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Mike Brennan

Permanent Secretary
Department for the Economy
Adelaide House
39/49 Adelaide Street
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20 March 2023

By email only

Dear Mr Brennan,

**Response to the draft Circular Economy Strategy for Northern Ireland
consultation**

I am pleased to submit the response of the Office for Environmental Protection to the consultation on the draft Circular Economy Strategy for Northern Ireland.

An effective Circular Economy Strategy is cross-cutting, aiming to design out waste and pollution, keep products and materials in use, and regenerate natural systems. In doing so, a circular economy can contribute to the reduction of emissions, to protection of biodiversity, and to improvement of the health, wellbeing, and long-term wealth of the people of Northern Ireland.

We are pleased to see the draft Circular Economy Strategy which signals the Department for the Economy's (DfE) ambition and commitment to environmental improvement while meeting economic and social goals. We commend the 2050 target, policy goals and proposals for change within the draft Circular Economy Strategy. We also welcome the development of a Circular Economy Delivery Unit in partnership with the Department for Agriculture, Environment, and Rural Affairs (DAERA). There remains, however, an opportunity and a need to strengthen the proposals and monitoring framework, to ensure coherence with Executive-wide strategy and policy, and to properly resource the implementation of measures.

By responding to this consultation, we seek to assist the Department in developing a Circular Economy Strategy that stimulates change across the economy and society of Northern Ireland. We aim to offer a strategic response. We make five main recommendations while providing further detail and response to some of the specific consultation questions in the Annex to this letter. We limit our response on the consultation questions to a selection of those which we have a particular strategic or specific recommendation to make. We recommend:

1. That DfE engages with relevant government departments, agencies, and stakeholders to undertake a stocktake of environmental pressures and impacts.
2. That the 2050 target is supported by a coherent hierarchy of interim and long-term targets for material flows and sectors, with corresponding indicators.
3. That DfE clearly maps the interlinkages between the Circular Economy Strategy and all other relevant strategies, obligations, and sectors, both national and international.
4. That a comprehensive action plan specifying delivery and assessment arrangements, transboundary implications, proposed impact, and funding is developed alongside the final Circular Economy Strategy.
5. That a comprehensive monitoring and evaluation framework is developed that takes account of the outputs and outcomes of a circular economy, enabling stepwise improvements, and with clear links across government.

I trust that our recommendations will be of assistance in further developing the Circular Economy Strategy and look forward to its publication.

Yours sincerely,



Dame Glenys Stacey
Chair, Office for Environmental Protection

CC: Ms Katrina Godfrey
Permanent Secretary
Department of Agriculture, Environment and Rural Affairs

Ms Alberta Pauley
Head of Sustainable Economic Development Policy
Department for the Economy



Assessment of the draft Circular Economy Strategy for Northern Ireland

The OEP is an independent body that protects and improves the environment by holding government and other public authorities to account. Our powers in Northern Ireland came into force in February 2022.

We have analysed the draft Circular Economy Strategy in the context of the six ‘building blocks’ presented in our “Taking Stock” report¹ and in our recent response to the draft Ammonia Strategy.² We consider these building blocks to characterise the essential elements required for strong environmental stewardship. They comprise: understanding environmental drivers and pressures; creating a vision; setting targets; coherent strategy and policy; governance; and monitoring, assessing and reporting.

We present a summary of our conclusions and five recommendations below. This is followed by our detailed analysis.

Summary of our conclusions and recommendations

We commend the development of a draft Circular Economy Strategy for Northern Ireland that demonstrates ambition and commitment to environmental improvement while meeting economic and social goals. We consider that the draft Strategy provides a valuable starting point. In our view, there is scope to strengthen and improve the evidence base, targets, and actions to delivery and evaluate a circular economy in Northern Ireland. We therefore provide the following five recommendations:

Recommendation 1: We recommend that DfE engages with relevant government departments, agencies, and stakeholders to undertake a stocktake of environmental pressures and impacts.

The Circular Economy Strategy for Northern Ireland should be underpinned by a comprehensive understanding of the state of the environment, and an identification and prioritisation of the drivers and pressures caused by resource extraction, use and management. We welcome the publication of the Circularity Gap Report Northern Ireland. However, we would have expected this to have include a review of the environmental pressures and impacts so as to inform the development of indicators and a monitoring programme. It is not too late to carry out this assessment prior to publication of the final strategy, enabling a more focused approach to developing a circular economy in areas that would contribute most to reducing environmental pressures.

¹ OEP, [Taking stock: protecting, restoring and improving the environment in England](#), (May 2022).

² OEP, [OEP welcomes draft Ammonia Strategy for NI but identifies areas for improvement](#) (March 2023).

Recommendation 2: We recommend that the 2050 target is supported by a coherent hierarchy of interim and long-term targets for material flows and sectors with corresponding indicators.

We commend the adoption of a 2050 target based on the United Nations' recommendation for annual material footprint. However, such mass-based metrics have limitations and have greater value as apex targets and indicators. The 2050 target should, therefore, be supported by other interim (e.g. 5-yearly) and long-term targets, and corresponding indicators covering critical material flows and sectors. We recommend that these targets are developed in coordination with other departments and agencies. In our view, the suite of targets should be designed to kick start action (e.g. interim targets) and drive progress in the long-term. For example, the right interim targets could highlight the need for action well ahead of 2050 in order to achieve the longer-term 2050 target. They can also support assessment and evaluation by providing a measure of whether progress is being made on a sufficient pace and scale.

Recommendation 3: We recommend that DfE clearly maps the interlinkages between the Circular Economy Strategy and all other relevant strategies, obligations, and sectors, both national and international.

The circular economy cuts across social, economic, and environmental policy areas and levels of governance. As such, a Circular Economy Strategy for Northern Ireland must be developed, delivered, and evaluated coherently with all other relevant strategies, obligations, and sectors. However, the draft Strategy lacks sufficient details of such interlinkages. Specific and clear details of such coherence is particularly important because the draft Circular Economy Strategy is described as a delivery mechanism for, among others, the Environment, Green Growth and Waste Management strategies.

Recommendation 4: We recommend that a comprehensive action plan specifying delivery and assessment arrangements, transboundary implications, proposed impact, and funding is developed alongside the final Circular Economy Strategy.

Within the draft Circular Economy Strategy, the intended actions are in our considered view neither sufficiently detailed or ambitious, nor coherent with policy goals, to provide a clear path to delivery of the intended outcomes. When combined with the lack of commitment to, and specifics on resourcing these deficiencies create a substantial risk of the strategy not achieving its objectives. Without sufficient detail as to how the draft Circular Economy Strategy's proposals for change will be delivered, and funded, stakeholders may question the achievability of, and government's commitment to, the 2050 target. This in turn may delay the action needed to drive the scale and pace of change required.

Recommendation 5: We recommend that DfE develops a comprehensive monitoring and evaluation framework that takes account of the outputs and outcomes of a circular economy, enabling stepwise improvements, and with clear links across government.

Monitoring, evaluating, and reporting progress will be fundamental to realising the objectives of the draft Circular Economy Strategy. We welcome the proposal for an outcomes-focused monitoring framework within the draft Circular Economy Strategy. We consider there is a

need to strengthen this approach to monitoring. An effective monitoring and evaluation framework for the circular economy includes a suite of indicators, supports qualitative and quantitative analysis, and clearly defines a timeframe for monitoring, evaluation, and review of corresponding policy and actions. It also necessitates involvement with relevant departments and stakeholders.

Detailed analysis

Building Block One: Understanding Environmental States, Drivers and Pressures

We consider that an effective Circular Economy Strategy begins with a clear definition of the different geographic, sectoral, and material focus of actions, supported by a comprehensive evidence base. This includes an understanding of the state of the environment, and an identification and prioritisation of the drivers and pressures caused by resource extraction, use, and management. This provides a foundation upon which to develop a Circular Economy Strategy that can have the greatest positive impact to significantly improve the natural environment.

The draft Circular Economy Strategy provides a useful description of the relationship between circularity, material footprint and carbon emissions. For example, we welcome the analysis and identification of structural and strategic issues of implementing a circular economy provided by the Circularity Gap Report.³ We commend the transparency in publishing this evidence base and encourage the Department to make other relevant research and information publicly available.

However, the extent to which the identified reduction in material footprint will deliver environmental benefits is unclear. There is, for example, limited direct linkage between the measures in the draft Circular Economy Strategy and how they will support delivery of environmental obligations including air quality.

Therefore, **we recommend that DfE engages with relevant government departments (e.g. DAERA), agencies (e.g. the Northern Ireland Environment Agency (NIEA), Agri-food and Biosciences Institute (afbi)), and stakeholders to undertake a stocktake of environmental pressures and impacts (Recommendation 1).** This should facilitate a more focused approach to targeting and developing indicators and actions for a circular economy in areas that would contribute most to reducing pressures.

Building Block Two and Three: Creating a long-term vision and setting targets.

Here we also include our response to:

Q5. Is this vision the right vision?

Q6. Do you agree with this target to halve our material footprint by 2050?

The vision and 2050 target included within the draft Circular Economy Strategy provide a useful and welcome starting point. There remains, however, a need to support this 2050 target with a **coherent hierarchy of interim (e.g. 5-yearly) and long-term targets for**

³ [The Circularity Gap Report: Northern Ireland](#) (2021), and associated [methodology document](#).

material flows and sectors with corresponding indicators (Recommendation 2), and to clarify whether any targets will be legally-binding.

We commend the Strategy's ambition represented by the 2050 target based on United Nations' recommendations. It is a challenging target that will create a long-term focus for implementation of the circular economy.

However, the 2050 target, as mass-based metric has some limitations. It provides a general picture at an aggregated level and does not provide information on the location and relative environmental impact of material use. A target based on such a metric, even one which delivers halving of a material footprint, could be met by minimising material use of the greatest weight (e.g. aggregates) or in the least environmentally damaging areas. For example, by prioritising recycling efforts on non-hazardous products (e.g. plastic) rather than products that contain hazardous materials (e.g. batteries). Also, mass-based metrics can be sensitive to population change. An increasing population may reduce *per capita* material use while increasing overall use, resulting in greater environmental impacts.

Therefore, mass-based metrics have greater value as apex indicators of progress, complemented by other targets and associated indicators that address specific material streams and sectors. It is for this reason that we recommend the inclusion of interim (e.g. 5-yearly) and long-term targets in the final Strategy. This suite of targets will enable the Circular Economy Strategy's long-term ambitions to be monitored, evaluated, and delivered more effectively.

Building Block Four: Coherent Strategy and Policy.

An effective Circular Economy Strategy is cross-cutting. It requires coherence between relevant policies, strategies, and delivery programmes across government and sectors. Coherence of aims, actions, monitoring, evaluation, and reporting will enable unintended consequences, risks, and trades-offs to be identified and actively managed. Whilst we welcome the recognition of several related strategies and the requirement for a whole-system approach, to maximise the chances of the strategy succeeding there remains both opportunity and need for greater cohesion. For example, the draft Circular Economy Strategy does not provide sufficient detail on the coherence of targets excepting waste and Net Zero where the links are made clear.

Therefore, **we recommend that DfE clearly maps the interlinkages between the Circular Economy Strategy and all other relevant strategies, obligations, and sectors, both national and international (Recommendation 3).**

We note in this regard that the Environmental Principles Policy Statement, once adopted as required under the Environment Act 2021, should assist in respect of policy integration.

This question of coherence is important because the draft Circular Economy Strategy is described as a delivery mechanism for, among others, the Environment, Green Growth and Waste Management strategies. Whilst we recognise that several of these wider strategies are not yet finalised, there is an opportunity to embed circular economy principles and indicators within them and vice versa. For example, the aforementioned Strategies share indicators (e.g. greenhouse gas emissions) and areas for monitoring (e.g. municipal waste generation and management). Co-development of evaluative frameworks will contribute to

the creation of an integrated evidence base supporting policy and decision making across government.

This coherence should, in turn, be clearly described within the final Circular Economy Strategy. For example, how policy goals, delivery, and monitoring of a Circular Economy will align with contribute to the delivery of the Strategic Environmental Outcomes within the Environment Strategy.⁴

We consider that the absence of comprehensive proposals for integrating actions on key areas of a circular economy, in particular the bioeconomy (including agriculture, food, and garden waste) and chemicals, raises significant risks.

For example, while a thriving agricultural sector plays an important role in the overall economy of Northern Ireland, it also places exceptional demands on the environment through material and emission intensity. The delivery of coherent action on food production, consumption, waste, and the bioeconomy can aim to reconcile or mitigate such impacts. For example, the current surplus of livestock manure in Northern Ireland means that approximately 7,300 tonnes of excess phosphorus are applied to agricultural soils each year.⁵ The development of a circular bioeconomy presents an opportunity to utilise this manure surplus for the development of new fertiliser products for export, or displacement of expensive inorganic fertiliser imports.

In addition, the circular bioeconomy could play a key role in helping to decarbonise the gas grid and progress towards net zero in Northern Ireland.⁶ Careful consideration needs to be given to trade-offs, to avoid, for example, the development of a circular bioeconomy leading to increased ammonia emissions. This was a key issue we highlighted in our recent response to the draft Ammonia Strategy for Northern Ireland.⁷

Similarly, whilst recognising the unique position of Northern Ireland created by the Protocol on Ireland/Northern Ireland, the lack of progress with a UK Chemicals Strategy is concerning. Contamination of materials and products with hazardous substances limits the potential of recycling to meet material demand. Therefore, action by the private and public sector on clean material cycles is essential to achieving circular economy goals.

Greater detail on how the strategy and policy frameworks for such critical material flows and sectors should be included within the final Circular Economy Strategy.

Building Block Five: Governance and the Policy Context.

Here we also include our response to:

Q15. Do you have any further comments to make on funding instruments that could be used to enable Circular Economy solutions to succeed?

⁴ OEP, [OEP supports adoption of NI EIP but identifies areas for improvement](#) (September 2022)

⁵ RePhoKUs, [Phosphorous Stock and Flows in the Northern Ireland Food System](#) (October 2020).

⁶ Mehta, N., Anderson, A., Johnston, C.R. and Rooney, D.W., 2022. [Evaluating the opportunity for utilising anaerobic digestion and pyrolysis of livestock manure and grass silage to decarbonise gas infrastructure: A Northern Ireland case study](#). *Renewable Energy*, 196, pp.343-357.

⁷ OEP, [OEP welcomes draft Ammonia Strategy for NI but identifies areas for improvement](#) (March 2023).

Q18. Do you consider that government should play a role in assisting the transition to greater circularity through a dedicated Circular Economy delivery body?

Q19. What do you think a Circular Economy delivery body should look like?

We consider that the lack of clarity on funding and delivery of the proposed commitments within the draft Circular Economy Strategy a significant risk to achieving the Strategy's objectives. **We recommend that a comprehensive action plan specifying delivery and assessment arrangements, transboundary implications, proposed impact, and funding is developed alongside the final Circular Economy Strategy (Recommendation 4).**

Until sufficient funding is secured and detailed, implementation of actions and achievement of proposed changes will be challenging. We welcome the commitment to establish a circular economy funding programme. However, the draft Circular Economy Strategy lacks sufficient detail on when this funding programme will be developed, how funding and resources will be prioritised in relation to the Strategy's objectives, and how it will be coherent with funding programmes across government.

In the absence of such funding security, stakeholders may lack the confidence to make the required changes or investments. To stimulate the pace and scale of change necessary, funding should be secured as soon as practicable, over the long-term, and targeted and supported through effective policies and regulation.

Action plans are an important element in setting out pathways to outcomes and may include targets, indicators, policies, and activities that contribute towards the achievement of the overall ambition. The absence of a clear plan for delivery of the proposals contained within Circular Economy Strategy creates uncertainty around responsibilities and prioritisation. This gap needs to be addressed within the final Strategy.

We welcome the proposals to establish a Circular Economy Delivery Unit within government. To be successful, an effective delivery unit will need to have clearly defined responsibilities and authority, linked to those of existing departments and agencies including those external to government, and to associated delivery and action plans. This unit should be developed and have ongoing engagement across government and take account of other departmental obligations. This should include, for example, obligations in relation to Northern Ireland's first Environmental Improvement Plan under the Environment Act 2021 (see also building block 6) and the future application of Northern Ireland's environmental principles policy statement. External stakeholder engagement in the delivery unit will also be essential, with the opportunity for and purpose of such engagement clearly delineated from the outset.

The draft Circular Economy Strategy does not in our view sufficiently address the transboundary implications of the circular economy on the island of Ireland. For example, while the draft Strategy identifies policy, regulatory, and financial drivers of the circular economy in the Republic of Ireland⁸ no actions are proposed as to how the Department will align working with authorities in the Republic of Ireland. This is despite the Circularity Gap Report's⁹ recommendation of learning and developing knowledge transfer with the Republic of Ireland. Moreover, promotion of a circular economy, and coordination of work on related policy and approaches is one of the North-South Ministerial Council's work programmes on

⁸ The Department of the Environment, Climate and Communications [Whole of Government Circular Economy Strategy 2022 – 2023 'Living More, Using Less'](#) (December 2021); Circular Economy Bill; CIRCULÉIRE.

⁹ [The Circularity Gap Report: Northern Ireland](#) (2021), and associated [methodology document](#).

the environment. The implications and opportunities for transboundary resourcing, delivery, and monitoring needs to be explained within the final Strategy.

Building Block Six: Monitoring, Assessing and Reporting.

Monitoring, assessing, and reporting progress will be a fundamental part of realising the objectives of the draft Circular Economy Strategy. We welcome the Department's proposal to develop an outcomes-focused monitoring framework and the recognition of data availability and alignment of statistical classifications as barriers to improving circularity. However, we consider there a need to develop a more **comprehensive monitoring and evaluation framework that takes account of the outputs and outcomes of a circular economy, enabling stepwise improvements, and with clear links across government (Recommendation 5).**

There are widely differing approaches and degrees of development regarding circular economy indicators, and monitoring and evaluation frameworks globally. Fundamentally, an effective monitoring and evaluation framework needs to reflect: all aspects of the material life cycle and circular business models, environmental pressures and outcomes, socio-economic information, information on innovation and technological development, the sharing economy, and the international and trade dimensions.¹⁰ It should capture changes across governance levels as well as public and private sectors.¹¹ This information should easily be inter-linked and combined, hence there is a need for coherent classifications and statistical frameworks across government. Such a framework should be developed with stakeholder input, and in phases enabling stepwise improvements in monitoring and evaluation, reflecting policy goals and capable of being populated with best-available indicators.

A range of potential indicators are identified within the draft Circular Economy Strategy. We consider that several are not sufficiently defined (e.g. "Water, soil and air quality") and that the data needs for these indicators should be included in the final Strategy. For example, while some of the proposed indicators are already established (e.g. "waste landfilled") others are not and will require new or improved data collection (e.g. "biodiversity"). Furthermore, several aspects of the circular economy are not captured in the proposed indicators, such as the international dimension of the circular economy¹². It is also not clear how these indicators were selected and whether there was any coordination with other departments and agencies, including DAERA and NIEA.

In our opinion, a broader suite of clearly defined indicators, data needs and related resource requirements would assist the delivery of the Strategy's objectives. This enhanced framework could include, for example, the development of environmental-economic accounts and material flow accounts by sector and derived indicators. The Strategy's

¹⁰ UN Economic Commission for Europe. [In-depth review of measuring circular economy](#) (May 2021).

¹¹ EEA, ISPRA and the EPA network in Europe (2020) [The Bellagio Declaration: Circular Economy Monitoring Principles Measuring Europe's circular economy](#). The declaration sets out seven principles for monitoring the transition to a circular economy and defines indicator groups including material and waste flow indicators; environmental footprint indicators; economic and social impact indicators; and policy, process and behaviour indicators. The declaration emphasises the need for multi-level monitoring that captures changes happening across governance levels as well as the public and private sectors.

¹² Defra has made progress in developing international indicators (e.g. [Theme 10: International indicators](#)). However, data collection for such indicators is recognised as being challenging.

monitoring and evaluation framework would benefit from co-development with stakeholders (e.g. policy makers, civil society, companies, and research communities), and clearly mapped links to relevant indicators and evaluation frameworks across-government.

Also, the inclusion of a clear timeframe for data collection, evaluation, and review would enable stepwise improvements.

We commend the draft Circular Economy Strategy's identified need for cross-border collaboration and alignment on metrics and data collection. For example, between the Northern Ireland Statistics Research Agency (NISRA), the Irish Central Statistics Office, and other cross-border bodies. Within the final Circular Economy Strategy, the monitoring and evaluation framework should detail how DfE, alongside other relevant departments and agencies, will achieve this alignment. For example, through use of already established European statistics frameworks and classifications including environmental accounts. Such an approach is recommended, will foster coherence, and enable international benchmarking.

Additionally, an effective circular economy monitoring and evaluation framework should utilise qualitative information and policy analysis. Not all aspects of the circular economy can be captured by quantitative metrics such as indicators, hence official statistics will unlikely be sufficient on their own. We therefore recommend a broader approach to monitoring and evaluation in which qualitative information and policy analysis are utilised alongside quantitative metrics. This should facilitate whole-system assessment, taking account of the links between environmental, economic, and social factors cross-government, private sector, and societal changes.