

Household Waste Collection, CCPC, Bloom House, Railway Street, Dublin 1, D01 C576.

Sent by email only to:

1<sup>st</sup> March 2018

Re: Consultation on Household Waste Collection Market

#### Dear

Further to receipt of your discussion paper on the above-referenced subject, I offer the following responses and comments on behalf of the IWMA. The IWMA is comprised of 40 members that operate 45 waste companies, 26 of whom collect household waste in Ireland. We estimate that our members collect kerbside waste from 860,000 households, which is about 72% of the market.

Our website, <a href="www.iwma.ie">www.iwma.ie</a>, provides details of our members. Note that some members have acquired other collectors in recent years and therefore trade under several brand names. See <a href="http://iwma.ie/household-waste/iwma-members-in-your-area/">http://iwma.ie/household-waste/iwma-members-in-your-area/</a> for details of IWMA household kerbside waste collectors in each local authority area. This is based on information supplied by the companies themselves to the IWMA. It is evident that there are between 1 and 7 IWMA member companies collecting kerbside household waste in each local authority area.

In addition, according to the NWCPO website, there are approximately 40 other collectors of household waste that are not our members. These companies are spread across the country and range in size from very large to very small.

The questions below are in black ink, with our responses in blue ink.

# Competition

- 2.1 In competitive markets consumers benefit from increased levels of innovation, higher service levels, and lower prices. It is therefore important that we understand the factors that impact on competition in the household waste collection market.
- (a) In your view, are there distinct local geographic markets in Ireland in the household waste collection market? If so, what characteristics would govern their size and boundaries? Please explain your answer.

No. Markets vary in geographical size as large companies can cover several counties with more than 50,000 customers and can compete against very small operators with less than 5,000 customers and

small to medium sized operators with between 5,000 and 50,000 customers. A small company's market may be governed by the number of trucks that an operator is prepared to invest in and then may grow organically and by acquisition, as has happened with all the larger waste companies in Ireland.

(b) What is your view on the level of competition in the household waste collection market in Ireland? Does this vary across the country? Where possible support your views with relevant data, analysis, reports, experience, etc.

This varies geographically with as little as two companies competing in some areas, but on average we see about 5 or 6 companies operating in each county. There are over 60 household waste collectors in Ireland. These companies are not always in direct competition, but are locally available to compete when price rises or service failures open opportunities to take customers from a competitor, so a strong and innovative level of competition is very real in every part of Ireland.

In our experience, household waste collectors have a real incentive to maintain competitive prices and high levels of service due to the fear of customer dissatisfaction and the associated competitive pressures. In recent years, waste collectors have experienced the following significant increases in costs:

- insurance costs.
- residual waste disposal/recovery costs (landfill levy increases),
- diesel costs
- labour costs (incl. minimum wage increases)
- additional costs in providing food waste collections
- additional costs in installing RFID chips in bins, installing weighing equipment and associated back-office costs

However, waste companies have avoided price increases for fear of competition. If all of these extra costs could be easily passed on to households, they would have been, so there is a clear disincentive to raise prices and that is a clear sign of a high level of competition in the market.

The annual cost of a kerbside waste management service for households in Ireland is generally between €200 and €400, including VAT at 13.5%. We estimate that the average cost in Ireland is between €250 and €300 per household per annum, including VAT, as the majority of customers live in urban areas, where the costs are lowest.

This compares favourably with costs in other EU States. A recent EU Commission report<sup>1</sup> that looked at household waste management in the 28 EU Capital Cities stated:

"On average from the available data, consumers pay around 145 €/cap/year for their separate collection. It should be noted that the data resolution does not allow in many cases to see if this cost refers to separate collection or to the cost of MSW management altogether."

The average household in Ireland has approximately 3 occupants, based on consistent CSO data, so €145 per capita would be €435 per house if this was applied to Ireland. With VAT added at 13.5%, this would rise to €494 per household. The cost to householders in Ireland is generally well below that level, as detailed above and the average appears to be between 50% and 60% of this quoted EU Commission average figure, included in the report on the EU 28 Capital Cities.

The charges for household waste collection in Ireland are also competitive compared with historical charges. SLR Consulting conducted a survey of waste collection prices charged to householders in

<sup>&</sup>lt;sup>1</sup> "Assessment of separate collection schemes in the 28 capitals of the EU", prepared for the EU Commission DG Env, by Bipro in cooperation with the Copenhagen Resource Institute, Final Report dated 13<sup>th</sup> November 2015. See page 97. (Reference: 070201/ENV/2014/691401/SFRA/A2)

August 2011 and compared this against 2004 prices that were quoted by the Competition Authority in a 2005 report<sup>2</sup> on the sector. The results of both surveys are summarised in Table 1 below.

Table 1 SLR 2011 Survey of Household Waste Charges Compared with 2004 CA Survey

County	2004 Competition Authority Survey Annual Price (€) 240 I bins weekly	August 2011 Available Price SLR Survey Annual Price (€) 240 I bins weekly	Price Change	
Carlow	420-444	198.00	53 to 55% decrease	
Cavan	324	300.00	7% decrease	
Clare	330	285.00	14% decrease	
Cork	360-370	285.00	21 to 23% decrease	
Donegal	360	326.00	9% decrease	
Galway	350-375	260.00	26 to 31% decrease	
Kildare	320-360	199.00	38 to 45% decrease	
Kilkenny	456-480	300.00	34 to 38% decrease	
Laois	320-384	198.00	38 to 48% decrease	
Leitrim	380	260.00	32% decrease	
Limerick	344	285.00	17% decrease	
Longford	324-380	300.00	7 to 21% decrease	
Louth	270-372	270.00	0 to 27% decrease	
Mayo	300-360	260.00	13 to 28% decrease	
Meath	270-372	270.00	0 to 27% decrease	
Monaghan	324-372	239.00	26 to 36% decrease	
Offaly	312-324	198.00	37 to 39% decrease	
Tipperary	380-384	285.00	25 to 26% decrease	
Roscommon	350	260.00	26% decrease	
Sligo	350	248.31	29% decrease	
Waterford	480	289.00	40% decrease	
Wexford	420-460	299.00	29 to 35% decrease	
Wicklow	372	231.45	38% decrease	
Average Price (using 2004 low prices)	352.87	262.86	26% Decrease	

The SLR survey showed that the cost to the householder had fallen by an average of €90 per customer (26%) from 2004 to 2011. This occurred despite an increase of 18.5% in the Consumer Price Index for Transport services in Ireland during the period 2004 to 2011. <sup>3</sup>

We believe that the current average price for a household waste collection service in Ireland is similar to the 2011 average price quoted above. This is despite the fact that the landfill levy has

<sup>&</sup>lt;sup>2</sup> Enforcement Decision Series (No. E/05/002), Decision of the Competition Authority (Case COM/108/02), Alleged excessive pricing by Greenstar Recycling Holdings Limited in the provision of household waste collection services in northeast Wicklow. 30 <sup>th</sup> August 2005.

<sup>&</sup>lt;sup>3</sup> CSO data <u>www.cso.ie</u>

increased from €50 per tonne in 2011 to €75 per tonne now, plus all the other increases in base costs that are mentioned above.

We ask that the CCPC compare the falling prices for household waste collection services in Ireland over the last 14 years, with the regular price increases that have been evident in many of the other utility markets over that period.

(c) Do you think most waste collection service offerings are broadly the same? Is the consumer's choice of provider influenced by factors other than price (e.g. frequency of service, consumer interface, etc.)? If so, are these important considerations for a consumer? Please explain your answer.

The quality of service is influential, as waste companies have an incentive to provide added value to their service, such as:

- separate glass collections,
- bin washing,
- collections on weekends and/or bank holidays,
- good communications,
- emergency vehicles to cover breakdowns,
- additional vehicles to provide cover when householders miss collections,
- engagement in local community projects,
- extra recyclable capacity after Christmas,
- provision of kitchen caddies for food waste as part of a starter-pack,
- separate garden waste collections (in addition to the mandated food waste collections),
- Flexibility with bin sizes to suit small or large households,
- Replacing bins to their original position after they have been emptied,
- etc.

The high level of competition in the side-by-side market in household waste collection in Ireland has encouraged waste collectors to be innovative in their service offerings to attract and keep customers. In contrast, waste collectors in competitively tendered markets have no incentive to innovate for the benefit of householders. The innovation in that market structure is more likely to be focussed on cost-efficiency for the company, with periodic consideration of other innovations when the tenders are up for renewal.

Flat fee prices have been quite similar in each geographical area due to downward competitive pressures. However, with incentivised charging systems, customers have a lot more choice to select a charging system that suits their individual needs and can gain a financial advantage from a move to a more suitable system offered by their incumbent provider or a competitor.

Frequency of service is quite similar in most of the country with fortnightly collections of each bin, although there is some variance from that position.

(d) In your opinion what would a well-functioning competitive household waste collection market look like in Ireland? For example, number of players, market shares, margin levels, levels of switching, number of operators in any given area/route. Is this in evidence in the market(s) in which you have experience? Please explain your answer.

A good market exists where householders get a fair price, a good service, can communicate easily with their service provider and can switch provider easily. In addition, the market has to support the regional, national and EU targets and obligations for the management of household waste.

We believe that this currently exists in the vast majority of localities in Ireland. The number of collectors and their market share is not as important, in our view, as the competitive pressure from a

nearby collector or collectors. Having several operators servicing a single street or housing estate is not necessary to maintain a high level of competitive pressure and that exists currently throughout every county in Ireland.

In contrast, we suggest that a competitively tendered market would lead to lower levels of customer service, as the waste collector's focus would be on winning the next tender, rather than on keeping every customer satisfied. Such a market would undoubtedly result in a smaller number of waste collectors and less consumer choice. Consumers could not switch service provider or even influence the level of service, no matter how dissatisfied they are with the service. That market would be less well-functioning in our view.

In some utilities such as gas and electricity, the product is identical, so the choice of service provider is purely a financial decision for the householder, assuming a basic level of service and back-up. Competitively tendering those markets would have very little impact on the service provided to the householder. This is different for services such as waste collection and telecommunications where the service is much more variable and consumers have personal needs that affect the choices that they make.

For example, a large family may require larger bins than a person living alone and that flexibility exists in a side-by-side competitive market, in the same way that a person that requires greater download speeds from a broadband provider can fulfil that need, at a competitive price. In our experience, competitively tendered waste collection markets in the UK, do not provide that sort of flexibility and many householders are not getting the service that matches their needs. Some householders are now turning to 'on-demand' private collectors to supplement the inadequate public service. That model is problematic as 'on demand' collectors may not take consideration of recycling requirements and may offer additional residual waste collections, with no obligation on the householder to recycle.

(e) What in your opinion is the most effective method of market entry? For example, this could be setting up an entirely new household waste collection service, acquiring an existing operator, setting up a joint venture. Please explain your answer.

Market entry is possible with just one or two trucks and agreed outlets for the materials collected. This has occurred recently in a number of areas. We can provide that evidence, if needed. Collection permits are low cost and easy to obtain and weighing systems are commonplace and can be adapted for small or large businesses.

Market entry by acquisition is also an option and there has been plenty of experience of this over the last decade. We can also provide that evidence, if needed.

Existing operators can also enter new markets where they compete against incumbent waste collectors. This occurs regularly and again, we can provide that evidence, if needed. <sup>4</sup>

(f) When an operator is considering entering a new market is the possibility that the incumbent operator could respond by also entering the new entrant's existing markets a key consideration? What are the main factors (e.g. densely populated routes) that are assessed to decide whether the potential of a new market will compensate for the possibility of also losing market share in an existing market? Please explain your answer.

The main factor is the price, with service as another important factor. If an operator is charging a high price, a new entrant is likely to make adequate profit at a lower price and will be adequately

<sup>&</sup>lt;sup>4</sup> We did not want to single out waste companies in our submission, which will be publicly available on our website, but we can provide examples if the CCPC wishes to test these statements.

incentivised to enter the market. Also, if service is poor in a market, a new entrant can make an impact with a better service offering.

If the price is low and margins are tight, it is usually not worth the risk of entering a new market at a price that is too low to generate sustainable profit.

## **Operational Barriers to Entry**

2.2 Where the market is defined at the local authority area level, each household waste collection market would likely display different characteristics in terms of the density and scale of households in that area, the number of treatment facilities and transfer facilities available, and the quality of the road network and level of Local Authority oversight.

In our experience, household waste collection markets are not generally defined by local authority areas. Historically, some local authorities sold their waste collection operations to the highest bidder and that has influenced the extent of collection by some operators that successfully won the tenders for those operations. However, in all cases where the waste collection operations were sold by the local authorities, there are more than one company collecting household waste currently, so each local authority area can support more than one operator.

Waste companies can enter markets that they can serve in a cost-effective manner. That may be a town, city, county or other area and will depend on the company's capacity with regard to vehicles, staff and access to transfer and treatment facilities.

County boundaries or other local authority boundaries have no significant role in such decisions, except in cases where the local authority has imposed bye-laws that impact on waste collection. There has been improved coordination between local authorities with regard to bye-laws since the setting up of the waste regions, so that particular issue is not widespread.

(a) Are there any features which are unique to specific local authority area markets that make entry less attractive? Please explain your answer.

The IWMA does not agree with the concept of 'local authority area markets' as each local authority area can support more than one waste collector and operations in most local authority areas are influenced by operations in neighbouring local authority areas. That includes the company's own operations and competitors' operations. In some counties, this can also include operations relating to the collection of commercial waste in the same vehicles that collect the household waste.

Local bye-laws may be a consideration, e.g. requirement in Leitrim to deliver brown bins to all houses, including rural ones and a requirement to collect on specified collection days in some local authority areas. Other considerations include urban versus rural population, housing density and availability of transfer stations and/or treatment facilities.

(b) What are the barriers to entry to a potential new entrant in a given local authority area market in Ireland (e.g. difficulties in customer switching, access to necessary treatment and transfer facilities, regulatory requirements, or other market characteristics.)? Are any of these disproportionate? Please explain your answer.

Barriers to entry are low for a new entrant that can secure trucks, weighing systems and outlets for the collected material. The level of investment is modest.

A waste collection permit is needed from the National Waste Collection Permit Office (NWCPO) and that takes a few months. We consider that the permit is very important to ensure that high standards are met and that the environment and the public are adequately protected. Collection permit applications are very rarely refused, but there can be requests for further information in the event that the NWCPO is not satisfied that the applicant is in a position to meet all the required

standards. The process can be very fast if an applicant is well prepared and can meet the required standards of operation.

Customer switching is governed by regulations, as customer charters must allow this and must be in accordance with the sixth schedule of the Waste Management (Collection Permit) (Amendment) Regulations 2015 (S.I. No. 197 of 2015). This legislation provides for switching customers, removal of existing bins, refunds (if due) and ensures that there are no impediments to customers switching service provider if they are not tied into a time-specified contract.

(c) What impact, if any, would a concentrated market (e.g. where there is only one or two major household waste collectors) for a local authority area have on the decision to enter such a market? Please explain your answer.

None. The decision is more likely to relate to the price being charged, the service being offered and the ability to deliver materials to a local transfer station or treatment facility. There are quite a few waste collection companies operating successfully, without operating their own transfer station. <sup>5</sup> Some of these companies are quite large.

# **Market Coverage**

- 2.3 Using Central Statistics Office census data and National Waste Collection Permit Office annual returns data the CCPC estimates that 77% of permanently occupied households availed of a household waste collection service in 2016. It is clear therefore that a significant proportion of households have alternative arrangements.
- (a) What is your view of the assessment of the current number of households which do not avail of a kerbside waste collection service in Ireland/the area in which you have experience? Please provide any data, analysis, or reports which support your answer.

The EPA has recently revised their position on unmanaged waste after further analysis. As you can see from the EPA data below, the gap between municipal waste generated and municipal waste managed closed significantly in the 2014 data.

	2010	2011	2012	2013	2014
Municipal waste					
Municipal waste generated	2,846,115	2,823,242	2,692,537		2,619,023
Municipal waste generated per person	0.621	0.615	0.587		0.568
Municipal waste managed	2,580,435	2,558,345	2,478,337		2,575,218
Municipal waste managed per person	0.563	0.558	0.540		0.559
fference between generated and manag	ed: 265,680	264,897	214,200		43,805

The unmanaged waste was thought to be 8% to 9% of MSW, which was 13% to 16% of household waste (MSW also includes commercial waste) in the 2010 to 2012 period. However, the 2014 data shows that the unmanaged waste was just 1.7% of MSW and about 2.7% of household waste. This is either a massive improvement or more likely, the older data over-estimated unmanaged waste.

<sup>&</sup>lt;sup>5</sup> Once again, we do not wish to single out companies to be named in our submission, but we can provide examples if the CCPC wishes to test this statement.

However, we do recognise that many houses do not avail of a waste collection service. Some of these households manage waste illegally, but more use CA sites, PTUs, share bins and/or bring waste to public bins or to bins in their workplace.

We also understand that some households consist of single occupants that produce very little waste and a fixed annual fee may have been expensive in that context and they may have opted out in the past. We therefore welcome the obligation to offer incentivised charging systems and we expect that this will result in better offerings for those households that produce very little waste and we would hope that more people in this category would opt in to a waste collection service in the future.

(b) What in your opinion are the main reasons why households do not avail of a kerbside waste collection service? Are there some areas which do not have access to a waste collection service? If so, why is this the case?

There are some houses located on roads that cannot accommodate a waste collection vehicle due to the narrowness of the road or due to bridges that cannot take the size and/or weight of these vehicles. In these cases, a suitable collection or delivery point can be agreed or can be designated by the local authority. We would welcome more engagement with local authorities to address these situations in a suitable environmental manner.

However, many more households that do not avail of a waste collection services are located on roads that are already serviced by a waste company. In these cases, the householder makes a conscious decision to avoid paying for a waste collection service. As mentioned above, some of these householders engage in illegal activities such as fly-tipping and/or burning of wastes and others use legal alternative methods.

The waste companies do not have the remit or the authority to investigate the extent of each such activity. However, one of our members carried out a survey of 257 houses, thought to have no waste collection service, in an urban area that has passing kerbside collections and found the following results:

- NOT IN / NO CONTACT MADE: 49 (19.07%)
- COMMUNAL BINS (MANAGEMENT CO): 158 (61.48%)
- OWNS OTHER PROPERTY AT WHICH WASTE IS DISPOSED OF: 3 (1.17%)
- TAKES TO CIVIC AMENITY SITE: 3 (1.17%)
- USES PUBLIC BINS ON STREET: 3 (1.17%)
- USING PRIVATE (POSSIBLY UNLICENSED) OPERATOR: 7 (2.72%)
- BRINGS WASTE TO WORK: 6 (2.33%)
- POOLING WITH NEIGHBOUR / RELATIVE: 3 (1.17%)
- REFUSED TO DISCUSS OR WAS NON-COMMUNICATIVE: 6 (2.33%)
- PROPERTY UNDER CONSTRUCTION AND/OR RENOVATION: 6 (2.33%)
- HOUSE FOR SALE: 3 (1.17%)
- DUPLICATE ADDRESS (ALREADY IN SYSTEM UNDER DIFFERENT NAME): 2 (0.78%)
- ALREADY IN SYSTEM UNDER THIS ADDRESS: 6 (2.33%)
- WISHES TO OPEN NEW ACCOUNT: 2 (0.78%)

This survey showed that communal bins were a big factor in the data and that may be a factor in many urban areas where there appears to be high levels of non-serviced houses.

# The CSO surveyed householders<sup>6</sup> on their waste collection practices in 2014 and found the following results:

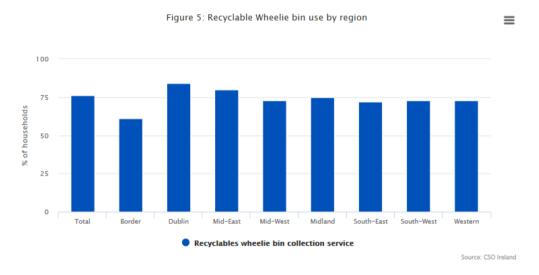
#### Household's main method for disposing of non-recyclable household waste (Table 5)

A wheelie bin collection service was used by 80% of households to dispose of non-recyclable household waste. Another 8% of households brought their non-recyclable household waste to a recycling centre and 4% of households shared a bin with another household such as a neighbour, relative or friend - in one-person households, where the person was aged 65 and over, the rate for sharing was 12%. Apartment dwellers were also more likely to share a bin (18% of apartments).

Dublin and the Mid-East had the highest percentage of wheelie bin use at 86%. Rural households made much more use of recycling centres (18% of rural households) compared with 3% of urban households.

#### Household's main method for disposing of recyclable household waste (Table 6)

The most popular method of disposing of recyclable waste was through a wheelie bin service with 76% of households using this method. The second most popular method was to bring this waste to a recycling centre (12%). There was a clear urban/rural divide with 24% of rural households bringing the recyclable waste to a recycling centre compared with 6% of urban households. 2% of households did not recycle waste.



The full data is available at <a href="http://www.cso.ie/en/releasesandpublications/er/q-env/qnhsenvironmentmoduleg22014/">http://www.cso.ie/en/releasesandpublications/er/q-env/qnhsenvironmentmoduleg22014/</a>

(c) For those consumers who do not/cannot use a household waste collection service, in your opinion are there adequate facilities for centralised waste disposal (e.g. civic amenities, direct to landfill, Pay to use compactors etc.) in Ireland/the area in which you have experience? Please explain your answer.

We believe that every household should avail of a waste collection service and if they do not, they should have to make a statutory declaration in relation to their waste management activities. Trying to facilitate those that do not want a waste collection service by way of residual waste receptacles at CA sites and PTU Compactors does not encourage good environmental outcomes. The Regional Waste Plans give primacy to kerbside household waste collection over other forms of managing household waste. We believe that bring centres and drop-off points should be available for recyclables but not residual waste, as they can encourage householders to dispose of mixed waste without any or adequate source segregation.

 $<sup>^6</sup>$  CSO statistical release, 14 March 2016, 11am. QNHS Module on Household Environmental Behaviours. Quarter 2 2014

<sup>&</sup>lt;sup>7</sup> See Policy E22a in Section 16.4.10 of each of the three Regional Waste Management Plans (see <a href="http://www.epa.ie/waste/policy/regional/">http://www.epa.ie/waste/policy/regional/</a>).

Source segregation is strongly encouraged in kerbside collection, particularly with the introduction of incentivised charging and the brown bin roll-out. Allowing people to by-pass that system results in lower environmental performance, with less source segregation of recyclables, less segregation of food waste and more car journeys to drop-off points.

IWMA members have been providing data to local authorities to assist with their enforcement efforts with regard to households with no kerbside collection service. There is currently a move by local authorities to introduce by-laws to address this situation and we are hopeful that this will significantly reduce the number of houses without a collection service.

(d) Does the structure of competition in the market (i.e. side-by-side competition, or tendering for the market) have an impact on household participation in the kerbside waste collection market? Please explain your answer.

That depends on a number of factors. If direct charging was removed and household waste collection was financed by central or local taxation, then we would expect the participation rates to increase significantly as householders would get a service that was already paid for. However, this would cost about €400 million per annum to the exchequer<sup>8</sup> as well as the very large start-up costs associated with changing the system.

It is important to note that all bins and collection vehicles in Ireland are owned by private companies and almost all of the waste transfer and treatment infrastructure, that facilitates household waste collection, is also owned and operated by private companies. Acquiring or replacing all of that equipment and infrastructure would have to be costed before that option could be seriously considered and we expect those costs to be massive (between 1 and 2 billion euro when all facilities are included).

This would also undo the recent progress made by waste collectors in introducing incentivised charging, which has now been roll-out to about 75% of household customers in Ireland. The other 25% should be on incentivised charging systems by the end of September 2018. If the service is already paid for, there will be no incentive to reduce waste or to source segregate waste, so many years of environmental progress would be lost to the country.

If tendering for the market is introduced in a way that provides local monopolies where the company that wins the tender has exclusive rights to collect in a specified area, but must charge the householders directly, then that system would have no impact on participation rates. In fact, it may have the opposite effect if the winning company does not offer a wide variety of options to suit both small and large households. It would also stifle the sort of innovation mentioned earlier in this submission.

# **Waiver of Waste Collection Charges**

2.4 It is our understanding that some local authority areas operate a waiver system (as distinct from the €75 government subvention provided for persons with lifelong/long-term medical incontinence) and that in others, for example, Dublin city, operators continue to offer discounts to previous waiver customers on a voluntary basis.

(a) What local authorities currently operate a waiver, or other form of discount scheme, and what household qualification criteria is currently used for the selection of households which qualify for a waiver scheme?

We understand that Limerick City and County Council still provide a waiver system. We are unaware of any other waivers systems provided by local authorities in Ireland.

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<sup>&</sup>lt;sup>8</sup> Approximately €250 per household by 1.6 million households.

(b) Do you think that a national waiver scheme should be introduced? Please explain your answer.

No, not directly. We consider that this is a matter for the Department of Social Protection and in principle, we would support a system similar to the system proposed for persons with lifelong/long-term medical incontinence.

(c) What are the potential issues with the implementation of a national waiver scheme?

We suggest that a National waiver scheme may be possible if it is financed by the Department of Employment Affairs and Social Protection (DEASP). However, it would be very difficult to implement without such resources and without the data being managed by the DEASP. Naturally, we would expect a separate consultation process prior to the introduction of any such scheme and that would offer greater opportunity for stakeholder consultation. It is difficult for the IWMA to comprehensively analyse this issue at short notice, but we would be open to further engagement if the DEASP wants to introduce such a scheme.

#### **Landfill and Incinerator Capacity**

- 2.5 In 2016, emergency legislation was invoked by regulatory authorities to make additional landfill capacity available. This development was one of the stated reasons behind the introduction of mandatory incentivised pricing structures in the household waste collection market. Although Ireland's landfill and treatment capacity is outside the scope of the CCPCs current study, we would still like to determine the views of relevant stakeholders.
- (a) Is there adequate capacity (landfill and incineration) to deal with Ireland's current and future residual waste generation? Please support your views with relevant data, analysis, or experience.

We understand that there was just about adequate capacity in 2017, but more capacity is needed, particularly in the Southern and Connaught Ulster Regions. One of our members has plans to develop a 230,000 t/a incinerator in Cork and this would be a great help in this regard. The Regional Planners are tracking the need for residual waste treatment, in consultation with the waste industry. We expect waste to grow, but recycling must also increase to meet the EU targets, so residual waste will grow slowly.

(b) In your view is there adequate capacity to deal with Ireland's current and future non-residual waste generation? Please support your views with relevant data, analysis, or experience.

There is currently adequate capacity for sorting dry recyclables in Ireland, but outlets for sorted waste paper and waste plastics are a serious problem globally, due to the new restrictions imposed by the Chinese Government on the import of paper and plastic wastes. With increasing levels of recycling required by EU targets, we expect that there will be need for more sorting of recyclables and we expect that facilities will be developed or existing ones expanded to deal with growth in this area. The lead-in time for development or expansion of Materials Recovery Facilities is short compared to the lead-in time for residual waste infrastructure, so supply should be able to keep up with demand in this regard.

Organic waste treatment infrastructure is keeping up with demand but more infrastructure is needed as the brown bin roll-out expands. A large (90Kt/a) AD facility is currently under construction in Huntstown, Dublin, another has just been constructed in Donegal and a third large AD plant is planned for Cork and has all the regulatory consents. This area is therefore considered to be well covered for the foreseeable future.

(c) Does the structure of the household waste collection market (side-by-side competition, or tendering for the market) have an impact on investment in landfill and incineration facilities? Please explain your answer.

The different market structures attract investment in infrastructure in different ways, but both can work and both can have problems. Northern Ireland is operated with tendering for the market and the authorities have struggled to develop large scale infrastructure in that jurisdiction. The Republic of Ireland is very well serviced with waste management infrastructure by comparison and that infrastructure has been developed and financed by the private sector, at little or no risk to the public purse.

Investment has been forthcoming for waste infrastructure in the last decade, despite the financial crisis. Investors understand that the market is open and waste is not guaranteed to be delivered to a new facility, but they also understand that the waste is not tied up in other ways and is available for their facility. They have been prepared to invest on that basis and Ireland has done very well in this regard, whilst other countries with competition for the market in place, have struggled.

(d) Is access to a sufficient long-term volume of waste a key factor in the development of appropriate waste management and treatment capacity (e.g. requirement for long-term supply arrangements to facilitate investment in treatment facilities)? Please explain your answer.

No, as detailed above, investors are prepared to finance large scale infrastructure without the security of long term waste supply contracts. Recent examples of large scale infrastructure developed by IWMA members with private sector financing include:

- Indaver Carranstown EfW facility €140 million
- Covanta Poolbeg EfW facility €350 million
- Indaver Ringaskiddy EfW facility €160 million (subject to planning permission)
- Huntstown AD plant €30 million (under construction)
- Little Island AD plant €30 million
- Other Investments could have a combined value of between €500 million and €1 billion, including landfills, transfer stations, MRFs, composting plants and other waste management facilities.
- (e) In your opinion, what impact will the current array of incentivised charging structures by operators have on Ireland's residual waste generation and waste streaming by households? Please explain your answer.

We expect that the new charging system will result in a reduction in residual waste and an increase in recycling rates. However, we have no data to put a figure on that.

(f) In your view what measures, if any, could be introduced to ensure that Ireland has adequate landfill and incinerator capacity to deal with Ireland's current and future residual waste generation?

Good forecasting by the regional planners is probably the best tool for this exercise. The regional plans should also deal with contingencies in a way that excess residual waste can be managed by short term capacity increases at existing landfills.

## **Regulatory Environment**

- 2.6 Ireland's overarching policy objectives in the waste management and waste collection markets are set by the Department of Communications, Climate Action and Environment. Local authority area waste management planning and enforcement is co-ordinated by three lead authorities for the Southern, Eastern and Midlands, and Connacht/Ulster areas.
- 2.7 Currently, the National Waste Collection Permit Office is mandated with issuing household waste collection permits in accordance with the Waste Management Collection (collection permit) Regulations. The responsibility for enforcing the conditions of the collection permits falls to individual local authorities.

(a) In your view are consumers adequately protected by the current regulatory environment (e.g. regulation of operator conduct, adequate complaints resolution procedures, ability to switch to an alternative provider, transparency of pricing etc.)? Please explain your answer.

We believe that consumers are protected by the companies' customer charters that are mandated by the waste collection permit regulations, as discussed above. Most consumers have a choice of service provider and can switch very easily. Prices are transparent as customers have access to data showing the weights of their waste on a monthly or an ongoing basis.

(b) What impact, if any, do the current household waste collection permit regulations relating to the weighing of household and apartment waste have on the decision to enter a specific market? Please explain your answer.

No impact. All household waste collectors have weighing equipment on their trucks and a back-office system to process these weights, so it is not a barrier to entry for any of the more than 60 companies that collect household waste.

(c) What impact, if any, do the current household waste collection permitting regulations and food bio regulations have on the number of household waste collection operators in the State? Please explain your answer.

These regulations have had an impact in reducing the number of collectors of household waste, but for good reason. They have raised standards and improved the environmental outcomes for management of household waste. If substandard collectors do not have the capability to reach those standards, then they have the option to sell their business to a company that will fully comply with these regulations. Ireland's environmental performance is more important than the number of collectors in this context.

(d) What impact, if any, has the introduction of the new regulations which effectively prohibit the offering of flat-fee charging structures had on market entry by operators? Please explain your answer.

We believe that these regulations have had no negative impact on market entry by operators. In fact, the new system has resulted in wide ranging offers that suit different sized households and that may open the market to more switching by consumers.

(e) What are your views of the roll-out of a dedicated bin for organic household waste in Ireland? Please support your answer with experience or relevant data.

The IWMA has supported this roll-out to date as it encourages a good environmental outcome and we need to meet EU targets with respect to recycling and food waste management. There is a current proposal to expand the roll-out to all rural areas as well as the currently mandated cities, towns and villages. The IWMA is seeking a Regulatory Impact Assessment, including a cost benefit analysis, prior to the implementation of new legislation that would mandate food waste collections in every part of the country. We suggest that there may be better ways to manage organic wastes in rural areas and these should be further explored at this time.

(f) The current waste collection permit regulations apply to waste collected from households and apartments. In your view, what, if any, enhancements to the current regulations would be appropriate for apartment collection? Please explain your answer.

The big issue with waste from apartments and other residential complexes with communal bins, is the lack of incentive for the residents to prevent waste and to source segregate waste. Waste collectors can and do provide a three bin system, but the contamination levels are very high in the recycling bins.

We suggest that there needs to be obligations placed on the management companies and on the residents to prevent and segregate waste in the same way that householders are obliged to manage their waste responsibly. Some management companies will opt for a two-bin collection system with no weighing of bins to save costs and this is contrary to regulations. Enforcement is needed in these cases.

We suggest that further consultation and discussion is needed in this area and the IWMA would be delighted to engage with the relevant authorities in a stakeholder workshop or meetings to improve this situation for the benefit of society and the environment.

(g) In your opinion, what impact could tendering for specific markets (i.e. competition for the market) have on the household waste collection market in Ireland? Please explain your answer.

The IWMA believes that a switch to competition for the market would have a devastating impact on waste management in Ireland and would undo decades of progress. The mere suggestion of a possible change in the market structure would do damage to the confidence of investors in the waste market, including investors in new infrastructure for the management of wastes. This issue was subject to public consultation in 2011 and during that period of uncertainty waste companies in Ireland struggled to secure investment.

There are no insurmountable issues in waste management in Ireland that suggest that a change in the market structure is necessary. We address the main issues individually below.

#### Cost to the Consumer:

As detailed above, the EU Commission Report on wastes management in the 28 EU Capital Cities suggests that the average cost per capita for kerbside household waste collection in the EU is €145 per annum. We suggest that the average cost per capita in Ireland is between €73 and €88 per capita per annum when VAT is excluded. It is clear therefore that prices are very competitive in Ireland and a move to a different market structure is not warranted, based on costs or prices.

We have also provided data earlier in this submission that shows that prices charged for kerbside household waste collection have decreased significantly since 2004, despite the following:

- The roll-out of a third bin and associated extra collection service to about 60% of households
- Increases in the landfill levy from €15 per tonne in 2004 to €75 per tonne currently (500% increase)
- Increases in wages minimum wage was €7.00 per hour in 2004 and is currently €9.55 per hour (36.4% increase)
- Increases in insurance costs (well documented large increases, particularly in the waste sector CCPC is undoubtedly familiar with this issue)
- Increases in Diesel Costs from 88 cent per litre in 2004 to €1.28 per litre currently (45% increase)
- Compliance with new regulations that require higher standards, including the installation of RFID chips in all bins, weighing equipment on all collection vehicles and associated backoffice systems.

It is therefore very clear that the waste industry has become more efficient over time and has avoided price increases in response to significant increases in base costs. This is a sign of a well-functioning competitive market, with no reason to interfere with the market structure.

<sup>&</sup>lt;sup>9</sup> Based on an average charge of between €250 and €300 per household per annum including VAT at 13.5%.

Also, the High Court judgment issued in 2009 in relation to the case between Nurendale Ltd. t/a Panda Waste Services –v- Dublin City Council & Ors<sup>10</sup> considered whether a change to either competitive tendering or a local authority monopoly in the Dublin Region from the existing side-by-side competition would benefit consumers. The four Dublin Local Authorities, led by Dublin City Council, proposed a variation to their waste management plan to give the authorities control over household waste collection in their functional area. Nurendale legally challenged the variation and were successful in their challenge. The case was not appealed.

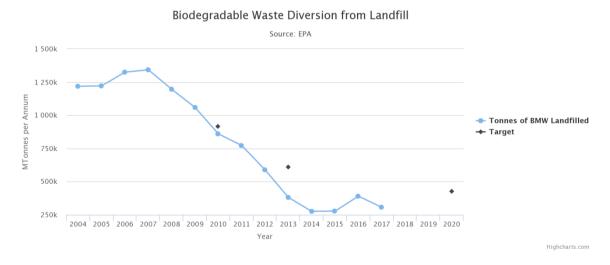
## The Judgment concluded the following:

"I would say firstly that I am satisfied that it is incumbent upon the respondents to prove on the balance of probabilities that the Variation, firstly, will improve the provision of the service to the benefit of consumers. Having considered the economic evidence presented before this Court I am not so satisfied. I do not believe that the Dublin market for the collection of household waste is a natural (local) monopoly either taken as a whole, or in each individual local authority area. The evidence from both parties would indicate that the minimum efficient scale is such that, even in the smallest local authority area, there are a sufficient number of customers to support at least three, if not more, operators. I am also satisfied that competition in the market can only provide a reduction in costs to consumers, above and beyond that which is obtainable from either a local authority monopoly or by way of competitive tender. Concerns expressed by the respondents that with competition in the market it is likely that one or more private competitors may become dominant, although true, ignores the fact that with constant competition within the market, such dominance will be tempered by both the actions of other competitors and by competition law. If a dominant player charges excessively, it will undoubtedly be undercut by a competitor; if it abuses its position it is amenable to the Competition Authority and the Courts. On the other hand where there is a public or tendered monopolist, any increase in price will merely be borne by the public, and there will be no constraining force preventing such a situation. Further it will create a situation involving incumbent providers who will be at a significant advantage upon renewable of any contract. There is also the question of what the other competitors are to do in the meantime while they do not have the contract. Many operators who would have been able to operate under the fully competitive system will be forced to exit the market if unsuccessful in their tender. Nor are they likely to invest in the infrastructure needed if they are unlikely to succeed."

#### **Environmental Concerns and EU Targets:**

Ireland has many obligations set by EU Directives and Regulations to prevent and recycle municipal solid waste (MSW). We are currently on track or meeting all our targets for MSW, including:

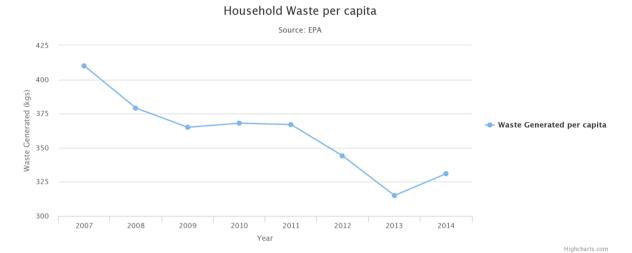
• Diversion of biodegradable municipal waste from landfill – Landfill Directive 2016 target met in 2013 (landfill limit of 35% of the total biodegradable municipal waste produced in 1995).



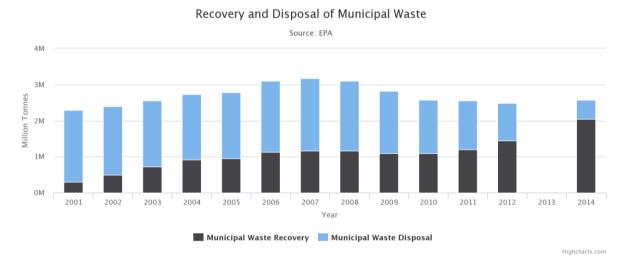
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<sup>&</sup>lt;sup>10</sup> [2009] IEHC 588, delivered 21/12/2009, McKechnie J.

 Household waste prevention measures are successfully reducing quantities of waste generated.



Recovery of MSW is increasing with disposal reducing.



 Recovery of Packaging Waste is increasing and has met the EU Targets set in the Packaging and Packaging Waste Directive.



 MSW Recycling rate – Waste Framework Directive (WFD) target of 50% recycling of paper, plastics, metal and glass from households by 2020 – on track by 2012 with 45% recycling of these materials.

It is clear that Ireland is performing very well with regard to EU targets and other environmental indicators for municipal waste, so there is no reason to interfere with a market that is functioning very well in this regard.

# **Uncollected Household Waste:**

We agree with the CSO and the CCPC that there are a lot of houses in Ireland that do not avail of a waste collection service. The data from the CSO and from our own members' informal survey detailed above give an indication of the ways in which these people manage their waste. The EPA data also quoted above, shows that previous fears that most of this uncollected waste is 'unmanaged' or illegally managed appears to have abated. The quantity now unaccounted for is just 1.7% of MSW or 2.7% of household waste.

As also detailed earlier in this submission, introducing competition for the market would only address this issue if waste collection was provided free of charge and paid for by central or local taxation. This would lead to massive costs and turmoil in the market to address a very small percentage of unmanaged waste. A lot of good progress associated with environmental performance, incentivised charging and cost control would be jeopardised, so we expect that a cost benefit analysis would not favour such a move to address this issue.

The IWMA favours other measures to address this issue within the existing market structure. The Regional Planners are currently working on bye-laws that would require householders to manage their waste legally and account for that waste. The Waste Enforcement Regional Local Authorities (WERLAs) are expected to follow through with enforcement of these bye-laws. This can only have positive results, whereas it is our view that a change in the market structure would have many negative significant impacts on waste management in Ireland, both economically and environmentally.

#### **Provision of Infrastructure:**

Some commentators suggest that competitive tendering of waste is needed to provide large scale waste management infrastructure. This is not the case. As detailed in response to question 2.5(d) above, the private sector in Ireland has provided the necessary infrastructure to meet all EU targets and there is a strong appetite for further investment in the sector within the existing market structure. Any move now to change the market structure would introduce a new period of uncertainty and would undoubtedly stall some or all investment, so this should not be taken lightly.

For comparison, we ask that the CCPC considers the Northern Ireland waste collection market, where waste is collected by competitive tendering. Northern Ireland has struggled to develop incineration capacity and has fallen well behind the Republic of Ireland in this endeavour.

## **Recyclables Market:**

Ireland has indigenous markets for recycled wood and glass (NI), but relies on global export markets for recycled paper, plastic and metals. Historically, Ireland had a paper mill and a steel smelter, but international competition led to the closure of both. It appears unlikely that Ireland's small economy can support such infrastructure in the foreseeable future, regardless of the market structure, so we will continue to rely on the global export market for recycled paper and metals. There is some interest currently in developing outlets in Ireland for recycled plastics and this interest is supported by the current market structure. Any suggestion of a change to the market structure would undermine advances in that regard.

The current impact on paper and plastic recycling markets is a global issue caused by new rules in China and is impacting every country in the EU as well as the US, Australia and elsewhere, regardless of the market structure in those countries. In fact, we believe that the dynamic nature of the household waste collection market in Ireland is better able to adjust to volatile recycling markets compared with tendered markets. There is no suggestion in Ireland that companies will stop collecting paper and plastics from households in Ireland, despite their negative value, whereas such claims are being made in other countries that have competitive tendering in household waste collection.

## Waivers or Other Public Service Obligations:

Should the Government decide to provide waivers or any other form of social welfare to people that require social protection, the waste industry can accommodate such moves within the current market structure. This has been demonstrated recently with our engagement on the move to provide support for persons with lifelong/long-term medical incontinence. The IWMA agreed to all that was asked in that case.

#### **Collection Density:**

Some commentators claim that household waste collection is a natural monopoly due to economy of density and should be competitively tendered.

Economy of density is an important factor in the unit cost of many services, yet this factor is not so overwhelming to require the introduction of competitive tendering in other areas. For example, delivery of milk, broadband, newspapers or home heating oil to householders or the provision of bus services between cities. These services are offered by different companies in side-by-side competition and the consumer benefits from the direct and dynamic competitive actions of the competing companies.

Dr. Francis O'Toole in support of Dublin City Council's position in the Nurendale Ltd. (Panda) –v- DCC case (discussed above) claimed that household waste collection in the Dublin Region is a natural (local) monopoly. However, Dr. Helen Jenkins of Oxera in support of Nurendale's position argued that household waste collection in Dublin was not a natural monopoly.

The High Court Judgment sided with Dr. Jenkins as follows:

"I do not believe that the Dublin market for the collection of household waste is a natural (local) monopoly either taken as a whole, or in each individual local authority area. The evidence from both parties would indicate that the minimum efficient scale is such that, even in the smallest local authority area, there are a sufficient number of customers to support at least three, if not more, operators."

And further in the same paragraph, the Judgment states:

"I was also not impressed by the report of Dr. O'Toole. His assertions were of a hypothetical nature and of little application, in many situations, to this case. I found it extraordinary that he did not consider it necessary to define the potential number of markets within the Dublin region; such I would have thought would have been a prerequisite to determining if the Dublin region was a naturallocal monopoly, and if so to what extent. In this regard I would note that the general nature of his report may not be wholly his fault; he may have worked with what he was given. However, in circumstances where the burden is on the respondents to show that the Variation is objectively justified under s. 4(5) CA 2002, I would have expected far more empirical evidence showing that notwithstanding what potential forbearance with regards to the Variation's effect on competition, it was in fact, when the figures were considered, both pro-competitive and to the benefit of consumers. No such evidence was presented in this case.

In contrast the report of Dr. Jenkins contains figures obtained from Panda which at least attempt an empirical analysis of minimum efficient scales and the effects of changes in both scale and density on costs, as well as evidence of pricing in the local authority areas. I am left in no doubt but that the market is capable of

supporting multiple operators in competition with each other, and that this is not a situation where a monopoly is either required or to be preferred."

Also, the High Court judgment appears to generally support Oxera's contention that the potential for economies of density are not large in the Dublin household waste collection market. Dr. Jenkin's claims in this regard were described by the Judge at Paragraph 93 as follows:

"She points out that Panda's data would suggest that the economies of density in the Dublin area are not prohibitive:

[W]here Panda breaks even at 12,652 customers with five trucks, then if fuel costs were to halve, the minimum efficient scale would be 12,467 customers, which is just 1.5% lower. As fuel costs are an important constituent of the saving which would be expected to be made as a result of denser operations, this would seem to indicate that there would have to be large savings in maintenance or staffing costs for economies of density to be large." (p. 7)

Similarly there would be no significant saving by doubling the density of operations of the trucks, since trucks have a limited capacity, and although there would a saving in time per lift (from 1.9 bins per minute to 2.8 bins per minute, by increasing from 50% to 100% of a route) this would not be a sufficient time saving to enable an extra run per day. There would thus, on the basis of Panda's assessment, be little or no cost savings from more efficient collection in this regard."

The household waste collection market in cities such as Dublin clearly supports the minimum efficient scale of several companies operating in household waste collection in side-by-side competition.

The situation outside the major cities has evolved differently, as housing densities are lower. Waste companies have compensated for the lower densities in these areas by collecting household and commercial waste together in a single vehicle. This improves the economies of density for each operator on each route. Any change in the household waste collection market would impact significantly on the synergies provided through combining household and commercial routes.

The award of single tenders for household waste collection in geographical areas around the country would inevitably lead to reduced competition for commercial waste collections in those areas to the point where uncontrolled monopolies would emerge. The economy of density in commercial waste collection in small towns and villages is insufficient to support commercial waste collectors that have no household waste routes. In this scenario, the company that wins the household waste tender will gain a monopoly position that it can exploit, as there will be no restriction on the prices offered outside the scope of the tender, which would only relate to household customers. The cost to business would inevitably rise and this would impact on Ireland's competitiveness.

In summary, case law dictates that household waste management in Ireland is not a natural monopoly. Also, evidence presented by Oxera, shows that economy of density in household waste collection is a relatively minor factor in the price charged to the consumer and this is outweighed by increased competition in the market. Therefore, these issues cannot be relied upon to provide justification for re-structuring the market.

Economies of density can be improved within the existing market structure by a number of methods, including informal tendering by residents associations and waste companies servicing each other's customers.

Finally, the economy of density argument must consider the synergies between household and commercial waste collection outside of the major cities in Ireland and must recognise the likelihood that any proposed change to the market structure would lead to the emergence of uncontrolled monopolies in the commercial waste collection market.

#### Waste Prevention and Recycling:

With incentivised charging and weighing of every bin, householders in Ireland have a greater choice of options for management of their waste compared with their EU counterparts and are financially incentivised to prevent and recycle waste. This is a major advantage with the Irish system for both the householders and the environment. Other EU countries are now looking at Ireland and learning from our experience, with a view to introducing payment systems that incentivise households in their countries to prevent and recycle waste.

This is not easy in systems where people pay local taxes and the market is competitively tendered on 5 year cycles. Some local authorities in the UK have tried to reduce the frequency of residual waste bin collections to every third week in an effort to reduce waste arisings. This has proved to be highly unpopular and has resulted in political pressure and the introduction of private collectors to supplement the public service, negating the effort to reduce waste.

One size does not fit all and in the UK system a medium sized household may be adequately incentivised to reduce and prevent waste, whereas a small household may not be incentivised at all and a large household may find it impossible to manage their waste within the system and may look elsewhere to supplement the service (legal or illegal). Fly-tipping is a big problem in the UK, despite universal coverage and indirect payment for the service.

#### **Innovation:**

The household waste collection market in Ireland is very consumer focussed and is highly innovative with service offerings and with cost-efficiencies. In Section 2.1(c) above, we highlight some of the innovative measures that have been taken by waste companies in Ireland to attract and to keep customers and we make the point that competitively tendered markets do not encourage such innovation. We see little very little customer-focussed innovation in the UK and in other countries in Europe that operate competitively tendered markets.

In addition, waste collectors in Ireland have been very innovative in servicing rural areas, where collection densities are low. They have introduced multi-compartment vehicles that can collect and weigh 2 or 3 waste types in separate parts of the vehicle body. This helps the collector to bridge the gap between the costs associated with servicing high density and low density routes. This innovation therefore ensures that rural customers do not have to pay a much higher price for service and are normally charged the same price as nearby urban dwellers.

(h) In your opinion, are the current regulatory and enforcement regimes in the household waste collection market adequate? What, if any, changes to these regimes would be appropriate? Please explain your answer.

The household waste collection market is very highly regulated by the Waste Management (Collection Permit) Regulations and the permits that are issued by the National Waste Collection Permit Office (NWCPO). The permits control every aspect of waste collection, including the following:

- Types of waste that can be collected,
- Vehicles that can be used to collect the waste and markings on these,
- Local Authority areas where the waste can be collected,
- Facilities where the waste can be delivered,
- Avoidance of environmental pollution,
- Emergency Response Procedures,
- Weighing of every bin lift and reporting the weights to the householder and the authorities,
- Collection of a consistent list of dry recyclables,
- Collection of biowaste in designated areas,

- Provision of a Customer Charter in a regulated format,
- Incentivised charging,
- Compliance with regional waste management plans,
- Waste management qualifications for key personnel,
- Compliance with EU Directives and National Targets,
- Compliance with wheeled bin standards (IS EN840 parts 1-6),
- Electronic tracking of vehicles where required by enforcement authorities,
- Notification of convictions and it and proper status of collectors,
- Reporting of incidents,
- Record keeping, annual reporting of data and maintenance of records for 7 years,
- Tax clearance certificate,
- Public liability insurance (€6.5 million) and third party property damage motor insurance (€6.5 million),
- Environmental management system including customer complaint management system,
- Provision of details on days of collection and collection routes,
- Payment of enforcement costs,
- Communication with customers,
- Rules to facilitate ease of changing service provider,
- Noise emission limits and nuisance avoidance,
- Permitted times for collection in specified areas.

The enforcement of these regulations lies with the local authorities and can vary somewhat from county to county. The IWMA favours consistent national enforcement and supports the enforcement authorities in their endeavours to ensure a level playing field for all waste collectors.

The IWMA does not currently have an agreed position on any other potential regulations or regulator for the waste industry. We would give due consideration to any such proposals as part of a stakeholder or public consultation process. The biggest currently for our members that collect household waste is consistent and equal enforcement.

## **Other Views**

2.8 Please provide any further views you may have on the household waste collection market in Ireland

We hope that our submission is informative and helpful to the CCPC and we look forward to your report in due course.

Yours Sincerely,

Conor Walsh IWMA Secretary

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