

# Economic assessment: Re-municipalisation of household waste management in Ireland

Prepared for the Irish Waste Management Association (IWMA)

—  
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# Glossary

Acronyms and key terms used in the report are listed below.

## Acronyms and key terms

AD	Anaerobic Digestion
bn	Billions
EfW	Energy from Waste
Excl.	Excluding
FX	Forex
Int'l	International
km <sup>2</sup>	Square Kilometre
LA	Local Authority
m	Millions
n	Number
n/a	Not applicable
NI	Northern Ireland
Pop.	Population
SRF	Solid recovered fuel
UK	United Kingdom
yr.	Year

## Organisations

CCPC	Competition and Consumer Protection Commission
CSO	Central Statistics Office
CUPE	Canadian Union of Public Employees
EU	European Union
GMB	General Municipal Boilermakers
IWMA	Irish Waste Management Association
ISWA	International Solid Waste Association
NWCPO	National Waste Collection Permit Office
OECD	Organisation for Economic Cooperation and Development
QUB	Queen's University Belfast

## Ratios

EBITDA	Earnings before interest, taxes, depreciation, and amortization
COGS	Cost of goods sold
ROCE	Return on capital employed

# Report context

The re-municipalisation of household waste collection in Ireland would have numerous economic, legal and practical implications. KPMG has been engaged by the Irish Waste Management Association to conduct an independent study into the impacts of re-municipalisation.

## Context:

**Household waste collection in Ireland is fully privatised**, with private companies contracting directly with household customers to provide the service. The waste collection system is **regulated** by a permitting regime that is backed by national legislation plus local bye-laws, in some places. The system is enforced by the local authorities with backing from a regional structure with national coordination. There are very limited circumstances in Ireland where local authorities collect household waste or directly contract such waste collection services. The transfer and treatment of household waste is also almost exclusively carried out by private sector companies.

## Change:

There have been a number of discussions in Dáil Eireann this year on household waste collection in Ireland. A number of Political Parties and Independent TDs and Senators have suggested that **local authorities should regain responsibility for household waste collection** and become the sole provider of the service (re-municipalisation). **Re-municipalisation** involves bringing the waste management and collection services back under direct public control and management after a period of privatisation or outsourcing.

## Objective:

The objective of this study is to **quantify the potential economic implications for a scenario of full re-municipalisation** of household waste collection in Ireland, i.e. where local authorities take over the household waste collection services currently undertaken by private sector businesses. Note that the cost and timescale of any legislative process to deliver re-municipalisation is not included in this analysis and fall outside the scope of this report. The analysis covers the **financial implications** of re-municipalisation across three key areas:



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# Executive summary

# Executive summary: key findings

<p><b>Evolution of the Irish waste management sector</b></p>	<p><b>The Irish waste management sector has evolved significantly and is now an innovative sector at the centre of the circular economy</b></p> <ul style="list-style-type: none"> <li>• There has been a shift from a historic reliance on landfilling of household waste, to it becoming a highly sophisticated and innovative sector focused on recycling and landfill diversion</li> <li>• For example, between 2001 and 2020, municipal recycling rates increased from 13% to 41%, and landfill rates dropped from 87% to 16%</li> </ul> <p><b>Significant capital expenditure has also been made by the private sector to invest in infrastructure and waste management beyond collection, landfill and recycling facilities</b></p> <ul style="list-style-type: none"> <li>• The sector is currently managing 100 transfer stations, +10 materials recovery facilities, +20 biological plants and +10 final treatment plants. Panda is also looking to invest €50m over 5 years to combat plastic waste, including the development of a “wash and return” facility to re-use plastic food trays</li> </ul> <p><b>Recent policy and regulatory developments is putting increased emphasis on the role of waste management in achieving environmental objectives</b></p> <ul style="list-style-type: none"> <li>• The Waste Action Plan for a Circular Economy 2020 and the Circular Economy Act in 2022 is positioning Ireland to become a more sustainable country, focused on re-use and reduced consumption</li> </ul>
<p><b>Privatisation of household waste management – a decade on</b></p>	<p><b>Privatisation of household waste collection has contributed to improved outcomes for government</b></p> <ul style="list-style-type: none"> <li>• Private sector involvement in household waste collection was initially encouraged by government policy in 1998 with a document entitled “Waste Management – Changing our Ways” as a method of meeting national waste objectives</li> <li>• In addition, from the perspective of cost efficiency – Dublin City Council was operating its waste collection service at an annual loss of ~€10m up until its exit from the market in 2012</li> </ul>
<p><b>Global waste re-municipalisation context</b></p>	<p><b>Global examples of waste re-municipalisation from fully privatised markets like Ireland are limited, and some jurisdictions have decided against re-municipalisation due to the cost</b></p> <ul style="list-style-type: none"> <li>• While there are some examples of waste re-municipalisation (including in the UK), these examples are limited to jurisdictions where a competitive tendering model was in use</li> <li>• Both Sheffield (UK) and Winnipeg (Canada) considered in-house provision but based on a review of the likely cost savings and cost of implementation, decided to continue with private service provision</li> </ul>
<p><b>Economic assessment of the impact of re-municipalisation in Ireland</b></p>	<p><b>Our analysis suggests the cost to consumers on a per household basis will increase significantly under a re-municipalisation model</b></p> <ul style="list-style-type: none"> <li>• Compared to jurisdictions with similar levels of rural geography and recycling (e.g. Northern Ireland and Scotland), waste collection and treatment costs per capita are lower in Ireland. Costs are also among the lowest when compared to EU countries with similar levels of rural geography and apartment living</li> <li>• Comparing operational effectiveness of Irish private sector waste management companies against peers, across jurisdictions that share similar demographics and recycling mandates as Ireland, evidence showed that Ireland is performing on par with both the United Kingdom and France when we compared with key performance metrics</li> </ul>


# Executive summary: overall cost of re-municipalisation

The potential financial impacts of re-municipalisation are considered across a range of low and high cost scenarios with incremental costs estimated.

## Low Scenario – Total cost of €2.14bn over 10 years, consisting of the following:



**€490m**  
Once-off direct costs for transfer of collection service to local authorities



**€810m**  
Ongoing direct costs (total incremental costs over 10 year period)




**€837m**  
Compensation costs for private operators exiting the market (once-off)


## High Scenario – Total cost of €3.79bn over 10 years, consisting of the following:



**€1.25bn**  
Once-off direct costs for transfer of collection service to local authorities



**€1.06bn**  
Ongoing direct costs (total incremental costs over 10 year period)



**€1.47bn**  
Compensation costs for private operators exiting the market (once-off)

*Note: Costs have been rounded and may not sum to total. Once-off direct costs refers to upfront investment required and ongoing direct costs refers to incremental operating expenditure required. Compensation includes EBITDA valuation of business and replacement for bin assets transferred. Costs are reported as incremental compared to current costs: capital expenditure, annual operating costs and combined costs over a fixed time period, e.g. useful life of physical assets. Compensation costs are a one-time payment paid to the companies who can no longer operate waste services. Compensation costs are point-in-time estimates that do not take into account current synergies across business units (i.e. joint provision of household and commercial collection, and operation of transfer and treatment stations) – calculating actual compensation costs will require valuation of individual businesses which is not within the scope of this report.*

# Executive summary: cost of re-municipalisation by household

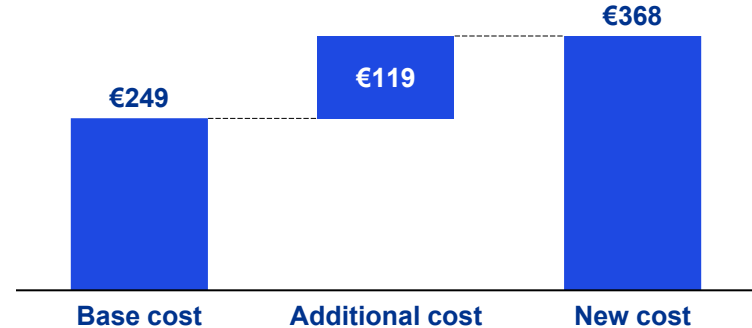
The potential financial impacts of re-municipalisation are considered across a range of low and high cost scenarios.

## Low Scenario – Total cost of €2.14bn over 10 years

Taking into account the number of occupied households in Ireland, this would imply re-municipalisation will result in

**an increase in costs per household of 48%.**

Average annual cost per household

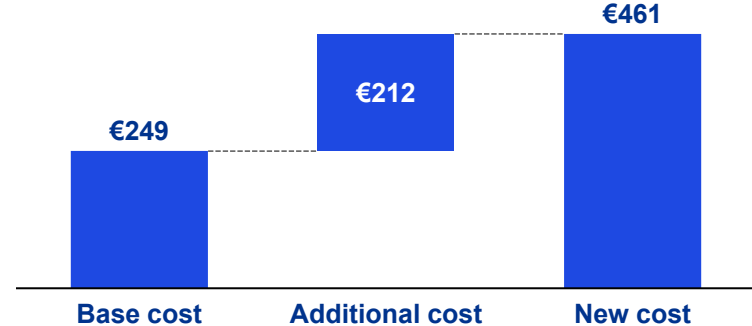


## High Scenario – Total cost of €3.79bn over 10 years

Taking into account the number of occupied households in Ireland, this would imply re-municipalisation will result in

**an increase in costs per household of 85%**

Average annual cost per household



Note: Cost per household assumes a weighted average of occupied house and apartment costs. All incremental costs from re-municipalisation are assumed to be passed onto households over a 10 year period. The base cost excludes VAT and is derived from analysis of 2018 to 2020 data collected by the Price Monitoring Group. Current costs are likely to be higher due to recent high inflation and additional Government levies introduced in 2023.



# Overview of the Irish waste management sector

# Policy landscape

The management of household waste in Ireland has evolved significantly since the Waste Management Act was introduced in 1996. A number of factors have contributed to this evolution, including changes in international markets and European legislation, changing practices within the waste industry and major institutional reform. Below we have summarised the key messages on household waste from Ireland's Waste Action Plan.

## Background

- Household waste management in Ireland is guided by national waste policy. The '[Waste Action Plan for a Circular Economy](#)' is an action focused plan and sets out Ireland's **National Waste Policy for 2020-2025**.
- The 2020 Circular Economy Action Plan 'For a cleaner and more competitive Europe' from the **European Commission** recognises the need to accelerate the transition to a circular economy to the entire mainstream economy.
- Domestically, transposition in 2020 of the revised **EU Waste Directives** hardwired the new **legal commitments** agreed in 2018 on **recycling** and **landfilling** for 2025 and 2030 into the Irish economy and society.
- The **Circular Economy Act** was published in 2022, providing a legal framework to define circular economy, **incentivise use of reusable and recyclable alternatives to single-use items**, use **CCTV to monitor illegal dumping**, and streamline rules supporting recycled materials, with implementation aided by the Waste Advisory Group.

## Proposed Measures

The **Action Plan** proposes new measures to improve household waste management, such as:



Ensure that household waste management will be an **operational** and **enforcement priority** for all stakeholders.



Improve **waste segregation** in apartment complexes.



**Mandatory provision** of an **organic waste bin** as part of a waste collection service for all households



Work with **stakeholders** to ensure the waste sector is **responsive** to **emerging trends** and **best practice** in waste collection and treatment options.



Introduction of a **€10/tonne waste recovery levy** alongside an increase in the existing landfill levy to €85/tonne. This will incentivise households and businesses to minimise black bin waste and maximise recycling for lower collection costs.

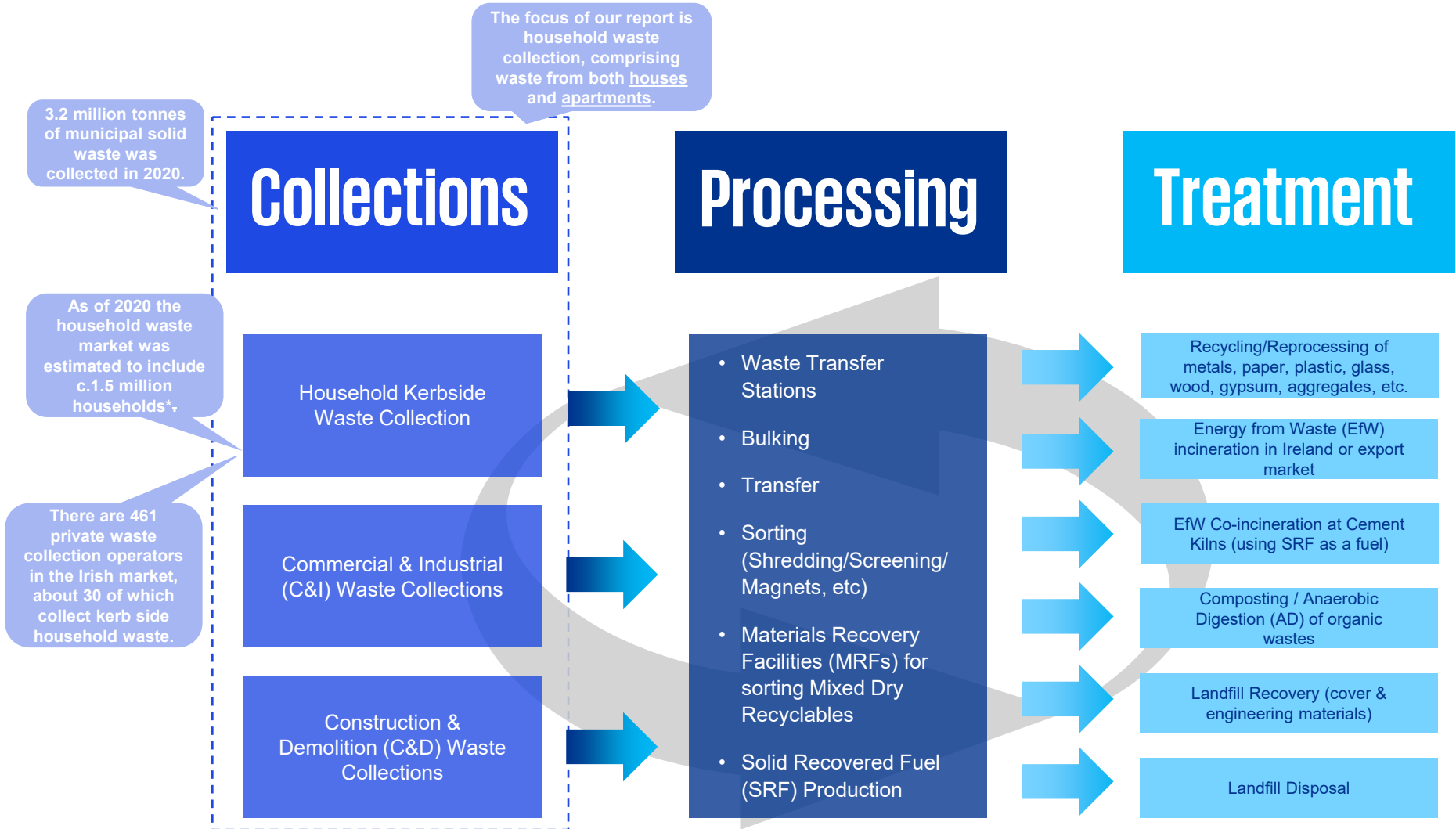
## Consumer Protection

- An effective waste collection market requires a **balancing of powers** across regulatory bodies, the waste collection industry, and their end-users – households throughout Ireland.
- There is currently **no statutory body** undertaking market monitoring for waste collection performance or charges. Similarly, no dedicated, statutory **customer complaints procedure** exists.
- The **Action Plan** proposes new measures to empower households through **better consumer protection** including:
  - Expanding the role of the **NWCPO** to become a collection market oversight body.
  - Expanding the role of the **Price Monitoring Group** to monitor more of the market.
  - Strengthening the current **customer service charter** with penalties for non-compliance, including fines.
  - Ensuring consumers can easily access their waste **data** and **pricing plan** to allow for **comparison** with other collectors & require waste collectors to ensure they provide **accurate** and **timely pricing information** to the public.

Sources: Government of Ireland, "[A Waste Action Plan for a Circular Economy: Ireland's National Waste Policy 2020-2025](#)"; Government of Ireland, *Circular Economy Act 2022*.

# Waste flows: value chain

The flow of waste can be categorised into three key steps: Collections, Processing/Transfer and Treatment.

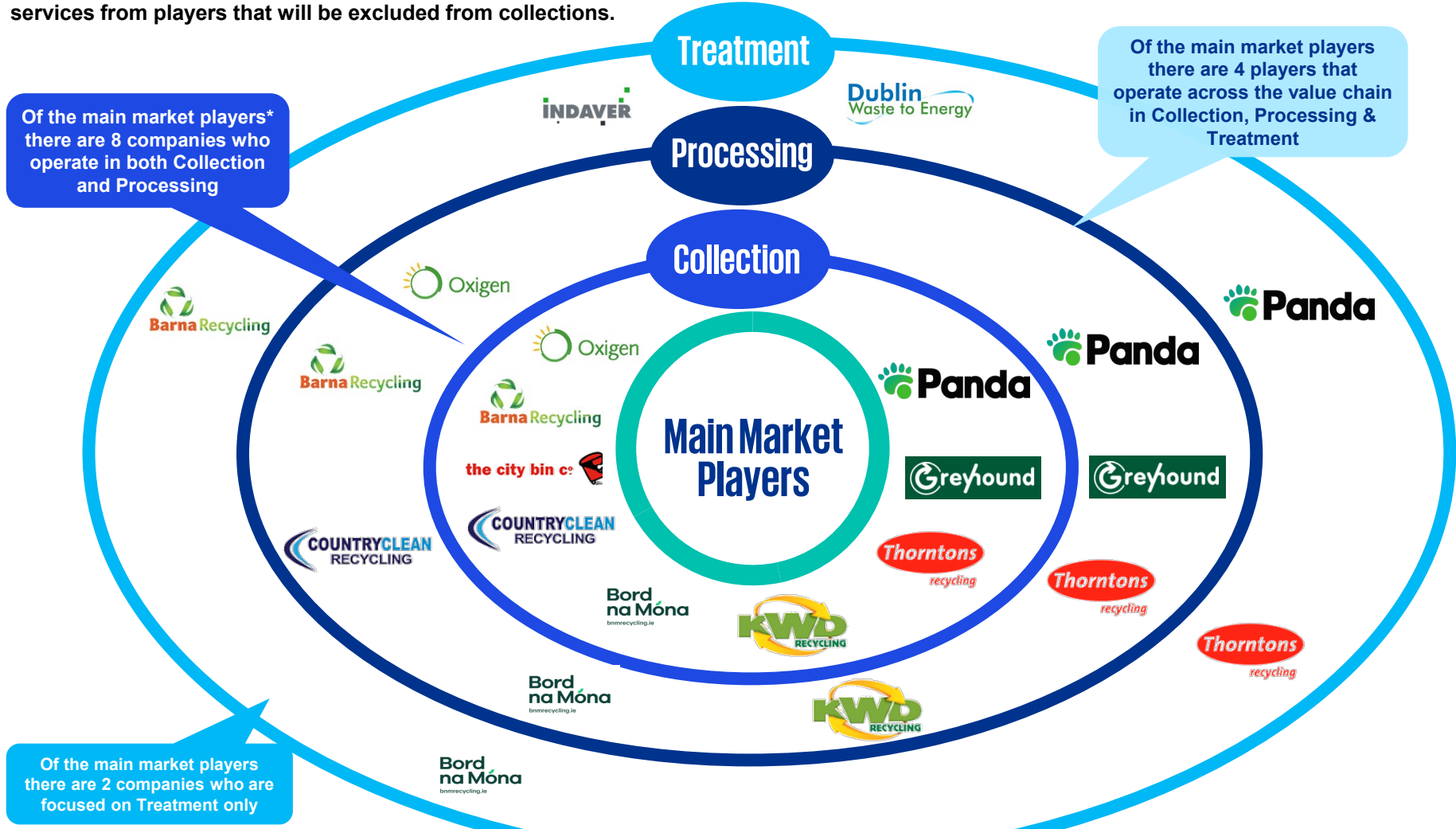


Sources: SLR, EPA, IBIS World. Note: \*Households includes both houses and apartments.

# Ecosystem: value chain integration

Non-exhaustive

Value chain integration holds implications for the re-municipalisation of collections, especially in terms of Local Authorities' access to processing services from players that will be excluded from collections.

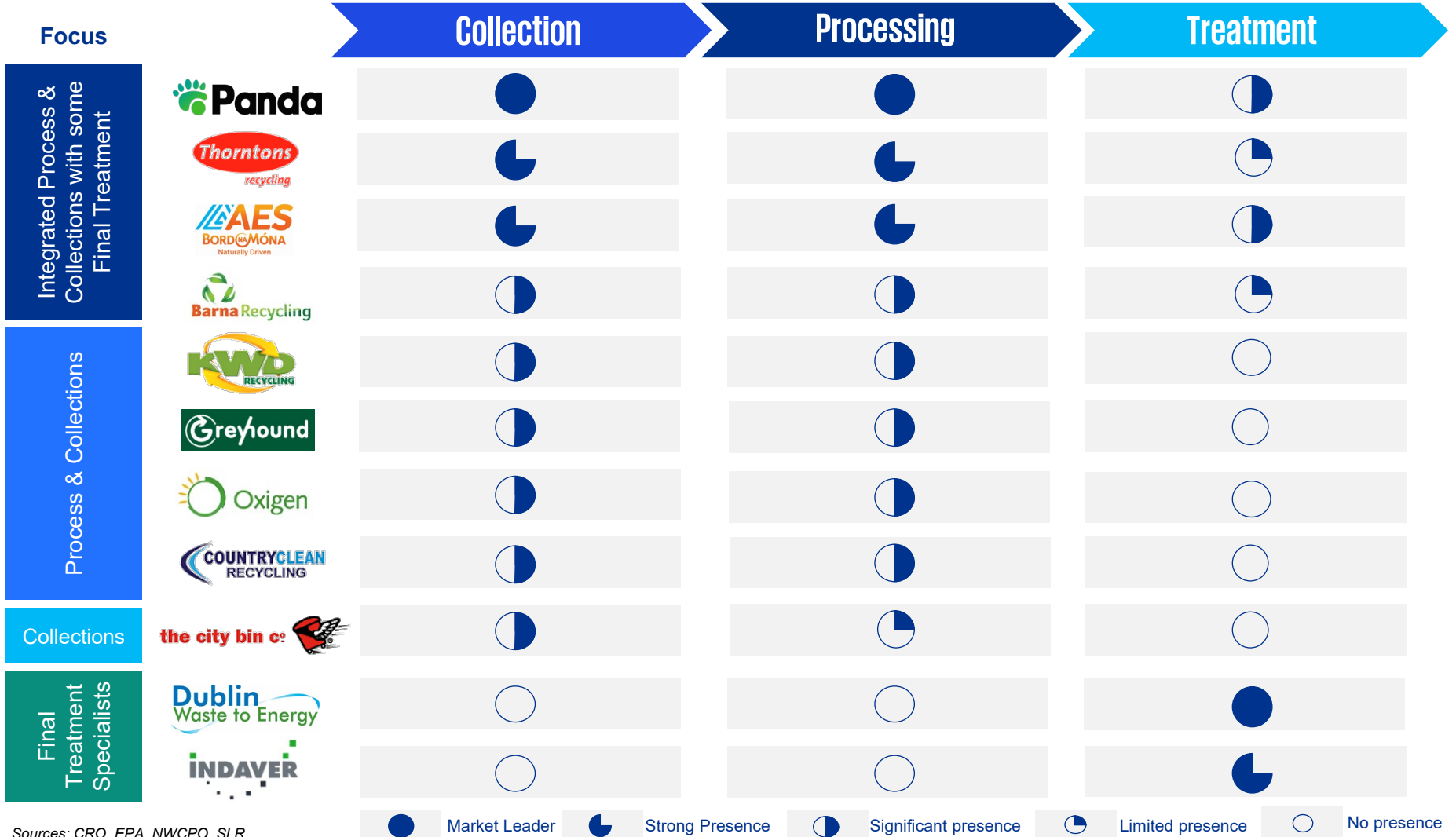


Sources: SLR.

Note: \*The list of waste management companies above is non-exhaustive. Main Market Players by market share. See next slide for further information.

# Main market players: activities

The main waste management market players (listed below) represent ~57% of the total Collection market, ~65% of the total Processing market and ~57% of the total Treatment market across the Republic of Ireland.



Sources: CRO, EPA, NWCPO, SLR.

● Market Leader
◑ Strong Presence
◐ Significant presence
◑ Limited presence
○ No presence

# Main market players: geographic coverage

✓ Presence    ✗ No presence

The main Irish waste management market players and their geographic coverage across the waste management value chain are outlined below.

Focus		Greater Dublin Area	Southeast	Midlands	Cork	Southwest	West	Northwest
Integrated Process & Collections with some Final Treatment	Panda	✓	✓	✗	✓	✓	✓	✓
	Thorntons recycling	✓	✓	✗	✗	✗	✗	✗
	AES BORD na MÓNA <small>Naturally Driven</small>	✓	✓	✓	✗	✓	✗	✗
	Barna Recycling	✗	✗	✓	✗	✗	✓	✓
Process & Collections	KWD RECYCLING	✗	✗	✗	✓	✓	✓	✗
	Greyhound	✓	✗	✗	✗	✗	✗	✗
	Oxigen	✓	✓	✓	✗	✗	✗	✗
	COUNTRYCLEAN RECYCLING	✗	✗	✗	✓	✗	✗	✗
Collections	the city bin co.	✓	✗	✗	✗	✗	✓	✗
Final Treatment Specialists	Dublin Waste to Energy	✓	✗	✗	✗	✗	✗	✗
	INDAVER	✓	✗	✗	✓	✗	✗	✗
Number of Main Players in Region (Excl. Treatment)		8	4	3	4	3	4	2

# Re-municipalisation context

# Timeline: evolution of the sector

Privatisation of the Irish market began in the 1990s and occurred gradually over time at a council level, with privatisation complete by 2013. The key driver was inefficiencies and high costs for consumers and significant losses incurred by local councils. While the structure is rare for household waste collections across Europe, the market structure has demonstrated benefits for both customers and local authorities. The successful structure is underpinned by cost comparability and environmental benefits.

1998 - 2003

## Pre 1995

Limited charges from local authorities – some private firms charged **charged** flat rate fees, particularly in rural areas not serviced by local authorities

## 1998

**Waste Management Changing Ways (1998)** – European and government policy emphasising waste prevention and reduced reliance on landfill

## 2002

**Delivering Change: Prevention and Recycling Waste (2001)** – European and government policy targets for improved recycling levels

## 2003

**Protection of the Environment Act (2003)** – extended & amended powers of local authorities to charge for waste collection

## 1996

**Waste Management Act (1996)** – introduced regulations concerning waste facilities, waste management plans, public information registers, etc.

## 2001

**Landfill levy imposed** – passed on by local authorities to private waste companies

At this point waste collection undertaken by a mixture of local authorities & private waste firms; increasing number of private firms entering market, waste charges largely fixed

2004 - 2018

## 2004

**Taking Stock and Moving Forward (2004)** – EU calling for ‘Polluter Pays’ principle to be applied. Pay by volume / lift is introduced in Dublin and some areas outside Dublin

## 2008

The privatisation of the Dublin market was opposed by Dublin local authorities, but a successful High Court challenge by two waste management companies prevented the creation of a local authority monopoly

## 2013

Domestic waste collection fully **privatised** due to limited council capabilities, stricter EU policies, and opportunities for **potential cost savings**

## 2015

**Environment (Miscellaneous Provisions) Act (2015)** – Introduction of a pay by weight scheme incorporating minimum mandatory fees by July 2016

## 2016

Government abolishes minimum mandatory fees allowing private companies to offer their own incentivised charging scheme

Enacting of pay by weight scheme per the 2015 Act  
Dublin customers experience significant price increases  
Political calls for more transparency from private waste industry

Amidst public backlash an already unstable government freezes new waste charges until July 2017

## 2018

Wide range of charging mechanisms in place the market

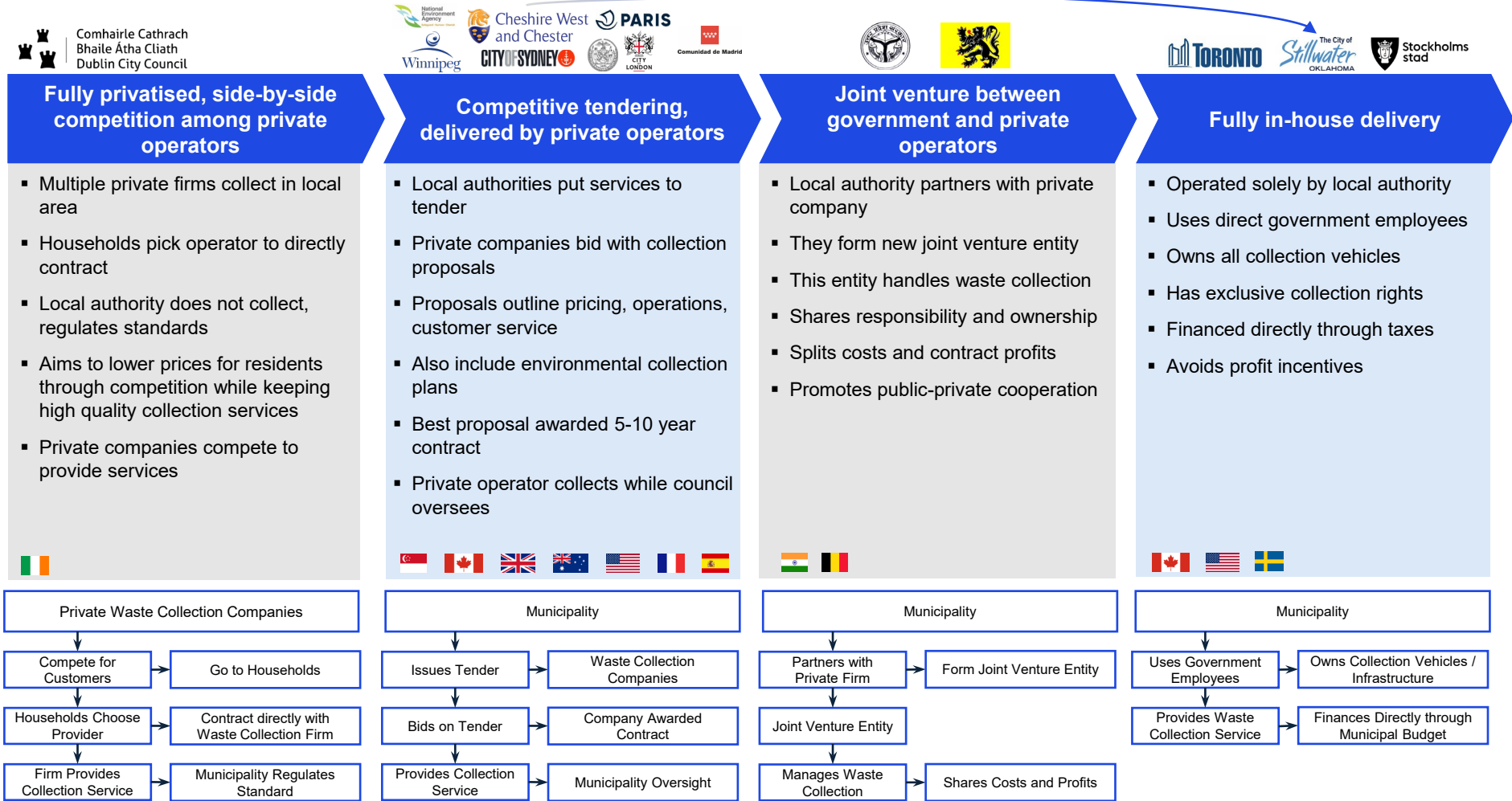
Fully privatised



# Operating models for waste collection

Household waste collection in Ireland has progressed almost exclusively towards side-by-side competition, with the exception of one or two municipalities.

Typical re-municipalisation pathway\*



Sources: CCPC Ireland, Winnipeg Council, NEA SG, ScienceDirect, WasteDive. Note: \*Typically it is municipalities that operate a tendered contract system that re-municipalise towards in-house delivery, we have found limited evidence of either joint venture systems or fully privatised systems re-municipalising.

# Role of government in waste collection

Household waste collection in Ireland is fully privatised, so private companies contract directly with household customers to provide the service, with customers charged a fee directly. The system is overseen by the local authorities with backing from a regional structure with national coordination. In other European countries, Local Authorities are responsible for waste collection, often outsourcing services to private operators under long-term contracts with customers normally charged via an annual council tax.

**Ireland**

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**Government Involvement**

Policy & Regulation	Contracting Out	Provision of Service
✓	✗	✗

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Private companies contract direct with households

Enforced by local authorities

Customers billed directly by private company

Operate under a permitting scheme regulated by national legislation

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**Typical Tender Terms**

n/a

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**Key Private Operators**

**United Kingdom**

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**Government Involvement**

Policy & Regulation	Contracting Out	Provision of Service
✓	✓	✓

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Collection by local councils or private waste firms

Waste regulation devolved separately to each nation

Funding partially from central government, partially from local taxes

Legal duty to collect household/commercial waste as outlined in the Environmental Protection Act

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**Typical Tender Terms**

5-10 year contract

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**Key Private Operators**

**Spain**

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**Government Involvement**

Policy & Regulation	Contracting Out	Provision of Service
✓	✓	✗

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National planning by Ministry of Agriculture, Food and Environment

Shared responsibilities between local, regional and national levels

Local management of municipal waste by municipal authorities

Municipal waste collection mainly at collection points, some door-to-door

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**Typical Tender Terms**

5-10 year contract

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**Key Private Operators**

**Greece**

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**Government Involvement**

Policy & Regulation	Contracting Out	Provision of Service
✓	✓	✓

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Majority of waste collected by municipalities

Shared public and private sector roles in municipal waste collection

Potential for strikes if contracting out to private sector

Several municipalities contract to 1 of 4 private waste collectors

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**Typical Tender Terms**

10-18 months

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**Key Private Operators**

Sources: European Environment Agency, ISWA, OECD.

# Case study: Sheffield, United Kingdom



## Overview

In 2017, the Sheffield City Council in the UK considered terminating its 35-year contract with Veolia, which was established in 2001 and was originally set to conclude in 2036. Analysis found that bringing the waste management services under municipal control through re-municipalisation would not secure the anticipated savings, so the council decided against this option. Although the current contract was deemed to be inadequate in addressing the city's needs, the analysis determined that re-municipalising would not fix the inherent issues.

### Existing private operator

- Veolia Environment SA designs and provides water, waste, and energy management solutions worldwide
- Veolia was responsible for collecting and disposing of waste, running household waste recycling centres, and managing and operating the council's incineration facility. Under the terms of the contract, Veolia cost the city ~€32 million (~£28m) in 2017, and employed 280 people in Sheffield

### Re-municipalisation rationale

- **Improve recycling targets:** The General Municipal Boilermakers ("GMB") union accused Veolia of redirecting recyclable household waste to its incinerators. This action led to increased pollution, hampered Sheffield's ability to achieve recycling targets, and resulted in workers missing out on potential bonuses tied to meeting those targets
- **Reduce industrial action and misconduct:** Veolia employees engaged in numerous strikes due to pay disputes, grievances related to management's "aggressive" tactics, and an unusually high number of gross misconduct cases
- **Reduce cost of service delivery:** The key strategic objective for the proposed re-municipalisation was to significantly reduce the cost of Waste Services and to allow for a more responsive, flexible and sustainable service in the future

### Re-municipalisation cost considerations

- Employee costs incl. payroll costs, TUPE transfers;
- Termination Payments & Lost Compensation;
- Organisational Infrastructure and workforce upskilling;
- Infrastructure Investment;
- Additional council resources and overheads; and
- Reputational risk mitigation

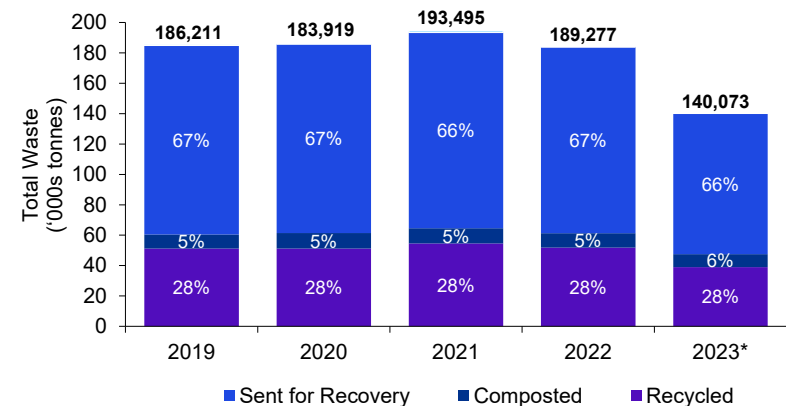
### Conclusion

- The Sheffield City Council rejected the option to insource this service based on the conclusion that the proposed re-municipalisation would result in too much risk for the Council and would not meet the prime objective of securing savings
- The council and private operator agreed a renegotiation of contract terms and continuation of Veolia as waste contractor for the city

Sources: Resource.co, Sheffield City Council Report.

Note: GBP to EUR 1:1.16, 16/10/2023.

### Sheffield Waste Collected by type



\*2023 figures only consider first three quarters

# Case study: Winnipeg, Canada



## Overview

In 2006, the municipal waste service and refuse collection in Winnipeg transitioned from a public municipal utility with a trade union presence to a privatised system. In 2020, the city proposed a two-year pilot project that was intended to see whether what the city calls "insourcing" — work by city employees — can be cost-competitive with waste collection by private contractors. After detailed consideration the council rejected the pilot due to budgetary constraints and the elevated costs associated with the delivery of the program.

### Existing private operator

- Miller Waste Systems & GFL Environmental became the new collection companies in 2018 as contracts with incumbents Emterra Environmental were not reinstated. All three firms offer waste and recycling services across Canada.
- The new contract set for a period of 7 years was worth €17.2 million (\$24.8m) annually, it previously cost €12.7 million (\$18.2m). The contract required the delivery of re-agreed waste services including curb side collection of garbage, recycling processing, yard-waste collection, and bulky item pick-up.

### Re-municipalisation rationale

- The Canadian Union of Public Employees (CUPE) pushed forward proposals to bring the service back in-house; a commissioned survey from the union claimed that 59% of residents believed the city should look into having city workers carry out waste collection.
- **Increase Reliability:** The then garbage collector had failed to effectively collect yard-waste for the months of October & November 2015. Additionally, the firm had been fined €275k (\$400k) in 2013 for consistently missing collection in several areas.
- **Reduce cost and increase quality:** CUPE president claimed they could complete the service at lower cost and higher quality due to their status of being a non-profit.
- **Key Consideration:** Winnipeg had the opportunity to take services in-house ahead of the private contract expiry date. Therefore, avoiding costs associated with early termination.

### Re-municipalisation cost consideration

- Employee costs incl. payroll costs, hiring costs;
- Fleet acquisition (collection vehicles);
- Ongoing operational costs: salaries, administration and support expenses;
- Infrastructure Investment: facility upgrades; and
- Technical & physical considerations: upscaling staff, capacity constraints

Year	2021	2020	2019
Household Waste (tonnes)	284,700	304,400	275,200
Recycling Rate	17.7%	16.8%	18.5%

### Conclusion

- The Winnipeg Public Service recommended not proceeding with the pilot project to re-municipalise multi-family garbage collection. This was because the estimated costs of the two-year pilot exceeded the approved 2019-2021 operating budget. Implementing the pilot would have required an unplanned budget increase of €457,000 (\$656,000).
- Currently, the Winnipeg city council still operates through contracting out services and has made no further attempts to re-municipalise the service.

Sources: Winnipeg Council Minutes, Winnipeg Sun, CBC.

Note: CAD to EUR 1:0.7, 16/10/2023.

# Key takeaways

Re-municipalisation should be considered in the context of how the waste management sector has evolved, the different types of operating models for waste collection, the role of government and lessons from international case studies.

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**Privatisation** of the Irish market began in the 1990s and occurred gradually over time at a council level with privatisation complete by 2013. The key driver was inefficiencies and high costs for consumers and significant losses incurred by local councils.

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**Sheffield & Winnipeg:** In both instances, these councils looked to re-municipalise and decided against moving forth due to unlikely ability to achieve savings.



## 1. Timeline

- The operation of household waste collection has been the responsibility of the private sector since 2013.



## 2. Operating Models

- There are four main operating models used in waste management, with competitive tendering being most common.

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**Side-by-side:** A fully privatised system where companies contract directly with consumers, utilised in Ireland.

**Competitive Tendering:** The most common method where cities contract firms through tenders.

**Joint Ventures:** Rarely used, involving a partnership between a municipality and private firm.

**In-house:** When a municipality performs all functions itself.



## 4. Case Study

- Re-municipalisation typically responds to issues with private provision, and faces unique situational factors in every case.



## 3. Role of Government

- Depending on local law, government involvement ranges from state-run monopoly, oversight to policy or hands-on provision.

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**Varies globally:** Some focus on policy and regulation while enabling private operations. Others contract services to firms but maintain municipal options, representing a more hands-on role in direct service delivery.

# Economic assessment

# Key considerations

We quantified the impacts of providing waste management services under different operating models.

1

Consumers

**Objective:** To understand whether the cost and quality of service provided to the consumer would be lower or higher under a public sector delivery model.

2

Economy

**Objective:** To estimate the economic cost and timescale of implementing the change, both in terms of initial investment by councils and the long-term cost.

3

Businesses

**Objective:** To understand the operational effectiveness of Irish private sector waste management companies by comparing against peers across jurisdictions that share similar demographics and recycling mandates as Ireland.

# Summary of economic assessment

The results of the economic assessment indicate relatively high levels of cost efficiency in current private operations, when benchmarked with similar jurisdictions and other EU countries. The estimated incremental cost of re-municipalisation is estimated to range from €2.14-€3.79bn.



## 1. Consumers

- **High cost efficiency** – Compared to jurisdictions with similar levels of rural geography and recycling (e.g. Northern Ireland and Scotland), waste collection and treatment costs per capita in Ireland is lower, despite higher hourly wages. Costs per capita are also among the lowest when compared to EU countries with similar levels of rural geography and apartment living.
- **Low switching levels** – Switching levels is low in Ireland, due to both satisfaction with existing service (CCPC survey), and lack of alternate providers (up to ~20% of households only have access to one provider).



## 2. Economy

Costs of re-municipalisation have been quantified in terms of direct costs and compensation costs.

- **Direct costs** – Direct costs include one-off capital costs (e.g. hiring staff, rebranding services and infrastructure required) and ongoing operating costs (e.g. cost of service provision).
- **Compensation costs** – Based on lost future profit from waste collection activities, equivalent to a sale of the collection business.

Our modelling shows the **incremental cost of re-municipalisation is estimated to range from €2.14-€3.79bn**, depending on the level of cooperation from private players exiting the market and the level of compensation granted.



## 3. Businesses

- **Operating effectiveness on par with UK and France** – Across key metrics such as the proportion of municipal waste sent to landfill vs. recycling and proportion of packaging waste sent for recycling, Ireland is performing on par with both the United Kingdom and France when we compared the following performance metrics below.




**The incremental cost of re-municipalisation is high (estimated to be €2.14-€3.79bn) and may not provide the same level of cost efficiency and operating effectiveness.**

*Note: The cost modelling is based on a set of assumptions around direct and compensation costs of service delivery. Costs of service delivery have been estimated on the basis of average household waste collection costs for houses and apartments across Ireland, and due to information availability, do not account for potential cost differences between urban and rural areas.*



# Consumers: cost comparison

We reviewed 2018 cost metrics of providing waste management services under different operating models, comparing Northern Ireland (NI) and Scotland as jurisdictions that share similar rural geography and recycling levels as Ireland. Both NI and Scotland exhibit higher costs compared to ROI.

	Republic of Ireland 	Northern Ireland 	Scotland 
Total Waste Collection & Disposal Costs	€394m	£156m	£431m
Population	4.83m	1.88m	5.44m
Waste Collection & Treatment Cost per capita	€81.50	£83.20	£69.14
<b>Waste Collection &amp; Treatment Cost per capita</b> <i>Converted at 5 year average FX rate</i>	<b>€81.50</b>	<b>€101.84</b>	<b>€84.63</b>
<b>Waste Collection &amp; Treatment Cost per capita</b> <i>Converted at 5 year average FX rate</i> <i>Adjusted for Apartments</i>	<b>€72.00</b>	<b>€92.04</b>	<b>€76.48</b>
Average Labour Costs € per hour	€31.00	€25.70	€25.70
Population Density (people per km <sup>2</sup> )	69	136	67
Rural Population	36%	37%	18%
Recycling Rate	42%	43%	43%






Sources: SLR Report "Household Waste Collection Benchmarking Report" June 2018.

Note: Waste collection & disposal costs and population estimates based on 2018 figures.

# Consumers: cost and efficiency comparison

By comparing Ireland's waste collection and treatment costs per capita to other European countries, while accounting for factors like rural population levels and apartment living, this evaluation examines Ireland's relative cost efficiency in waste management.

Waste Collection and Treatment Figures Across European Nations

	Pop. Density (per km <sup>2</sup> )	Rural Pop.	Cost per Capita	Pop. in Apartments	Adjusted Cost per Capita*
France 	106	20%	€73.00	31.5%	€70.20
Republic of Ireland 	69	36%	€81.50	7.3%	€72.00
Austria 	106	34%	€107.00	45.0%	€108.34
Italy 	204	31%	€106.00	52.5%	€110.58
Denmark 	136	12%	€134.00	31.4%	€129.09

- Ireland operates a cost efficient waste collection and treatment model, irrespective of its low-density and highly rural population
- It outperforms comparable nations and only falls short against nations with high density, high apartment occupancy or fewer bin types

### Public Sector Inefficiencies

**56%**

Average revenue collection rate for commercial water charges in 2011 and 2012, prior to the establishment of Irish Water in 2013  
Higher levels of bad debt and lower revenue is likely to drive higher cost of service provision

**40%+**

higher pay for public sector workers in Ireland – *higher costs to run services.*

 **27% higher**

spend by EU countries to achieve similar public sector performance compared to other OECD nations.

**€20.6 bn**

Irish public sector wage bill

  
**€47,400**  
Average public sector wages in Ireland

  
**€33,900**  
Average private sector wages in Ireland

### Cost Savings

According to a study conducted by the Economic and Social Review on refuse collection in Ireland, it was found that private provision, had cost savings of:

**45%**

and demonstrated greater efficiency than their municipal provider counterparts.

Sources: SLR Report "Household Waste Collection Benchmarking Report" June 2018, Davy Stockbroker, Public Choice, Institute for Fiscal Studies, ESR.

Note: \*Cost per capita is adjusted for mean European Union apartment occupancy of 41.8%.

# Consumers: current attitudes

According to a public survey, most Irish consumers appear happy with their waste collection service. Current switching levels suggest that, even in areas where households do have a choice of operator, consumers are not switching to a degree that would have a meaningful impact on operators. The limited choice and lack of consumer protection around complaints & sanctions are the largest issues.

## Customer service

- As evidenced from the CCPC's market research, waste collection **would not appear to be an issue of concern** for most consumers, who seem to be **happy with their service**.
- However, the CCPC is aware, through contacts from consumers that **poor customer service** by some operators does arise as an issue, particularly when new policy initiatives are rolled out.
- Inadequate **consumer protection**, in terms of the lack of both **sanctions** for non-compliance and protocols for the **escalation of complaints**, was highlighted by several respondents to the CCPC consultation.
- While a **customer charter** was introduced in 2015, it has **no legal standing** in terms of operators adhering to its requirements.
- Introducing measures in this area is given specific attention in the 'Waste Action Plan for a Circular Economy' for Irish Waste Policy.

## Switching

- Consumers in a private market with a **choice** of provider have the potential to influence the behaviour of their supplier, particularly when a firm is offering a service that is deemed not to be acceptable.
- In Ireland a significant number of households can only obtain the services of **one operator**. Consumer market research found that 18% of households nationally and 25% in the Dublin region **did not have the option of more than one service provider**.
- Nationally, even where alternative operators are available, this is a **market with low switching levels**, which could be a consequence of the relatively **low financial returns** from switching, as **price** is the main reason for changing suppliers.
- A re-municipalised model **would limit consumer choice** by preventing switching between waste collection providers completely, reducing the competitive effects of provider selection on market pricing.

## Service uptake

- Based on NWCPO and Central Statistics Office data, the CCPC estimates that **approximately 23% of households do not avail of a waste collection service**.
- Household waste collection services are available almost everywhere in the country, however **some households choose to not pay for it**.
- This has **consequences** for the ability of these households to **dispose of their waste** in an **environmentally friendly manner**.
- In rural or low-density areas, service operation may be less economical for private players – the consequence of lower uptake in these areas is that the costs borne by consumers who do opt-in becomes comparatively higher.

Sources: CCPC "The Operation of the Household Waste Collection Market" September 2018.

# Economy: overview of cost buckets

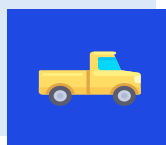
The costs of re-municipalisation have been quantified in terms of direct incremental costs and compensation costs. Qualitative considerations should also be taken into account.

## Direct costs



### “Once-off” – capital costs

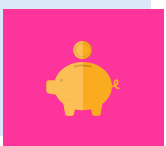
Costs for Local Authorities to take over household waste collection in terms of the capital and operational investment required. This includes costs of transitioning services over to municipalities, such as hiring staff, rebranding services and infrastructure required.



### “Ongoing” – operating costs

Costs of providing services to households and apartments, measured as the difference in costs between private and public service provision. Considers cost impact of potential public sector inefficiencies and the reaction of displaced operators influencing their willingness to cooperate.

## Compensation costs



### Compensation for market exit

Compensation for private providers based on lost future profit from waste collection activities effectively, a sale of the household collection business. Estimates based on industry EBITDA multiples and margins have been calculated and presented to give a range of potential outcomes. Additionally, an estimate of the compensation organisations may expect to receive from transferring assets (bins) is included.

## Qualitative considerations

Some considerations have not been quantified in the cost estimates due to higher uncertainty surrounding potential outcomes.

It is expected that the private companies currently providing waste management services would launch a **legal challenge** around future loss of earnings in the event of re-municipalisation. Whilst insight can be gleaned from other industries and global examples of re-municipalisation, it is unknown exactly how long a legal challenge would take or how much the agreed settlement might come to. The costs estimated in this analysis assume any such legal challenges have been resolved prior to LA running services.

In the event of re-municipalisation, Local Authorities responsible for waste management services would be responsible for the **Health and Safety obligations** for their staff. As a Public Sector organisation, this may be more elaborate and costly than current practices.

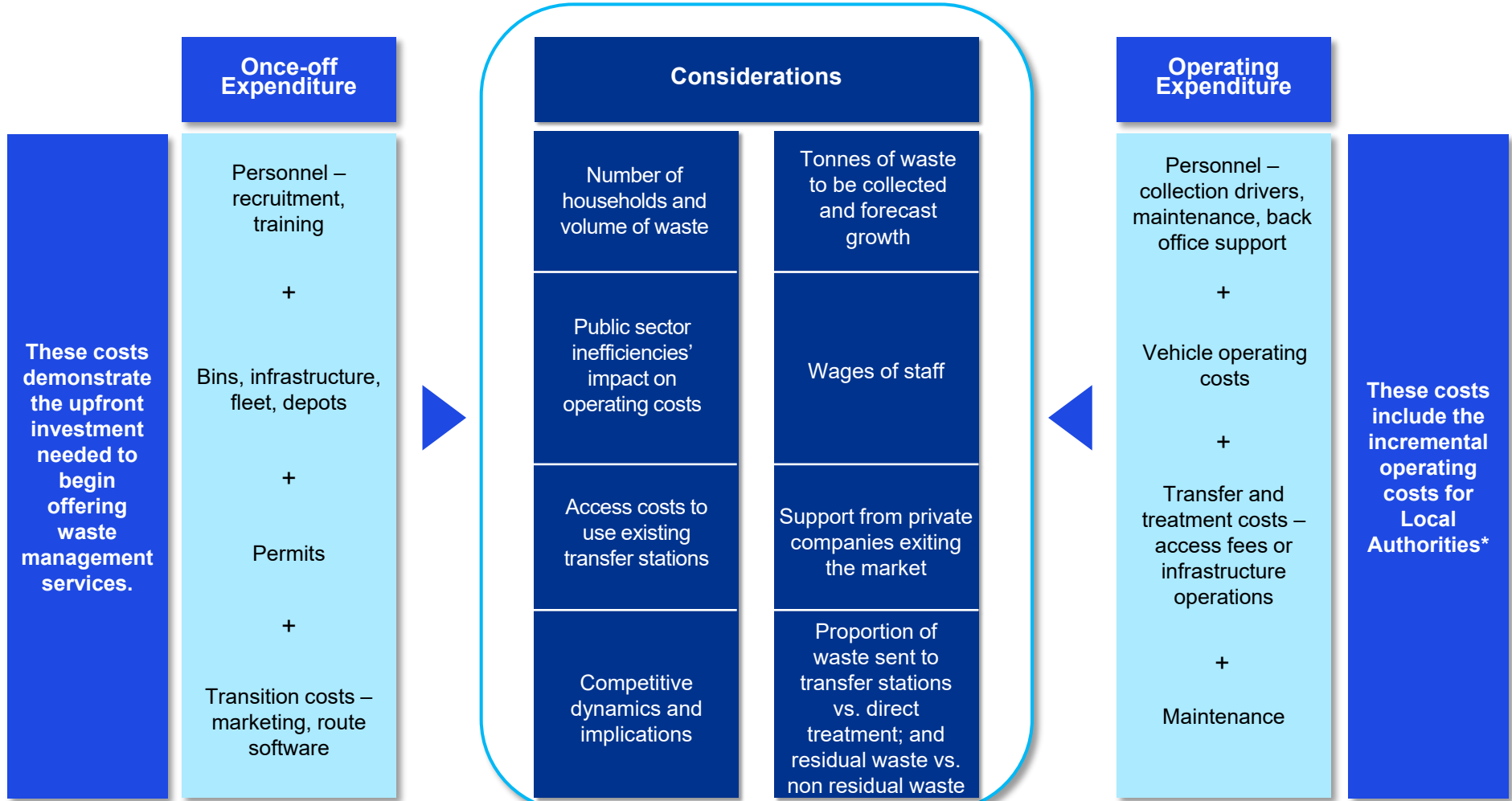
The higher public sector wages included in the analysis reflect higher labour costs in the public sector. However, **additional labour costs** could be incurred from differences between public and private sector pensions, annual leave or sick pay allowances.

In addition, there may be a **higher risk of bad debt** associated with local authority service provision. This would further impact operating efficiency and the ability to reduce costs for households. Historical data on local authority revenue collection for water charges before the creation of Irish Water serve as an example: only ~56% of monies owed was collected in 2011 and 2012.

*Note: Costs are reported as incremental compared to current costs: capital expenditure, annual operating costs and combined costs over a fixed time period, e.g. useful life of physical assets. Compensation costs are a one-time payment paid to the companies who can no longer operate waste services. Compensation costs are point-in-time estimates that do not take into account current synergies across business units (i.e. joint provision of household and commercial collection, and operation of transfer and treatment stations) – calculating actual compensation costs will require valuation of individual businesses which is not within the scope of this report.*

# Economy: cost buckets – direct costs

The direct re-municipalisation costs required to successfully operate the collection, transfer and treatment of household waste capital and operating costs.

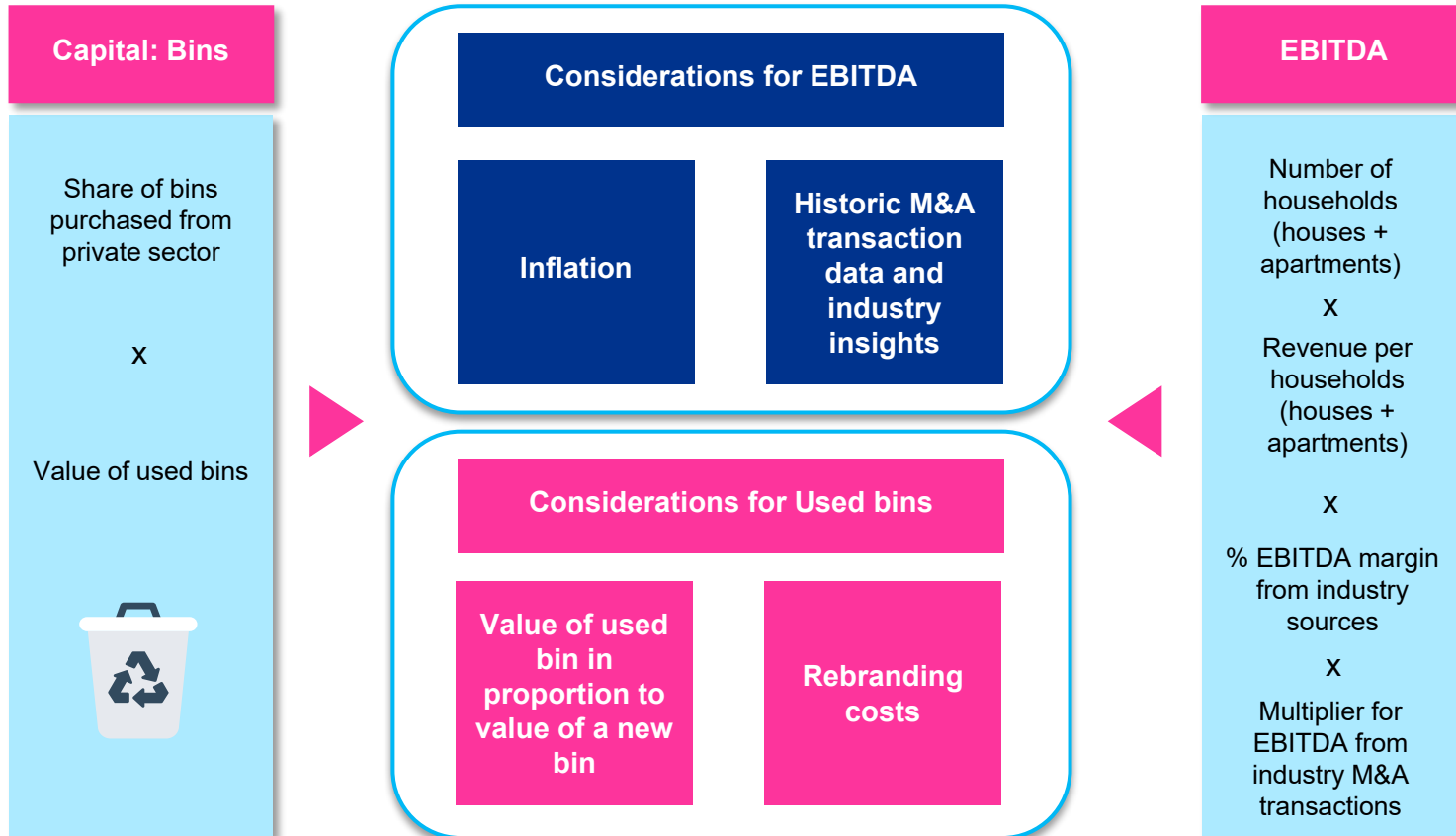


Source: KPMG analysis.

Note: \*In a scenario of full re-municipalisation, considering incremental costs that would be incurred relative to the current private sector operating model.

# Economy: cost buckets – compensation costs

Private operators will likely claim for compensation to exit the collection market and a range of compensation costs are estimated based on an industry standard approach to deal valuation – use of EBITDA multiples.



These costs reflect an estimate of the lost income to private organisations from Local Authorities taking over waste management services and effectively – a sale of the household collection business. The costs would be used to compensate for investment in fixed assets and loss of future income.

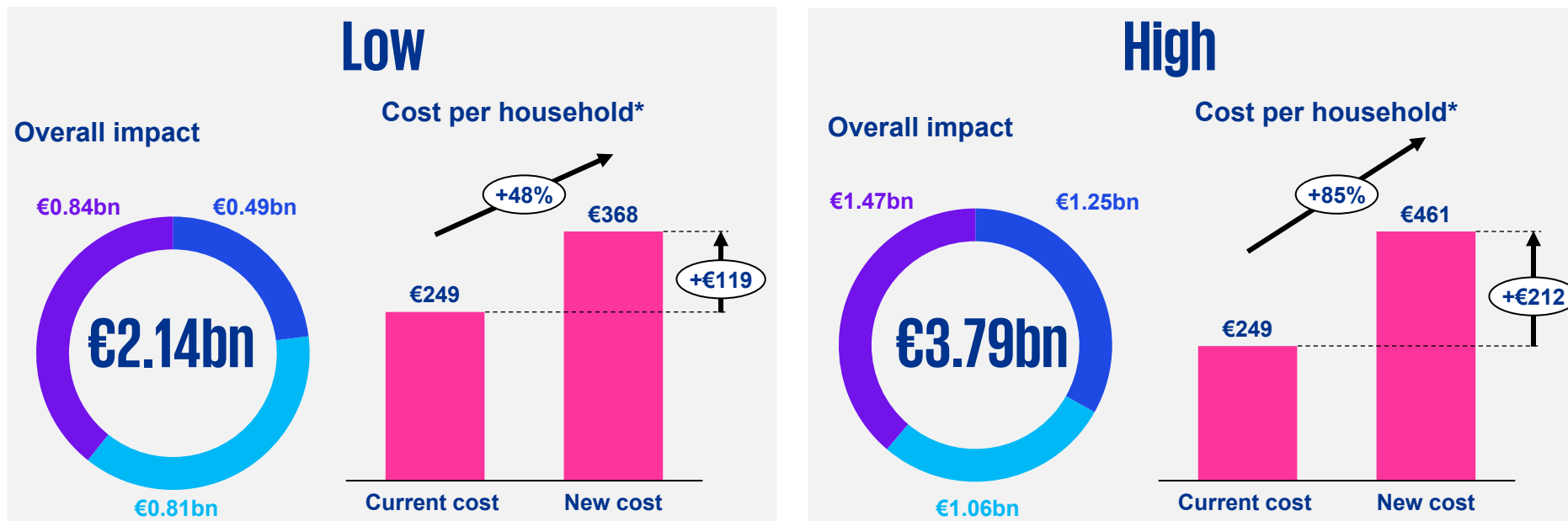
Source: KPMG analysis.

Note. \*EBITDA: earnings before interest, taxes, depreciation, and amortization. Compensation costs are point-in-time estimates that do not take into account current synergies across business units (i.e. joint provision of household and commercial collection, and operation of transfer and treatment stations) – calculating actual compensation costs will require valuation of individual businesses which is not within the scope of this report.

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# Economy: headline results

Two cost scenarios (Low and High) present a range of incremental costs which could occur depending on the level of cooperation received from private organisations exiting the market and the level of compensation granted.



Estimates assume all occupied households pay for waste management services. As an illustrative example, if only 56% contributed to the incremental cost (following the commercial water charges example on page 27), the **annual cost per household would increase by 85-151%** compared to current costs.

This is a **“best case”** scenario in which costs are minimised. The private organisations continue to cooperate with the Local Authorities when transferring services. The Local Authorities operate efficiently, drawing on existing labour force skills and paying low fees to access existing infrastructure. Public sector inefficiency uplift is assumed to be 10-15% of private sector operations. Compensation awarded is in the lower range of previous examples.

This is a **“worst case”** scenario which assumes Local Authorities must invest in their own infrastructure to treat and transfer waste. The private companies leaving the market do not support the transfer of services, requiring the Local Authority to hire and train new staff, procure new assets and develop new transfer and treatment plants. Additionally, the public sector operates at a higher inefficiency, of 20-40% uplift. Compensation paid is the most generous of examples considered.

■ Once-off costs ■ Ongoing costs ■ Compensation costs

Note: Cost per household assumes a weighted average of houses and apartments costs. All incremental costs from re-municipalisation are assumed to be passed onto households. Ongoing costs are over a 10 year period. Does not take into account potential impact of bad debt on cost of service provision and charges to end customers.

# Economy: breakdown of estimates

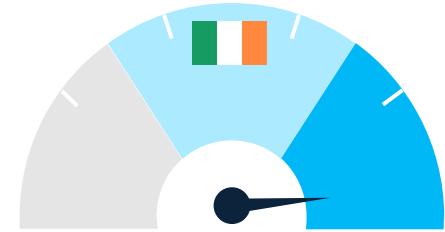
The estimated ranges for overall incremental costs are disaggregated for the two cost scenarios (Low and High).

	Low	High
<b>Once-off costs</b>		
Personnel	7,863,897	13,290,954
Permits	15,025,363	16,331,916
Bins	151,252,412	195,559,026
Infrastructure	152,740,293	864,853,978
Transition costs	163,319,160	163,319,160
<b>Total</b>	<b>490,201,124</b>	<b>1,253,355,033</b>
<b>Ongoing costs (over 10 years)</b>		
Personnel	265,763,977	597,968,947
Vehicles	80,715,273	181,609,363
Access fees	360,317,158	-
Maintenance	102,167,208	295,149,711
<b>Total</b>	<b>808,963,615</b>	<b>1,074,728,021</b>
<b>Compensation Costs</b>		
EBITDA	761,087,835	1,427,039,690
Bins	76,042,761	38,021,381
<b>Total</b>	<b>837,130,596</b>	<b>1,465,061,071</b>
<b>Total Estimated Costs (10 yr, €bn)</b>	<b>2.14</b>	<b>3.79</b>



# Businesses: operating effectiveness

We have compared and quantified the performance of Irish private sector waste management companies against peers across jurisdictions that share similar demographics and recycling mandates as Ireland. Evidence showed that Ireland is performing on par with both the United Kingdom and France when we compared the following performance metrics below.



**16%**

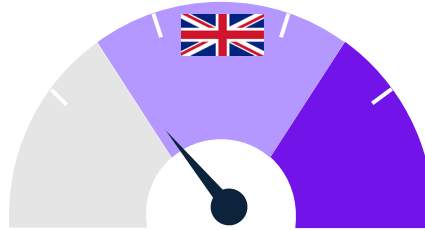
Proportion of municipal waste sent to landfill for disposal

**42%**

Proportion of municipal waste sent for recycling

**62%**

Proportion of packaging waste sent for recycling



**28%**

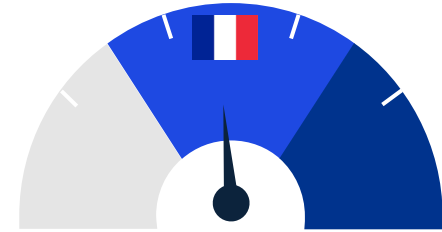
Proportion of municipal waste sent to landfill for disposal

**44%**

Proportion of municipal waste sent for recycling

**63%**

Proportion of packaging waste sent for recycling



**26%**

Proportion of municipal waste sent to landfill for disposal

**42%**

Proportion of municipal waste sent for recycling

**60%**

Proportion of packaging waste sent for recycling

Sources: SLR Report "Household Waste Collection Benchmarking Report" June 2018; Publications Office of the European Union, Environmental Protection Agency Ireland, Eurostat data on recycling rates of packaging waste (2020), UK government statistics on waste (2020).

# Appendix

# Role of government in waste collection

	Ireland 	UK 	Spain 	Greece 
<b>Overview</b>	<ul style="list-style-type: none"> <li>Fully Privatised.</li> <li>No Government involvement.</li> </ul>	<ul style="list-style-type: none"> <li>Generally, the Government manages the tender process for waste collection.</li> </ul>	<ul style="list-style-type: none"> <li>Most of the waste is collected by the private sector while a smaller proportion is collected by the municipalities own in-house public companies.</li> </ul>	<ul style="list-style-type: none"> <li>In Greece, the majority of waste is collected by the municipalities with a smaller proportion of contracting out.</li> </ul>
<b>Operating model(s) in place</b>	<ul style="list-style-type: none"> <li>Private companies contract directly with household customers to provide the service with customers charged a fee directly.</li> <li>The waste collection system is regulated by a permitting regime that is backed by national legislation.</li> <li>The system is enforced by the local authorities with backing from a regional structure with national coordination.</li> </ul>	<ul style="list-style-type: none"> <li>Waste regulation is devolved, separately, to England, Northern Ireland, Scotland and Wales.</li> <li>All households receive door-to-door collection of mixed municipal (residual) waste and some level of collection of recyclables.</li> <li>Waste is collected by local councils or private waste management companies.</li> <li>Local authorities have also a legal duty to offer commercial waste collection services according to the Environmental Protection Act 1990.</li> <li>Residual waste collection as well as door-to-door collection of dry recyclables from the households is partly funded by central government and partly by households through local authority taxes.</li> <li>Most councils offer weekly or fortnightly rubbish collection services.</li> </ul>	<ul style="list-style-type: none"> <li>Responsibilities for waste administration are shared between local, regional and national authorities.</li> <li>At the national level, the Ministry of Agriculture, Food and Environment is responsible for the national plans. At the local level, municipal authorities are responsible for the management of municipal waste from households, commerce, offices and services, including separate collection and transport of MSW.</li> <li>Municipal waste collection is mainly based on a collection point system.</li> <li>The number of households served by door-to-door collection is limited, mostly in small and medium-sized municipalities in the regions of Catalonia, Basque Country and Navarra. Commercial waste is partly managed by the same system as municipal waste, and partly by private service providers.</li> <li>Formal waste collection systems reportedly cover all households in Spain.</li> </ul>	<ul style="list-style-type: none"> <li>In Greece the majority of waste is collected by the municipalities because of the potential for industrial action if it seems that the waste collection contract maybe outsourced to the private sector.</li> <li>There are however four private contractors who exist in Greece which do provide waste collection contracts for some municipalities – listed below.</li> </ul>
<b>Typical tender terms</b>	<ul style="list-style-type: none"> <li>n/a</li> </ul>	<ul style="list-style-type: none"> <li>Typically, 5-10 year contracts</li> </ul>	<ul style="list-style-type: none"> <li>Typically, 5-10 year contracts</li> </ul>	<ul style="list-style-type: none"> <li>Typically, 10-18 month contracts</li> </ul>
<b>Key private operators</b>	<ul style="list-style-type: none"> <li>Beauparc</li> <li>Thorntons</li> <li>AES</li> </ul>	<ul style="list-style-type: none"> <li>Veolia</li> <li>Biffa</li> <li>Suez</li> </ul>	<ul style="list-style-type: none"> <li>FCC (collect 50% of waste on behalf of Spanish municipalities)</li> <li>Urbaser</li> <li>Cespa</li> </ul>	<ul style="list-style-type: none"> <li>Technical DION E.E.</li> <li>Helesi</li> <li>Spider</li> <li>Perme</li> </ul>

Sources: Eionet Europa, Ategrus (ISWA), Irish Government (gov.ie), CCPC, House of Commons Library, European Environment Agency, OnWaste.

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