



“Decentralized waste management in Ireland”

– Exploring the process of diffusion of “best practices in waste management” from its neighbours.

Executive summary –

As one of the worst performers in waste management in the European Union, Ireland is plagued by multiple issues like highest per-capita plastic waste generation, falling recycling rates and heavy dependence on fossil fuels. This policy brief examines Ireland's waste management practices from 1990 to 2020 and compares them to those of other EU member states. Identifying key gaps in public behavior, collection and treatment of Municipal Solid Waste in Ireland, a customized policy solution is provided that can have profound impact not only on the environment but also on the social, economic and energy challenges faced by the country. This policy brief illustrates how the binding character of an Inter-Governmental Organization (IGO) like the EU, along with the neighborhood impact of nations with superior waste management practices, can play a critical role in diffusion of successful environmental policy implementation in Ireland.

What's at stake?

The alarming rate at which municipal solid waste is generated in Ireland has made it the country with highest per capita plastic waste generation in the European Union (EU). Adding to this high plastic consumption culture is the declining recycling rates in Ireland. A whopping 43% of the MSW was sent for incineration and a further 14% to landfills in the year 2018. Such gross mishandling of waste has made Ireland one of the worst performers in waste management within the EU and has led to the imposition of hefty fines. This policy brief proposes solutions that will lead to a paradigm shift in the perception of waste, from being “Ugh” to “Ah ha”!

Research Approach -

The analysis presented in this policy brief is based on the data of waste management practices of Ireland and other states of the European Union between the years 1990 to 2020 ([Municipal waste, Generation and Treatment, 2021](#)). Information available from the Environment Protection Agency (EPA), Ireland was used to understand the individual composition of Municipal Solid Waste and its life-cycle was analyzed. The targets/guidelines set by the European Union for its member states with respect to waste management and resource recovery was studied along with fines for non-compliance.

The theory of socialization and diffusion is applied to explain, how “best waste management practices” of other EU member nations can be imbibed by Ireland through strong commitments and right policy interventions. This policy brief shows how the diffusion of policy can play a crucial part in achieving a circular economy for Ireland as demonstrated by Brain Greenhill. ([Greenhill, 2010](#))

Key findings –

Ireland has the second best Human Development Index (HDI) in the world which indicates not only high standards of living, life expectancy and literacy but also high consumption of goods and more waste generation ([Jonker and Harmsen, 2012](#)). However, waste management policies of Ireland shows a lack of resilience which is reflected in the key findings-

48% of the Irish households do not have separate bins for recycling.

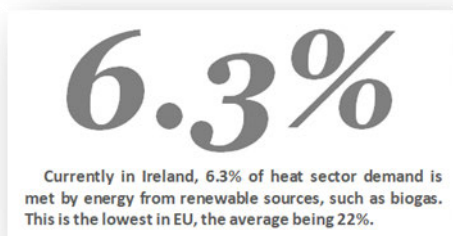
The fact that nearly half of Irish households do not have a waste recycling bin reflects the fact that Ireland has dimly low plastic recycling rates, making it one of the worst performers in the EU. One of the main reasons for having separate bins is that it can improve recycling rate by pre-sorting, save a significant amount of money and also reduce the amount of contamination as seen in countries like Germany and Sweden.

43% of the MSW is incinerated.

The quantity of waste ending up in landfills has dwindled significantly from 92% in 1995 to 14% in 2018. These statistics are in line with other European nations but this has resulted in burning or incinerating over 43% of the MSW. Incineration has had significant impact on recycling rates which went down from 41% in 2016 to 37% in 2018. This goes against the “waste action plan for a circular economy” initiative announced by the government.

Ireland has lowest share of renewable energy in the Renewable Heat Obligation (RHO) scheme.

Currently in Ireland, 6.3% of heat sector demand is met by energy from renewable sources, such as biomass and biogas. This is the lowest percentage of any member state and well below the EU average of 22%. ([Ireland seeks views on potential new Renewable Heat Obligation scheme - Energy Live News, 2021](#)). While countries like Sweden and Norway have become exporters of renewable bio-methane from MSW, Ireland is largely depended on fossil fuels.



Over-reliance on export for recycling.

Local recyclers have been acting more like "collectors and traders" of waste, exporting nearly 100 percent of paper, wood, and textile waste and nearly 88 percent of plastic and metal waste. This "over-reliance" on waste export led to a crisis in 2017 when China, Thailand, and Malaysia imposed a ban on the import of packaging waste, highlighting the pitfalls of waste export.

Sanctions by the European Union.

Under existing EU legislation, adopted in 2008, Ireland has a binding target of recycling at least 50% of household waste by 2020(which has not been met). EU revised the waste directive to introduce more ambitious recycling targets, namely 55% by 2025, 60% by 2030, and 65% by 2035. Ireland has to pay €50m to other EU countries on top of an estimated €100m already accumulated to pay for missing a key carbon reduction target.

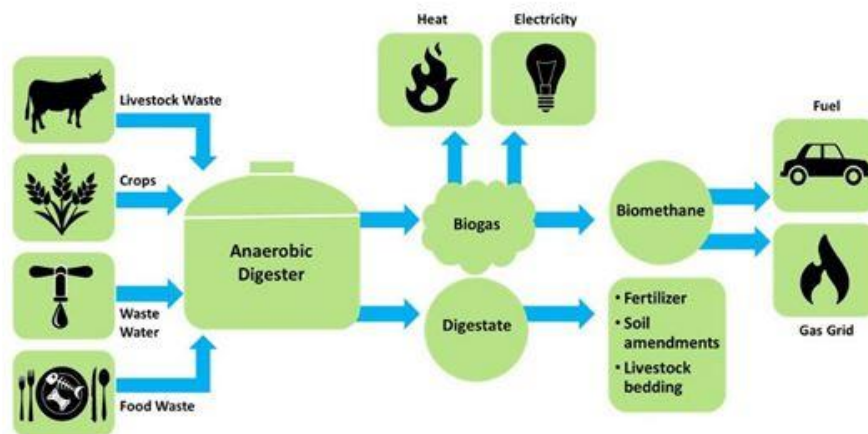
Policy recommendations-

“In situ” treatment of organic waste.

The government can implement schemes to encourage "in-situ" decentralized waste treatment of organic waste (composition greater than 40%) by providing incentives and subsidies for individual homes and institutions to set up composting/Anaerobic digestion plants, which will result in efficient waste treatment as well as an overall behavior change. This can also be used to offset the costs of capital incentives for centralized treatment facilities, as well as to reduce the carbon footprint and transportation costs. This model has been studied successfully in the UK and has yielded promising results. ([Home composting | WRAP, 2021](#))

A Policy for biogas/Anaerobic digestion.

Ireland's favorable climate, MSW composition, and large agricultural sector make it the EU member state with the greatest potential to use biogas from organic waste to generate more than half of Ireland's gas supply by 2050. However, there is no "renewable heat incentive" (RHI) to support this sector, making Ireland the only EU country without one. In addition to producing rich organic manure, biogas from MSW can provide clean fuel for electricity, heat, and transportation. Ireland has only 31 biogas plants, compared to Germany's 9000 and Italy's 1800. Introducing this policy can result in the creation of thousands of new jobs ([New Binding EU Waste Recycling Targets Require Major Rethink on Ringaskiddy Incinerator | Sheila Nunan | The Labour Party, 2021](#)), the improvement of declining Irish farm incomes by assisting farmers in making money by selling farm waste ([Almost 45% of Irish farms earn less than €10,000/year, 2021](#)) and the avoidance of massive EU fines ([Switch to Biogas could save Ireland from massive fines | European Biogas Association, 2021](#)).



Last minute markets (LLM)

Innovative service models, such as the Last Minute Market (LLM), can efficiently work with distribution networks that connect “for-profit” and “non-profit” realms by acting as a "gift broker" by delivering excess food rather than eliminating it. Diffusion of LLP project has positive economic implications (reduction of disposal cost), social implications (donation of food to charity) and environmental implications (waste reduction). [\(BONFANTI, ANGELO, BRUNETTI, FEDERICO and CASTELLANI, PAOLA, 2018\)](#)

Strong green procurement policy

The ailing recycling industry in Ireland needs a fresh impetus from the government in terms of grants, loans and land for upgrading recycling facilities. These measures have proved to substantially boost the recycling industry as seen in the countries like Norway which have become net importers of waste. Providing disincentives for export and establishing a strong green procurement policy for buying recycled products from local recyclers will drive the supply-demand of waste. [\(Ryan-Christensen, 2021\)](#)

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