061	



Headlines on changes in emissions

- Covid impacted on Council energy consumption during recent years, so it is important to make comparisons with pre-Covid years.

- Gas increased by 2.5% compared to previous year, but decreased by 5% compared to 2018/19 year.
- Electricity decreased by 22% overall compared to previous year, principally due to street lights reduction as building use increased by 9% on the previous year. However, compared with 2018/19, building use decreased by 32%.
- Fleet mileage emissions decreased by 16% on the previous year and by 20% compared with 2018/19.
- Water consumption emissions decreased by 80% compared with 2018 (but the total emissions are insignificant so doesn't show up in tables).
- Staff business mileage emissions increased significantly on the previous year (which included Covid restrictions), but is a 49% decrease on 2018/19 figures (pre-Covid).

Annex B - Glossary

- BC - NYCC Beyond Carbon Transformation Programme
- DEFRA - Department for Environment Food and Rural Affairs
- EV - Electric Vehicle
- EVCP - Electric Vehicle Charging Point
- HVO - Hydrotreated Vegetable Oil
- LED - Light-Emitting Diode: essentially a low emission light bulb.
- LEVI - Local Electric Vehicle Infrastructure: a Government grant to facilitate deployment of public EVCPs
- Net Zero Hub - BEIS regional energy decarbonisation support delivered by Tees Valley Combined Authority for the North East region
- PSDS - Public Sector Decarbonisation Scheme: a Government grant fund for decarbonising public buildings
- tCO₂e - Greenhouse gas measurement which combines all greenhouse gas emissions into a single unit equivalent to the strength of Carbon Dioxide, measured in tonnes (1 tonne would fit into a 500m³ balloon)
- YNYLEP - York and North Yorkshire Local Enterprise Partnership