

1.0 Factsheet – Waste Management in Ireland

This factsheet analyses the situation regarding waste management policies and practices in Ireland, the focus being on municipal solid waste (MSW). The basic aim of the factsheet is to identify potential deficiencies in waste management practice implemented in the country that could lead to non-compliance with EU waste legislation, in particular the waste hierarchy and the EU waste management targets.

The following table presents some basic data and information related to current waste generation and management in Ireland, which the following analysis was based on.

Table 1-1: Basic waste management data for Ireland

Population / Households (CSO)	
Total inhabitants (2013)	4,620,306
Dwelling stock (2013)	1,658,243
Municipal Waste Generation	
Total (tonnes in 2013)	2.7 million tonnes (including commercial waste)
Total (kg/cap/annum)	587 (EPA 2012) including C&I waste Household waste 344 kg / capita / annum
Performance Against Targets (EPA)	
Waste Framework Directive: Recycling accounted against calculation method 1	45% (2012)
Landfill Directive	Target for 2013 was met, thought to be on track for 2016
Existing Waste Management Infrastructure	
Mechanical biological Treatment (MBT) / Pre treatment	Authorised capacity: Connacht 584 ktpa; East Midlands 5,251 ktpa; Southern 732 ktpa
Engineered landfills	6 sites (confirmed by DECLG)
Thermal treatment	Carranstown – 200ktpa currently operating; Poolbeg 600ktpa due to operate from 2017

1.1 Roles and Responsibilities of Key Actors

Overall responsibility for waste policy in Ireland has been delegated to the Department for the Environment, Community and Local Government (DECLG). The main policy statement of current relevance in Ireland was published by DECLG in July 2012, and is entitled *A Resource Opportunity – Waste Management Policy in Ireland*.¹ The policy set out in this (and previous

¹ Department for Environment, Community and Local Government (2013) A Resource Opportunity: Waste Management Policy in Ireland, July 2012, <http://www.environ.ie/en/Environment/Waste/PublicationsDocuments/FileDownload,30729,en.pdf>

policy documents of 1998, 2002 and 2004), intended to deliver the objectives of the European Directives, is implemented through relevant statutory instruments (such as landfill levy regulations, packaging regulations etc.).

However, much of the responsibility for planning and implementation has effectively been devolved to the regional and local levels. Three regional authorities have been developed, with a lead authority in each case being made responsible for developing the regional plan in conjunction with other local authorities.

An indication of the split of responsibilities as far as implementation is concerned is shown in Table 1-2, which shows the actors responsible for the delivery of some of the key legislative actions called for within the regional plans. In addition to the local and regional authorities, other key actors include the:

- DECLG, responsible for developing the policy and legislative framework for waste management in Ireland.
- National waste collection permit office (NWCPO), responsible for the administration and management of the collection permit system.
- The Environmental Protection Agency (EPA).
- Producer Responsibility Organisations (PROs) – for packaging (of specific relevance to the MSW targets) the scheme is operated by Repak Ltd.
- National Transfrontier Shipment Office (NTFSO), competent authority for the administration and enforcement of waste exports and imports.

Local authorities have a wide range of roles covering a wide range of activities including responsibility for ensuring the hierarchy is respected, issuing collection permits, ensuring the targets are met, as well as conducting enforcement activities. In most cases, they are not responsible for actually delivering waste collection and treatment services, this being done through private contractors.

The table confirms that the contractors do not have direct responsibility for delivery of the targets included within the plans, this being managed by the local authorities. Contractors are instead obliged to provide services meeting certain standards (such as two or three bin collection systems) through their permit conditions. In discussing the development of the waste sector in Ireland in recent years at the expert seminar held in Dublin in April, workshop participants confirmed that efforts by the private sector have played a key role in the improved performance of the country in respect of waste management during this period.

Table 1-2: Policy and Legislation Actions within the Regional Plans

Policy area	Policy action (Objective)	Targets (Approach)	Responsibility
Applying the waste hierarchy to the management of waste streams	Move waste further up the hierarchy by eliminating the direct disposal of unprocessed residual municipal waste to landfill.	Consult with the EPA and recommend new collection permit conditions for issue to NWCPO.	Regional Lead Authority, EPA, and NWCPO
Implement the polluter pays principle across all waste services and regulatory activities in a manner appropriately	Review the application fee structures related to regulatory activities for local authority facility authorisations.	Complete review and issue suggested changes to the DECLG.	Regional Lead Authority, DECLG, and local authorities

reflecting the risk to the environment and human health	Review and implement (if appropriate) charging structures in place for wastes accepted at local authority civic amenity and other local authority waste facilities .	Complete review and implement appropriate charges.	Local authorities
Improve management performance through the implementation of policy actions and monitoring progress towards national targets	Prepare an annual report reporting on the progress of policy actions and the implementation of mandatory and waste plan performance targets.		Lead Authority , EPA, NWCPO, PROs and Local Authorities
Improve regional and national self-sufficiency in accordance with the proximity principle	Monitor and report on planned, authorised and utilised capacity on a regional and national basis (building on the work done for the waste plan)	Establish and maintain capacity database	Lead Authority, local authority, NWCPO ,EPA and DECLG

1.2 Summary of Legislative Framework for Waste Management

The Waste Framework Directive (WFD) is transposed through the “*European Communities (Waste Directive) Regulations 2011 (Statutory Instrument No. 126 of 2011)*”, as amended by the “*European Communities (Waste Directive)(No. 2) Regulations 2011 (Statutory Instrument No. 323 of 2011)*”.^{2&3} As is acknowledged within the Irish questionnaire return on the implementation of Directive 2008/98/EC,⁴ much of the provisions of the 2008 WFD were already enshrined in national primary legislation by the 1996 Waste Management Act and associated Regulations made thereunder.

The Landfill Directive (LFD) is enshrined in the national legislative framework through the “*Waste Management (Licensing) Regulations [WMLR] 2004 (Statutory Instrument 395 of 2004)*”, complemented on various aspects by the Waste Management Act and the “*Waste Management (Landfill Levy) Regulations 2015 (Statutory instrument No. 189 of 2015)*”.

The definition of municipal waste in Ireland is similar to that used in the Waste Framework Directive. The concept is defined in Section 5 of the Waste Management Act 1996 which states that municipal waste is “household waste as well as commercial and other waste which, because of its nature or composition, is similar to household waste”.

In May 2015, the DECLG also issued further legislation in the form of Waste Management (Collection Permit) (Amendment) Regulations 2015, Waste Management (Facility Permit and Registration) (Amendment) Regulations 2015, European Union (Household Food Waste and Bio-Waste) Regulations 2015, Waste Management (Food Waste) Amendment Regulations 2015, Waste Management (Landfill Levy) Regulations 2015. Changes to primary “piece” of

² <http://www.environ.ie/en/Legislation/Environment/Waste/WasteManagement/FileDownload,25856,en.pdf>

³ <http://www.irishstatutebook.ie/pdf/2011/en.si.2011.0323.pdf>

⁴ Questionnaire on Implementation of Directive 2008/98/EC, C(2012) 2384 final

waste legislation within the Waste Management Act has been enabled by the Environmental Miscellaneous Provision Act also came into effect at the end of August 2015.

1.3 Status of Waste Management Plan(s)

Three regional waste management plans were legally adopted in May 2015, covering the period 2015-2021.⁵ These replaced the ten outgoing non-hazardous Regional Waste Management Plans adopted in 2005 and 2006, and in so doing reach compliance with the requirements of the Revised Waste Framework Directive 2008/98/EC. Public consultation on the three regional plans ran from November 2014 to the end of January 2015. The current Waste Management Plans are configured into the following three regions:

1. Eastern-Midlands Region;
2. Southern Region; and
3. Connacht/Ulster region.

Extensive consultations were held during the development of the plans including a pre-consultation seeking written submissions in relation to forthcoming preparation of the plans from October 2013 to December 2013, a Public Consultation period on the draft plans from November 2014 to January 2015 and Consultation Meetings held with the Waste Collection Industry throughout 2015.

1.4 Summary of the Key Objectives of the Plans

1.4.1 Waste Management Plan(s)

The reduction from 10 Regions to 3 Regions was a significant change in waste management planning in Ireland considering that the Regions are now more varied (e.g. in population density) and include a greater number of local authorities in each regional configuration. The three Regions worked together closely in the preparation of the three regional waste management plans and the plans have been developed on a common basis. The consultation drafts have a broadly similar structure and much of the content is shared.

Each of the plans has the same following three overarching performance targets:

- 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan;
- Preparing for reuse and recycling target of 50% of municipal waste by 2020; and
- “Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and indigenous recovery practices.”

In particular, the following key elements are identical in all three waste management plans:

- 8 Strategic Policy Objectives
- 27 Infrastructural Policy Statements
- 62 Policy Actions

⁵ Plans available via: <http://www.environ.ie/en/Environment/Waste/WasteManagementPlans/>

Some of the more significant policy actions in the plans include:

- Support for the development of additional capacity – up to 300,000 tonnes additional thermal recovery capacity for non-hazardous waste on a national basis and additional biowaste treatment capacity per region, development of civic amenity (CA) sites and bring centres as well as collection infrastructure.
- The designation of lead authorities, who are expected to co-ordinate actions regionally and nationally. The lead authorities in each region will take responsibility for delivering the majority of policy actions over the course of the plan, working with the local authorities in the region and other stakeholders.
- Move waste up the hierarchy through eliminating direct disposal of un-processed MSW to landfill.
- Review the application fee structures for local authority facility authorisations.
- Review charging structures for CA and other similar sites.
- Produce an annual report on progress in relation to policy actions.
- Monitoring on capacity regionally and nationally.
- Prioritise waste prevention.
- Actions on the circular economy, e.g. establish reuse, repair and preparation for reuse activities.
- Implement a consistent and co-ordinated system for the regulation and enforcement of waste activities (there are a whole range of policies here).

The obligatory elements of Article 28.3 for waste management plans for the most part appear to have been incorporated. Waste quantities are fully explored. Current waste collection systems are given due attention. The draft plans propose an overarching performance target on local authorities of 50% recycling and composting of MSW (WFD calculation method 4). This is slightly different to the adopted national target which is 50% recycling of household paper, metal, plastic and glass (WFD calculation method 1). The plans acknowledge the objective for local authorities is broader than the national target, and in practice this is likely to be a more ambitious target (given that performance for 2012 under calculation method 1 was 45%, compared to 40% under method 4). The need for changes to the collection regime to accommodate the desired performance improvement is not discussed in any detail, but rather is subject to supplementary legislation discussed further below.

In the plans, the forthcoming Poolbeg incinerator (600,000 tpa) and the Carranstown 235,000 tpa incineration facility which has been operational since late 2011 are taken into consideration nationally as the policy statement in the Plans considers only the national need for thermal recovery. The Eastern-Midlands Region plan raises the issue that planned treatment capacity for some waste streams is insufficient, while for others capacity is over-provided. However, DECLG has indicated this to be a legacy issue, and confirmed that the three regions are in close discussion in respect of planning for treatment capacity going forwards. The plans also discuss the closure of landfills.

1.4.2 Waste Prevention Plans

Although activities, policies and targets relating to waste prevention are identified in the non-hazardous regional waste management plans and the national Hazardous Waste Management Plan, the prevention requirements of the 2008 revised Waste Framework

Directive are intended to be delivered through the EPA's Prevention Plan for 2014-2020. The EPA has now published a fourth iteration of the National Waste Prevention Plan (NWPP) "*Towards a Resource Efficient Ireland*" which will run until 2020 (this plan supersedes the information summarised by the EEA on the previous plan).⁶ The aim of the NWPP is to deliver substantive results with regards to hazardous and non-hazardous waste prevention and minimisation and to integrate a range of initiatives addressing awareness raising, technical and financial assistance, training and incentive mechanisms.

The NWPP saw the introduction of the National Waste Prevention Committee (NWPC) which includes a broad group of stakeholders who meet periodically to provide strategic direction to the EPA with respect to the implementation of the NWPP. Within this Framework, Outline Work Plans for the NWPP were established for the periods 2004 to 2008 and from 2009 to 2012. In addition, Annual Reports on the activities of the NWPP are available for the years between 2004 and 2012.⁷

Resource efficiency and waste prevention activities are funded through the Environment Fund. Work is focused on a series of measures that comprise a programme of funded activities and projects to support communities and businesses in making well-informed choices on waste prevention and resource efficiency. The emphasis is intended to be on activities with greatest potential to reduce waste and deliver savings, based on review of project performance by the National Waste Prevention Committee.

The 2013 annual report reports on a number of resource efficiency / waste prevention activities, of which the following are the more relevant to municipal waste:

- The "**Local Authority Prevention Network**", co-ordinated by the EPA, which draws together local authority personnel engaged in the practical application of resource efficiency with communities, businesses and other organisations across the country. Recent activities have included training events on food waste prevention, the development of good practice guides on greener gardening and greener cleaning, development of a video on food waste aimed at households etc.
- The "**Stop Food Waste Programme**" is a national platform to inform, and engage with consumers, communities and businesses on how to avoid food waste and compost unavoidable food waste at home.
- "**Freetrade Ireland**" facilitates re-use for households and businesses across Ireland. With 14,000 items re-used through the service during 2013, it is estimated the service diverted approximately 200 tonnes of materials away from landfill and saved members of the service over €1.4 million during the year.
- "**Community Re-use Network Ireland**" is an all island umbrella for community-based social enterprises specialising in both direct re-use and preparing for re-use activities while providing training and employment for excluded people.
- "**Green Home Programme**" is a framework to support and advise householders on ways to save money on their household bills while protecting the environment. The

⁶ EPA (2014) *Towards a Resource Efficient Ireland – A National Strategy to 2020*, <http://www.epa.ie/pubs/reports/waste/prevention/TowardsAResourceEfficientIreland.pdf>

⁷ Environment Protection Agency, Ireland (2013) *National Waste Prevention Programme (NWPP)*, Date Accessed: 15 October 2013, Available at: www.epa.ie/waste/nwpp/

programme focuses on the themes of waste, energy, water and transport. 26,000 households are now registered as participating in the programme.

- The **“Green enterprise”** scheme challenges organisations and companies to produce goods and provide services in more environmentally friendly ways and to minimise emissions through cleaner production methods. The programme aimed to support prevention, and re-use, projects in line with key EU and Irish strategic policies (such as “A Resource Opportunity - Waste Management Policy in Ireland” and “Delivering Our Green Potential”, both published in 2012). From 44 applications, 14 projects receiving funding up to a maximum of €60,000. These represented a number of sectors and types of organisations, including manufacturing, agri-food, community groups, public sector organisations and charities.
- The **“Green business initiative”** which includes a packaging prevention project with Repak.

Concerning targets, all projects undertaken in the National Waste Prevention Programme have built-in metrics. Indicators are quantitative where possible and qualitative where appropriate.

Further initiatives are contained within the National Hazardous Waste Management Plan.

1.5 Progress towards the Fulfilment of Targets

1.5.1 Landfill Directive Targets

A report published in November 2014 assesses Ireland’s progress towards targets.⁸ This clarifies that Ireland secured a four year derogation from the first two landfill directive targets, meaning that the target years are 2010, 2013 and 2016. The data given in the report is reproduced as follows, with the projected figure for 2016 representing the actual tonnage of BMW consigned to landfill in 2013, as reported by landfill operators to the Environmental Protection Agency using its approved measurement system for BMW:

- 75% of the 1995 landfilled tonnage of biodegradable waste by 2010;
 - Target: 916,000 tonnes
 - Achieved: 860,000 tonnes
- 50% of the 1995 landfilled tonnage of biodegradable waste by 2013;
 - Target: 610,000 tonnes
 - Achieved: 589,000 tonnes for 2012, thought to be on track for 2013.
- 35% of the 1995 landfilled tonnage of biodegradable waste by 2016.
 - Target (max to LF): 427,000 tonnes
 - Projected: 381,000 tonnes but it is noted that at the time of publication it is *“a preliminary figure and is liable to change”*.

It may be noted in this context that MSW generation in Ireland was reported in the 2013 NWPP annual report to have decreased by 17% since it peaked in 2007, though much of this is likely to relate to the economic downturn which hit Ireland particularly hard.

⁸ EPA (2014) *EPA’s National Statistics - Progress towards EU waste recycling, recovery and diversion targets*. Updated November 2014 <http://www.epa.ie/pubs/reports/waste/stats/Progress%20EU%20targetsNov.pdf>

The 2013 NWPP annual report gives the following commentary in relation to landfill directive targets:

“Ireland’s continued reliance on landfill means that we are at risk of not reaching strict biodegradable waste diversion targets by 2016. Efforts in waste prevention, diversion to recovery, the development of necessary supporting infrastructure and the enforcement of the 2009 and 2013 Food Waste Regulations will underpin the achievement of future targets.”

The European Union (Household Food Waste and Bio-Waste) Regulations 2015 [S.I. No. 191 of 2015] should help to divert biowaste up the hierarchy. In addition, the landfill levy (recently increased to €75/tonne) and subsequent closure of many landfill facilities (a decrease was seen from 28 in 2009 to 11 in 2013, whilst current numbers are around 5 or 6), the export of waste for thermal treatment in Europe, and the operation of the forthcoming Poolbeg incinerator are all likely to have a significant effect on reducing biowaste disposal to landfill, and thus enable compliance. Covanta achieved the final step of executing its project agreement with Dublin City Council and agreed financial close on the 600,000 tpa Poolbeg incinerator in 2014. Construction has started and commencement of operation is targeted for late 2017. Gate fee costs for the new facility are not currently published, but gate fees for the Carranstown facility have reportedly been a competitive €83-93 per tonne in recent years, and the concluding remark of the recent “Dublin Waste To Energy Waste Market Assessment” is that the Poolbeg facility gate fee will need to compete with the export market.⁹ It should also be noted that previous plans for an incineration tax were not proceeded with in 2011. In addition to municipal incineration capacity, there is a potential national capacity for 340,000 tonnes of waste to be used as a fuel at cement kilns, though the collapse of the cement market means that current capacity is limited and RDF producers have instead been seeking capacity abroad. Finally, a reported 550,000 tonnes of biological waste treatment capacity is also thought to be available.¹⁰

The EPA reports that, in relation to the biodegradable municipal waste landfill diversion targets, the 2009 Technical Guidance Document ‘*Municipal Solid Waste: Pre-treatment and Residuals Management*’ has played a key role in promoting a reduction in the amount of biodegradable waste being sent to landfill.¹¹ This document includes associated information in support of its formal sectoral guidance notes on the determination of national Best Available Techniques (BAT) for the waste sector (Landfill BAT, Waste Transfer BAT, Composting BAT, etc.). In particular, this guidance addresses aspects of municipal solid waste pre-treatment for waste landfilling, waste incineration and waste treatment industries. The requirements set out in this Technical Guidance Document have been incorporated into the licence conditions that apply to individual landfill sites and incineration plants.

⁹ RPS (August 2014) *Dublin Waste To Energy Waste Market Assessment*, <http://www.indymedia.ie/attachments/oct2014/rpsreportfinal.pdf>

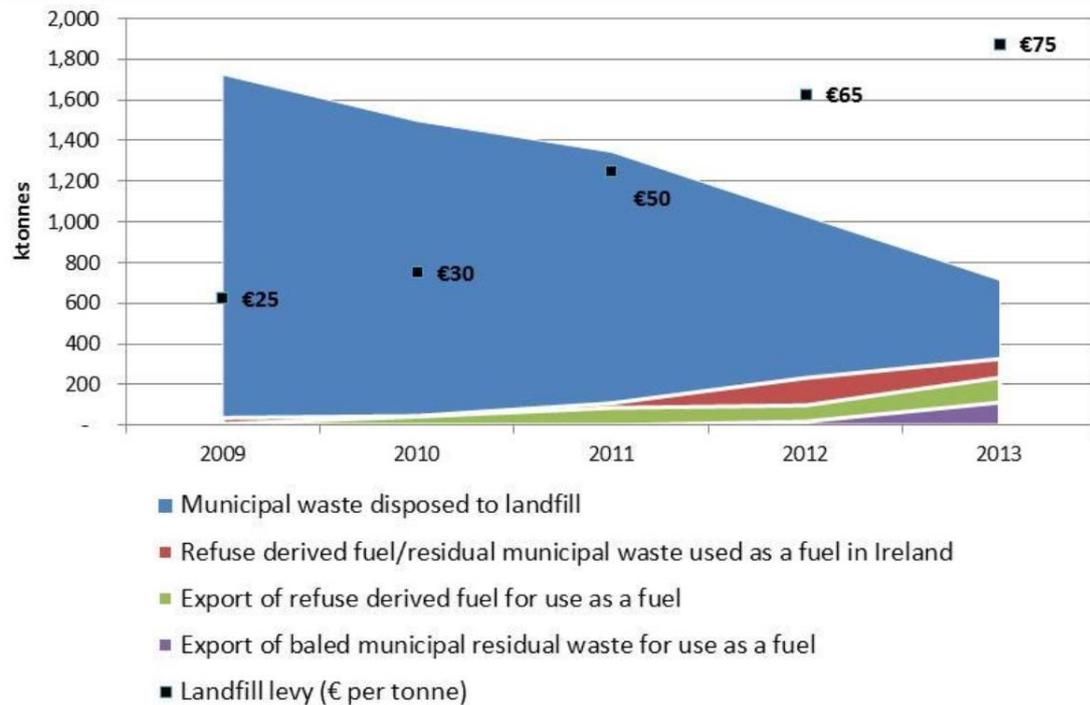
¹⁰ Source: <http://www.epa.ie/irelandsenvironment/waste/#.VRu8Y-H2qPV>

¹¹ Environment Protection Agency, Ireland (2009) *Municipal Solid Waste: Pre-treatment and Residuals Management*, www.epa.ie/pubs/advice/waste/municipalwaste/

It is clear that there continues to be rapid change in how waste is managed in Ireland. Management of residual waste from 2009 to 2012 is shown in Figure 1-1. This shows a considerable decline in waste sent to landfill over the years 2011-13, driven by the recent increases in the cost of the landfill levy.

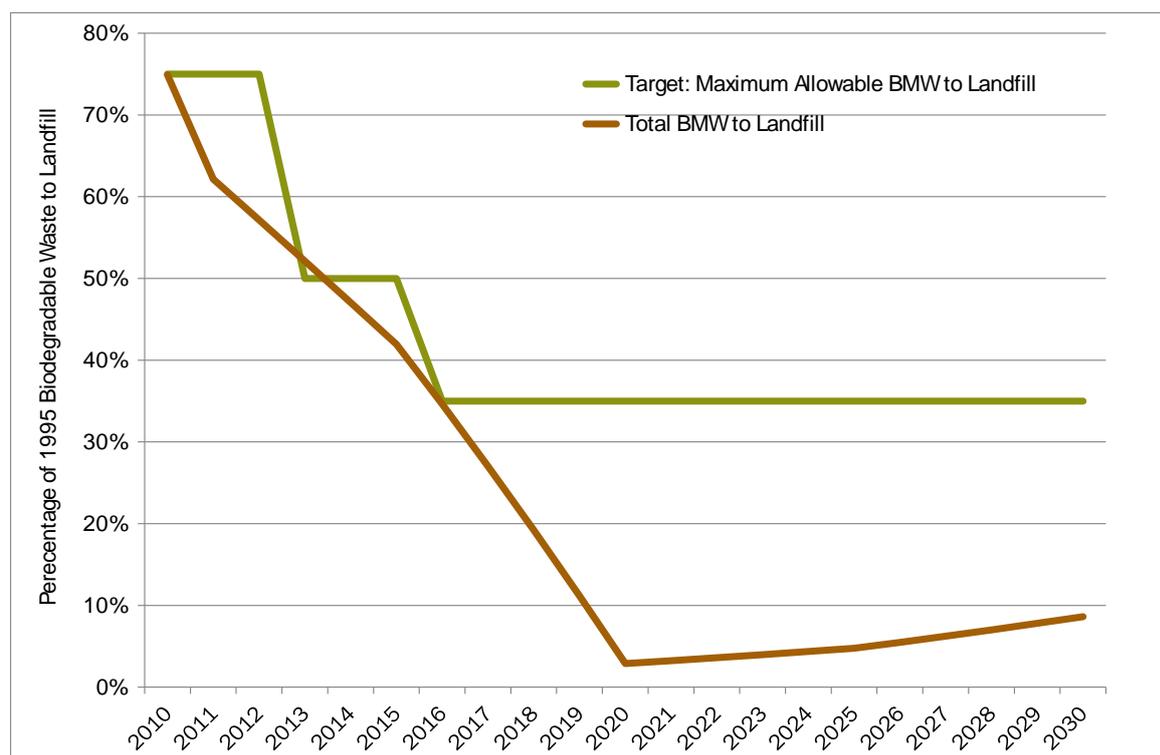
Within the work produced for the European Commission by Eunomia in 2013 (produced prior to the three new regional plans), the projections of performance against the landfill directive targets indicates Ireland meeting their LFD targets. The scenario with the Poolbeg incinerator going ahead is reproduced in Figure 1-2.

Figure 1-1: Management of Residual Waste in Ireland in Recent Years



Source: EPA (2014) Bulletin 3: Residual waste treatment trends 2009 to 2013
http://www.epa.ie/pubs/reports/waste/stats/residual_waste%202013.pdf

Figure 1-2: Projection of possible Performance against LFD Targets for Ireland



Given that the Poolbeg incinerator (which represents such a large proportion of residual waste in Ireland) is currently expected to be in operation in 2017, only the 2016 target is expected to present any challenge, and the rapid evolution of pre-treatment processes observed in Figure 1-1 looks set to make an encouraging contribution to meeting the target. In years subsequent to 2016, performance can be expected to far exceed the target maximum allowable BMW to landfill.

1.5.2 Waste Framework Directive Targets

Ireland is set to use calculation method 1 to report progress against the WFD targets, meaning that the 50% target applies to paper, metal, plastic and glass only within household waste. In practice, this will be one of the least challenging of the four possible approaches.¹² At the workshop the EPA indicated that this method has been chosen as it focuses solely on household waste.

The November 2014 EPA report (*EPA's National Statistics - Progress towards EU waste recycling, recovery and diversion targets*) confirms that in recent years Ireland has made considerable progress towards delivering the WFD target for recycling 50% of MSW.⁸ As of 2012, the national recycling rate under calculation method 1 was reported to be 45%, up from 40% in 2011. This value includes metal and plastic estimates from household WEEE.

¹² For 2012 Ireland reports its performance under calculation method 1 to be 45%, compared to calculation method 4 for which the overall MSW recycling and composting rate is 40%.

Although not fully documented in the plans themselves, there are intentions to improve waste collection and thus aid meeting the WFD recycling target through tightening the regulatory system. The DECLG consulted on the regulation of household waste collection from November 2013 to end Jan 2014. Taking stakeholder feedback into account, as was indicated in Section 1.2 new legislation issued in May 2015 reformed the regulation of household waste collection, through strengthening the existing regulatory structure. This includes a move to a pay per weight system of charging, introduction of on-the-spot fines through fixed payment notices.

This suggests that, providing the plans and policies are successful in delivering the additional change necessary to close the gap, Ireland should achieve this target. It is not clear, however, whether the proposed changes in the systems will be sufficient such that the possible future higher targets – i.e. 60-70% recycling by 2030 which are proposed as a long term aspirational goal in the regional plans - can be achieved.

Recycling rates are calculated accounting for a 13% reject rate applied to collected dry recyclables due to the co-mingled approaches used. There is a centralised national system for recording waste tonnages through the annual reporting of waste collection data by waste collection permit holders into an online reporting system hosted and managed by the National Waste Collection Permit Office (NWCPO). The data reported includes details of waste source (by Local Authority Area), EWC code, tonnage and destination. Secondary movements are also reported but separately. Collectors of household waste provide additional information on the service they provide. The Environmental Protection Agency uses this dataset for household kerbside collection data (tonnages collected and number of households served) in particular. Since its establishment in 2012, the NWCPO has validated the household kerbside datasets prior to handover to the Environmental Protection Agency.¹³

1.6 Implementation of Specific Waste Framework Directive Articles

1.6.1 Article 4: Application of the Waste Hierarchy

The Irish questionnaire return to the European Commission on the WFD lays out a detailed explanation of how the waste hierarchy has been reflected in national legislation. Key elements are as follows:

- The waste hierarchy is implemented through the amendment made to the 1996 Waste Management Act (S.I. No. 126/2011 - the “European Communities (Waste Directive) Regulations 2011”), where Section 21A (2)(a) states:
“When applying the waste hierarchy referred to in subsection (1), the Minister, the Agency and the local authorities, in carrying out their respective functions under this Act, shall take measures to encourage the options that deliver the best overall environmental outcome.”

¹³ Confirmed in discussion with Brendan O’Neill, Department of Environment

- Section 32(1) of the Waste Management Act, as amended, then sets out a general duty on waste producers and holders to apply the waste hierarchy in management decisions so that waste treatment operations are in accordance with the Section 21A statement above.
- The 2012 policy statement “A Resource Opportunity” clarifies that responsibility for ensuring compliance with the waste hierarchy has been assigned to the relevant regulatory authorities:

“Decisions in relation to the application of the waste hierarchy in matters of licensing and enforcement will be the responsibility of the appropriate regulatory authorities on a case by case basis, and determinations in relation to such matters will take account of the Waste Framework Directive, European Commission Guidance on the implementation of the Directive, national policy and regional waste management plans.”
- A long list of regulatory requirements are then identified which seek to give effect to the waste hierarchy in the management of waste, including:
 - A landfill levy, which as of 2015 is €75/tonne. This dis-incentivises the bottom tier of the hierarchy.
 - A plastic bag levy, a measure designed to promote prevention and reuse of plastic bags, currently set at €0.22/bag.

Concerning waste prevention, the first National Waste Prevention Programme (NWPP) was published in 2004, and much activity has occurred since, with most recently a new plan being published in 2014 which runs until 2020. Detail is provided in Section 1.4.2.

Current recycling rates are above average compared to the broad cross section of European countries, and considerable efforts appear to have been dedicated to prevention through the NWPP and its many faceted activities.

The plans include an aspirational goal to reach higher recycling targets beyond 2020 of 60-70% recycling, providing an indication of increased ambition in the future, though these objectives are likely to be revised in line with future adopted EU policy. However, these cannot yet be considered as statutory targets. The targets that are devolved locally are for 50% recycling of MSW, which is notably a broader and more stringent target than is obliged to meet the WFD recycling target under the selected calculation method 1; this could be taken as an indication of application of hierarchy at the local level.

1.6.2 Article 10: Recovery

Again, a thorough response to the WFD recovery objectives is provided in the Irish questionnaire return to the European Commission on the WFD. This clarifies that the recovery objectives of the WFD are implemented by the 1996 Waste Management Act, as amended by S.I. No. 126/2011 (the “European Communities (Waste Directive) Regulations 2011”), including:

- A legal duty imposed on waste producers to recover their waste in accordance with the requirements of the waste hierarchy.
- A requirement for the EPA and local authorities to apply ‘measures’ to ensure waste undergoes recovery.

In addition, further regulations are relevant in that they oblige collection systems that facilitate recovery of various material streams. This includes the following, with evidence associated with their impact provided as sub-bullets:

- The European Union (Household Food Waste and Bio-Waste) Regulations 2015 (S.I. No. 191 of 2015) provide for producer responsibility at commercial food facilities to segregate food waste and send for recovery.
 - The National Waste Report 2011 records that 25% of the available commercial food waste was collected in 2011, though the 2012 report suggests that the tonnage decreased slightly in the subsequent year.
- The European Union (Household Food Waste and Biowaste) Regulations 2015 (S.I. No. 191 of 2015) also provides for producer responsibility at households to segregate food waste and send for recovery.
 - Feedback received by DECLG during the course of this project confirm that in 2014 570,000 houses (out of a total of 1.2 million) had been provided by a brown bin (the data was provided via a survey of waste management companies).
- Regulation 20(2)(g) of the Waste Management (Waste Collection Permit) Regulations 2007 (S.I. No. 820 of 2007), steers local authorities to attach conditions to waste collection permits to oblige collectors to introduce arrangements for source segregation and separate collection of dry recyclables.
 - The 2011 National Waste Report records that 98% of households provided with a waste collection service have at least a separate collection for dry recyclables. The dry recyclables collection would typically include the co-mingled collection of at least paper, metal, aluminium and plastic. Glass packaging from households is collected both through separate kerbside collection and via bring banks and civic amenity centres.

As highlighted in the first policy measure in Table 1-2, the current lack of control exerted over where residual waste is taken, is to be addressed in the coming period. It is proposed to be addressed through a revised coordinated approach to permit conditions for waste collectors.

The three plans all support the development of additional capacity for biowaste treatment (155ktpa across the three regions which looks to be an approximate doubling of the current level of biowaste treatment taking into account some reserve capacity not currently being utilised).

Each of the three plans states that it supports the development of up to 300,000 tpa of additional thermal treatment capacity nationally for the treatment of non-hazardous waste (totalled from the three plans). This is in addition to the 600,000 tpa of thermal capacity agreed and now under construction at Poolbeg. It is also acknowledged in each of the three plans that there is a significant quantity of unused treatment capacity in the regions. In 2012, from the 11.4 million tpa of local authority authorised treatment capacity across the nation, only 3.1 million tpa (27%) was used. It appears that much of this overcapacity relates to mechanical pre-treatment activities and also land improvement activities. The plans state that any future authorisations to be granted by the local authorities, the EPA and An Bord Pleanála (the body that decides on appeals from planning decisions made by local

authorities in Ireland) must take account of the scale of existing treatments in the market prior to making a decision on additional capacity.

1.6.3 Article 11: Reuse and Recycling

As outlined in Section 1.6.2, the 2007 Waste Collection Permit Regulations, the 2009 Food Waste Regulations, and the 2013 Household Food Waste and Biowaste Regulations do much to encourage systems that separate and recycle (or compost) waste. The 2012 policy statement “A Resource Opportunity” outlines the intention for mandatory service standards for household waste collection to progressively increase the degree of segregation of household waste.¹ Initially, mandatory service standards will provide for a minimal national standard of segregated collections of residual waste and dry recyclate. Mandatory service standards are intended to address the frequency of collections as appropriate. Separate organics collections are also to be phased in as obligated through the 2013 Household Food Waste Regulations (see Section 1.6.5).

The lack of uniformity in approach to waste collection in Ireland has resulted in varying levels of success. Market structure and variances in approach to enforcement have resulted in households being given freedom to select from a wide number of waste collectors marketing the service, or not availing of collection at all, provided that the waste is managed in an environmentally acceptable manner. The 2012 *‘Regulatory Impact Analysis on Household Waste Collection’* considered, but denied, the introduction of competitive tendering for household waste collection. It recommended instead that Government preserve the current household waste collection market structure and that it strengthen the regulatory regime to address areas of weakness. The document “A Resource Opportunity” announced the intention to strengthen the enforcement of permit conditions relating to segregated collections, with appropriate financial penalties being specified for breaches of conditions, and a possible withdrawal of permits in cases of serious breaches. This approach of a strengthened regulatory framework for household waste collection is therefore reflected in the policies included within the plans.

New regulations on household waste were adopted in 2015 and are expected to enhance the regulatory and enforcement role of local authorities to address issues such as poor service provision and uncollected waste. The potential impact of this will be discussed during the subsequent stages of the analysis. A summary of the intended regulatory measures are provided within the National Waste Report for 2012, published in August 2014:

“Regulation of Household Waste Collection: *The performance of the household waste collection market will be crucial in achieving overall waste policy objectives and meeting national targets on landfill diversion as set out in “A Resource Opportunity - Waste Management Policy.” The July 2012 policy document set out a range of proposals to significantly revise the existing regulatory regime to ensure, inter alia, that waste collected is managed in accordance with the waste hierarchy; that mandated service levels are delivered, that pricing structures are put in place to incentivise waste reduction and source segregation by households and that Customer Charters are put in place by all*

waste collection providers. The Department of Environment, Community and Local Government (DECLG) published a discussion paper¹⁴ in November 2013 and there was a public consultation process on the environmental regulation of household waste collection to inform the detailed development of the new regulatory regime to strengthen the regulation of household waste collection. Ninety-one submissions were received from a range of stakeholders, the significant majority indicating support for the measures proposed in the consultation document. This highlights the progressive relationship between the numerous private operators, regulators and those setting policy, illustrating leadership through progressive engagement. Work is now underway on preparation of a package of legislative measures to give effect to a wide range of changes to the existing regulatory structure including measures such as:

- A move to a pay per weight (by kilogram) system of charging, with standing charge to cover administration/provision of bins;
- Introduction of a range of on the spot fines/fixed payment notices for operators;
- Introduction of a three strike/one strike approach for serial offenders (operators);
- Increase in the number of mandatory conditions to be applied to all collection permits (eg customer charters [these being information set out for customers in relation to issues such as charging structures, operational procedures etc.]);
- Application of household waste collection standards to pay to use (PTU) units [these being 'bring type' receptacles / compactors].

Drafting legislation to implement these changes is underway and stakeholder consultation is ongoing by DECLG."

Appendix M of the 2012 national waste report provides estimate of unmanaged household waste.¹⁵ The estimate for 2012 of 214,200 tonnes is included within the national statistics for MSW, and represents 8% of the national quantity of generated waste, and is only slightly less than the 9% (or 265,000 tonnes) figures for the previous two years.

How free-riders are dealt with, and what enforcement measures are to be used will be pivotal in the success or otherwise of dealing with this issue. It is understood that no absolute obligation will be placed on the householder to contract with an authorised collector under the new system. Householders will, however, be required to demonstrate that where they have not contracted with an authorised collector, they are nonetheless managing their waste in an environmentally acceptable manner in accordance with legislation and the provisions of the waste management plans.¹⁶ Provided the free-rider issue is tackled, the majority of households in Ireland should be on a waste collection service that includes the collection of the key recyclables targeted by the WFD. Schemes are largely based on a co-mingled collection service. The performance of these schemes is discussed in Section 1.5.2.

¹⁴ <http://www.environ.ie/en/Environment/Waste/PublicConsultations/>

¹⁵ EPA (2014) *Appendices to the National Waste Report 2012*,
http://www.epa.ie/media/EPA_NWR12_Appendices.pdf

¹⁶ Confirmed in discussion with Brendan O'Neill, Department of Environment

Other than the introduction of bio-waste systems which is proposed at the household level, the plans do not specifically identify the need for further changes in collection system in the future. The plans include the aspirational goal to meet higher targets of 60-70%, and indicate that the authorities should be aiming towards this, though such moves can be considered be the subject of future waste plans and policies beyond the current planned period.

1.6.4 Article 14: Costs of Waste Management

Section 75 of the Waste Management Act (as amended by the Protection of the Environment Act 2003) lays out that a local authority charge for provision of any waste service by, or on behalf of, that authority. Through this power, local authorities operate pay as you throw systems where the waste producer funds the costs associated with waste collection and recovery or disposal. There is an open market for collection at a local level. Costs have been reduced in recent years, with a 26% decrease from 2004 to 2011 being cited by one source, taking the average annual cost for the householder for all waste collection services down to €262.¹⁷ Legislation has now been enacted such that the future charges will be applied on a pay-by-weight basis, with lower prices being levied for recycling services in comparison to residual collections. Further enforcement activity is intended to ensure that all householders are connected to the system or are otherwise managing their waste in an environmentally acceptable manner.

Concerning producer responsibility in Ireland, the draft plans inform that the national packaging compliance scheme, Repak, provides subsidy payments to fund the recovery of waste packaging that is sourced by service providers. Rates are agreed between Repak and the waste management industry based on the material type and source, recovery activity for that material, landfill levy, the market value of that material and the recycling and recovery target that Repak is committed to meet. The 2012 policy document “A Resource Opportunity” announced the intention to review producer responsibility initiatives and examine the financial mechanisms within which producers seek to comply with their obligations. The Producer Responsibility Initiatives review was intended to consider the most efficient and effective manner to progress this issue in relation to the relevant waste streams. Further information is contained in the report published in 2014.¹⁸ The scheme does not fund whole recycling system costs, but provides a contribution to recycling operators who collect and recycle packaging waste either from industry’s back door or from households via bring and kerbside collection systems. This is discussed in more detail in Section 1.7.

1.6.5 Article 22: Encouraging the Separate Collection of Biowaste

The National Strategy on Biodegradable Waste launched in 2006 reaffirms the Landfill Directive targets and the move towards recycling and recovery. In 2009, the first Food

¹⁷ IWMA (2011) IWMA Submission to DECLG in relation to ‘Altering the Structure of Household Waste Collection Markets – a discussion document – June 2011’

¹⁸ DECLG (2014) *Review of the Producer Responsibility Initiative Model in Ireland*, Report produced for DECLG by RPS, ESRI, BIO IS, Phillip Lee Solicitors, <https://www.repak.ie/files/documents/PRI-Review--Main-Report-2014.pdf>

Waste Regulations introduced producer responsibility at commercial food facilities to segregate food waste and send for recovery, which led to 25% of available commercial food waste being collected by 2011, as is identified in Section 1.6.2. The 2012 policy statement “A Resource Opportunity” then outlined the intention for regulations on food waste designed to promote segregation and recovery through composting and other forms of treatment. It intends to align to the Waste Framework Directive objectives of maximising the resource which can be extracted from waste and minimising disposal, as well as facilitating the achievement of the Landfill Directive targets.

The Minister signed the European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 191 of 2015) in 2015, commonly referred to as **the 2013 Food Waste Regulations**.

The Regulations impose obligations on both householders and waste collectors:

- Most **householders** will be obliged to segregate their food waste and make it available for separate collection when availing of a collection service. Alternatively householders are intended to demonstrate the appropriate alternate management – i.e. composting the food waste at home, or bringing it to authorised treatment facilities (such as civic amenity sites or anaerobic digestion sites). Where a source-segregated collection for food waste is available, householders are not allowed to dispose of food in the residual waste collection service. The new draft plans announce a policy to allocate resources for monitoring and inspection at household levels.
- **Waste collectors** are required to provide a separate collection service for household food waste. This is intended to be controlled through collection permits issued under a strengthened permitting system.

In accordance with the regulatory impact assessment prepared for these regulations, the roll-out of the brown bin is being phased in on a progressive basis, beginning on 1st July 2013. The timetable for when the regulations take effect is as follows:¹⁹

- 1st July 2013 for population centres greater than 25,000 persons;
- 31st December 2013 for population centres greater than 20,000 persons;
- 1st July 2014 for population centres greater than 10,000 persons;
- 1st July 2015 for population centres greater than 1,500 persons, and
- 1st July 2016 for population centres greater than 500 persons.

By July 2016, brown bins will be rolled out to most towns and villages. Only very small population areas, or small islands, will be exempt, because it is not technically, environmentally or economically practical to separately collect such waste in these areas.

Recent tonnage data for composting and AD is reproduced in Figure 1-3. This shows a considerable increase in the tonnage composted / digested since 2005 even prior to the introduction of the household food waste regulations.

¹⁹ It is understood (through discussion with the Department of the Environment) that local authorities could impose more onerous requirements under a Waste Management Plan, or via the Waste Collection Permits or through by-laws.

Figure 1-3: MSW Accepted for Composting/Anaerobic Digestion, 2005 to 2013



Source: EPA

1.7 Summary of Policy Mechanisms and Instruments to Meet Targets

Legal instruments aimed at local authorities

The regional plans indicate that Irish local authorities are committed to achieving a 50% recycling target for all MSW. This may be a somewhat harder target to meet than the 50% recycling target required to meet the Waste Framework Directive target under calculation method 1, and should also assist in ensuring the country meets the Landfill Directive target.

The plans indicate that local authorities have set out long term goals which seek to ensure that they will be prepared for the higher targets that may be put into place in 2030, although there is no detail as yet on these preparatory measures.

The approach to promoting recycling is to ensure that collectors provide systems including a recycling collection stream, and for improved enforcement of households (and collectors) in future – the latter also being undertaken by local authorities. There appear to be no sanctions imposed in the event that a local authority fails to meet the target.

Legal instruments aimed at waste producers

There is legislation aimed at ensuring **food waste collection**, thus helping Ireland achieve its Landfill Directive targets:

- 2009 Food Waste Regulations already imposes an obligation on producers of commercial food waste. These regulations have reportedly led to 25% of the available commercial food waste being collected in 2011, though the tonnage fell slightly for 2012.
- The 2015 Food Waste Regulations impose obligations on waste collectors and householders to provide and participate in food waste collection services.

With regard to enforcement of these regulations, the regional plans announce a policy action for individual local authorities and the lead authority for waste enforcement to *“Allocate resources to the systematic monitoring of household compliance with the segregation of waste with a particular focus on prioritising the reduction of contamination”* in order to *“increase the level of monitoring and inspection at household levels”*. It is intended that this policy will be extended such that it will cover the take-up of food waste collection.²⁰ Specific provision has been made in the RWMPs to prioritise the enforcement of the Household Food Waste Regulations, in particular through an enforcement Policy Action to *“allocate resources to monitor the schedule for the roll-out of brown bins to households in accordance with the Regulations”* which has been included.

The performance of the household waste collection market will be crucial in achieving overall waste policy objectives and meeting national targets on landfill diversion as set out in *“A Resource Opportunity - Waste Management Policy.”* A package of legislative measures giving effect to a wide range of changes to the existing regulatory structure including measures such as a move to a pay per weight system of charging, increased mandatory conditions applied to collection permits, and introduction of a range of fines / fixed payment notices for households and operators is now in place and will be effective by 1 July 2016.

Packaging producers in Ireland either attempt to self-comply with their packaging directive obligations, or comply collectively through membership and satisfactory participation in Ireland’s packaging waste compliance scheme which is operated by Repak Ltd. This is the only compliance scheme to have been approved for packaging waste since the regulatory system commenced.

The 2014 *“Review of the Producer Responsibility Initiative Model in Ireland”* provides an in-depth assessment and makes a range of recommendations for improving the current systems. DECLG has since been tasked with tackling the compliance issues raised in the report.

Concerning costs, Repak provides subsidy payments through the Repak Payment Scheme to fund the recovery of packaging that is sourced by the service providers. Rates are agreed between Repak and the waste management industry, based on the material type and source, the market value of material and the recycling and recovery target that Repak is committed to meeting. These subsidies are paid to waste recovery operators (i.e. it does not fund whole recycling system costs, but provides a contribution to recycling operators who collect and recycle packaging waste either from industry’s back door or from households via bring and kerbside collection systems). The 2014 review states *“The cost to producers who are members of a compliance scheme was €35.6 per tonne in 2012, a decrease of €10 per tonne since 2010. When compared with other European countries, these costs are in the lower end of the spectrum.”* The Repak strategy is to target the heavier packaging waste and most cost-effective sources to meet targets. In 2012, the average support provided by Repak to household packaging waste recovery was €58.50/tonne.

²⁰ Confirmed in discussion with Brendan O’Neill, Department of Environment

Legal instruments aimed at waste companies

New collection permit conditions in the coming plan period are intended to ensure that waste collectors provide acceptable recycling services. Given that household waste recycling collection services in Ireland are largely co-mingled, and assuming the new conditions improve the quality of recyclate collected by waste collectors, this may assist Ireland in meeting the waste framework directive targets by reducing the level of contamination in the collected material streams. , The plans state the local authorities should:

“...work with NWCPO to standardise Waste Collection Permit conditions with standard mandatory conditions and local discretionary conditions”.

This policy will enable the NWCPO to agree with representatives of all local authorities on agreed, harmonised conditions that should be applied to individual collection permits by the NWCPO.

Similarly, the plans also announce a policy action for individual local authorities, the lead authority for waste enforcement and the NWCPO to:

“Allocate resources to the national systematic monitoring of waste collectors including on site audits of waste collection data and random roadside checks for compliance with permit conditions”

and

“To conduct at least one strategic review meeting with each major household waste collector a region annually and to complete at least one waste collection permit audit per county annually.”

It is understood that contamination is taken into account using deductions derived from a 2008 MSW characterisation study, with the deduction being applied to the whole of the mixed recyclable stream rather than to the specific segregated streams.²¹ It is not clear to what extent this data matches reality given the age of the data and the EPA is proposing to carry out an updated MSW Characterisation Study in 2016.

Financial instruments

In recent years, a key financial instrument aimed at improving waste and recycling performance in Ireland has been the landfill levy, introduced at €15/t in 2002, and then increased over the 13 subsequent years until it reached €75/t from July 2013. This has been instrumental in diverting waste from landfill to date. No detail on any subsequent future increases is provided in the plans.

Local authorities are charged with ensuring that the levy is paid. A database has been developed in conjunction with the EPA and it is proposed that waste enforcement officers also work with police officers to deal with criminal activities. A key element of the plans is the additional effort anticipated to be expended on enforcement activities: for example, an Action Plan to deal with fuel laundering and waste arisings from criminal activities is also proposed and the newly-established Waste Enforcement Regional Lead Authorities (WERLAs) have established enforcement efforts on fuel laundering as a national priority in

²¹ This was confirmed in discussion with Brendan O’Neill, Department of Environment. RPS (2008) Municipal Waste Characterisation Surveys 2008, Final Report for EPA, March 2008

their Work Programme for 2016. Since the Action Plan has not yet been developed and the waste plans are not yet implemented, the effectiveness of these measures cannot yet be evaluated.

However, it is clear that landfill will become much less significant as a method of treating waste throughout the duration of the plan; this is further discussed in Section 1.8 (which deals with investment in infrastructure). Although this is arguably indicative of the success of the levy, it also suggests that its effectiveness as a means to drive further increases in recycling in the future will be reduced.

No detail on any subsequent future increases is provided in the plans, however, future policy is set out in A Resource Opportunity and states that “the rate of charge of the levy will be kept under review by reference to diversion rates and the consumer price index to ensure the dissuasive effect of the levy as an economic instrument is maintained.

Administrative instruments

There is a centralised national system for reporting waste data as is set out in Section 1.5.2.

Informational instruments

As part of its role in managing the packaging waste compliance scheme, the plans confirm that Repak is obliged to run national waste awareness campaigns annually to help drive a change in behaviour of waste producers towards packaging recovery.

Much activity has also been seen regarding The National Waste Prevention Programme since its inception in 2004. The new prevention plan published in 2014 runs until 2020, and reports on a number of resource efficiency / waste prevention activities – some of which are summarised in Section 1.4.2.

1.8 Investment in Waste Management Infrastructure

The Carranstown incinerator outside Duleek, County Meath has been operational since late 2011, treating 230,000 tpa.

Forthcoming investments in infrastructure include the following:

- The Poolbeg incinerator Dublin, under construction and due to be complete in 2017. Facility size is 600,000 t.p.a. Total municipal waste generation in Ireland (including both commercial and household waste) is around 2.7 million t.p.a, with an estimated 1.33 million tonnes of residual waste being projected for 2018.²²
- Figures provided by DECLG during consultation in the development of this factsheet indicate that biological treatment capacity is currently estimated by industry to be about 230Kt/a, for brown bin waste, sludges and organic fines plus another c.150Kt/a capacity in open windrow composting for green/garden waste. Industry estimates that there is an additional 474Kt/a biological treatment capacity planned, including two 90,000 t/a Wet AD plants planned by Stream Bioenergy in Dublin and Cork.

²² SLR (2015) Overview of Municipal Solid Waste Market in Ireland, draft report April 2015

Landfills numbers are plummeting: nationally there were 28 in 2009 to 6 at the time of writing. The quantity of residual wastes exported for energy recovery also increased from 117 k in 2012 to 347 kt in 2013 and c.550kt in 2014; as has been previously indicated there is a growing trend to export baled municipal residual waste which has not undergone mechanical treatment. The draft plans warn against future planned investments/permitting for other treatment capacity (MBT, land restoration) since significant overcapacity is identified in the plans. Workshop participants were keen to stress, however, that at a national level, planning for infrastructure had been undertaken on the basis of the number of facilities treating both commercial and household wastes.

It should also be noted that there is a potential national capacity for 340,000 tonnes of SRF combustion at cement kilns, though the collapse of the cement market means that current capacity is limited. It is for this reason that RDF producers have instead been seeking capacity abroad.

DECLG indicates that Ireland has adequate material sorting capacity for the recyclables that are currently collected and can quite easily increase that capacity in a relatively short time period, if and when supply of mixed recyclables increases. After sorting, most recyclables are exported to many countries in Europe and in Asia, depending on the market. Development of reprocessing capacity for materials in Ireland is difficult due to the global nature of the market and the small size of the Irish Economy. In the last decade or two Ireland has experienced the closure of a major steel mill, paper mill and glass bottling plant due to their lack of competitiveness in an international context.

2.0 Summary

Impressive progress towards the targets has been made in recent years, although there is still a little way to go to achieve the 50% WFD recycling target by 2020. The high landfill levy and suite of regulations on household waste collection currently in place (as well as the current reforms being undertaken to strengthening the existing regulatory structure), have driven change and have potential to enable compliance with the current EU directive targets. Efforts by the private sector have also played a key role in the improved performance of the country in respect of waste management in recent years.

The strengths of the plans, policies and strategies put in place to date include the following:

- There is now a relatively detailed legislative framework in place which has been put together remarkably quickly and has had significant effect on national waste management in a short amount of time. In addition, a landfill levy has had considerable impact in driving waste out of landfill. In conjunction with new policies on food waste collection together with additional residual waste treatment infrastructure, Ireland should have no difficulty in meeting the landfill directive targets even in the event that the economy continues to improve and waste quantities therefore increase.
- The plans include a 50% target that is passed down to the local authorities, and also include an aspirational goal to reach higher recycling targets of 60-70% by 2030, although no details have yet been developed of the additional policies or system changes that will be required to achieve this performance, and whether or not these

aspirations are pursued is very likely to depend on the policy coming from the European Commission.

- Changes in the regions and organisation which have been brought about as part of the process of developing the new plans should help improve the effectiveness of policy making and implementation, and will assist in ensuring national standards are maintained.
- Pay as you throw systems have been in place at a household level for some time, although these have not operated optimally, resulting in free-riders. The new pay by weight systems should ensure an appropriate differential is maintained between the cost of recycling and residual services. These should provide a financial incentive for householders to participate in recycling services.
- The NWCPO now has centralised control over the permits issued to contractors via the local authorities, and through this mechanism should be able to ensure that the services offered by the private sector meet required performance standards.

Given the above, Ireland is on track to meet the targets in both directives, particularly given the recent progress and that the plans have not yet been implemented. The principle weaknesses in the current systems and policies include the following:

- It is clear that historic performance improvements have been driven in large part by the landfill levy. This will become far less important as waste is moved out of landfill and into other forms of treatment. Future performance improvements in respect of recycling for commercial waste in particular will therefore be dependent to a certain extent on there being a continued differential in cost favouring recycling activities over residual treatment. This is of increased importance as there are otherwise no financial sanctions in place to ensure that local authorities meet the recycling targets that have been passed down to them.
- There remains an open market for waste collection in Ireland as the current plans have not substantially changed this part of the system. Historically not all households have been connected to the system and the new enforcement regime is intended to tackle this, though challenges are expected to remain as households can avail of waste collection in different ways (i.e. through door to door collection, pay-to-use receptacles/compactors, CA sites etc.), as long as the household waste is being managed in an environmentally acceptable manner. Households without a kerbside collection service may be less likely to participate in recycling services such that future performance increases in recycling may be slowed. The fragmentation of the market may also make it more difficult to control the actions of a large number of players, thereby making it more challenging to bring about further change at a local level. The distinctive approach taken by Ireland in comparison to other member states relies on enforcement activities to ensure the success of policies. It is not entirely clear how successful current measures to oblige households to use formal waste management systems have been, or how effective the forthcoming regulatory mechanisms will be.

3.0 Information Sources

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