

North Yorkshire County Council

Transport, Economy and Environment Overview and Scrutiny Committee

12 July 2021

Report of the Chief Executive

Climate change impact assessment – progress to date

1.0 Purpose of report

- 1.1 The purpose of the report is to update the committee on the introduction of climate change impact assessment into the decision-making processes of the County Council.

2.0 Background

- 2.1 On 24 July 2019 North Yorkshire County Council passed a motion with an aspiration to achieve net carbon neutrality by 2030, or as near to that date as possible. It also committed to producing a carbon reduction plan. This is due to be agreed at Executive on 13 July 2021.
- 2.2 A Beyond Carbon programme within the Council's change management governance structure has been established to oversee the main strands of the plan and a one-off £1m fund for pump-priming and development of business cases has been committed in the Council's 2021-22 budget.

3.0 Climate change impact assessment tool

- 3.1 It was decided that an impact assessment tool, similar to the equality impact assessment tool, should be developed and introduced to ensure that climate impacts and other environmental considerations are taken into account when decisions are made. This is not intended to replace situations where more detailed statutory environmental assessments are required e.g. Environmental Impact Assessment, Strategic Environmental Assessment or where planning permission is sought.
- 3.2 Unlike equality impact assessment, there is currently no legal requirement for climate change impact assessment. However, research shows that most councils are at a similar stage to ourselves and have developed or are developing processes to assess impact. Following research into what other local authorities were using, a tool has been adapted from one in use at Devon County Council. Accompanying guidance has also been developed.
- 3.3 The climate change impact assessment tool is attached at appendix 1. The associated guidance is attached at appendix 2.

4.0 Implementation

- 4.1 The impact assessment tool and accompanying guidance were trialled with a number of projects from different directorates in early 2020 and rolled out across the council from August.
- 4.2 Democratic services have incorporated environmental and climate change impacts into the executive report template.
- 4.3 An overview of 23 completed climate change impact assessment forms shows that adoption of the new approach has been most effective in business and environmental services and technology and change. Use of the impact assessment is less well developed in services for adults and children. This may be because staff find it easier to see the environmental impact of physical or digital infrastructure than that of a social care contract, for example.
- 4.4 Projects which are being progressed through the Council's change management programme also undergo climate change impact assessment. The 2020 programme management office have introduced climate change impact assessment into its required documentation for project management at both outline business case and full business case stages. Following feedback, an initial assessment form is being developed for use at outline business case. This is in line with the process followed for equality and data protection assessments and requires the project manager to work with the service to assess the likelihood of climate change impact at options appraisal stage. A full climate change impact assessment, where the initial assessment finds that this is necessary, will be completed as part of the full business case.
- 4.5 In order to improve understanding and uptake across the Council, we need to raise awareness of the need for climate change impact assessment. A communications programme for the Beyond Carbon programme is being developed incorporating opportunities to re-emphasise the agreed impact assessment process. We are also working with the York and North Yorkshire Local Enterprise Partnership, District Councils and City of York Council to develop a carbon literacy training programme for staff and Councillors. The training module development will be completed in July 2021, with local authority rollout likely to commence in the autumn.

5.0 Future development

- 5.1 Climate change impact assessment is new to many staff across the Council and we will continue to learn and refine the process. We will continue to research best practice in other councils and organisations and incorporate this into our own processes. We will also reflect any national requirements or guidance if this is forthcoming.

6.0 Recommendation(s)

- i) That the Committee note progress in implementing climate change impact assessments and make suggestions for further improvement of the process.

Richard Flinton
Chief Executive
North Yorkshire County Council
2 July 2021

Report Author – Deborah Hugill, Senior Strategy and Performance Officer

Presenter of Report – Deborah Hugill, Senior Strategy and Performance Officer

Appendices:

Appendix 1: Climate change impact assessment tool

Appendix 2: Climate change impact assessment guidance



Climate change impact assessment

The purpose of this assessment is to help us understand the likely impacts of our decisions on the environment of North Yorkshire and on our aspiration to achieve net carbon neutrality by 2030, or as close to that date as possible. The intention is to mitigate negative effects and identify projects which will have positive effects.

This document should be completed in consultation with the supporting guidance. The final document will be published as part of the decision making process and should be written in Plain English.

If you have any additional queries which are not covered by the guidance please email climatechange@northyorks.gov.uk

Please note: You may not need to undertake this assessment if your proposal will be subject to any of the following:

Planning Permission
Environmental Impact Assessment
Strategic Environmental Assessment

However, you will still need to summarise your findings in the summary section of the form below.

Please contact climatechange@northyorks.gov.uk for advice.

Title of proposal	
Brief description of proposal	
Directorate	
Service area	
Lead officer	
Names and roles of other people involved in carrying out the impact assessment	
Date impact assessment started	

Options appraisal

Were any other options considered in trying to achieve the aim of this project? If so, please give brief details and explain why alternative options were not progressed.

What impact will this proposal have on council budgets? Will it be cost neutral, have increased cost or reduce costs?

Please explain briefly why this will be the result, detailing estimated savings or costs where this is possible.

<p>How will this proposal impact on the environment?</p> <p>N.B. There may be short term negative impact and longer term positive impact. Please include all potential impacts over the lifetime of a project and provide an explanation.</p>	<p>Positive impact (Place a X in the box below where relevant)</p>	<p>No impact (Place a X in the box below where relevant)</p>	<p>Negative impact (Place a X in the box below where relevant)</p>	<p>Explain why will it have this effect and over what timescale?</p> <p>Where possible/relevant please include:</p> <ul style="list-style-type: none"> • Changes over and above business as usual • Evidence or measurement of effect • Figures for CO₂e • Links to relevant documents 	<p>Explain how you plan to mitigate any negative impacts.</p>	<p>Explain how you plan to improve any positive outcomes as far as possible.</p>	
<p>Minimise greenhouse gas emissions e.g. reducing emissions from travel, increasing energy efficiencies etc.</p>	Emissions from travel						
	Emissions from construction						
	Emissions from running of buildings						
	Other						
<p>Minimise waste: Reduce, reuse, recycle and compost e.g. reducing use of single use plastic</p>							
<p>Reduce water consumption</p>							
<p>Minimise pollution (including air, land, water, light and noise)</p>							

<p>How will this proposal impact on the environment?</p> <p>N.B. There may be short term negative impact and longer term positive impact. Please include all potential impacts over the lifetime of a project and provide an explanation.</p>	<p>Positive impact (Place a X in the box below where relevant)</p>	<p>No impact (Place a X in the box below where relevant)</p>	<p>Negative impact (Place a X in the box below where relevant)</p>	<p>Explain why will it have this effect and over what timescale?</p> <p>Where possible/relevant please include:</p> <ul style="list-style-type: none"> Changes over and above business as usual Evidence or measurement of effect Figures for CO₂e Links to relevant documents 	<p>Explain how you plan to mitigate any negative impacts.</p>	<p>Explain how you plan to improve any positive outcomes as far as possible.</p>
<p>Ensure resilience to the effects of climate change e.g. reducing flood risk, mitigating effects of drier, hotter summers</p>						
<p>Enhance conservation and wildlife</p>						
<p>Safeguard the distinctive characteristics, features and special qualities of North Yorkshire's landscape</p>						
<p>Other (please state below)</p>						

Are there any recognised good practice environmental standards in relation to this proposal? If so, please detail how this proposal meets those standards.

Summary Summarise the findings of your impact assessment, including impacts, the recommendation in relation to addressing impacts, including any legal advice, and next steps. This summary should be used as part of the report to the decision maker.

Sign off section

This climate change impact assessment was completed by:

Name	
Job title	
Service area	
Directorate	
Signature	
Completion date	

Authorised by relevant Assistant Director (signature):

Date:



**Climate change impact assessment – supporting guidance
(Based on Devon County Council assessment and guidance documentation)**

This guidance should be used in conjunction with the climate change impact assessment form.

Date: December 2019 updated June 2020

Version: V4 – July 2020

Introduction

Purpose

This guidance and the impact assessment document should be used at the outset of the development of your proposal. The process will help you understand the potential environmental effects of your options and demonstrate how your proposal minimises or mitigates climate change impacts and maximises any potential environmental opportunities.

Please note: You may not need to undertake this assessment if your proposal will be subject to any of the following:

Planning Permission
Environmental Impact Assessment
Strategic Environmental Assessment

However, you will still need to summarise your findings in in the summary section of the form below.

Please contact climatechange@northyorks.gov.uk for advice.

Why carry out an impact assessment?

North Yorkshire is England's largest county, and one of its most rural, containing a diverse range of landscapes and historic assets including two National Parks and three Areas of Outstanding Natural Beauty. Our natural environment makes a considerable contribution to the county's economy and it is in our interest to protect it for a number of reasons.

Concern about climate change and the need to reduce carbon emissions has also led the Council to pass the following motion on 24 July 2019:

'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.'

In order to meet this aspiration we need to ensure that we consider the effect that all proposals are likely to have on carbon emissions and other environmental factors, and work hard to mitigate any detrimental effects.

Our climate is already changing – for example flood events in North Yorkshire are increasingly a fact of life – and an important part of the assessment highlights the need to improve the resilience of the county and its communities.

How to use this guidance

The impact assessment document lists a number of areas which may be impacted by your proposal. These are listed below.

The impact assessment document asks you to consider whether your proposal will have no impact, make things better or make things worse.

Click on each heading to find out more and for help filling in that section of the form, including hints and tips to help reduce these impacts.

The climate change impact assessment also asks you about timescale. Please think about impact over the lifetime of the project. The intention is to enable decision makers to understand the full impact of a project over time, particularly where there will be positive impacts in the longer term. For example, a project might be very expensive in the short term if capital investment is required but this could pay back over time in energy savings, and reductions of emissions, over a longer period. Please provide details where this is the case.

For further support and advice on taking account of environmental effects please contact climatechange@northyorks.gov.uk

Impact areas

[Greenhouse gas emissions](#)

[Reduce, reuse, recycle and compost](#)

[Water consumption](#)

[Pollution \(including air, land, water, light and noise\)](#)

[Resilience to the effects of climate change \(e.g. increased flood events, drier and hotter summers, rising sea levels\).](#)

[Conservation and enhancement of wildlife](#)

[Safeguarding the distinctive characteristics, features and special qualities of North Yorkshire's landscape](#)

Greenhouse gas emissions

The UK Government has committed to a target net carbon neutrality by 2050 levels and NYCC has an aspiration of net carbon neutrality by 2030, or as near as possible to that date.

Will your proposal affect the consumption of fossil fuels or electricity in buildings or vehicles?

The burning of fossil fuel directly or to produce electricity emits greenhouse gases.

Examples of how your proposal could affect fossil fuel or electricity consumption include:

- Constructing or demolishing a building, or changing the occupancy or opening hours
- Changing the technology (e.g. heating, ventilation, lighting, IT) in a building
- Altering the amount of travel required by staff or service users
- Changing the mode of travel or vehicle type

You can use the energy hierarchy to help identify opportunities to minimise consumption:

1. **Reduce demand for energy.** Is there a way of doing less of these things? e.g. schedule heating to match building occupancy; redesign a process to need less travel; make use of flexible working; enable residents to access services digitally.
 - **Improve energy efficiency.** Could the proposal achieve the same outcome with less energy input? e.g. Add insulation; use more efficient vehicles; buy low-energy appliances. Could you use different models of ownership, for example rental or sharing models? e.g. Philips' new model of selling [light as a service](#)
2. **Use renewable sources of energy.** Could the proposal use or promote the development of wind, solar, biomass and hydro energy?

Will your proposal produce waste?

Waste of any type contributes to greenhouse gas emissions due to its 'embodied energy' – the energy that has been used to produce the item. Specifying recycled materials when making purchasing decisions, not over-ordering and ensuring unwanted resources are reused and recycled will minimise wasted energy. Biodegradable waste, such as food, garden waste, paper, and wood, produces methane (a greenhouse gas 21 times more powerful than carbon dioxide at causing global warming) if it is allowed to degrade in a landfill site.

For further guidance see the [Reduce, Reuse, Recycle and Compost](#) section.

Will your proposal contribute to land-use change?

Generally, permanently removing vegetation such as trees and hedgerows and replacing them with grass or hard surfaces is treated as an emission of greenhouse gases because the carbon stored in the vegetation is released to the air when it is burned or biodegrades. This emission can be avoided by designing your proposal not to remove the vegetation or ensure that replanting takes place.

If you answered 'no' to the above questions then your proposal will not significantly affect greenhouse gas emissions.

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Reduce, reuse, recycle and compost

Does your proposal affect waste management?

Your proposal will affect waste management if it:

- Needs new materials or supplies
- Generates waste materials

How you can minimise waste

Reduce, for example:

- Could the quantity of waste produced by your proposal be minimised?
- Could perishable materials be stored or transported more intelligently to minimise the potential for them to become unfit for purpose before they're required?
- Has the proposal been designed to minimise the quantity of any packaging materials?

Reuse

- Is the proposal going to cause items or materials to be disposed of before the end of their useful life? Could the proposal be altered to ensure these are used again before disposal or could they be sold on for use elsewhere?
- Could items or materials that have been initially thought of as waste be given a new life as something else?
- Can you use a rental or sharing model for items?

Recycle and Compost

- Can the waste be recycled?
- If the waste products are not currently recyclable, can the process that produces the waste products be altered to use materials that are recyclable?
- Items such as food waste and garden/arboriculture waste should be composted.

Can you buy recycled products?

If your proposal needs new materials or supplies, before purchasing those from virgin sources, consider whether there is an alternative available that contains recycled material. All sorts of materials and products are available with recycled content, from office stationery to construction materials. Ask your suppliers whether they can provide a similar product with recycled content.

Can you specify alternatives to single-use plastics?

Could you specify reusable products instead or use paper or bioplastic alternatives? Note that biodegradable alternatives, such as paper or bioplastic, need to be recycled or sent to an energy-from-waste facility rather than landfill.

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Water consumption

Parts of the UK already suffer from water stress. The expected impacts of climate change, as well as population and household growth, will make this an increasing problem for the UK. The Water Act (2003) requires local authorities to “take into account the desirability of conserving water”.

Does your proposal affect water consumption?

Will your proposal...

- Make use of water directly?
- Change the way the county council, households or businesses use water?

If you can answer ‘yes’ to either of the above questions, then your proposal does have implications for water consumption.

How can your proposal minimise water consumption?

There are three ways to reduce water consumption:

1. Reduce demand for water

- Is any of the water to be used by the proposal unnecessary? Examples to help reduce water include:
 - Install a water meter to help change behaviour.
 - Use push-taps, low-flow shower fittings and put a Hippo in single-flush toilet cisterns.
 - Specify drought tolerant plants for landscaping.

2. Improve water-use efficiency

- Could the proposal achieve the same outcome with less water? Examples include:
 - Specify appliances that use less water – the EU Energy Label includes water consumption for dishwashers and washing machines
 - Use dishwashers (full) rather than hand-washing.
 - Specify dual-flush toilet cisterns

3. Reuse and recycle water

- Could the proposal reuse water? Examples include:
 - Harvest rainwater in water butts for irrigation and outdoor cleaning (e.g. vehicles, hard standing).
 - Use greywater (e.g. water from basins, baths, showers, vehicle cleaning processes) for irrigation and toilet flushing.

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Pollution (including air, land, water, light and noise)

Pollution has negative environmental impacts which in turn affect our health.

Air Pollution

Transport - Your proposal could affect air quality if it will make significant changes to transport patterns or vehicle types. If so, you should check whether your proposal will affect an Air Quality Management Area – find out [here](#)

If your proposal will affect one of these areas, you need to contact the relevant highway area team to discuss your proposal.

Mitigation options include:

- Is the transport necessary? Could technology be used to avoid the need to travel?
- Transport mode – buses, coaches and heavy goods vehicles are less clean than trains but are cleaner than cars and vans on a per tonne of freight or per passenger basis.
- Could you use an electric vehicle?

Other sources – Your proposal could affect air quality if it includes a significant use of combustion of any kind, or increases agricultural emissions. See the section on [greenhouse gas emissions](#).

Water pollution

Water pollution arises from a variety of sources. These examples may apply to your proposal:

- Soil erosion will wash sediment and soil pollutants into watercourses. Maintaining ground cover (i.e. vegetation) will help reduce soil erosion.
- Substance spills – oil, fuel, chemicals, paint etc. Store and use hazardous substances appropriately and have a clean-up plan in place to deal with spills immediately.
- Cleaning products contain chemicals that can harm the environment, such as phosphoric acid and bleach. Could you reduce the frequency of cleaning? Or could you use natural/ecological cleaning products instead?
- Use of pesticides and herbicides. Could the use of these products be minimised or natural/ecological products be used instead?

Noise pollution

Will your proposal significantly affect noise associated with these activities, or ones like them?

- Road, air and rail transport
- Construction work
- Events
- Entertainment venues

Light Pollution

Will your proposal increase night-time, external lighting?

- Is the lighting necessary?
- Could it be timed to switch off part-way during the night?
- Could you specify a light fitting that shines downwards and therefore minimises the amount of light that leaks away into the night sky?

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Resilience to the effects of climate change (e.g. increased flood events, drier and hotter summers, rising sea levels).

Enhancing the resilience of your proposal to extreme weather and climate change will save time and money by avoiding future impacts, such as service interruptions or damage to property. It's useful to think of weather as what is going on outside right now, whereas climate is weather averaged over 30 years.

Is your proposal sensitive to weather or climate change? Does it:

- Include aspects that are affected by the current weather and climate? For example:
 - Buildings, structures, roads
 - Green spaces and landscaping
 - The **need** to travel
 - A location vulnerable to flooding. Check the vulnerability of the location [here](#) and long term flood risk information [here](#)
 - Vulnerable groups – e.g. the elderly or people with sensory impairment

- Have a lifetime or legacy that extends beyond a few years?
- Provide or support critical infrastructure? For example:
 - Highways, bridges, drainage
 - Waste management
 - Health and community support
 - Education
 - Utilities
 - Digital / communications
- Provide contingency planning or business continuity needs?

What are the potential impacts of climate change on the proposal?

Consider how climate change effects could impact the business aspects of your proposal.

Ask yourself what the effects would be on your proposal if a heat wave, flood or extreme tide became the 'normal weather'. To help you, an example proposal is provided in Table 1.

Positive or negative impact on...	Change in climate						
		Hotter summers	Drier summers	Wetter winters	Warmer winters	Intense storms (rain, wind and snow)	Higher sea level
	Logistics/travel			Staff and other care professionals travel affected by potential flooding.		Staff and other care professionals travel affected by potential snow or storms.	
	People	Older people adversely affected by high temperatures					
Premises/location	Maintenance of garden areas will require more water.	Maintenance of garden areas will require more water.	May be affected by flooding, dependent upon siting		Higher maintenance costs of building.	May be vulnerable to coastal flooding.	

Commercial opportunity						
Financial	More costly if air conditioning is run during hot summers			Reduction in heating bills over winter.		
Infrastructure			Food medicines			
Environment			Avoid siting of new facility in flood risk areas			

Table 1: Example climate impacts for a hypothetical project to build an extra care facility in a coastal area.

How can you adapt your proposal to minimise the impacts and maximise any opportunities from climate change?

Think about how you could mitigate each impact you have identified. Mitigating measures should increase the resilience of your proposal so that it can tolerate a wider range of extreme weather before serious impacts occur. They should also be flexible so that adjustments can be made easily in the future as new information about climate change and its effects emerges.

Consider low cost measures that could be incorporated now and also higher cost measures, needing more research.

To help you, examples have been provided in Table 2 based on the same hypothetical project.

Make sure you incorporate the appropriate mitigating measures into your proposal.

Impact	Low cost, no regret measures	Higher cost measures needing research
Older people adversely affected by high temperatures due to hotter, drier summers	Design building to ensure it can be kept cool in the summer and warm in the winter.	
Maintenance of garden areas will require more water in hotter, drier summers	Specific plant species that withstand summer drought and winter deluges	Investigate the cost and practicality of installing rainwater harvesting equipment.
Staff and other care professionals' travel affected by potential flooding, snow or other extreme weather.	Doctors' appointments by skype to avoid inclement weather	Provide some staff accommodation within the premises to allow staff to stay overnight if necessary.

Table 2 – Example mitigating measures for some of the climate impacts identified for a hypothetical project to build an extra care facility in a coastal area.

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Conservation and enhancement of wildlife

Our outstanding environment underpins our wellbeing and economic prosperity. It provides products such as fuel, water and timber; services such as pollination, flood control, water purification and climate regulation; and with recreational and cultural opportunities.

NYCC has a duty to have regard to the conservation of biodiversity in exercising its functions. This duty was introduced by the Natural Environment and Rural Communities Act in 2006.

Will your proposal affect wildlife?

Your proposal will affect wildlife if it is likely to cause the following types of changes:

- Gains or losses in the amount of area covered by habitat
- Gains or losses in the connections between habitats – e.g. hedgerows and lanes
- Gains or losses in the variety of species
- Gains or losses in the abundance of species
- Change land and/or water management
- Alter wildlife management
- Introduce or remove elements from habitats, such as pesticides, water supply or forestry activities
- Cause disturbance to ecosystems through infrastructure, tourism or recreation

These changes are important to consider even if they occur in environments which are already managed, such as farms, parks and greenspace within urban areas.

If your proposal has a specific location, you should check if it is in or near a site designated for its wildlife or geological value. You can check [here](#)

How to maximise the opportunity:

Redesign your proposal to:

- Increase the area of habitat
- Provide additional connections between habitats
- Avoid disturbing species but provide additional shelter
- Avoid affecting a site designated for its wildlife or geological value

If you think that your proposal could have significant implications for wildlife, contact climatechange@northyorks.gov.uk

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Safeguarding the distinctive characteristics, features and special qualities of North Yorkshire's landscape

North Yorkshire's landscape underpins our economy, offering superb natural and cultural resources that sustain agriculture, attract inward investment and support a vibrant tourism industry. It improves our health and wellbeing by encouraging physical outdoor activity and is an antidote to stress.

What are ‘distinctive characteristics, features and special qualities’?

Landscape characteristics are the distinct, recognisable and consistent patterns of features that make one landscape different from another, rather than better or worse. In many parts of North Yorkshire valued characteristics include tranquillity and the darkness of night skies.

Features are the elements that appear in the landscape, such as hills, dry stone walls, trees, woodlands, hedgerows, fields, buildings, valleys, archaeology etc.

Special qualities are characteristics that might be highly valued, individually rare, outstanding, extraordinary or dramatic.

Will your proposal affect North Yorkshire’s landscape?

Your proposal will have the potential to affect landscape if it results in changes to the landscape’s distinctive characteristics, features and special qualities. These would include:

- New structures or features, such as buildings, signage, transport infrastructure, drainage systems, overhead cables, masts, kiosks or landscaping
- Removal or repair of an existing feature
- Changes in land use
- Changes to the management of land. This includes proposals not to carry out maintenance operations that have been done in the past.
- Changes in noise, lighting levels or odour

You should also check whether your proposal is in or near a World Heritage Site, National Park, or Area of Outstanding Natural Beauty using this [link](#) . These areas are designated for their cultural heritage, natural beauty and wildlife.

If your proposal results in any of the above changes, particularly in a designated area, then it is likely that your proposal will affect landscape.

Will your proposal result in visual impacts for people?

Could residents or walkers enjoying the scenery from viewpoints, public rights of way, picnic sites or parks be negatively affected by your proposal?

If so, what could you do to reduce these impacts to acceptable levels? Could you...

- Alter the location?
- Select materials or colours that blend into the landscape?
- Plant indigenous shrubs and trees to act as screening?

If you think your proposal could harm one or more of the distinctive characteristics, features and special qualities of the landscape, or cause adverse visual impacts, contact

climatechange@northyorks.gov.uk

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