Vision

By 2050 Northern Ireland will have an innovative, inclusive and competitive economy where business, people and planet flourish, with responsible production and consumption at its core.

Question 5: Is the Vision the Right Vision?

Yes

Any other comments?

We suggest that the draft Vision should make reference to the potential economic benefits of a functioning Circular Economy for Northern Ireland, as well as emphasising the virtue of preventing waste by design. Suggested wording change "By 2050, Northern Ireland will have an innovative, inclusive and ***thriving*** economy which is based on sustainable production and consumption, ***designs out waste*** and enables businesses, people and planet to flourish."

The initial focus, on four material streams and four sectors, tackles high CO_2 emissions and material footprint and has the potential to provide positive results quickly thus acting as proof of concept. The Vision also aligns with the pre-committed 10X objectives of other regional strategies, making it compatible and supportive of these strategies in enabling the development of economic opportunities that address climate and waste issues in Northern Ireland.

Things to consider:

- Data collection processes need to be tested.
- Adequate financial backing for Local Authorities.
- Development of other 'enablers' (incentives, penalties, national campaigns, enforcement responsibilities etc.).
- A programme in place to explain the vision to the public, why it is important and the benefits it will bring.

Belfast City Council has committed to being a carbon neutral city by 2050, with an 80% reduction by 2030, and 100% by 2050 (based on baseline emissions in 2000). This sets Belfast on an urgent and rapid decarbonisation pathway. Creating a sustainable and circular economy is a key part of our draft economic strategy. We are committed to managing a just transition, one that will provide new skills and opportunities for local communities and businesses. It is important that long term strategies strike the right balance across business, people and the planet.

Target

According to the Circularity Gap Report, each person in Northern Ireland is consuming c.16.6 tonnes of resources per year. This is our individual material footprint. With the earth's finite supply of resources and our current production and consumption patterns, we must start to rethink our relationship with resources and reduce our demand for them. To live sustainably, the United Nations (UN) recommends that we should only be using an average of 6-8 tonnes of resources per year.

Within this strategy we have included a target to reduce our annual material footprint to 8 tonnes per person by 2050.

Question 6: Do you agree with this target to halve our material footprint by 2050?

Yes

Any other comments?

The target is ambitious; however, it may be challenging to achieve. To aid this, we suggest developing sub-targets for the focus sectors and materials; the individual targets have to be made clear. Currently they are mentioned as potential percentage change against seven scenarios rather than the eight focus areas. This should be better aligned.

Significant changes in public behaviour will be required. A key tool to influence public behaviour would be through education at all stages (schools and work). We suggest there will be a requirement for business and commercial adaptation of the Planet, People, Profit model in that order.

To achieve this target there will need to be some key enablers in place such as:

- Infrastructures that facilitate Reuse/ Repair such as: Second hand Markets, Platforms and Hubs.
- Central Government creating consistent national campaigns to support the work.
- KPIs for the economy that are measured in something other than GDP (as this does not necessarily factor the environmental impacts of business activities).
- Targeted legislation, such as the 5p levy on plastic bags, aimed at changing behaviour through disincentive tools.
- A **resourced** action plan with clear targets and roles for all parties involved, including the public, business and public sectors, for example, Belfast City Council and partners through structures such as the Belfast Resilience and Sustainability Board and emerging Belfast Sustainable Food Partnership.
- A central Circular Economy unit to co-ordinate actions and report on progress against targets.

The changing of mindsets, business models and developing new products and services is going to be a complicated task, especially for Northern Ireland, which has many SMEs with limited time and resource. As per Q5 there will need to be a programme in place which explains these targets to the public if they are to accept them and join together in working towards achieving them.

Proposals for Change

Develop and implement a programme to support and promote behaviour change
Our behaviours and individual choices about what, where and how we purchase stuff, how long we use it for, whether we can reuse or repair it, and when and how we dispose of it, will ultimately determine if Northern Ireland can successfully transform to a Circular Economy.

A recent report issued by the House of Lords 'In our Hands' urged Ministers to lead a public campaign using all government levers to guide public behaviour change in order to stop biodiversity loss and achieve net zero.

Changing mindsets, business models and developing new products and services is going to be a complicated task, especially for Northern Ireland, which has many SMEs with limited time and resource.

This level of intervention is required to transform our relationship with resources.

Question 7: What efforts do you think government should make to promote behavioural change?

Please put the following in order of priority. Ranking Scale 1 = most preferred / 4 = least preferred.

- Provide or adapt physical infrastructure to help make it easier for people to change behaviours e.g., Recycling centres, refill stations in supermarkets and bottle banks **[2]**
- Use regulatory and financial incentives to increase affordability and availability of sustainable options **[1]**
- Provide greater transparency and clarity on what government is doing to show commitment and create momentum. **[4]**
- Provide information and tools to increase awareness and help change attitudes **[3]**

Create clusters and networks to raise awareness and facilitate collaboration

Many of the barriers to circularity will not be addressed without the utilisation of existing and new clusters and networks which will support industry to research, design, test and deliver transformative solutions.

Clusters are a geographic collection of interconnected companies producing similar or related goods/services that are innovation-orientated, seeking to benefit from integration across businesses.

Networks are an alliance of organisations (public/private or other) seeking to work together to achieve an economic goal, this could be within or outside a cluster. Networks may involve organisations within the same sector or across sectors which belong to the same value chain.

Question 8: What existing clusters and networks could be utilised to deliver transformative solutions for increased circularity?

There is a growing cluster of low-carbon industries and green entrepreneurs active in Belfast city. Many innovators are locating or linked to the development of the green port (which will be Net Zero by 2030) and Net Zero Zone in the Titanic Quarter. The Innovation District prioritised through the Innovation City Belfast partnership will act as an enabler to develop the technology-specific growth clusters.

Belfast City Council is a member of the Dublin Belfast Economic Corridor, a cross border partnership involving eight local authorities and two universities. This network is strongly positioned to support the delivery of transformative solutions to increase circularity, using the institutions, scale and capacity of a region of 2 million people. As referenced in the draft document Belfast City Council and Dublin City Council have partnered for a feasibility study into a joint capital project to support the circular economy and we hope to develop relationships and networks from this work. Belfast City Council is also part of a number of other learning networks – for example Core Cities, Resilient Cities Network and Four Cities Net Zero Carbon MOU all of which could demonstrate learning experiences and best practice exchange.

Belfast City Council is committed to supporting social enterprises and cooperatives as they play a vital role in delivering inclusive and sustainable growth and supporting community and economic resilience. Through our dedicated social enterprise and cooperative support programme we have provided support to develop the circular economy using the social economy business models.

Additional Networks and Clusters include:

Arc-21, Waste Resource Action Programme Environmental Campaigns (WRAP-ENCAP), Association for Public Service Excellence (APSE), Northern Ireland Council for Voluntary Action (NICVA), Northern Ireland Local Government Association (NILGA), Local Authority Recycling Advisory Committee (LARAC), NI Resources Network (NIRN), Business in the Community (BITC), Business Improvement Districts (BIDS), Certified Institute of Waste Management (CIWM), Belfast Chamber, Northern Ireland Chamber of Commerce and Industry, Federation of Small Businesses (FSB),Sustainable NI, Sustrans, RICS (Royal Institute of Chartered Surveyors), Smart District, Innovation City Belfast, Belfast Sustainable Food Network, Belfast Region City Deal, Health Care District (around Kings Hall area) Science and Tech District (e.g. around Titanic), Civic Spine (Belfast City Council), Fuel

Hubs, NI Water, Translink and other collaborations, NIEL (NI Environment Link), Repair Café, Invest NI, Universities and Colleges, Belfast City Centre Management, Innovation City Belfast - Net Zero Park (Net zero/ industrial cluster on Queens Island), Belfast Resilience and Sustainability Board (key city institutions within the Belfast Community Planning Partnership, sectoral clusters established through the new Climate Bill.

Question 9: What clusters and networks do you think will need to be established to maximise resource use?

The Draft Belfast Economic Strategy has identified priority enabling technologies in four areas. Digital, ICT and Creative Industries, Fintech and Financial Services, Life and Health Sciences and Advanced Manufacturing. By 2030 we aim to have at least four technology-specific place-based growth clusters where innovative businesses co-locate near key assets including those funded by the Belfast Region City Deal. For example, an opportunity for growth has been identified focussing on the development of zero emission marine vessels and shore power, development of e-fuel technologies and Belfast Harbour as a 'green port'. Maximising resource use will be helped by supporting this and similar place-based growth clusters.

Underpinning the establishment of the Belfast Retrofit Hub will maximise opportunities to upskill the workforce and increase the capacity of the construction sector to renovate and retrofit existing buildings. This will improve human resources within the circular economy and also the potential for co-operation on materials.

Potential cross-border networks across the island and the UK that would enhance scale or specialisation and ensure equivalence on standards. Belfast and Dublin are about to undertake a feasibility study and economic appraisal funded by the Shared Island Development Fund that will examine the existing and required measures to support a circular economy in and between both cities.

There will be a requirement for clusters / networks that focus on efficient collections of waste, giving consideration to the proximity principle and for Local Authority Networks that address legislative issues and collaborative approaches to shared problems.

Embed Circular Economy principles in public procurement

In Northern Ireland, public sector procurement has buying power in excess of £3 billion per annum. This provides strong potential to shape markets and behaviours through the development of specifications and contract management clauses to retain the value of materials for example purchasing refurbished computers or supporting leasing business models. This creates opportunity to influence the maintenance of the public estate, supply contracts including food and waste as well as delivery of infrastructure and capital projects.

Question 10. How do you think public sector procurement can best influence the behaviours of industry to increase circularity of resources?

Public sector procurement should place a higher emphasis on changing attitudes within procurement so that whole life costing is considered and that there is a desire to purchase used/non-version material in the first instance. Opting to lease/hire and contract equipment when appropriate will help stimulate the market for same and should reduce the negative carbon impact of production and acquisition. Buying products that fit with CE ideas: like recycled content, reusability.

Adopting a CE Standard (EG BSI 8001:2017) and applying it to procurement policy could further influence the growth of the CE. As could the development and adoption of a Single-use Plastic Policy that adds this consideration to procurement policies by default.

Public Sector procurement could influence industry on a range of factors linking to Circular Economy principles, including the reduction of scope 3 emissions, a regional framework for procurement to enable maximum impact, the role of procurement in energy use, landscaping contracts, catering, requiring suppliers to follow circular economy principles, use of buildings, land and office space by third parties and linking in with the voluntary and community sector etc. There is also significant scope to improve circularity through procurement when it comes to the creation of assets for the public benefit e.g. renovation and re-use of construction materials rather than rebuild, the use of less carbon intensive materials etc..

In 2020 Belfast City Council published 'Our Commitment to Inclusive Growth'. Reviewing and updating our approach to procurement in support of our inclusive growth ambitions was a key deliverable within this strategy. Specifically, Belfast City Council committed to the:

- Development and implementation of social value in procurement;
- Introduction of progressive procurement measures designed to support the local supply chain;
- Implementation of measures to increase the capacity of the local supply market; and
- Implementation of measures to ensure that our spend can boost the local economy.

The full document (https://www.belfastcity.gov.uk/documents/social-value-procurement-policy) presents the Council's approach to delivering on these commitments through its commissioning and procurement activities.

Create and support platforms and hubs to share goods and materials

To improve the use of resources and retain their value, people and businesses need to know what is available, where it is and what condition it is in. Information is required for people and business to make choices about what they want to access. This can be provided through online platforms for typical fast moving consumer products e.g. the Olio platform which is dedicated to helping stop food waste within the UK. It can also be provided for industrial materials through established platforms such as International Synergies. We want to create more platforms and hubs to share products and materials.

Question 11. What sorts of platforms do you think would be most useful in the future to enable people and business to share and reuse products and materials?

Initially there is a need for more methodological research to identify what exists now, and then to develop from there. With that said we suggest the following will be of use:

- Developing Knowledge sharing hubs to disseminate research, know-how and best practice. The gathering and publication of CE case studies would likely inspire and drive growth in the CE https://ce-hub.org/ce-stories/
- Belfast City Council's draft Economic Strategy includes a medium aim to establish an innovation 'platform' to link together consortia including large companies, universities, and SMEs, to compete for innovation funding.
- Utilize existing transport mechanisms and networks for easier accessibility to second-hand goods.
- The development of materials data hubs, scaling from local to national will help inform and cement the development of the Circular Economy.
- Promote existing platforms: eBay, vinted, Facebook etc.
- The development of a Pro-circ procurement research programme similar to Zero Waste Scotland would also help establish the CE.
- For businesses, the further development of the Invest NI's Industrial Symbiosis platform is useful for sharing one business' unused/wasted products which are valuable resources for others. https://www.investni.com/sites/default/files/documents/static/library/invest-ni/documents/industrial-symbiosis-guide-for-businesses-in-northern-ireland.pdf
- Consideration of the WARP-It app for use across the public sector network in particular to increase re-use.
- Research into the development and adoption of Business models that allow the end customers to buy specific goods and parts will help to cut down waste.
- Develop an offline network of facilities where people can drop off items suitable for reuse, which in turn can be then taken for use by other members of the public, either for free or for a small flat fee. The fee could help cover the cost of running the site, checking items are safe etc. Using current facilities, such as Household Recycling Centres would have obvious advantages and the public coming to dispose of items could be redirected to the reuse area instead.

Platforms and Businesses that give access and knowledge to 3D printing:

- Reduces waste in initial material manufacturing phase. (Beneficial in the focus sectors: Construction and Manufacturing)
- Precise technology enables greater control in product design to allow life-cycle considerations: lifespan, reusability, repairability, and recyclability.
- Fulfilling customer requests with ad-hoc manufacturing.
- Fab Lab- 3D printing allowing for ease of repair when paired with manufacturer schematics (for example a broken plastic clip on an otherwise sound vacuum cleaner).

Maximise the value of materials locally

When products and materials are kept in use, it retains the maximum value of those materials and components, reducing the overall demand for material extraction to make new products. We can do this by increasing the repair and reuse sector, doing more with natural bio-based materials locally available as well as growing our reprocessing sector.

The European Commission established the 'right to repair' for consumers and similar regulations have been introduced for GB.

The 'right to repair' regulation requires manufacturers of household appliances such as dishwashers, washing and drying machines, refrigerators and televisions to ensure their products are repairable for at least ten years through providing repair manuals and making parts available.

Question 12. What are the most effective tools that government could use to encourage and facilitate business and society to extend the life of products and services to keep materials and resources in use for longer?

Government could encourage products to last longer by design by accreditation for products that have longer guarantees. For example: requiring parts to be readily available to ensure repairability for an extended period of time, or if 3D printable, ensuring that the schematics for those parts are made available. These measures would be necessary to facilitate the success of "Right to Repair", legislation which should be introduced to Northern Ireland.

Develop training programmes to ensure the skills exist so people can find someone to repair their products or repair them themselves. Provide financial incentives to encourage people to keep items for longer e.g., subsidise the price of parts or cost of repair. Currently it is often nearly as expensive to get a product repaired as it is to buy a new one. Focus on items that will provide the maximum benefit. e.g., is it better to get a smartphone or a washing machine repaired in terms of carbon and materials footprint? Promote these schemes and benefits to the public to encourage behaviour change away from buying new towards repair or keeping for longer.

Work has been undertaken in Belfast to establish a retrofit academy to build capacity among existing and new tradesmen and officials, linked to the UK retrofit academy - a similar model could be used to support specific sectors within the circular economy. There is a need to link in with universities, Colleges of Further Education to provide repair apprenticeships in the key sectors identifies so that we have a flow of suitably qualifies individuals who can take advantage of future green jobs.

The Dublin City Council and Belfast City Council joint feasibility study and economic appraisal which will include analysis of aspects of the circular economy in both cities and will contribute to recommendations at operational and policy levels.

Taxes on goods, such as the £200 per tonne on plastic packaging that contains <30% recycled content use was successful thus this has to be expanded other goods to ensure use of virgin materials are disincentivised. Remove or adjust VAT on refurbishments/ reuse (e.g. refill tea had VAT whereas single-use cup did not.)

Local and Central Government must lead by example, for instance:

- Where the Housing Executive builds or refurbishes houses and accommodation, it should equip such premises with refurbished furniture and appliances as standard.

- Road and utility infrastructure should incorporate recovered/recycled materials (that may otherwise have been incinerated or landfilled) albeit not compromising the quality.
- Building projects (as above) should measure and document exact material inputs recorded so that when it comes to deconstructing/upgrading these assets, an exact list of materials is available. (x amount of steel girders, x amount of copper wiring, etc)
- Partner with Research organisations to educate and train on repairing.
- Set Clear goals and targets for different sectors.

Several Not-for-Profit Organisations/ Foundations (Such as Recoup, WRAP and the Ellen McArthur Foundation) have consistently worked in these areas - their research and guidance is readily available and should be considered.

Establish a Circular Economy funding programme
To unlock benefits at scale, we need to create economic incentives that enable Circular Economy solutions to succeed.

Question 13. Which of the following interventions should be a priority focus for government funding? Please put the following in order of priority. (Ranking scale 1 = highest priority / 9 = lowest priority)

Belfast City Council's ranking:

1. Research and development
2. Circular supply chains
3. Reuse and repair
4. Carbon emissions reduction
5. Secondary material markets
6. Digitisation and technology
7. Job creation
8. Waste reduction
9. Environmentally focused solutions

Further comments?

Whilst this is a subjective question, we believe that Research and Development should be addressed as a top priority, to create the technology and solutions, baselines and the knowledge required to enable circularity. Investing in this area first should also lead to more job opportunities and openings within the other areas listed. If successful, the top priorities will likely enable and support some of the lower priorities listed. Given city targets and council ambitions to reduce carbon emissions and the emphasis elsewhere and in the consultation on climate and carbon reduction, green growth etc., we have also ranked Carbon Emissions Reductions high on our list. Waste reduction and environmentally focused solutions should result as a natural consequence of the top tier priorities being implemented.

Question 14. What funding instruments do you consider would be most appropriate in years 1-3? Please rank. (Ranking scale 1 = most preferred / 3 = least preferred)

1. Grants & Subsidies
2. Blended finance (i.e., a mix of repayable and non-repayable finance)
3. Loans

Question 15. Do you have any further comments to make on funding instruments that could be used to enable Circular Economy solutions to succeed?

Available and future funding instruments is a large area of ongoing work in relation to net zero and the wider climate programme in Belfast and beyond. The work of 3CI (Cities Climate Investment Commission) may be of interest, and Just Transition Bond analysis by LSE, as well as research undertaken by PWC and UKRI on the potential co-benefits of place-based net zero.

The following additional steps may be considered:

- Widen access to finance (credits) when buying second-hand/circular products.
- Added incentives, e.g., vouchers, to purchase Circular Products (reused/ repaired).
- Better use of VAT to increase circularity of products.
- Grants and funds to initially fund R&D.
- Tax relief / VAT variations for new businesses/existing that employ circular design models and other practices that put circularity at the core of their business model.
- Blended finance to incentivise to choose circular materials or products over products made from virgin material (or virgin materials themselves).
- Supporting funding for a net-zero park at Queens Island to attract further investment

Create a regulatory framework that enables circular solutions to become the norm

Regulations, taxation and enforcement can further reduce waste and improve resource efficiency.

For example, the European Commission rules to establish the 'right to repair' for consumers. These regulations will affect the design, manufacturing and distribution of all applicable goods in Northern Ireland and will facilitate greater reuse and repair of such products.

Question 16. Considering the EU right to repair regulation, what other regulatory tools do you consider government can use to stimulate greater circulation of materials?

- A Requirement for circular economy assessments to be built into decision making, budget allocation and procurement processes
- Minimum guarantee for lifespan of products based on price
- An incentive/ tax to encourage and prioritise repair / refurbishment etc.
- Eco-labels (especially for clothes and the four target areas): grade high to low circularity, then tax based on that.
- Higher tax on unrecyclable/ non-circular materials and products.
- Extend EPR to other materials
- Correct the balance between cheaper virgin materials against circular materials.
- Remove financial, and other barriers (identify as appropriate to different sectors)
- Mandate the Eco-design of products.
- Mandate Circular Criteria in Public Procurement.

- Standards on products based on circularity
- Principle of "Designing out waste" built into all products and services

Deliver a Skills programme to support a Just Transition

Unless we plan, anticipate and resource for the transition to a Circular Economy, skills shortages could derail long-term goals for circularity and jobs growth.

As we progress into the 4th Industrial Revolution, some jobs will be lost in traditional sectors and the demand for new skills will increase, for example the demand for diesel engineers will decrease while the demand for those skilled in electric vehicles will increase.

Question 17. What three skills do you consider will be most critical to supporting the Circular Economy?

A range of the following skills:

1. Sustainable design: Designers need to be able to incorporate Circular principles into products. Also, consultants (equipped with 'Re-design' Skills) could help existing and new businesses in the transition to Circular Economy.
2. Repair and maintenance: Re-skilling traditional trades such as plumbers, electricians etc to ensure they are qualified to install future proofed green heating and electrical systems
3. Lifecycle assessment:
4. Logistics and reverse logistics
5. Sustainable supply chain management
6. R&D of technologies
7. Digital and Technological Skills: This will contribute to a 'Digital Spine' through product design, automation, data analysis, use of monitoring and sensors that will support circular systems.
8. Building retrofitting

Future Delivery

Delivery of Circular Economy Strategy

Question 18. Do you consider that government should play a role in assisting the transition to greater circularity through a dedicated Circular Economy delivery body?

- Yes

Question 19A. What do you think a Circular Economy delivery body should look like? e.g., Government led or a public-private partnership.

Both models have their advantages. A government led, place-based approach delivered in partnership with local authorities, private and social enterprises, as well as the community and voluntary sectors seems feasible. It should be adequately resourced.

19B: Please provide a Rationale for your answer

We suggest a place based approach, through local authorities building on existing capacities and networks, adequately resourced to support delivery against city, district and regional targets would be most effective.