

**Consultation on Northern Ireland's 2030  
and 2040 Emissions Reduction Targets  
and First Three Carbon Budgets**

**&**

**Seeking Views on CCC Advice Report:  
The path to a Net Zero Northern Ireland**

**Response Template**

**June 2023**

You can access the consultation document and online survey here <https://www.daera-ni.gov.uk/consultations/carbonbudget>.

We would encourage participation from all interested parties. The primary method for responses is online via **Citizen Space**. The survey is quick and simple to complete. Please supplement your response with any relevant supporting information, evidence and/or analysis.

If you are unable to complete the survey online, you can respond to this consultation by email or post. Please forward the completed Response Template to DAERA using the email or postal address below:

**Email:** [GreenGrowthFeedback@daera-ni.gov.uk](mailto:GreenGrowthFeedback@daera-ni.gov.uk)

**Post:**

Carbon Budget Consultation Response  
Climate Change and Green Growth Policy Division  
2nd Floor, Klondyke Building  
1 Cromac Avenue  
Gasworks Business Park  
Belfast BT7 2JA

Responses to this consultation are invited until 11.59pm on Wednesday 11 Oct 2023. Following consideration of all responses, a full analysis report will be published on DAERA's website.

If you require any further information, please contact a member of the consultation team on **028 9056 9708**.

Thank you for taking part in this consultation.

## First, please tell us 'About You', to help us analyse the responses

### A. What is your name?

Claire Shortt

### B. What is your email address?

Shorttclaire@belfastcity.gov.uk

### C. What is your organisation

Belfast City Council

## Questions 1 - 7

You can contribute to this consultation by providing observations and comments in respect of the following questions. Please supplement your response with any relevant supporting information, evidence and/or analysis.

DAERA would welcome your responses to Questions 1-7.

**Question 1. The 2030 Target:**

Do you agree that DAERA should follow the current advice provided by the CCC and keep the current 2030 emissions reduction target in the Act of an at least 48% reduction in emissions compared to the baseline?

Yes

No - please provide your reasons and any suggested alternative (Noting, that if the target

In the absence of any alternative advice, Council broadly agrees with the recommended targets. The targets are ambitious, however this is a climate emergency and the targets should in turn reflect this.

It is worth noting the impact that this would have on urban areas too in Northern Ireland. Emissions by sector differs across urban and rural regions and therefore this would need to be taken into consideration if targets were to be allocated sub nationally.

Belfast has developed an analysis of the scope 1 and 2 emissions for the city. This known as the Belfast Net Zero Carbon Roadmap and it has informed the agreement of city net zero targets. The Intergovernmental Panel on Climate Change (IPCC) has argued that from 2020, keeping within a global carbon budget of 344 gigatonnes (i.e. 344 billion tonnes) of CO<sub>2</sub> emissions would give us a 66% chance of limiting average warming to 1.5°C and therefore avoiding dangerous levels of climate change. If we divide this global figure up on an equal basis by population and adjust the budget to consider other gases that contribute to climate change, this gives Belfast a total carbon budget of c.14 megatonnes over the period between the present and 2050. At current rates of emissions output, Belfast would use up this budget in just over a decade at some point during the winter of 2030. However, Belfast can stay within its carbon budget by reducing its emissions by c.8.4% year on year. This would mean that to transition from the current position where emissions are 42% lower than 2000 levels to a local pathway that is consistent with the world giving itself a 66% chance of avoiding dangerous, runaway climate change, Belfast has adopted the following carbon reduction targets (on 2000 levels): 66% by 2025 80% by 2030 88% by 2035 93% by 2040 97% by 2045 100% by 2050. This road map was recently updated for the Belfast City Region Deal area and takes into account some of the already reduced emissions. The targets are now 64% by 2025, 78% by 2030, 87% by 2035, 92% by 2040 and 95% by 2045 reaching 100% by 2050.

**Question 2. The 2040 Target:**

Do you agree that DAERA should follow the current advice provided by the CCC and set a 2040 emissions reduction target of an at least 77% reduction in emissions compared to the baseline?

Yes

No - please provide your reasons and any suggested alternative.

As with question one, however future targets should be revisited with new advancements in technologies and historically reduced emissions.

**Question 3. First Carbon Budget (2023-2027):**

Do you agree that DAERA should follow the current advice provided by the CCC and set the first carbon budget at a level that has a 33% average annual reduction in emissions compared to the baseline?

Yes

No - please provide your reasons and any suggested alternative

Although Council broadly agrees with this, it realises the need for clear guidance coming from central departments. A complete breakdown of the budget, analysis by sector and information on the role of Local Government along with the science and data behind this, would be essential. This is relevant for all of the budget periods.

**Question 4. Second Carbon Budget (2028-2032):**

Do you agree that DAERA should follow the current advice provided by the CCC and set the second carbon budget at a level that has a 48% average annual reduction in emissions compared to the baseline?

Yes

No - please provide your reasons and any suggested alternative.

As above.

**Question 5. Third Carbon Budget (2033-2037):**

Do you agree that DAERA should follow the current advice provided by the CCC and set the third carbon budget at a level that has a 62% average annual reduction in emissions compared to the baseline?

Yes

No - please provide your reasons and any suggested alternative.

As above.

**Question 6. CCC advice:**

Do you agree that DAERA should follow any updated advice and recommendations from the CCC (as a result of the publication of the Northern Ireland 2021 GHG Inventory) when setting the first three carbon budgets?

Yes

No - please provide your reasons.

The science around climate is constantly improving and it is logical to use the most up-to-date recommendations.

We believe that DAERA should follow CCC advice and recommendations, and should review all peer reviewed research particularly where it is focused on Northern Ireland, United Kingdom, Ireland, but also being aware of new and existing good practice from other parts of the world.

## Question 7. Impact Assessments

Can you provide any information (relating to the potential financial, economic, social, rural and equality impacts) which will help inform the completion of the relevant impact assessments on the proposed carbon budgets?

Local authorities in NI have limited level of control over some sectors, such as housing and transport, that could greatly contribute to staying within the carbon budgets and achieving those targets recommended by the CCC.

The retrofit challenge, for instance, would help create construction jobs in places that need it most and that have been most impacted by the economic shock and cost of living crisis. Alongside national government intervention, local policymakers have the power to bring about change directly to their local area, through their approach to planning and discouraging car usage, for example. But the lack of powers and resources impedes this intervention. The national government should support them by developing plans and delivering the necessary tools and funding to meet that objective – support local authorities and public bodies to work and take action.

It is also worth noting that the majority of businesses in Belfast are Small to Medium Enterprises (SME's). In order to meet climate targets, we need to ensure that local SME's consistently have access to similar grants and supports as other UK regions in order to mitigate the impact of carbon budgets on their long-term viability. Opportunities to engage and participate in all-island initiatives or programmes for mutual benefit should also be assessed.

We should consider the impact on the service sector, and ensure it is not overlooked. According to research carried out by Enterprise Research Centre (QUB) in 2021 ref the Net-Zero target "SMEs in service sectors are more likely to cite a lack of relevant skills as well as the lack of information on low carbon technologies as barriers to their environmental activities than SMEs in production sectors".

While Belfast is primarily an urban conurbation it should be noted that there are small rural settlements within the city boundaries which may be adversely (or positively) impacted by the new carbon budgets. In particular access to active travel opportunities, public transport and EV charging infrastructure will support those communities in the process of decarbonisation.

The city of Belfast is also home to significant numbers of ethnic minorities whose views must be heard in the course of this transition. Similarly, the views of older people and young people on climate action plans and the carbon budgets are important to capture. The Youth Working Group of Belfast Climate Commission conducted research which was responded to by 1200 young people using a consultation mechanism managed by Council, called YourSay, this tool may be helpful in any future consultation or consideration of impacts.

## Questions on CCC Advice Report: The path to a Net Zero Northern Ireland

You can contribute to the dialogue on climate change by providing responses and comments in respect of the following questions. Please supplement your response with any relevant supporting information, evidence and/or analysis.

Northern Ireland Executive Departments would welcome your responses to Questions 8 – 17.

### Stretch Ambition

The options proposed under the 'Stretch Ambition' would mean increases in the amount of carbon sequestered in land and engineered greenhouse gas removals. The Stretch Ambition scenario would achieve a 93% reduction against the baseline by 2050.

### **Question 8. Stretch Ambition Scenario to reach 93% reduction by 2050:**

Do you agree that the Northern Ireland Executive should follow the advice provided by the CCC and choose the Stretch Ambition Scenario?

Yes

No - please provide your reasons and any suggested alternative.

Under the Stretch Ambition Scenario, it is proposed that tree planting increases to 3,100 ha/year by 2035. This ambition is in line with the ambitions of Belfast's One Million Trees Programme which to date has planted 63,500 trees since it was setup in 2020. One Million Trees programme aims to, through the setting up of effective partnership working across the city, build the necessary infrastructure to be able to significantly increase tree planting efforts across Belfast by 2035. The programme is a city-wide partnership with landowners and institutional bodies to identify, assess, plan for, implement, monitor, measure and maintain tree planting across the city, based on the overarching principle from the Belfast Tree Strategy of the 'right tree in the right place'. It currently is reliant in large part on the Woodland Trust's Emergency Tree Fund thus far, with limited support or resources having been provided from central government.

We would strongly suggest that in order to reach the Stretch Ambition, initiatives such as the One Million Trees programme are best placed to coordinate place-based action and delivery and should be utilised given the infrastructure that is currently in place to deliver. However, to ensure a pipeline of tree supply, land availability, willing partners, and robust assessment, maintenance and survival monitoring procedures, substantial financial resources and investment in existing tree planting regimes such as the One Million Trees programme are required, along with the establishment of land use agreements, if this ambition is to be fulfilled. BCC notes the CCC's assessment of the delays in tree planting having a substantial impact on their ability to contribute to reducing carbon emissions, given that the benefits of trees take several years to be realised. It is therefore critical that adequate resources and a financial package for delivery of this ambition is identified and deployed as a matter of urgency to ensure targets are met.

### **Speculative Options**

Even with the radical actions under the stretch ambition pathway, there is still an emissions gap to Net Zero. The CCC considered some speculative options including the deployment of direct air capture of CO<sub>2</sub> and a further decrease of livestock numbers. Whilst it is up to the Northern Ireland Executive to decide which speculative options to pursue, the CCC's advice on the 2030 and 2040 emissions reduction targets and the first three carbon budgets is based on the Speculative DACCS.

#### **Question 9 (a). The Speculative DACCS Option to reach Net Zero by 2050:**

Do you think that the Northern Ireland Executive should choose the Speculative Direct Air Capture with CCS (DACCS) option to reach Net Zero?

Yes

No - please provide your reasons and any suggested alternative.

We note the challenges associated with direct air capture with carbon capture storage, however believe that this option should be subjected to detailed analysis within the range of potential interventions being considered.

**Question 9 (b). The Speculative Agriculture Option:**

Do you think that the Northern Ireland Executive should choose the Speculative Agriculture option?

Yes

No - please provide your reasons and any suggested alternative.

Although Belfast is largely an urban area, there are small pockets of rural communities within our city boundary. It is important that during any transitions to zero emissions that these communities are considered and brought along at the same speed as the rest of the city.

**Question 9 (c). Other Speculative Options:**

Do you think that the Northern Ireland Executive should consider other speculative options such as (1) enhanced rock weathering and (2) addition of biochar to agricultural land?

Yes

No - please provide your reasons and any suggested alternative.

Belfast City Council is supportive of the CCC's view of the need for further evidence to support enhanced rock weathering and addition of biochar to agricultural land. Through the Horizon 2020 UPSURGE project, Belfast City Council is working in partnership with Queen's University Belfast and University of Antwerp, along with five other European City initiatives, to provide learning and evidence through the testing of both enhanced rock weathering and the addition of biochar on a climate demonstrator site on its land in Belfast. The project overall is designed to test Nature Based Solutions (NBS) to mitigate against climate impactors.

This project which is ongoing will be completed in 2025. BCC welcomes any opportunities to share learning, knowledge and evidence being gathered that may support the CCC's and DAERA's decisions on this as a speculative option. As part of Belfast City Council's One Million Tree initiative, our delivery partners are also working closely with farmers to mitigate against climate change and create more sustainable models of climate awareness and has existing strong relationships within that sector.

**Question 10. Agriculture Sector Contribution to Net Zero:**

Do you think that the Northern Ireland Executive should diverge from the CCC sector advice to deliver the required outcomes for the first carbon budget period and that these can be achieved through the actions outlined in the Agriculture sector summary?

- Yes
- No - please provide your reasons.

**Question 11: LULUCF Sector Contribution to Net Zero:**

Do you think that the Northern Ireland Executive should follow the LULUCF sector advice provided by the CCC?

Yes

No - please provide your reasons

*Please see BCC's response to Question 8 above in relation to reforestation.*

As well as the Million Trees Programme which is identifying and bringing forward land across the city for tree planting, Belfast is currently undertaking a number of pilot research projects to test a range of different land use and management approaches such as piloting integration of more species rich grasslands across its parks and estate, greening urban areas such as alleyways and public streets, delivering a Grey to Green programme, and testing nature based interventions on its land to increase capacity for carbon storage, rewetting and increasing biodiversity. Whilst we agree with the LULUCF sector advice provided by the CCC, we would suggest that an integrated and landscape based approach to land management to facilitate this is critical to its successful delivery. This means that both mitigation and adaptation measures can be delivered together and a place-based approach used, to ensure we are reaching net zero and preparing adequately for climate change, with other multiple benefits such as biodiversity being incorporated as well.

We would strongly suggest that a well resourced, clear, and robust, methodology for assessing soil carbon, and the impact that different interventions may have, would enhance the accuracy of the LULUCF targets, with knowledge gaps across those delivering such land use changes being filled to ensure accurate measuring and reporting can take place. As a significant landowner, Belfast City Council is committed to playing its role in the improved management of its land to help support the Stretch Ambitions targets, and is currently in process of adopting a Climate Action Plan which will support this. One issue that will slow down or act as a barrier to the effective delivery is deployment of adequate resources for training, capacity building and land management strategies for delivery.

Note also that this category includes both sinks and sources. These should be separated out to measure progress and change. Without this separation unsustainable land use and issues such as degraded peatlands emitting carbon may be overlooked.

**Question 12 (a). Buildings Sector Contribution to Net Zero:**

Do you think that the Northern Ireland Executive should consider the CCC advice on residential buildings, and develop a plan to improve energy efficiency and reduce reliance on fossil fuels, taking account of the capacity and capability of the low-carbon heating sector in Northern Ireland?

Yes

No - please provide your reasons.

Yes, Belfast City Council has worked through Belfast Climate Commission to commission the Belfast Net Zero Carbon Roadmap which analyses the scope 1 and 2 emissions of the city. Buildings has been identified as the primary source of emissions in the city and in response to this a Housing Readiness Assessment was undertaken in 2021, supported by the University of Leeds team who helped to develop the Net Zero Carbon Roadmap. Belfast City Council established a Belfast Retrofit Delivery Hub in 2022, working closely with NIHE and a range of stakeholders from across the construction and building sector. Energy efficiency improvements for residential buildings are critical. Recognising that new housing accounts for a small proportion of housing stock, effort should focus on retrofitting existing stock. A strategic approach would be welcomed - it should be noted that NI does not yet have a National Retrofit Strategy which is essential to facilitate planning, investment and capacity building. With new low carbon heating systems costing around 2.5-3 times as much as traditional fossil fuel based system, financial support will clearly be required across different tenures.

A Belfast Local Area Energy Plan (LAEP) will be produced at the start of 2024 which will shape how we use energy in the city in the future. The LAEP will seek to recognise the importance of assessing the unique characteristics of Belfast as part of the net zero transition and utilise place-based data and network system modelling as a foundation to simulate the most effective pathway to achieving net zero for the region.

Belfast's Local Development Plan (LDP) was officially adopted in May of this year and is a 15 year plan that sets out how the city will develop in the future. This will be delivered alongside the cities Belfast Agenda, that amongst other things, aims to re-nature the city and improve food systems, create a sustainable circular economy and be innovative on our path to net zero.

As the city is delivering its ambitions as set out in the Belfast Resilience Strategy it is also working to create and Climate Action Plan that will highlight specific projects that helps the organisation achieve it's net zero ambitions (outlined in the Belfast Carbon Road Map above).

Belfast City Council recognises the importance of these city strategies and would recommend consistency in direction of travel across the region.

**Question 12 (b): Buildings Sector Contribution to Net Zero**

Do you think that the Northern Ireland Civil Service (NICS) should lead by example in the government estate and phase out the use of fossil fuel boilers as per the CCC advice?

Yes

No – if not, please provide reasons.

Yes – the public sector has a duty to lead by example. As well as demonstrating leadership, such a move would support development of a low carbon approach to estates and asset management, helping to develop processes and pathways to help public bodies to follow suit. The NICS is also one of the regions biggest land owners – there are many other ways that the organisation can led the way and set an example for other organisations as well as having a massive impact on emission reductions.

**Question 13. Energy Sector Contribution to Net Zero:**

Do you think that additional measures (over and above those in the Energy Strategy) should be taken to ensure alignment with the CCC's advice?

xNo

Yes – please provide examples of additional measures.

While we do not propose that additional measures should be taken, we would draw attention to the development of the Belfast Local Area Action Plan which will provide a detailed analysis of the energy infrastructure in the city, and options for net zero projects. In addition the potential of a Belfast Heat Network is being considered at present and we note that the CCC advice identifies heat networks and air source heat pumps as the likely priorities for decarbonisation of heat. The introduction of a fabric first energy efficiency programme is also to be welcomed and aligns with work being undertaken in Belfast to analyse the building stock and retrofit requirements of the city.

Belfast is currently working on a Local Area Energy Plan. As the whole region has a population of 1.9million, a LAEP should be considered across NI.

**Question 14. Transport Sector Contribution to Net Zero:**

Do you think that the Northern Ireland Executive should follow the transport sector advice provided by the CCC?

Yes

No - please provide your reasons and any suggested alternative.

Belfast is working to support active travel through initiatives such as the Bolder Vision Strategy and through the Connectivity, Active and Sustainable Travel Group within the Belfast Community Planning Partnership, which is co-chaired by Sustrans and Translink. The travel hierarchy approach is one of the key principles underpinning this work. In addition, Belfast City Council has produced an EV Strategy for the city of Belfast, which sets out projections on EV car uptake to enable net zero to be reached, and the associated infrastructure requirements to allow this to happen. When approved this Strategy shall be shared, and DAERA, DFI and all key stakeholders will be invited to participate in the Belfast EV Group which shall oversee the implementation of the EV strategy. Substantial investment in both active travel and EV infrastructure will be required to achieve the city and NI targets.

**Question 15. Business and Industrial Processes Sector Contribution to Net Zero:**

Do you think that the NI Executive should follow the Business and Industrial Processes sector advice provided by the CCC?

Yes

No - please provide your reasons and any suggested alternative.

Clear guidance for industry would be necessary, and in many cases access to funding opportunities. It would be important to create a level playing field for industry so that the smaller (majority) are not left behind.

The main focus is around the transition from fossil fuel to electricity. It will also be important to allow for evolving technologies in this sector as soon as they become available.

### Question 16. Waste Sector Contribution to Net Zero:

Do you think that the Northern Ireland Executive should follow the Waste sector advice provided by the CCC?

Yes

No - please provide your reasons and any suggested alternative.

We broadly agree with the advice provided by CCC and the proposed actions to tackle climate change within the waste sector. We would however like to note a number of points to reflect the particular circumstances of waste management in NI, the UK and put forward recommendations for consideration. The immediate focus as to how the waste sector can drive down its carbon footprint is regarding the reduction of waste to landfill and in particular bio-degradable waste given the impact of methane gas. This should indeed be a key aspect of the plans, however, it should be noted that NI has an underdeveloped Energy from Waste (EfW) infrastructure and this action needs to be carefully co-ordinated in line with the development of local EfW capacity or at the very least capacity to export this material to EfW facilities. In terms of the export of Refuse Derived Fuel (RDF) we are aware that DAERA is exploring the possibility of an export ban on waste. Should this export ban include RDF it should only be implemented when local EfW is at a sufficiently developed stage. It is envisaged that EfW will be included within the UK Emissions Trading Scheme and as such by 2028-30, treatment costs will increase significantly for UK based facilities. If there is a significant variance in landfill versus EfW costs Local Authorities may be inclined to persist with landfill disposal for longer than desired. There needs to be a fiscal incentive/disincentive to maintaining landfill as a primary disposal route for residual waste. To drive biodegradable waste away from landfill DAERA should consider re-instating a new version of the Northern Ireland Landfill Allowance Scheme (NILAS). These reducing, annual thresholds of biodegradable waste to landfill which were placed on Local Authorities, were one of the most effective policy drivers over that last 20 years, along with the landfill tax escalator. Local Authorities were clear as to the implications of not complying with their NILAS obligations with the prospect of financial penalties resonating with elected members and the public. NILAS provided clear strategic direction to Local Authorities and the waste sector as companies and councils stepped up to the plate to deliver its goals. A revised NILAS would also assist in setting a clear pathway to the attainment of the Circular Economy Package target of a maximum of 10% of waste to landfill by 2035. If a revised NILAS was to be developed, consideration should be given as to how the private sector could be included in order to capture the commercial waste collected by these companies.

DAERA should liaise with UK regulators and government to consider the re-introduction of the landfill tax escalator. When this was operational it was set for a decade at around £8 per tonne increase each year which at that time was significantly more than inflationary increases. Without this fiscal measure and in the event of EfW facilities applying Emissions Trading Schemes, the cost variance between these two disposal routes will become greater and influence decision making.

In terms of tackling food waste, the Food Waste Regulations (2015) are in place but we would suggest that awareness amongst businesses which fall under this policy are either largely unaware of the legislation or fail to engage. Without proper enforcement of this legislation it is likely that compliance levels will remain low and the opportunity to capture significant tonnage of commercial food waste will be lost.

It is important that the DAERA climate action activities include the commercial and industrial sector and waste collected by private companies. A WRAP report noted that to achieve the recycling targets of the Circular Economy Package (65% by 2035) will require a significant step up from the commercial waste sector (70% recycling rate of commercial waste) and not to overcook the contribution to be made by Local Authority Collected Municipal Waste (58% target for LACMW) where much of the lower hanging fruit has already been picked. To achieve these climate action targets the waste sector needs clear strategic direction which sets the scene for waste management activities in NI for the next decade. Unfortunately, the time scales for the various strands of legislation, policy drivers and strategies have drifted and this has created a level of uncertainty regarding UK government intentions and timetables for delivery. The absence of a clear, strategic pathway increases uncertainty and risk levels and as such reduces the attractiveness to invest in the waste sector which presents a challenging environment when attempting to deliver on recycling and climate based targets.

The DAERA climate plan refers to the need to deliver behavioural change to bring about increased recycling activity. We agree that it is important to win over the hearts and minds of residents and businesses in playing their part in these important strands of work. DAERA should consider a large-scale promotional campaign similar to the "Wake UP to Waste" campaign aimed at getting the message through about the need for action and how everyone can play their part.

While the emphasis in the early years budgets is on diverting biodegradable waste from landfill the importance of reuse and repair should not be marginalised and should feature more strongly in future waste strategy documents. Many of the participants within this sector are smaller scale players such as charities and social enterprises. DAERA should consider how it can support these organisations and see how their activities could be scaled-up to deliver increased social, economic and environmental benefit.

**Question 17. Fisheries Sector Contribution to Net Zero:**

Do you think that the Northern Ireland Executive should follow the Fisheries sector advice provided by the CCC?

Yes

No - please provide your reasons and any suggested alternative.

**Data Protection**

Information provided by respondents will be held and used for the purposes of the administration of this current exercise and subsequently disposed of in accordance with the provisions of the Data Protection Act 2018 and General Data Protection Regulation.

