



CEWEP Ireland response to the public consultation on the new National Planning Framework

CEWEP Ireland welcomes the opportunity to respond to this important consultation on the new National Planning Framework – ‘Ireland 2040 – Our Plan’. This Plan aims to set a new strategic planning and development context for Ireland and all its regions and the co-ordination of a range of national, regional and local authority policies and plans. It also seeks to underline the importance of an all-island approach to such planning and development and the promotion of mutual co-operation and collaboration between both jurisdictions going forward to 2040 and beyond.

CEWEP is the umbrella association of the owners / operators of Waste to Energy (WtE) Plants, representing approximately 400 WtE from 18 European countries. Our members make up 86% of the WtE capacity in Europe. CEWEP Ireland is the Irish branch of CEWEP Europe and has two members: Indaver, which operates the Meath WtE Facility and is proposing to develop a similar WtE Facility in Cork; and Covanta, which is currently constructing the Dublin WtE Facility. By 2020 it is anticipated that members will have a total treatment capacity of over 1,070,000 tonnes per annum residual waste and export more than 90MW electricity and/or heat.

In the context of sustainable waste management, we propose to address the following objectives as outlined in the Plan and which include:

- the reduction of carbon emissions;
- the prioritisation of developing waste processing infrastructure on a commercial/public partnership basis capable of delivering benefits at the national scale including renewable energies;
- utilisation of the planning system in a manner which maximises the role it can play regarding climate change objectives ; and
- the management of the planning and development process in a manner which promotes sustainability, the best use of available resources and good environmental stewardship on an ongoing basis.

A. Waste Planning in Ireland

Waste planning in Ireland is primarily informed by the waste management plans for the Southern, Eastern-Midlands and Connacht-Ulster regions. These Plans provide the framework for the prevention and management of waste in an environmentally safe and

sustainable manner for each constituent region. Waste management practices in Ireland must comply with the principles enshrined in the Waste Framework Directive¹.

Such compliance is also in alignment with the overarching objectives of self-sufficiency and sustainable waste management which underpin CEWEP’s activities. These Regional Plans have called for further investment in treatment infrastructure for inert, non-hazardous and hazardous wastes. In addition, the National Hazardous Waste Management Plan 2014-2020² has also made this call and highlighted the need for increased self-sufficiency in the management of hazardous waste and the need to minimise hazardous waste export. Such forecasts are of even greater significance given the population increase projected to take place over the period until 2046.

i. Waste capacity requirement for a growing all-island population

In the most recent Central Statistics Office (CSO) publication ‘Population and Labour Force Projections: 2016-2046’³, it is estimated that the national population will increase to 5.1 million by 2031 and to just over 5.6 million by 2046⁴. According to the Northern Ireland Statistics Agency, Northern Ireland’s population is projected to grow to 2.021 million by 2039.⁵

In looking at waste treatment requirements for 2040 in the context of these projections and a recycling rate of 65%, 2,296,168 tonnes of residual municipal waste will require treatment or disposal.

Landfill Rate – 5%	WtE Capacity – 2,181,359.6 Landfill – 114,808.4
Landfill Rate – 10%	WtE Capacity – 2,066,551.2 Landfill – 229, 616.8

The figures used in applying projected treatment capacity are as follows:

- (1) the figures for Ireland apply until the year 2041 and for Northern Ireland until 2039;
- (2) the figures on municipal waste generated per person for Ireland is: 534 kgs per person as per the Eurostat Report 2010⁶ and 485kgs for Northern Ireland as per the Eurostat Report 2015; and
- (3) A recycling rate of 65% has been applied (as proposed by the European Commission for 2030 for the Circular Economy Package). It should be noted that the EU could introduce a higher recycling rate post 2030.

¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006L0012> [Accessed: 15th March 2017]

² http://www.epa.ie/pubs/reports/waste/haz/NHWM_Plan.pdf [Accessed: 14th March 2017]

³ http://www.cso.ie/en/media/csoie/releasespublications/documents/population/2013/poplabfor2016_2046.pdf [Accessed: 15th March 2017]

⁴ Calculation method: M2F2 as based on certain fertility and migration assumptions.

⁵ <http://www.nisra.gov.uk/archive/demography/population/projections/NPP14-Bulletin.pdf> [Accessed: 19th March 2017]

⁶ The Environmental Protection Agency was contacted to ascertain if more up to date data was available post 2010. It was confirmed that this data is not presently available and is due to be made available in the second quarter of 2017.

As such, it is of vital importance that the National Planning Framework is reflective of these plans and waste generation and recycling targets in order to ensure that a coordinated and joined up approach to waste management is achieved to safeguard delivery of the required treatment infrastructure highlighted in these plans, as well as achieving compliance with current and likely future EU legislation in order to avoid the imposition of penalties. The development of additional waste treatment facilities, including further biological treatment and further recovery capacity will be required given the projected increase in population.

Therefore, policy coordination which is reflected in the National Planning Framework will help to ensure that Ireland's policy objectives and targets are achieved going forward. The necessary policy environment and infrastructure needs to be put in place now and in the short term in order to deliver the waste prevention and recycling targets as set out in these regional waste management plans.

Recommendations:

- Recognition in the National Planning Framework that the management of waste is a nationally strategic issue and that related facilities are generally regarded as strategic infrastructure developments.
- A strategic coordinated approach to waste planning and management which is reflective of both all - island, national and regional requirements is required.
- This should also be aligned with an all-island approach to planning as detailed below.

B. Ireland - All-Island Context

Of equal importance is the need to address waste management in the National Planning Framework in terms of an Ireland as seen in an all-island context. Significant progress has been made in many and varying policy areas between the North and South over recent years and given recent developments, most notably in the form of the UK's referendum on membership of the European Union, enhanced cooperation appears to be of even greater importance going forward. The North South Ministerial Council (NSMC) has agreed to optimise North-South joint planning and engagement on many key issues following on from this decision. The Council was established to develop consultation, cooperation and action within the Ireland of Ireland.

In the waste management sphere, the Environmental Sector of the Council make decisions on common policies and approaches in areas such as environmental protection, pollution, water quality management and waste management in a cross-border context and seeks to identify strategies and activities which would contribute to a coherent all-island approach to the achievement of sustainable development.

Further collaboration in the context of the waste sector and sustainable waste management policy, would serve to ensure that all disposal and treatment options available on the island would be firstly exhausted before relying on export. The export option is unlikely to be available into the long term given the increasing difficulties with securing outlets on continental Europe for waste exported from Ireland. Thus, the availability of sufficient domestic waste management capacity is essential in order to reduce Ireland's vulnerability to external forces due to dependency on the export market for the treatment of recyclable waste.

Moreover, the export of municipal waste for recovery abroad undermines the sustainability objectives of the National Planning Framework, represents a lost economic and resource opportunity and is at odds with the envisaged transition to a circular economy whereby such waste streams should be regarded as valuable material resources and adhere to the principles of self-sufficiency. An all-island approach to waste management is a key element of a sustainable waste management solution to 2040 and beyond.

Practical examples of all-island cooperation in waste management include the joint procurement of services by the Department of Health and Children and the Department of Health and Social Services. The contract, devised under the auspices of the Joint Waste Management Board, included the removal, treatment and final disposal of risk waste produced by publicly funded hospitals on the island.⁷

CEWEP is of the opinion that an all-island Waste Plan / Strategy, informing the four regional waste plans would facilitate a collaborative approach to waste management, sustainable management of resources and ultimately bring value for money to the consumer. This would help to ensure a joined up approach to strategic infrastructure and investment decisions that have a cross-border dimension and would also assist in the development of mutually beneficial policy to address common environmental challenges. It would also help to ensure that economies of scale are achieved regarding the development of new waste management infrastructure whilst taking account of Ireland's climate change obligations.

i. Post-Brexit scenario

The ability to enter into a bi-lateral agreement with the North is permissible within the framework of the European Regulation (EC) No 1013/2006 on the Shipments of Waste⁸ and which is implemented in Irish law through the Waste Management (Shipments of Waste) Regulations, S.I. 419 of 2007⁹. The overall objective of the Regulations is to implement measures for the supervision and control of shipments of waste in order to ensure that the movement, recovery, or disposal of waste, is managed in an environmentally sound manner, for the protection of the environment and human health.

Movement of waste between Member States must comply with this Regulation and imports of waste intended for disposal or recovery from non-EU countries are prohibited, with the exception of imports from four areas: OECD countries¹⁰, countries which are party to the Basel Convention; countries which have concluded a bilateral agreement with the EU or a particular Member State; or other areas during situations of crisis.

Therefore, in terms of the North South context, the entering into of a bilateral agreement between the two jurisdictions is permissible which could be coordinated with the waste

⁷ *Waste Management in Hospitals*, Comptroller and Auditor General, Government of Ireland, 2005.

⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:l11022> [Accessed: 15th March 2017].

This Regulation implements into EU law the provisions of the 'Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal' and the OECD Decision C(2001)107/FINAL concerning the Control of Transboundary Movements of Wastes Destined for Recovery Operations.

⁹ <http://www.irishstatutebook.ie/eli/2007/si/419/made/en/print> [Accessed: 15th March 2017]

¹⁰ Organisation for Economic Cooperation and Development - List of OECD Member Countries: <http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm> [Accessed: 15th March 2017]

plans developed for the constituent regions in order to produce an all-island approach and achieve economies of scale regarding treatment infrastructure. Moreover, should a 'full' Brexit occur, whereby the UK leaves the European Union without concluding a Free Trade Agreement, the North as part of the UK, could conclude a bilateral agreement with the South at that point.

This scenario however, could have implications in terms of tariffs should the UK be required to revert to World Trade Organisation (WTO) trading rules and the General Agreement on Tariffs and Trade (GATT)¹¹. This cannot be confirmed conclusively until the exact format that Brexit will take is confirmed by the UK Government.

Furthermore, in terms of the UK's departure from the EU, this is likely to have implications for the North South context in terms of border control, tax divergence, a divergent energy market and many other varying and potentially conflicting regulatory mechanisms existent in both jurisdictions and which are likely to require significant amendment to reflect the new arrangement post Brexit.

Recommendations:

- The development of an all-island Waste Strategy / Plan which informs the four regional waste plans should be considered as an objective of the National Planning Framework in order to facilitate an all-island approach to sustainable waste management to 2040 and beyond; and
- The entering into of a bilateral agreement between the two jurisdictions should be given due consideration in light of the Brexit vote and impending departure of the UK from the EU. Given the length of time it may take to develop an agreement, consideration could be given to prioritising this aspect at the earliest opportunity.

C. Contingency and Reserve Planning

Another issue of critical importance is the need for contingency and resilience in the waste sector to be provided for and referenced in the National Planning Framework. Such a contingency could take the form of a 'reserve' or 'emergency only' landfill. The objective of providing contingency landfill capacity is the pressing need to safeguard resilience in the waste management sector in order to ensure that should a waste-related incident occur, it could be managed safely and effectively. It would also permit waste to be baled and stored at the landfill contingency site and moved at a later date once a permanent solution has been sourced and after the contingency situation has been resolved.

This is of the utmost importance given that any such incident could be detrimental to the health and well-being of citizens and lead to severe environmental harm. This type of event would also have negative financial implications in terms of Ireland's obligations under many European Regulations and Directives which prescribe that all such activities be managed in an environmentally sound manner and require the safeguarding of citizens health and well-being.

¹¹ The WTO is an international organization of 162 members that deals with the rules of trade between nations and encompasses all major trading economies including the EU.

Such a facility would attract a large premium and its use would be solely confined to emergency situations. It would serve to act as a backstop to prevent potentially severe waste-related incidents. This would also provide greater value for the tax payer and be more cost effective than building a new facility to use in such emergency circumstances, as any such facility would necessarily involve substantial maintenance costs and compliance with strict planning obligations and conditions.

Recommendation:

- A ‘reserve’ or ‘contingency’ only landfill should be provided as a matter of urgency, to help to ensure that should a serious waste related event occur, contingency is available and in place to deal with such an incident in a safe and effective manner.

D. Climate change and sustainability

WtE has a pivotal role to play in the reduction of carbon emissions. A forward looking planning system should have the mechanisms to recognise the role of WtE infrastructure in meeting Ireland’s EU mandated targets.

i. EU climate and renewable energy targets

Ireland’s challenging EU climate and renewable energy targets are well established in the consultation document. The significant shortfall in meeting these targets is explored in further detail in the recently published draft National Mitigation Plan. Rather than meeting the 20% greenhouse gas emissions reduction required for 2020, the draft National Mitigation Plan predicts the likely outcome will be closer to 6%. The proposed 2030 GHG reduction target suggests a 39% GHG reduction target for Ireland, based on GDP per capita, for the period 2021 to 2030, adjusted downward for cost-effectiveness by 9 percentage points to give a headline target of 30%. While not yet agreed, it presents an enormous challenge for Ireland, particularly with the likely outcome in 2020 being a 6% reduction in non-ETS emissions compared to the 20% emissions reduction target.¹²

The report also points to the challenges in meeting renewable energy targets; the EPA Business As Usual (BAU) projections highlight the need for action. BAU would result in the disappointing progress of 8.3% towards the 16% renewable energy target for 2020.

ii. Role of WtE in meeting EU targets

The primary purpose of WtE facilities is to safely treat the residual waste that cannot be recycled in a sustainable way while producing energy from it. This form of sustainable waste technology has the benefit of producing electricity and heat. WtE also helps to divert waste from landfills, thus reducing impacts on land, air, groundwater quality and contributes towards greenhouse gas emission reduction targets. In 2016 Meath WtE in diverting MSW from landfill, displaced approximately 60,000 tonnes CO². Valuable ferrous and non-ferrous metals and where possible, a range of aggregates, are also recovered for recycling from the residual bottom ash.

¹²

<http://www.dccae.gov.ie/energy/Lists/Consultations%20Documents/National%20Mitigation%20Plan/National%20Mitigation%20Plan.pdf> [Accessed: 20th March 2017]

It contributes to diversity of fuel mix and provides predictable power supply while contributing towards national energy policy objectives of security and competitiveness of energy generation. Furthermore, the development of district heating networks will enable one plant to provide steam to a network of users. This underlines the important role that WtE facilities could play in meeting EU targets.

WtE has a role to play in achieving Ireland's binding renewable electricity targets with circa 50% of the electricity produced from waste considered to be renewable. The development of district heating networks could help to meet Ireland's challenging renewable heat target, help to reduce Ireland's GHG emissions and external energy dependency. Besides from the potential of meeting renewable and greenhouse gas emissions reduction targets, given the projected contribution of 57% bioenergy of the EU's total renewable energy by 2020, there is the need to direct bioenergy towards where it can deliver efficiencies and where it is needed most.

District heating networks have the ability to:

- a) save fuel by utilising waste heat in the energy system from power plants and industry;
- b) utilise more renewable energy by using heat from thermal generation; and
- c) save money by using less fuel and by reducing the thermal capacity necessary in the heat sector i.e. by sharing the capacity in a common boiler instead of installing an individual unit in each building.¹³

Given the benefits that could be derived from the development of district heating networks in Ireland, district heating pipes should be considered and treated the same as any other underground pipe or cable and be exempt from planning permission in most circumstances under the Planning and Development Act.¹⁴

iii. Biosolids

The National Planning Framework should consider the more immediate need for alternatives to landspreading for Biosolid management. The nature of the Biosolids produced by WWTP facilities provide further potential value to the circular economy. Irish Water's National Wastewater Sludge Management Plan outlines the strategy for managing wastewater sludge over the next 25 years, and includes proposals for the investment in future treatment, transport, storage and reuse (or disposal) of the sludge. One of the objectives includes extracting energy and other resources where economically feasible. As outlined in the NSWMP, current pressures on the agricultural outlet for wastewater sludge make the timely consideration of alternative outlets a pressing matter. Furthermore, as the Biosolids are not of heavy industrial origin, the ash residues from the thermal process are suitable for further processing to recover Phosphate, a material vital to agriculture.

¹³ Connolly, David and Brian Van Mathieson, 2014 [A technical and economic analysis of one potential pathway to a 100% renewable energy system](#), International journal of Sustainable Energy Planning and Management Vol. 01

¹⁴ https://www.seai.ie/Renewables/Energy_Research_Portal/National-Energy-Research/RD-D-Projects/2016-RDD-79-Guide_District-Heating_Irl-CODEMA.pdf [Accessed: 20th March 2017].

Recommendations:

- Given Ireland’s challenging EU climate and renewable energy targets, the role that WtE can play in helping to achieve Ireland’s mandated EU targets should be recognised in the National Planning Framework and given serious consideration as a matter of priority;
- In this regard, the development of district heating networks would facilitate a reduction in GHG emissions and contribute to renewable energy targets; and
- District heating pipes should be exempted from planning permission under the Planning and Development Act.
- An alternative to landspreading for Biosolid management should be considered as it is a resource which, if exploited fully, is capable of adding further value in terms of energy extraction and utilisation of ash residues produced thereafter.

Accurate and up to date Data

In waste planning terms, it is important that access to the most up to date waste statistical information is available in order to ensure that the waste sector can plan effectively and deliver strategic infrastructure. The provision of robust data and indicators supports the assessment of policy effectiveness and helps to identify any waste treatment capacity gaps in the market.

This would also help to achieve a coordinated policy position and ensure that policy alignment exists at the national, regional and all Ireland level which could then be aligned with the National Planning Framework. For example, in 2014 the Environmental Protection Agency (EPA) released up-to-date statistics¹⁵ on Ireland’s progress towards EU recycling waste recycling, recovery and diversion targets. This information has not been updated since this point.

Statistics on waste generation and management for EU Member States are compiled to comply with EC Waste Framework Directive (2008/98/EC) and EC Waste Statistics Regulation (2150/2002/EC) reporting requirements. As such, in order to properly feed into the National Planning Framework, and to contribute to the development of a joined up and coordinated waste management policy framework, these statistics should be made available as a matter of priority and reported on an annual basis. Such data would help to prevent over capacity occurring in the market and thus prevent potential market imbalances. The availability of accurate data to identify trends is also particularly relevant in the context of the long lead time required to obtain the required consents for delivery of waste treatment infrastructure.

Recommendation:

- The availability of accurate and timely data on waste flows is a prerequisite to achieving policy alignment at national, regional and all Ireland level. It is also essential in terms of planning strategic waste infrastructure and identifying any potential capacity gaps. The National Planning Framework should recognise the importance of such data.

¹⁵ <http://www.epa.ie/pubs/reports/waste/stats/> [Accessed: 15th March 2017]

Conclusion

In summary, it is imperative that the issues highlighted above are reflected in the forthcoming National Planning Framework in order to ensure that the necessary policy and infrastructure environment is put in place imminently in order to deliver the waste prevention targets as set forth in the regional waste management plans. This must also be cognisant of the need for an all-island approach to waste management, climate change and sustainability to 2040 and beyond.

Going forward, such cooperation will be of vital importance to ensure that the island as a whole can develop in a sustainable and strategic fashion amidst unparalleled challenges likely to be seen in the next number of years as the implications of the UK referendum become clear.