

Submission by the Clean Technology Centre at Cork Institute of Technology on

the Consultation on the Waste Action Plan for a Circular Economy

Overarching comment:

For Ireland to set about transforming itself into a circular, sustainable society, significant support and investment is needed. It is now imperative that this work is carried out on a full national scale, with a coordinated and collaborative approach, rather than continue to run small independent programmes or rely only on carrying out research.

Changing behaviour, which is what this requires, takes time and no one organisation can do this on its own. Whether relating to institutions, individuals or within society as a whole, these behaviour changes require funding, know-how, collaboration and time. In addition, they need to be supported with ambitious policies.

However, there have been policy documents stretching back to the early 2000s that contained ambitious plans at the time, but of which many still have not been implemented (e.g. roll out of local small scale anaerobic digestion, smart metering, etc.).

It is time to just do it.

Waste Prevention

CTC wishes to make the following points in relation to waste prevention:

- The EPA's National Waste Prevention Programme (NWPP) has been held up as a success story since its inception in 2004. It was also the first such programme in the European Union and CTC is proud to have played a part in its development and effective implementation. The range and impact of the many projects and actions undertaken have been extensive and have embedded waste prevention in the national environmental sustainability conversation. However, in recent years there appears to have been a change in how the programme is driven and, while a review was carried out in 2018, the emphasis has moved away from on-the-ground, direct assistance to relevant stakeholders.
- The need for the continuation of the NWPP and its range of support, co-operation, collegiality and partnerships has never been more acute, to counteract growing paralysis and helplessness in the face of material depletion and climate change.
- With a move into the post-waste era, and given the need for multi-media (materials, waste, water, energy) approaches to environmental sustainability, it may now be time to consider a formal name change of the programme – one that deals not just with waste but also material flows, water and energy. Possible names could be: the National Resource Efficiency Programme or the National Sustainability Programme.

- With regard to the National Waste Prevention Committee (NWPC), additional membership of organisations such as SEAI and Irish Water, among others, would enhance its work. The NWPC should become a stronger working committee that develops and sustains partnerships while bringing the know-how of different stakeholders together. Meetings of this Committee need to be more frequent and more structured (e.g. with working sub-groups on specific topics) if any real meaningful progress is to be made.
- The need for a dedicated capital fund for resource efficiency (circular economy, waste prevention) in Ireland would support effective projects and bring Ireland in line with EU best practice.

Circular economy

The following is CTC's input on the circular economy:

- It is important that the implementation of circular economy principles in Ireland does not focus solely on recycling. Circular economy encompasses prevention, reuse, and repair and these need to be included. In particular, it is important to ensure that prevention is not neglected. While circularity is preferable to disposal, the underlying principle of European (and Irish) waste policy, in the waste hierarchy, is that preventing waste is preferable to having it re-enter the raw material stream.
- As per the opening point made in the introduction to this submission, transforming society into a circular model needs significant support in terms of resources.
- Ireland needs to acquire (with the CSO) national sector-specific and material flow data so that targeted actions can be taken. Without such detailed information it is not possible to properly prioritise policy approaches and targeted action to the material flows and the production sectors requiring action.
- We need to support shared use and 'product as service' approaches. This is especially true for the public service where changes should be easier to implement than in wider society.
- The EPA should continue to partner other government agencies like SEAI, BIM, EI, IDA, Bord Bia and business federations like Ibec, SFA, IHF, RAI, Chambers Ireland; we need to support an integrated multimedia approach to resource efficiency (materials, waste, water, energy), not just focusing on solid waste.
- Similar to previous SEAI programmes with a capital fund for energy efficiency in business, there should be a large capital fund programme for resource efficiency in business (including SMEs) for improvements to reduce resource consumption, covering both input materials and water. Such grant aid, allied to technical support, should be both an open rolling funding call available throughout the year, and multi-annual, to better meet industry's needs and timing. This could be a major boost for developing a circular model in Ireland.

- The Accelerated Capital Allowance (ACA) scheme allows companies to write off the cost of investments in certain energy efficient equipment and renewables against their profit in the year of purchase. There should be a similar ACA scheme allowed for certain material efficiency process and equipment improvements, including for water conservation measures.
- There are existing barriers in Ireland to reuse, for example the majority of charity shops not handling electrical and electronic items for reuse. This barrier does not exist at an EU level, as other member states have significant EEE second-hand sales through charity shops and other such organisations, for example in Belgium and Austria. This needs to be addressed (e.g. through support of PAT testing for EEE) as reuse has significant potential in retaining material resources in use.
- There should be government support of the repair industry. Tax incentives for repairs and reuse should be investigated. This could include measures such as further VAT reduction for repairs or even zero VAT for repairs, and exploration of the potential for citizens to write off repair costs against income tax (similar to how the Tax saver scheme acts to incentivise the use of public transport by workers through savings on tax). The proposed measure in the consultation document under the Textiles section on short term measures in proposing a reduction in VAT in relation to textiles repair and reuse is to be welcomed. It would be advocated that such a reduction in VAT for repairs should go beyond textiles and incorporate other consumer goods like electronics, electrical goods, etc.

In Sweden individuals can claim back half of the labour cost from their income tax for repairs carried out to their own goods for items like clothes, bicycles, fridges and washing machines.

- There are resource use issues that are typically addressed under other areas of environmental policy, as this is where the resulting pressures are seen, but which could also be tackled under the circular economy remit.
 - For example, the use of synthetic and natural fertilisers usually only comes to the fore from an environmental point of view in how they impact on surface and groundwater quality, and of course their contribution to greenhouse gas emissions. However, these could also be looked at from a resource use perspective and their optimisation in terms of efficient farming practices to reduce this resource use and in turn prevent pollution. For example, why not consider a water pollution levy on artificial fertilisers whereby the resulting money is ringfenced and used for water protection measures and the training and promulgation of best practice in the farming sector.
 - Similarly, the substitution of the use of horticultural peat with compost based materials helps protect the carbon sequestration and biodiversity potential of peatlands, while utilising a waste sector output as a resource.

- Please refer to the green public procurement (GPP) recommendations, which are also relevant to the circular economy. For example, one of the GPP criteria could be related to circular purchasing and the reuse of materials – acquiring good quality ‘used’ products – rather than always buying new products.

Green or circular public procurement

We wish to make the following points on green/circular procurement:

- GPP is something that is internal, and can be done by the government itself. It is not relying on third parties such as individuals or private industry to act. There is a need for the government to lead by example. GPP can have a significant impact – €8.5 billion¹ is spent on public procurement of goods and services – about 12% of GDP.
- GPP needs to be led from the top of the government. While much of GPP can be implemented by the Minister for Communications, Climate Action and Environment, full commitment is required from all government departments, especially the Department of the Taoiseach and the Department of Finance.
- Green or circular considerations have not been mainstreamed into public procurement in Ireland, and need to be. It needs to be mandatory and driven, in and by, the Office of Government Procurement (OGP). It needs dedicated staff in OGP doing this, with competence in GPP developed internally. We should ensure that all staff involved in public procurement take on and own the role of green or circular procurement. This includes reform of all relevant procedures to include circular/green considerations. In the Netherlands, 160 municipalities, provinces and water boards have signed the national sustainable public procurement manifesto. The public consultation document mentions in the “Other options and policy measures” section under GPP the suggested action to “Mainstream sustainability training across the public service”. This should most definitely be done.
- Life cycle costing/total cost of ownership needs to be brought into all procurement practices, even just purely from a financial point of view. In fact, it should be mandatory. An option that is the green or circular option does not necessarily have to be the more expensive. This is especially true when total cost of ownership is taken into account (for example, over 70% of the cost of most electrical items occurs during use phase. Therefore, from a financial perspective, the most efficient option should be always taken). Use of life-cycle costing is mandatory in Germany. Denmark has developed total cost of ownership tools for 13 different product groups.
- There should be an increase in incorporating aspects like service models instead of outright purchasing (similar to what is happening with office printers).

¹ Source: Enterprise Ireland.

- There needs to be a significant ramp up of training of procurement staff in all procurement roles in circular procurement practices. Countries like the Netherlands has a Circular Procurement Academy and Finland has a national competence centre for sustainable and innovative public procurement. While such a dedicated centre may not be necessary in Ireland, building up the capacity of staff through training is key, however this is achieved.
- There is a need for more tools for Irish procurers, like tender models, framework models, total cost of ownership tools, vendor questionnaires, ready reckoners, etc. However, there is no need to reinvent the wheel. We should use tools that have been developed in other EU countries. Those that are particularly strong in GPP include: Austria, the Netherlands, Belgium, Germany, Denmark, Finland, France, Italy and the UK².
- The country should aim for a long-term ambitious target of 100% for the percentage of public procurement that should be green procurement. This obviously needs to be built up over a period of time. A realistic timeframe for reaching 100% should be established. Other countries that have a target of 100% GPP include Finland. The public consultation document mentions in the “Other options and policy measures” section under GPP the suggested action to “Mandate inclusion of green criteria in all public purchasing”. This should be the target for Ireland’s GPP programme.
- Resource Efficiency Action Plans (REAPs) which have been introduced for a number of Government buildings have been successful in raising awareness on the issues of resource efficiency amongst staff, facility managers and management in general and have resulted in immediate cost savings for the exchequer. Extending REAPs and making it mandatory for every public building will reduce Ireland’s carbon footprint and make significant cost reductions in the public sector. This can be monitored and cost savings verified with benchmarking and “Origin Green” style independent checking. There should be support funding. A budget needs to be assigned to each public building to allow for REAPs to be actively implemented. However, implementing REAPs cannot be left as a side task tagged onto somebody’s day job – if this is the case then it won’t be done. Technical support, with a national benchmarking programme, should be initiated.
- As has been recognised by the Climate Action Plan 2019, public procurement has a significant role to play in reducing carbon emissions.
- Vehicles and transport are important, there is huge scope within this area for the public fleet. The Climate Action Plan mentions creating an early public procurement framework for EVs as well as accelerating steps to decarbonise the public transport fleet. The Climate Action Plan Total Cost Abatement curve shows that there are net lifetime cost savings for certain vehicles. Thus, all such purchasing of vehicles should automatically be EV,

² European Commission, Environmental Implementation Review, Individual Country Reports, 2019.

with exceptions only allowed in justified special circumstances. (Watch <https://www.youtube.com/watch?v=y916mxoio0E>).

- Incorporation of reuse into GPP. There is significant stock of fixtures and fittings across the public sector, so there may be scope to establish platforms for exchange, for example within a geographical area. Some preliminary work in this area has been carried out within the HSE on both a hospital and regional level. Such practices should become more formally adopted into both procurement procedures and asset disposal procedures, and existing barriers should be addressed.
- Centralised purchasing via OGP, from a food perspective, can sometimes take away the ability to buy local and seasonal, affect the ease of return of crates, disrupt more flexible ordering, and also affect hard to measure social and local benefits. It is important that there is clear and transparent ability for local ordering exceptions to allow for such benefits to be gained in relation to food.
- Monitoring systems for GPP are important in terms of tracking the adoption of circular and green procurement practices. The public consultation document mentions in the “Other options and policy measures” section under GPP the suggested action to “Extend monitoring and reporting of GPP to all public authorities”, which would be a good action to undertake.

Citizen engagement - awareness & education

The focus of the consultation document in relation to citizen engagement is very much on domestic waste segregation, contamination levels, and recycling. While all of this is necessary, we need to go beyond waste management only and engage society in a move away from a focus on endless material consumption. This of course is a wide ranging societal and economic issue and beyond the remit of any single government, let alone any single government department policy. Having said that, there are actions that could be taken to engage citizens in a broader sense:

- With the introduction of the UN Sustainable Development Goals and the Circular Economy, a wider appreciation of the perilous nature of our production/consumption model has grown. There is a need for the government and relevant agencies to act as a positive social force in advocating and promoting positive action. There should be more extensive and more focused supports to Irish householders, communities, local authorities, businesses, social enterprises and all the other key stakeholders in making Ireland more sustainable.
- Though there are various agencies and government departments working on different aspects of sustainability (see Our Sustainable Future), the EPA is unique in that it is charged with environmental protection – a task that underpins all sustainability work. Thus, the EPA should have a central role as an advocate of sustainable behaviour and as an informed leader.

- Potential topic areas:
 - Raise awareness of sustainable consumption, especially for young people.
 - An awareness programme on the benefits - social, environmental, and economic - of repairing and reusing.
- There needs to be an appreciation that societal change is an inexact science and not one that can be measured over short periods and in an explicit manner. For example, food waste per household dropped by over 35% between Waste Characterisation 2008 and 2018. Was this as a direct results of the Stop Food Waste programme? Unlikely, but it did it have an important part to play. The engagement approach developed by the SFW programme (which is especially important for food waste prevention due to the complexity of our relationship with food) has evolved and is worth considering in terms of citizen engagement for wider waste prevention.

Food waste

Context for food waste prevention: To a greater extent than many other priority waste streams, the wastage of food is closely linked to sociological elements such as culture, values and subconscious behaviours of the population. Where education, infrastructure and technical changes will be capable of solving many of the current issues for other waste streams, they are unlikely to achieve as much success for food waste prevention. For this, a more integrated approach to change deeply rooted public values and perceptions is needed.

- A **national strategy** on food waste prevention is needed. This should be amplified by the inclusion of food waste prevention in other relevant national strategies. For example, Ireland Agri-Food Strategy needs to incorporate cross-sectoral action on food waste. Food Wise 2025 contains no content on food waste directly, and scarce mention of waste in general. In order to achieve our targets of food waste reduction, the issue needs to be removed from it's silo and brought to discussions across Irish government and society.
- In order to become a "*farm to fork* global leader in food waste reduction" Ireland needs to make real and meaningful commitment to taking action on this issue. This will require a significant increase in public funding across the food sector. Ireland should look to neighbouring countries for ideas and collaboration on food waste prevention. For example, in 2014 the Scottish Government established an independent, publicly funded organisation solely focused on waste prevention – Zero Waste Scotland. Since committing to the SDGs, the Scottish, through Zero Waste Scotland, have made significant investment in food waste prevention initiatives, research and supports for businesses and consumers. They are now establishing a Food Waste Hub to further centralise the effort and expertise in the issue.

- **Consumer and household** level food waste makes up a significant proportion of total food waste, and contains the highest embedded environmental impact. Ireland already has a well-established and respected public facing programme addressing this section. However, in order for the EPA Stop Food Waste programme to double its reach, in a sustained and meaningful way, an increase in and guarantee of programme funding is required. Due to the multi-faceted nature of the issue, a focused campaign will not be enough to meet our reduction targets. Strategic collaborations with other public facing bodies is needed to introduce the concepts of food waste prevention alongside relevant issues like health, sustainable diets etc.
- In the shorter term, **food donation** is an effective mechanism to reduce waste from retail and processing sectors. Further support should be made available to businesses looking to implement safe and efficient food donation. Market based or regulatory instruments may be required to achieve a more widescale uptake of food donation – see the French law on food waste donation (LOI no 2016-138) or the Italian tax incentive for same (Legge del 13 maggio 1999, n. 133).
- It is time to drive the use of small-scale **anaerobic digestion** as a sustainable local solution for organic wastes and slurries. This would generate local energy, reduce greenhouse gas emissions, contribute to the circular economy, and protect water quality. Anaerobic digestion needs no more research – it now needs action and support.
- With regard to food waste, **agriculture** also requires attention and support. As a first act, the amount of food waste emanating from agriculture needs to be quantified and qualified, so that targeted action can be taken. The EPA have recently funded such research. With forthcoming EU requirements for reporting data on the levels of food waste generated in Member States, data on food waste from this sector will be required. Once this information is available, relevant bodies should be ready to take immediate action. While it will take 2-3 years to produce the required information on food waste in agriculture, commitment to action should be made forthwith.
- Improvements are needed in food waste segregation. Before further efforts are put in place to enforce householders to use segregation services, they should be made more widely available within the current areas of 500 or more people. Enforcement should be placed on waste contractors to provide food waste segregation to everyone within the designated areas, including apartment dwellers. Food waste collection within civic amenity sites should become standard and composting support should be maintained for people living in areas outside of the population centres. Attempts to enforce household food waste segregation before the activity is more widespread and accepted as norm will risk public rejection of the activity itself.

Plastic & packaging waste

We wish to make the following points on plastic & packaging waste:

- This area needs the full chain involved, which is difficult due to the international nature of supply chains and the import of many packaged products to the country.
- The issue of taxation of packaging associated with online sales delivered direct to consumers from overseas needs to be addressed. The law in relation to packaging waste needs to be changed in order to ensure such companies are required to be in an EPR or otherwise comply with the packaging Directive requirements.
- The forthcoming EU requirement for EPRs on packaging to introduce so-called eco-modulated fees is to be welcomed. These are to take account of prevention, recyclability, and so on. It is important that such a system rewards in a clear and transparent manner:
 - The application of the overall packaging prevention/minimisation standard in order to minimise overall packaging use.
 - The use of recycled, and recyclable, packaging material.
- The waste recycling industry needs to invest in the appropriate equipment in order to recycle additional materials that are being recycled in other countries, like soft plastics. This is essential in order to meet the forthcoming revised EU recycling targets.
- Research into the main sources, uses and end-of-life of plastics in Ireland should be carried out.
- Research and pilot new uses for waste plastics like plastic lumber.

Single use plastic

We wish to make the following points on single use plastic:

- Single use *in general* is important to tackle, not just single use *plastic*.
- Taxation on all single use items should be considered regardless of provenance, e.g. a supermarket switching to compostable bags does not get absolution.
- Single use plastics that are not recyclable (e.g. composites), either should be taxed or removed from the market.
- Reuse programmes to substitute single-use plastics and other materials are recommended and should be supported (e.g. Refill.ie; the Conscious Cup Campaign). Research into best practice programmes elsewhere is also recommended.
- While there is an EPR for wipes under development at an EU level, a tax on wipes could also be considered.
- Consider urban, geographically-limited, bring-back schemes for beverage containers.

Textile waste

Consider targeting textiles as a priority waste stream:

- Include fashion consumption information and environmental impacts in citizen engagement measures. The consultation document mentions under other policy options “education and awareness targeting younger consumers in particular through engagement with Education Sector around textiles as a theme of SDG 12 Sustainable Production and Consumption”. This should be implemented.
- Investigate economic instruments to reduce textile waste and to better manage textile waste, particularly in light of the forthcoming EU requirement for households to be able to avail of separate collection of textiles from 2025.
- Promotion measures are needed to increase use and social acceptability of second hand clothes, clothes sharing apps, etc. This would require funding to help develop the charity sector which, traditionally, has been seen as a bargain basement rather than a sustainable and fashionable option.
- A better understanding of the private companies that are involved in this area is needed. Significant volumes of materials are collected annually that ultimately end up being exported. These are materials that could be reused in Ireland.
- Better information needs to be disseminated on what waste textiles can go where, e.g. textiles for reuse, textiles for rags, etc.

Construction and demolition waste

We wish to make the following points on construction and demolition waste:

- Incorporate life-cycle thinking and eco-design into all construction projects to design out waste at all stages from choice of raw materials (lower embodied energy, re-use of C&D waste, factory built modular units to minimise waste and provide a higher quality product); building design (maximise site layout in terms of passive heating, use of natural light and rainwater/greywater capture, zero carbon buildings with energy storage capability, design for disassembly, water conservation measures); to use of by-product and end of waste criteria to better manage unavoidable C&D waste.
- Green public procurement guidance for construction needs to be promoted in all public bodies and government departments and its implementation monitored.
- Require developers to address waste prevention and life-cycle thinking in design and construction by including it as a requirement on the planning application form. Require developers, at the planning application stage, to identify opportunities for recycling C&D waste materials. Current guidance for planning applicants does not address this. Example of requirement from current Planning Guidance (Cork Co. Co.): *Construction waste shall be disposed of in accordance with the Waste Management Acts*

1996 to 2006. If construction waste is to be removed off site it shall be disposed of to a licenced or permitted facility.

- Train planners in construction waste avoidance techniques to allow them critically evaluate planning applications and Construction Waste Management Plans. There is plenty of guidance published on this topic including Irish case studies such as EPA Research Report 146 - *A Review of Design and Construction Waste Management Practices in Selected Case Studies – Lessons Learned*³.
- There should be a roll out of training for public procurement personnel procuring and managing construction projects. A pilot training project carried out under the EPA's LAPN programme in 2019, led by Limerick City & County Council involved training local authority procurement personnel in designing out waste and efficient design in the construction sector at both the procurement stage and project management stage. Training was for architects/technicians, engineers, quantity surveyors, project managers, etc.
- Include waste prevention in design and construction on curricula for third level courses for engineers, surveyors and planners.
- Pilot/demonstrate new choices of materials in the construction sector. Support more environmentally friendly design.
- Require developers, at the planning application stage, to identify in their C&D Waste Management Plan if their site either generates C&D waste material (soil & stone, aggregates, road planings etc.) that could be reused elsewhere or if the development requires such materials during the construction phase. The Regional Waste Management Offices should maintain a register of source sites and destination sites (map based/grid references), the types of C&D waste materials, estimated tonnages and dates when generated or required. Developers should be required to provide the RWMOs with this information.
- Article 28 (end-of-waste) is not currently widely used in Ireland for C&D waste other than for two EPA decisions on aggregates in 2019 and one on gypsum in 2011. End-of-waste status is widely used in other member states for aggregates and gypsum from recycled C&D waste streams. The public consultation document in the "Other options and policy measures" section under C&D Waste has the suggested action to "develop national end of waste decisions for specific construction and demolition waste streams". It is recommended that the use of end-of-waste criteria for selected C&D waste streams in other EU states is evaluated and the potential for similar implementation in Ireland to divert waste C&D from treatment/disposal routes be proactively explored. These criteria could be built into building site permits to ensure segregation. Specific stream targets could also be considered.

³ <http://www.epa.ie/pubs/reports/research/waste/research146.html>

- Waste exemptions in the UK allows for up to 1,000 tonnes of soil to be brought from elsewhere for use in housing developments. Another exemption allows for the temporary treatment of waste (including screening or blending) on a small scale to produce soil at a construction or demolition site. Article 27 is used for declaration of soil and stone waste as a by-product for the majority of this type of C&D waste in Ireland but significant quantities ends up in EPA licensed or local authority permitted sites. These sites will not meet with anticipated increased demand from the construction boom and a capacity crisis is well flagged. Proposed new soil trigger limits may also limit future quantities of soil and stone declared as a by-product. Alternatives such as prevention, reuse on-site or on other construction sites must be promoted.

Wastes from garages

One of the most hazardous items that most Irish households own is their car yet we hand them over and expect garages to manage our myriad of potentially hazardous wastes for free (or at least as cheap as we can get). Garages are mini civic amenity sites – they handle a wide range of wastes and store them on site until there is sufficient volume to remove. However, most have had insufficient training and are not fully aware of the important role they play.

- In the first instance there is a need to educate the public about the hazardous nature of cars in terms of the hazardous and other problematic wastes generated during their servicing and the importance of the use of responsible garages.
- There needs to be training of garage staff and support for garages (e.g. grants) in order to set up proper waste management compounds. The majority will simply not do this on their own. Once this support has been offered there is a need to enforce the existing legislation – this again requires funding for local authorities.
- There should be a standard national charging system that sets out the range of charges that garages pass onto the customer for waste management in relation to oil changes, oil filters, etc.. This would create funds for the garages to properly manage wastes but also generate an expectation from consumers to see these services available.

Extended producer responsibility

There is no real legitimate reason why extended producer responsibility schemes (EPRs) cannot be used more widely in the Irish context for the likes of streams which are currently costing public money, and, in reality, need much more funding in order to get nationally and/or properly operational. There are of course going to be EPRs required under the Single Use Plastics Directive. But, EPRs should be considered for other **key** product groups beyond this. EPR should particularly be considered for those products whose wastes are hazardous in nature, that are not straightforward to handle in terms of recovery/disposal, and those that are liable to end up in the environment with

potentially adverse consequences. This should be done in a systematic fashion but in any case would likely include consideration of EPR for:

- Consumer waste pharmaceutical products – at present there is only limited, occasional collection schemes for waste medicines from consumers. The roll out of a national scheme, e.g. in pharmacies and medical centres, should be explored, funded by the industry placing such products on the market. The nature of many pharmaceuticals is such that collection for safe disposal is warranted over storage in the home, flushing to sewer, etc.
- Veterinary medicines, crop protection products and other farm chemicals in terms of waste, out of date, or no longer used materials. These are often stored on farms on a long term basis.
- Waste paints. This is a difficult stream to deal with at a domestic level.
- Household hazardous wastes like engine oils, solvents, etc.. Again these are difficult to deal with.

Data collection

We wish to make the following points on data collection:

- What can be done with the brown bin data that is collected needs to be considered, that is, how can we use it to engage citizens to try and reduce their food waste amounts?
- Waste contractors should be required to report their waste statistics by NACE category (or at least a version that is agreed with waste contractors – many already have this information in their own formats) to the National Waste Collection Permitting Office (NWCPO).

Municipal waste & household waste

We wish to make the following points on municipal waste & household waste:

- Consider targeting textiles as a priority waste stream. See separate point made.
- There is a low penetration of brown bins across households in Ireland. Waste collectors should be required to provide brown bins to domestic and commercial customers, not just offer them. Legislation should be changed so that there would be suspension of collection permits where brown bins are not provided, with a need to show customer refusal.