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Introduction

What is your name?

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What is your organisation?

Organisation:
Royal Town Planning Institute

Questions 1 - 7

Question 1. 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

If no, please provide your reasons and any suggested alternative (Noting, that if the target is to be changed, that the Act only allows it to be changed to a higher percentage):

Question 2. 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

If no, please provide your reasons and any suggested alternative.:

Question 3. 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

If no, please provide your reasons and any suggested alternative.:

Question 4. 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

If no, please provide your reasons and any suggested alternative.:

Question 5. 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

If no, please provide your reasons and any suggested alternative.:

Question 6. 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 Greenhouse Gas Inventory) when setting the first three carbon budgets?

Yes

If no, please provide your reasons.:

Question 7. 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?

Please specify:

Research published by the RTPI in 2022 on 'Rural Planning in the 2020s' has a significant amount of information on climate change, climate action and mitigation, and the impact of both on rural communities. The full report and technical appendices can be found here:

<https://www.rtpi.org.uk/policy-and-research/research/rural-planning-in-the-2020s/>

Climate Change:

Rural areas are susceptible to climate threats, for example via increased frequency and severity of riverine flooding; stronger and more regular extreme storms and associated damage to power lines, communications and transportation infrastructure; a greater potential for coastal erosion due to sea level rise; and impacts on farming, fisheries, forestry and aquaculture from rising temperatures, changing weather patterns, and ocean acidification.

Climate change is having a range of impacts on the 'natural environment', much of which is in its nature rural and non-metropolitan. Shifts in cultivation methods, in response to climate pressures, can impact negatively on soil quality and on the capacity of land to not only produce food but also sequester carbon and therefore mitigate climate change. The carbon sequestering function of rural land may be further reduced by development, which adds to the water quality issues that are now limiting development in many parts of the UK and Ireland.

The planning system should be used to effectively plan for, monitor and measure land use change to enable the best use of land to mitigate against climate change and create resilient rural communities. This could be done through strategic planning policies that can be developed and adopted region-wide.

Climate Action and Mitigation:

Rural areas can play a huge role in addressing climate change. Introducing nature-based solutions in both rural and urban locations (such as ecosystem-based adaptation and mitigation measures and green and blue infrastructure) in addition to improving agricultural methods and environmental stewardship, have the potential to provide up to 30% of the greenhouse gas mitigation required until 2030 to keep global warming to less than 2 degrees.

However, rural areas may also be disproportionately affected by climate change policies, for instance there is not the same access to public transport that is available in urban areas, so there is more reliance on the private car to access vital amenities. Higher density mixed-use development supports the viability of public transport networks, which are difficult to justify on a cost-benefit ratio in rural areas. Therefore, outside of urban areas, increasing people's ability to live local, use active travel for short trips, and improve access to affordable, integrated public transport hubs or new forms of shared mobility can help achieve the same climate action goals whilst ensuring access to essential goods and services, thereby helping to build more resilient rural communities.

The farming economy is a significant source of carbon emissions. However, if new forms of farming are required, these could be costly for farmers to implement, and their impacts also need to be mitigated. The transition of the agriculture industry towards a more agroecological approach and encouraging biodiversity net gain of land use changes and development could be facilitated through planning policies that support diversification of farm businesses.

The challenges of retrofitting homes to help them mitigate, and adapt to, climate change, are significant across all of the UK and Ireland. Some rural-specific problems are: a legacy of poor design and insulation which is not being addressed through existing funding streams, and the need to acknowledge that newer technology such as ground-source and air-source heat pumps requires highly skilled local maintenance, which can be harder to access in rural than urban areas. Ensuring that new housing is fit for the future, both in terms of design and location, is a key function of planning.

An emphasis on renewable energy can also disproportionately affect rural communities. Solar energy schemes are seen by some as being responsible for reduced agricultural productivity in some cases. It is land hungry but financially attractive to those farmers not hindered by grid constraints. More generally, there has been a rising volume of applications for renewables, and significant pre-application discussions often contesting landscape and farmland impacts. Local authorities often lack the expertise needed to deal with planning for renewable energy developments applications.

'Just Transition':

Research published by the RTPI in 2022 on Rural Planning in the 2020s, found that planning needs to balance a myriad of competing claims in rural space, from housing to habitat protection, flood management, biodiversity protection, and tree planting, as well as the effective management of landscape designations and the promotion of economic diversity. The report asserted that many rural areas need to urgently transition from where they are now – from locked-in carbon dependency and unsustainable patterns of development and energy use – to where they need to be very soon – places of economic diversity and adaptation. A framework is needed in which to make sense of competing needs and land uses, and the plan-led system which is in place in Northern Ireland is an opportunity to deliver a balanced approach to development that can set out a pathway for resilience in rural areas that reduces dependency on fossil fuels and supports innovation and economic resilience. However, local authorities require the skills, expertise and resources to deliver local development plans in a timely manner that can support this transition.

The idea of 'just transitions' seems to offer a way forward, as it argues that local people's livelihoods, and their future prospects and prosperity, cannot be overlooked. Ideas on how local populations share in the benefits of 'just transitions' emerged from a number of case studies in the research report. The 'Talking about our Place' toolkit (developed by NatureScot in 2012), for example, illustrates the central role of communities in identifying the values and benefits arising from key assets. The Toolkit was developed to empower rural communities in particular to represent their needs and preferences in planning. The toolkit has been followed by a wider move towards place-based approaches in Scotland in recent years, such as the Climate Ready Places initiative (2016) and the Place Standard Tool with a climate lens (2022), both of which were developed by Adaptation Scotland. In order to ensure a just transition, an integrated approach towards mitigation and adaptation planning should take place, to ensure decisions on net zero support, rather than work against, efforts to protect vulnerable communities from the consequences of climate change.

Role of Planning:

Planning plays an essential role in the climate action and sustainability conversation, with its ability to integrate energy, transport and land use planning,

encourage sustainable travel, develop the best local solutions to low carbon energy, deliver well located and energy efficient housing, guide investment in integrated blue and green infrastructure and coordinate strategic resilience to the impacts of climate change. Planning policy provides a strong mechanism and guide to managing development, with a place-based approach, ensuring that the local context is considered and opportunities are utilised to ensure maximum benefits for climate mitigation. Research shows that a place-based approach is essential to climate action, adaptation and mitigation policies, in order to avoid sectoral thinking and acting in silos, which can have a disproportionately negative impact on some communities, including rural communities. Therefore local planning services need to be suitably resourced and planners need to receive the appropriate training and support they require to make holistic place-based decisions that are equitable and climate conscious.

Question 8 - 11

Question 8. Do you think that the Northern Ireland Executive should follow the advice provided by the CCC and choose the Stretch Ambition Scenario?

No

If no, please provide your reasons and any suggested alternative.:

Whilst, yes, we need to achieve high carbon reduction targets by 2050, doing so through afforestation and engineered removals, as proposed by the stretch targets, is problematic. Firstly, the research base for engineered removals is not robust enough to follow this policy confidently, and the measuring and monitoring of carbon reduction resulting from afforestation is not reliable enough currently in Northern Ireland to ensure the actual levels of carbon reduction expected. Systems and procedures that assess baselines, reliably measure actions being taken, and monitor the effectiveness of solutions are currently missing. In addition, afforestation can actually harm local biodiversity and exacerbate other environmental crises, such as the nature crisis, when not implemented correctly.

RTPI NI would instead encourage the government to pursue a place-based and ecosystems-based approach, rather than a sectoral one, where policies relating to climate action and adaptation are integrated into land use policies and development decisions, and behaviour change of all individuals in society towards sustainable choices is encouraged through the creation of environments that encourage low carbon lifestyles. This can bring positive and lasting change, be more reliable longer term, and provide multiple co-benefits to society such as improved health and wellbeing, more secure supply chains, creation of sustainable green jobs, and a reduction in NI's reliance on fossil fuels.

Research published by the RTPI in 2021 provides the evidence base for a Place-Based Approach to Climate Change. The full report can be found here: <https://www.rtpi.org.uk/research/2021/march/place-based-approaches-to-climate-change/>

A 'whole systems' approach promotes an understanding of the interactions between different parts of the system, and how these can combine to affect the desired outcome. A place-based systems approach would align local plans with the national sustainability agenda, create mechanisms which enable planning across boundaries, level up by addressing regional disparities in productivity and access to social infrastructure, provide technical and financial support to planners in local authorities to address internal barriers to delivery, and harness the power of data sharing to promote access to information about the planning process such as platforms for digital collaboration and engagement.

Among other things, a place-based systems approach creates a system which complements and contextualises input from subject experts tackling an issue such as climate change or biodiversity loss. For example, planners work with sustainability and climate officers as well as transport planners and highway teams, in-house energy experts and ecologists, tree officers, flood officers, and housing officers among others. Planning and sustainability colleagues need to work together in local authorities to develop strategies and action plans which prioritise a place-based approach where people thrive within social and planetary boundaries.

The RTPI research suggests that while there are significant opportunities for joint working between planning officers and climate and sustainability colleagues, there is also a skills and knowledge gap within the planning profession that needs to be addressed so planners can play a leading role in the place-based response to the climate and ecological emergency from within local authorities. Shared outcomes, integrated climate and planning policies, skills and training, and area-based commitments (such as the Belfast net zero carbon roadmap) could support a more effective model for reducing emissions and building climate resilience.

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?

Not Answered

If no, please provide your reasons and any suggested alternative.:

Question 9 (b). The Speculative Agriculture Option: Do you think that the Northern Ireland Executive should choose the Speculative Agriculture option?

Not Answered

If no, please provide your reasons and any suggested alternative.:

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?

Not Answered

If no, please provide your reasons and any suggested alternative.:

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?

Not Answered

If 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?

No

If no, please provide your reasons.:

There needs to be a word of caution relating to dramatic afforestation plans – there needs to be a holistic approach which ensures that programmes of afforestation actually provide environmental benefits and do not result in the unintended sterilisation of local biodiversity in order to plant trees, which can thereby exacerbate other environmental degradation issues.

Greater evidence is required on ecosystem baselines and potential strategies' effectiveness to gauge whether this approach will help achieve in reality the reductions in emissions required. The role of other habitats and their effective management is required (such as rewetting) in order to understand the contribution of LULUCF to net zero ambitions.

Again, taking an ecosystems-based approach and focusing on outcomes rather than solely focusing on afforestation will ensure that the right approach is taken for a particular place, and that multiple co-benefits can be realised such as enhanced climate resilience, improved biodiversity and biosecurity from the importing of tree stock to fulfil targets.

Questions 12 - 14

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

If no, please provide your reasons and any suggested alternative.:

Northern Ireland is unusual in its still heavy reliance on oil for home heating, with 68% of households relying on oil for their central heating, compared with 4% on average in the UK. Gas central heating in NI households is at 24%, compared to 85% in the UK as a whole.

The RTPI commends the Department for Infrastructure in its initiative last year to make it easier for householders and businesses to install renewable technologies through permitted development rights. This would be a positive step on the path towards making our energy supply more secure and less carbon-intensive and micro-renewables such as Air Source, Water Source or Ground Source Heat Pumps have an important role to play. However, investment in housing is required as ageing housing stock in NI is not being retrofitted and insulated at the rate required, due to a range of barriers such as a lack of economic incentives and regulations, skills gaps, and advice and support from Government to homeowners.

In addition to maximising renewable and low carbon energy generation at all scales, and minimising the carbon impact of other energy generation, the planning system should:

- facilitate the integration of sustainable building design principles in new development;
- optimise the location of new developments to allow for efficient use of resources; and
- optimise energy storage and the integrated planning of infrastructure investment so that grid capacity is available where renewable energy opportunities are, and energy demand is highest.

The RTPI's research 'Planning for Smart Energy' (July, 2019) considers 'smart energy' in relation to national planning policy and guidance and the gap between what happens on the ground and the opportunities offered by smart energy, using the south west of England as a study area. It explores how the planning system can take a proactive, forward-looking and positive approach to supporting the UK's transition to a smart energy future. This research found that the planning system has an important role to play in identifying how new development can integrate with existing assets, such as ensuring new developments connect to district heating systems or that electricity storage can be co-located with existing generation assets. Maximising the use of existing assets and the integration of low carbon energy sources with smart technology could significantly reduce the need for new infrastructure, and avoid contentious proposals being hard-fought through the planning system, as well as offering the most cost-efficient solution.

Therefore, there needs to be strategic, whole system energy planning set out in the regional strategic planning policy framework with an emphasis on:

- detailed locally specific evidence, including engaging with the local distribution network operator, housing developers, energy industry and communities, to create a deliverable plan with high levels of local buy-in;
- planning for homes and developments that are "smart-energy-ready" i.e. have features that support the addition, at a later date, of smart technologies, for example low temperature distribution heating such as underfloor heating enabling later connection of a heat pump;
- planning for outcomes rather than specific technologies. For example, setting levels for onsite energy efficiency, rather than requiring a particular technology;

- performance monitoring and improvement policies.

A well-resourced, plan-led, positive planning service offers an established and effective process to support a sustainable future for Northern Ireland (NI). However, the service is under severe pressure and scrutiny, with specialist resources and skills under particular strain. Like any good public service, the planning system requires resources and capacity to deliver outcomes efficiently, effectively, and equitably. Financial support to increase the number of public sector planners employed, funding for specialist knowledge in renewable and low carbon infrastructure, and investing in efficiency-saving digital technologies can help support the shift from a largely reactive, regulatory planning system, to a proactive and strategic planning system.

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

If no, please provide your reasons and any suggested alternative.:

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?

Yes

If yes, please provide examples of additional measures.:

We need a place-based approach to renewable energy generation and provision, with strategic direction to unlock potential conflicts in land use planning. Local Development Plans are a significant opportunity to provide an integrated place-based approach to delivering low carbon energy supplies where the demand and opportunities are. More effective cross scale working between DAERA, DfI and Local Councils is needed to deliver local plans and policies that will support the transition to greener energy sources.

Until Local Development Plans are adopted, strategic planning policy would benefit from identifying broad areas which have the capacity to site wind and solar generation. The policy could also set out criteria against which proposals could be assessed. Individual sites should then be assessed on their own merit and factors such as environmental impact and community views be assessed through the planning system. Again, environmental expertise is required at local and central government levels to deliver effective and timely environmental impact assessments, mitigation and monitoring.

LDPs should seek to realise their area's full potential for electricity and heat from renewable, low carbon and zero emission sources by identifying a range of opportunities for energy development. LDPs should help to achieve renewable and low carbon energy targets by providing a presumption in favour of development in areas identified in LDPs. LDPs should also align with Climate Action Plans and have strong climate policies that deliver mitigation and adaptation through place-based solutions. However, this opens up a debate about the cycle of LDPs compared with climate action plans and renewable energy targets, and the speed with which LDPs are coming forward. There is a robust and wide-spread body of evidence which points to the need for speed in taking action on the climate emergency and therefore resource needs to be prioritised for preparing and approving LDPs across Northern Ireland. The adequate resourcing of the planning system is a key factor in delivery of LDPs as well as renewable energy infrastructure permissions. Flexibility to integrate climate action into emerging LDPs should be prioritised by the Departments, and mechanisms to speed up the policy cycle and deliver LDPs that are up to date with current climate change thinking is crucial for plans that deliver investment, jobs, and homes that are fit for the current challenges faced by climate change.

Planners will need skills and resources to ensure they can not only produce LDPs which align with the Council's targets in terms of carbon budgets, biodiversity, renewable energy targets and permissions etc but also monitor performance. This will also require much more interdisciplinary working in Councils and across Government Departments, between planners and climate change and sustainability officers to ensure alignment and best use of expertise.

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

If no, please provide your reasons and any suggested alternative.:

Research published by the RTPi in 2021 on Net Zero Transport emphasized a place-based approach which prioritises measures to reduce the overall need to travel, followed by those which shift trips to active, public and shared transport, and finally those which switch vehicles to cleaner fuels. By following this hierarchy, decarbonisation acts as a catalyst for reducing car dependency and creating healthier, safer and more equitable communities. By contrast, the switch to cleaner fuels only accounts for just over half of the necessary emission reductions and does not tackle other negative impacts of car dependency such as poorer health outcomes, increased strain on public services, and economic resilience.

With this in mind, the planning system should prioritise development that enables growth whilst achieving a substantial reduction in travel demand. This should focus on maximising the potential for local living by ensuring that most people can access a wide range of services, facilities and public spaces by walking and cycling. Increased home working, digital service delivery, and new forms of flexible work and community spaces will play a key role, alongside investment in place.

Residual travel demand should be shifted away from private vehicles to active, public and shared forms of transport, at a scale which significantly exceeds current UK best practice. Integrated transport networks should be accompanied by access and parking restrictions for most categories of private vehicle, creating liveable streets and ensuring that sustainable modes are the attractive option.

Achieving this requires a decisive break with the conventional approach of meeting predicted changes in travel demand with new road capacity. The scale of this challenge requires a truly integrated approach that unites transport and land use planning to deliver place-based visions which meet ambitious targets for trip reduction, modal shift and carbon reduction, alongside other economic, social and environmental objectives.

Achieving these place-based visions requires a policy framework that puts the reduction of carbon at the heart of decision making, and enables the planning, funding and delivery of the necessary interventions to create genuinely sustainable communities.

Question 15 - 17

Question 15: Business and Industrial Processes Sector Contribution to Net Zero: Do you think that the Northern Ireland Executive should follow the Business and Industrial Processes sector advice provided by the CCC?

Not Answered

If no, please provide your reasons and any suggested alternative.:

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?

Not Answered

If no, please provide your reasons and any suggested alternative.:

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?

Not Answered

If no, please provide your reasons and any suggested alternative.: