# Carbon Pricing & Cross-Cutting Policies

## Q7: What further opportunities exist within our taxation system, beyond measures already implemented and planned, to promote emissions reductions, either on an economy-wide basis, or in specific sectors?

[redacted] The Rediscovery Centre:

The low cost of new items is a major barrier to the circular economy, which distorts the market against reuse or repair. Until the environmental and social impact costs of a product are included in the consumer price, the main barrier for the consumer will continue to be cost.

Some examples of taxation measures that do support prevention activities (avoidance, reuse, repair) include the levy on plastic bags and the planned (yet to be introduced) levies on single use beverage cups and take away containers. We would also support work toward an EU-wide plastic packaging tax as proposed in the Waste Action Plan for a Circular Economy. However examples of subsidies that support waste prevention or preparation for reuse, which are a priority in the waste hierarchy, are generally limited.

In some cases current subsidies actively undermine such activities. The Waste Framework Directive identifies a key economic instrument as being "Phasing out of subsidies which are not consistent with the waste hierarchy". A mapping exercise is required to understand where subsidies are unintentionally supporting recycling or recovery activities in Ireland - which are a lower priority in the waste hierarchy - ahead of prevention or preparation for reuse activities. It should further be added that the Waste Framework Directive requires that Member States prioritise activities higher in the hierarchy and therefore such subsidies go against EU legislation. Subsidies currently support recycling (through EPR schemes), recovery and disposal operations (through renewable energy subsidies) and litter cleanup and antidumping (subsidising the environmental consequences of cheap single use products).

## Q10: Are there any other cross-cutting issues that should be considered in the development of the 2023 Climate Action Pan?

[redacted] The Rediscovery Centre:

Recognising the social and economic impacts of the transition to a circular economy.

The potential for national and global emissions reductions -

The transition to a circular economy could lead to significant GHG emissions reductions due to a reduced need for upstream material extraction, manufacturing and transport.

While many of our consumer goods are imported, the emissions associated with material extraction, manufacturing and transport are often incurred elsewhere.

For example, recent research on textiles and further work on Circular Textiles Green Enterprise project, found that over 110,000 tonnes of used textiles are recovered or sent to landfill each year from household, commercial and industrial sources. This compares with just 10,000 tonnes being reused locally and roughly 40,000 tonnes being exported for reuse. If separate collection led to the diversion of just 5% more textiles away from household bins and toward to local reuse, it would save 33,250 tonnes of CO2 equivalent.

As approx 90% of our textiles are manufactured overseas, such local circular actions would not impact on national but on global emissions. As national and sectoral emissions reporting is not set up to deal with the complexity of measuring and valuing impacts that take place across regions, nations, and continents, it is not currently possible to measure or valorise such activity nationally, or to reward circular economy policy developments or behaviours accordingly.

On the other hand, there are a number of sectors that are directly impacted by circular economy measures reducing consumption and associated GHG emissions within Ireland. For example, the carbon intensity of national agricultural emissions relating to food production can be mitigated through food loss and waste prevention.

As circular economy activities impact GHG emissions throughout entire product supply chains, these impacts would be subsumed across a number of sectoral emissions reductions targets. For example, a reduction in demand for construction products through adaptive reuse, building materials exchanges and other sustainable building strategies would cut GHG emissions associated with manufacturing (e.g. a sector responsible for 7.5% of Ireland's emissions in 2021) and transport (e.g. a sector linked to 17.7% of Ireland's emissions in 2021). However, the connection between national circular economy activity and emissions reductions in these areas is not currently measured, or well understood.

Recommendations - valorising circular economy activities

Support for further research

To wholly capture the climate mitigation value of circular economy actions, we recommend that further research is supported on the following:

Building on recent research into qualifying and quantifying reuse (Q2Reuse project), develop a national methodology for calculating GHG emissions savings based on circular economy activity. While the Circular Economy Act requires the introduction of sectoral reuse targets, a systematic methodology has not been introduced for the purposes of equating reuse or wider circular economy activity with carbon savings. Further funded research is required.

Identifying how circular economy activity impacting national emissions across the entire product lifecycle can be recognised, and valued through national emissions reporting. Such a system would complement the current efforts to measure and value national and sectoral GHG emissions.

Identifying how to account for the value of local circular economy activity in reducing global emissions, through further work on, and accounting for, material carbon footprints, natural capital accounting or exploring offset mechanisms.

Ensure strong and effective reuse and other circular economy targets

Meanwhile, it is imperative that policy continues to support circular economy activity, building on recent policy developments including the Whole of Government Circular Economy Strategy, the Waste Action Plan for a Circular Economy, and the now legally ratified Circular Economy Act.

Notably, the Circular economy act sets out the legal framework for both national and sectoral targets, providing an opportunity to measure whole supply chain impacts against sectoral GHG emissions. These will place Ireland at the forefront in Europe as the one of the few Member States to formally legislate for reuse targets.

To ensure targets are effective, it is imperative that they are measurable (e.g. in the form of kg/inhabitant or equivalent), set for a fixed timeframe, that there are clear lines of accountability and regular progress reporting.

## Enterprise, Waste & Circular Economy

## Q71: What are the main barriers to consumers embracing the Circular Economy, e.g. lack of awareness, increased costs compared to disposable products, lack of access to circular goods and services?

[redacted] The Rediscovery Centre:

Valorising national Circular Economy activities in carbon terms:

Ireland's Climate Action Plan 2021 sets a national target of reducing GHG emissions by 51% by the year 2030 and achieving net-zero by 2050 when compared with 2018 levels. Emissions are currently 3% below 2018 levels, but continued efforts are needed to achieve the 7% reduction per annum in order to achieve the interim and overall target. It is therefore alarming that after a reduction in 2020, Ireland's 2021 GHG emissions exceeded pre-pandemic figures by 1%.

As we see more frequent climate change induced catastrophes unfolding around the globe, the time to take meaningful and impactful action is swiftly running out. As the National Centre for the Circular Economy, the Rediscovery Centre highlights the importance of accelerating the transition to a fully circular economy as a means of addressing this challenge.

The circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. A pathway to developing a more circular economy is set out in the EU Circular Economy Action Plan 2.0 (CEAP 2.0), adopted as one of the main blocks of the European Green Deal as Europe's new agenda for sustainable growth. As asserted in this CEAP 2.0, a transition to a circular economy will represent significant savings in overall GHG emissions. This pathway of action for achieving GHG emissions savings is supported by the annual Circularity Gap Report produced by Circle Economy. 2020 figures highlight that switching to a circular economy could reduce global GHG emissions by 39%. These savings relate to the reduced need for upstream material extraction, manufacturing, transport. Transitioning to a circular economy would also reduce emissions associated with end-of-life management of materials which typically accounts for 3-4% of total GHG emissions in OECD countries.

As an organisation we have made submissions to consultations on previous iterations of Ireland's Climate Action Plan, European and national Circular Economy policy and legislation as well as national economic policies - all accompanied by a broad suite of recommendations regarding the transition to a more circular economy.

In this consultation response, we would like to narrow the focus to two main climate-related themes that should inform the implementation of the Climate Action Plan, including:

Measuring and valorising GHG reductions achieved by circular economy activities in Ireland as well as recognising the social and economic impacts.

Effective policy approaches to shaping societal behaviours

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As circular economy activities impact GHG emissions throughout entire product supply chains, these impacts would be subsumed across a number of sectoral emissions reductions targets. For example, a reduction in demand for construction products through adaptive reuse, building materials exchanges and other sustainable building strategies would cut GHG emissions associated with manufacturing (e.g. a sector responsible for 7.5% of Ireland's emissions in 2021) and transport (e.g. a sector linked to 17.7% of Ireland's emissions in 2021). However, the connection between national circular economy activity and emissions reductions in these areas is not currently measured, or well understood.

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To ensure targets are effective, it is imperative that they are measurable (e.g. in the form of kg/inhabitant or equivalent), set for a fixed timeframe, that there are clear lines of accountability and regular progress reporting.

## Q72: What other opportunities exist to support decarbonisation through the acceleration of a transition to the circular economy?

[redacted] The Rediscovery Centre:

Citizen behaviour and perceptions of the circular economy

Current research:

The process of setting and agreeing upon carbon emissions reduction targets at a governmental level is an important one. However, the implementation of specific actions, measures, and interventions is equally important if such targets are to be achieved. In this section of the submission, we focus on research on human behaviour that can inform the specific approaches taken.

Existing research on consumer behaviour in Ireland indicates that there are significant challenges in this area. For instance, research carried out by the Rediscovery Centre as part of the DIRECT LIFE project revealed that fewer Irish adults were considering environmental sustainability when grocery shopping in 2021 than one year prior. Moreover, recent international market research indicated that Irish adults are less likely (39%) to consider sustainability in their shopping choices compared with adults in other countries surveyed. Finally, the DIRECT LIFE research indicates that 52% of Irish adults are unlikely to consider environmental issues, sustainability, or corporate social responsibility in relation to their own consumption choices. Other important studies related to circular economy behaviours have also been published by the EPA that reinforce the complexity and often conflicting nature of citizen behaviour in this area.

There is no single clear pathway for affecting consumer or citizen behaviour in relation to circular consumption choices. Indeed, existing research shows that human behaviour is extremely complex. Clayton et al. (2015) identify that intrinsic factors including personal values and self-identity can be predictors of some kinds of behaviour change, while extrinsic factors, such as economy, cultural norms, default options, and social relationships can be predictors of others.

Recommendations on supporting behavioural change:

Based on our reading of the existing literature we make recommendations on three kinds of approaches that may successfully address behaviour change in relation to the circular economy. These are set out in further detail below. It is noted that, to be effective, a monitoring and evaluation protocol would need to be developed alongside each of these.

Involve end-users in the design of circular economy and climate policy:

A vast body of research has highlighted the benefits of participative approaches to policy design and implementation. Participation helps to validate policy as legitimate and democratic. Moreover, such approaches can foster a sense of ownership among citizens and those who ultimately end up being governed by the end-product. More than this, research carried out by Runhaar (2017) argues that participation is important because it produces what he refers to as "useful knowledge".

Useful knowledge is produced when experts, such as scientists, are brought into meaningful dialogue with practitioners. Such practitioners include farmers in the case of agriculture, store managers in the case of retail, and private householders in the case of domestic consumption. The chief benefit lies in combining formal scientific knowledge with the everyday knowledge of how people carry out their lives and work in specific settings.

All of this underscores the value of the completed citizen's assemblies on climate and circular economy in providing for participatory policy formation. Similar, but smaller scale models should be explored for dealing with more detailed policy measures where relevant.

Community-based social marketing:

This approach is based on evidence from social psychology research that people change their behaviours when those behaviours are supported, adopted, and promoted by "real" people at a local level. Specifically, people are motivated by social status, prestige and acceptance among their peer-group. As such, it has been shown that people shape their own behaviours in line with what is valued by those with whom they interact on a daily basis. This approach has had success in incentivising "back-yard composting, reducing travel by car, and increasing kerbside recycling rates" as well as a range of other areas.

Linder outlines that a Community-based social marketing approach involves five steps including selecting behaviour(s), identifying barriers and benefits, developing strategies, piloting; and broad-scale implementation.

Linder et al. (2018) followed these steps to develop a food waste reduction intervention among residents living in a specific housing development in Stockholm, Sweden. Although found to be resource intensive, this kind of approach targeting the needs and difficulties of specific communities is a proven method for affecting change in behaviour.

Build and reinforce trust in public institutions and leadership:

The final component we advocate for in terms of behavioural change is the importance of the entire political-economic and socio-economic culture in which we are seeking to change behaviour. As is established in the literature, extrinsic factors such as the cultural normalisation of certain behaviours, and the political-economic structures that allow desired behaviours to take place are hugely significant.

A meta-analysis carried out by Cologna et al. (2020) found that trust in environmental groups and scientists was most strongly associated with pro-environmental and climate friendly behaviours among individuals and within public and private institutions. On this basis, they note with regard to scientists in particular, who are still the most trusted actors in society with regards to providing climate and environment related information, it is vital to maintain and increase this level of trust. Moreover, it indicates a need to visibly involve and delegate leadership roles to scientists and environmental groups in the development and communication of public policy with regard to affecting climate friendly behavioural change. Indeed, linking with some of the previous points, it is not simply about communicating science to the public, but about delivering those messages through the medium of trusted communicators.

Support ReMark initiative to drive behavioural change for the reuse sector:

In addition to these general behavioural change approaches, we welcome and encourage support for the national roll out of ReMark as a measure already being developed for the sector.

In 2019 CRNI completed a pilot project to establish a quality mark "ReMark" through the EPA Green Enterprise programme. The aim of this mark was to address negative consumer perceptions about secondhand goods due to concerns about quality and safety. In addition to addressing consumer engagement, the quality mark delivers broad and positive impacts to reuse operators participating in the ReMark accreditation programme. The final research report recommended that ReMark be rolled out throughout Ireland and Northern Ireland. Northern Ireland's Waste Prevention Programme 2019: Stopping Waste in its Tracks commits in Action 16 to establishing a reuse quality mark. At this stage, there is no equivalent policy commitment in Ireland to rolling out a quality mark.

Through policy alignment and a shared island approach, this mark could become a game changer as it has been for Scotland, underpinning Circular Procurement as well as consumer confidence in secondhand goods. In terms of Ireland's GHG emissions, Remark offers an additional method for reassuring consumers in the quality of reused goods and thereby promoting the transition to the circular economy. The programme is currently being further developed by CRNI through the Circular Economy Innovation Grant Scheme.

## Research & Innovation

## Q92: Have you identified any research and innovation gaps which need to be addressed? If so, how can these gaps best be addressed?

[redacted] The Rediscovery Centre:

See previous response re circular economy research.