

NPF Submissions, Forward Planning Section, Department of Housing, Planning, Community and Local Government, Custom House, Dublin D01 W6X0

10th November 2017

(sent by email only to npf@housing.gov.ie)

Re: Consultation on Draft "Ireland 2040 - Our Plan"

Dear Sir/Madam,

In response to the above-referenced consultation, the Irish Waste Management Association (IWMA) offers the following submission.

IWMA Background

The IWMA is made up of c.40 waste management companies. Further details of our association, including a list of our members is available at <u>www.iwma.ie</u>.

It is widely recognised that the State is not in the business of providing large-scale waste and resource management infrastructure and the country relies on private sector initiatives and investments to meet current and future needs. The private sector does not write the national, regional, county or local development plans, but it relies on these plans to support the development of waste management infrastructure, that is clearly required to meet the future needs of the country.

Ireland must achieve various binding EU and national waste management targets under the regulatory control of the Department of Communications, Climate Action and Environment. In order to achieve those targets, we must develop infrastructure and that infrastructure must be supported by our National Plan as well as by our regional, county and local development plans.

The draft Ireland 2040 Plan pays very little attention to the provision of waste and resource management infrastructure, yet without such infrastructure, the country cannot grow in a sustainable manner. This is an oversight that we respectfully suggest must be addressed in the Final Plan.

The predicted population growth and predicted economic growth both need to be supported by additional waste management infrastructure, including the provision of recycling facilities, transfer stations, materials recovery facilities (MRF), refuse derived fuel (SRF/RDF) production plants, composting plants, biogas plants (anaerobic digestion), thermal treatment plants (waste to energy) and landfills. We also need to promote the development of reprocessing facilities for recyclable materials that we collect and segregate, whether that is a step in the recycling chain or final recycling solutions.

In addition, we have EU obligations to meet with regard to packaging waste, end-of-life vehicles, waste tyres, waste electrical and electronic equipment, batteries, farm plastics, etc.

Ireland should be ambitious in the move to a Circular Economy and we should strive to develop new technologies for wastes management and resource recovery and this should also be recognised in the Plan. It seems likely that many new technologies will become available over the next two decades, so the Plan must not work against installations of that nature.

The development of new waste management facilities is critical to meeting legislative obligations, set by the EU. Failure to achieve these targets will result in Ireland incurring significant financial penalties. A well-functioning integrated waste management system comprising different types of strategic waste treatment infrastructure is essential to underpin Ireland's economic growth.

Further details on the types of infrastructure that we consider should be promoted in the Plan are described below.

Recycling

The IWMA members have developed a comprehensive collection and treatment system for recycling in Ireland, with support from packaging producers via Repak. This system is working very effectively but it needs to expand to meet future EU recycling targets as well as meeting population and economic growth. The quantity of recyclables to be processed in Ireland in the next two decades will increase substantially (50% or more) and new facilities will be needed to meet the demand.

In recent times, difficulties with outlets for some of the recycled materials such as postconsumer paper and plastics is a real threat to the IWMA efforts to achieve EU targets, so this area needs particular attention currently.

Development of new infrastructure to re-process or to add value to the recyclable materials would be most welcome in the future and should be encouraged in the Plan. For example, a paper pulper would significantly enhance our recycling efforts as it would open up better markets for the paper that we collect and segregate.

Similarly, new facilities that would add value or provide final recycling solutions for plastic waste would provide much greater security for Ireland's plastics recycling efforts. Development of indigenous plastics recycling facilities or even small scale start-ups would also be hugely beneficial to Irelands recycling efforts going forward.

Composting

The aerobic treatment of organic wastes in composting plants allows food waste and garden waste to be recycled into a soil enhancer. The compost product replaces peat and recycles nitrogen, carbon, phosphorous and potassium. The diversion of these organic wastes from residual waste reduces methane and leachate emissions from landfill and increases calorific value of residual waste that is used as a fuel in thermal treatment technologies.

Anaerobic Digestion

Anaerobic Digestion (AD) is a proven and efficient technology that delivers multiple energy, climate, environmental, societal and economic benefits. It can help Ireland meet a number

of important energy and non-energy EU and national policy commitments and it has wide ranging cross-sectoral benefits.

Biogas is a valuable product of AD which will play an important role in helping to achieve our EU Renewable Energy Targets for 2020. Biogas can be converted to energy via an on-site Combined Heat & Power Plant (CHP) and electricity generated from the CHP process can be used in neighbouring industrial or commercial enterprises or can be fed into the national grid. The surplus heat generated can be used in industrial processes or for district heating systems. Alternatively the biogas can be upgraded on-site for use as a natural gas substitute to help achieve our renewable heat and transport targets. The upgraded renewable gas can be injected directly into the gas network to maximise efficiency in distribution and usage.

AD provides a constant supply of electricity, gas and/or heat. It therefore can be used to provide a stable base-load of renewable energy to the grid. It has the potential to supply enough electricity to power 20% of Irish homes, or to replace 7.5% of the fossil-based natural gas used via the national gas grid with renewable 'green' gas, saving Ireland €200 million in imported fuel.

As well as producing heat and power that can be fed into our communities, AD has an important role to play in the fight against climate change as it can reduce Greenhouse Gas Emissions (GHG) which Ireland has international commitments to decrease.

AD not only recovers the energy from organic waste, but it also produces a nutrient rich digestate that can be suitable for use as an organic soil conditioner or biofertiliser for agricultural and horticultural purposes thus reducing reliance on artificial fertilisers that are becoming increasingly expensive to manufacture. The nutrients contained in digestate are more amenable to plant uptake than other organic fertilisers and thus its use has water quality, environmental and health benefits as it decreases organic pollution potential as well as reducing risk of spreading microbial contamination.

Waste to Energy

The primary purpose of waste-to-energy facilities is to safely treat the residual waste that cannot be recycled in a sustainable way while producing energy from it. WtE also helps to divert waste from landfills, thus reducing impacts on land, air and groundwater quality. Valuable ferrous and non-ferrous metals and where possible, a range of aggregates, are also recovered for recycling from the residual bottom ash.

This aligns with the basic objectives of EU waste policy to minimize the negative effects of the generation and management of waste on human health and the environment. This includes turning waste into a resource based on strict application of the waste hierarchy, limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

National waste policy and waste plans also closely reflect these goals. In order to fulfil European and National policy objectives, Ireland's Regional Waste Plans identify the need for 300,000 tonnes thermal treatment (e.g. WtE) capacity for non-hazardous waste in addition to that already developed in Meath and Dublin.

The development of this additional capacity will help to reduce Ireland's reliance on the export of residual municipal waste. Over 500,000 tonnes of residual municipal waste was exported in 2015, which equates to approximately 33% of the available residual waste market in Ireland. This represents a loss to the economy of approximately €50 million in terms of energy resource and gate fees. It also poses a risk to Ireland's ambition to become self-sufficient in waste treatment and leaves Ireland vulnerable to market shocks, price increases and regulatory controls.

In addition to fulfilling waste management goals, WtE represents a secure, cost effective and sustainable energy source. About 50% of the energy produced by WtE plants comes from carbon-neutral biomass. Unlike other renewables their capacity is reliable, controllable and predictable. A WtE facility can also provide system services, making it unique in that it can both generate renewable electricity and support the integration of renewables onto the system.

Solid Recovered Fuel

The use of Solid Recovered Fuel, which is derived from residual waste, is a very good environmental measure that IWMA members have developed over the last decade in partnership with the cement industry. SRF replaces fossil fuels such as coal and pet-coke, that are often transported from South America and farther afield. There are therefore three environmental benefits associated with the production and use of SRF:

- 1. Reduced emissions from fossil fuels
- 2. Less waste disposal and associated emissions
- 3. Reduced transport emissions

Landfill

Whilst Ireland is moving away from landfill for residual municipal waste, there remains a need to manage some materials in landfill, including construction and demolition waste fines as well as inert wastes and possibly bulky wastes, so some new landfills may be required. The Circular Economy requires minimising landfill rather than eliminating it.

New Technologies

The waste industry in Ireland is dynamic and always watching for new and emerging technologies that make economic and environmental sense. Some technologies come and go as they struggle commercially, whereas others prove to be successful and are embraced by the waste industry in Ireland. The Plan needs to be flexible enough to allow the future development of infrastructure that embraces such new technologies.

Next Steps

The IWMA is a significant stakeholder in Ireland's future development and we ask that we be recognised as such. We were not invited to partake in stakeholder consultation at any stage of the development of the Ireland 2040 National Plan and we believe that this is an oversight that is reflected in the lack of interest in waste and resource management in the Draft Plan. We ask that you please take account of our comments in this submission and keep us involved as a stakeholder going forward.

Yours Sincerely,

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Conor Walsh IWMA Secretary

c/o SLR Consulting, 7 Dundrum Business Park, Windy Arbour, Dublin 14.