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Green Waste in Ireland Overview of Policies and Opportunities

Topics

- How much green waste is there in Ireland?
- What is the best way to manage green waste?
- What do the Waste Management Plans want to achieve?
- What are the opportunities/ challenges for setting up new facilities?
- What quality standards can we achieve?
- What are the uses for green waste compost?

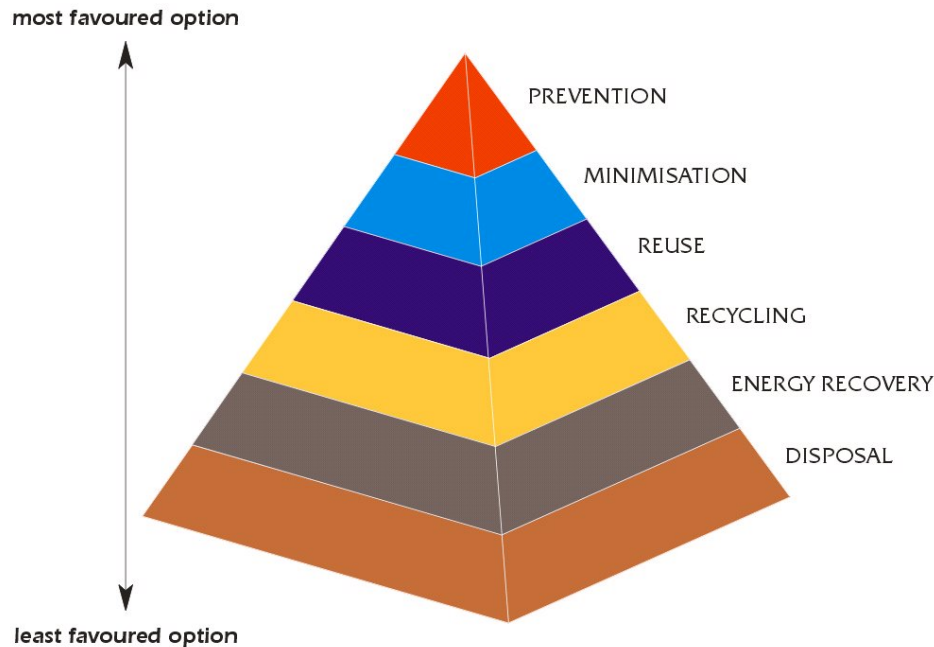
Quantity of Green Waste

- Difficult waste stream to quantify
- Household sector
 - 2004 EPA Waste Characterisation Study (RPS and CTC)
 - Approx 7% of household waste is green waste (110,000 tpa)
 - Seasonal Variation - Quantity in black bin varied from 3% to 22% depending on season
- Commercial Sector
 - Quantity collected and managed by landscaping companies is difficult to assess
 - Guesstimate 40,000 – 80,000 tpa in the Dublin region alone

Future Quantities of Green Waste

- International Experience:
 - As the system of facilities to collect green waste improves, the quantity available/ presented increases
- Trends
 - Greater attention to landscaping, maintenance of parks, apartment blocks, open spaces in general
 - Wood chipping for easy handling
 - Likely to have an overall increase in green waste arisings in the years ahead

Hierarchy for Managing Green Waste

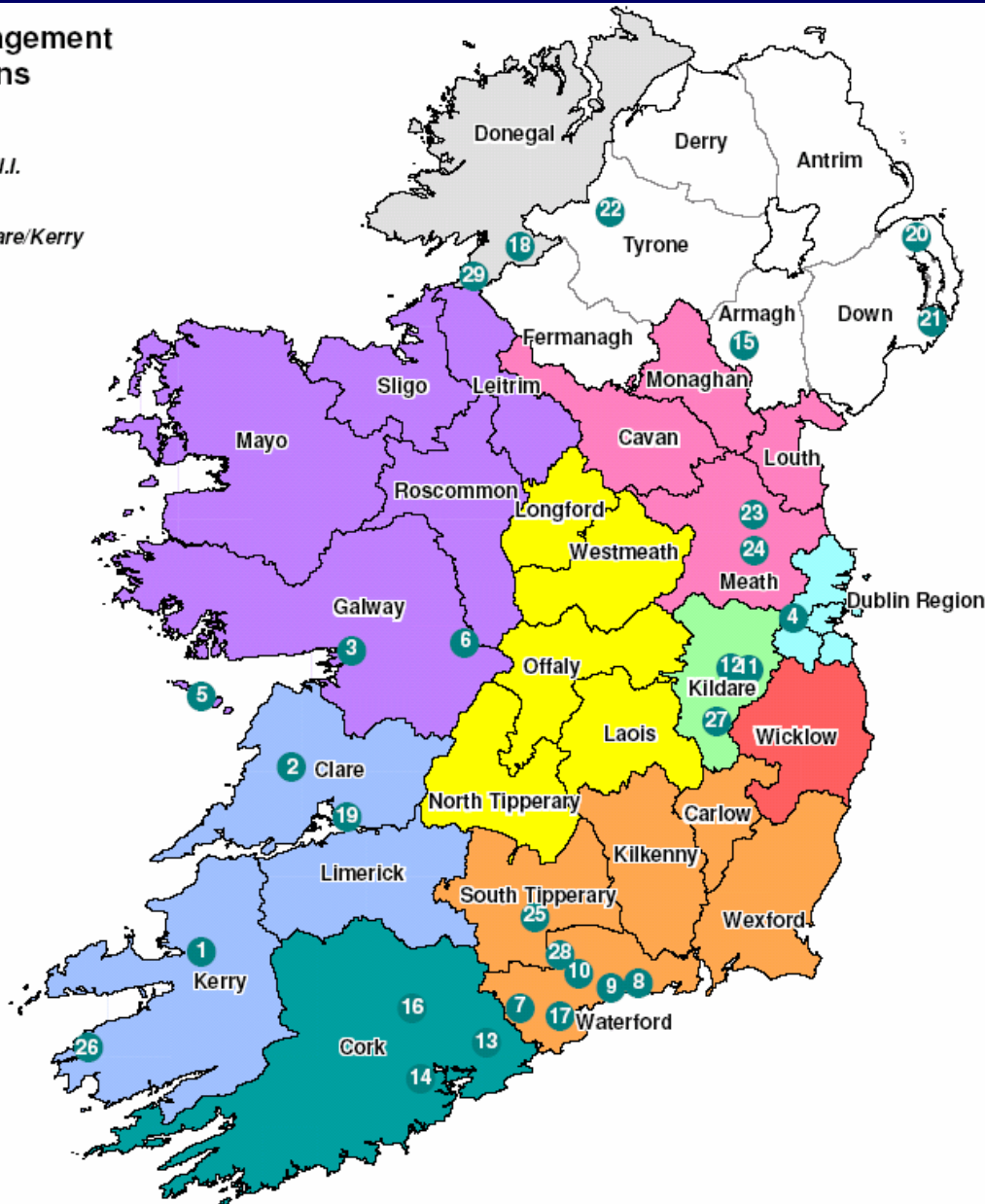


- Prevention: choosing low maintenance garden options/ replicate natural cycle – low intervention approach
- Green waste composting at source/ at home/ Community Composting
- Off-site Central Composting
- No excuse for landfilling of green waste!!!
- Plus Environmental Benefits of reducing reliance on peat-based compost products.

Composting Facilities in Ireland

Waste Management Regions

- Connaught
- Cork
- Donegal & N.I.
- Dublin
- Kildare
- Limerick/Clare/Kerry
- Midlands
- North East
- South East
- Wicklow

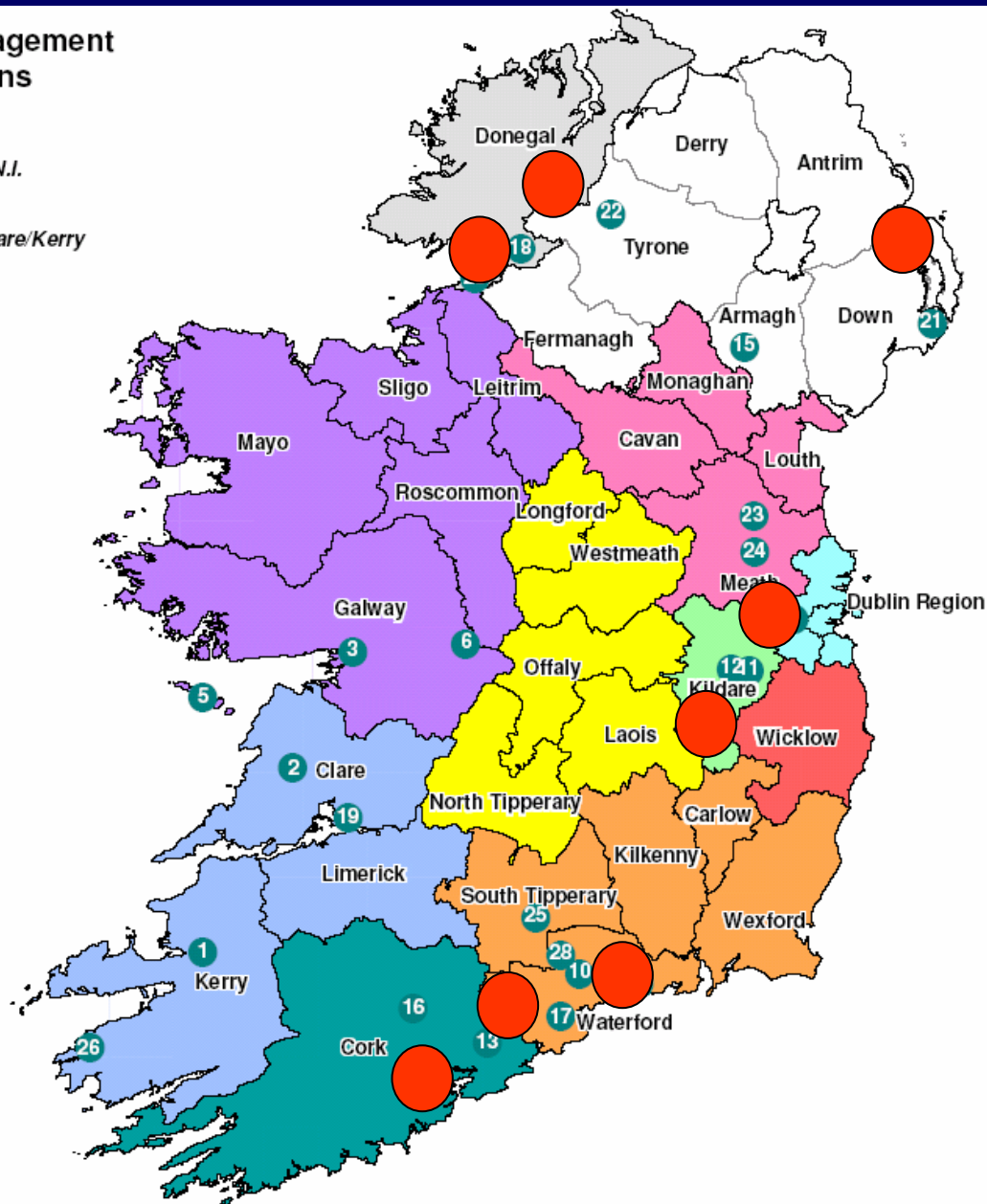


Approximately 30
Composting
Facilities in Ireland


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Green Waste Treatment

Green Waste Facilities	Capacity	Mi
8		500 nnes



composting

Waste Management Plans

- Policies identify Green Waste as a priority
 - Improve collection systems
 - Via Recycling Centres (CA Sites)
 - In tandem with kitchen organics in the Brown Bin
 - Significant boost to recycling rates
- Requirement to develop central composting facilities for green waste
 - Typically local sites with capacity <5,000 tpa in most regions
 - Reduce transport
 - Encourage home composting



Waste Management Plans - Future

Region	Policy for Green Waste	Requirement
Dublin	Transfer to central composting facilities in Greater Dublin region. Private sector expected to lead	50,000 – 80,000 tpa capacity,
Midlands	Commercial Operators and Farmers encouraged to develop facilities	No Limit (30-40 Ktpa for biowaste overall)
North East	Encourage provision of further capacity to manage green waste – private sector.	Approx. 10,000 tpa capacity required in 2 – 3 facilities
Limerick/ Clare/ Kerry	Expand on existing treatment capacity	Approx. 10,000 tpa capacity required in 1 facility
Connaught	Expand available treatment capacity both public and private	10,000 – 15,000 tpa
South East	Encouraging local provision of windrow composting facilities and also farm-based composting for non-food organics	No Limit

Implementing Plans

- Technical and environmental challenges can be managed.
- Generally assigned to Local Authorities to implement this policy
- Opportunities for:
 - Green waste landscaping contractors/ farmers/ waste management companies

Implementing Green Waste Collection

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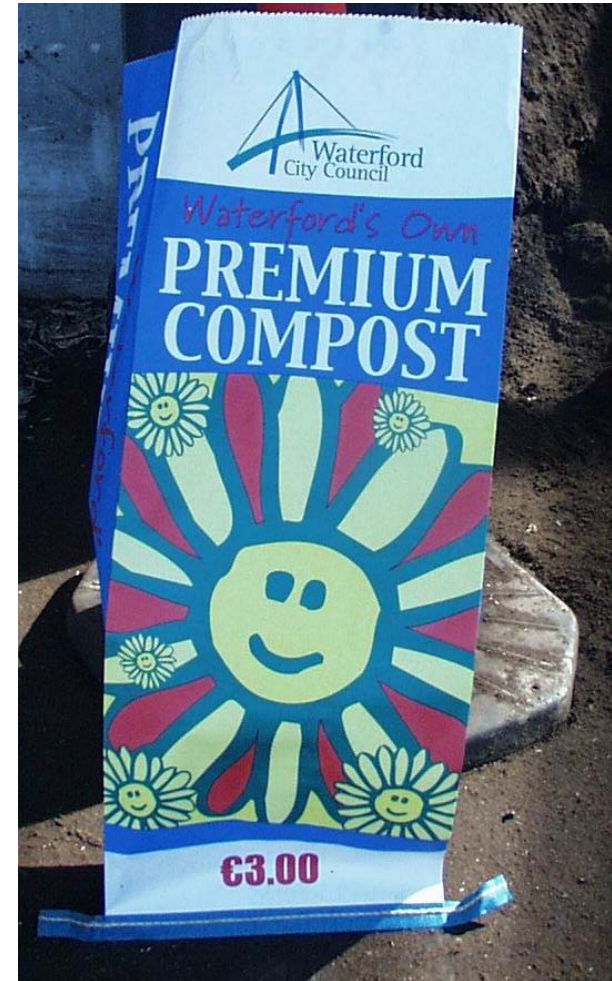


Implementing Green Waste Treatment

- Financial considerations for operating a green waste facility
 - Can't expect a big gate fee or revenue for product: keep capital and operational costs to a minimum
 - Availability of 'Environment Fund' grant for capital costs is open to Local Authorities
 - Beneficial to attract commercial green waste/ landscapers who will pay a tipping fee
- Alternative is to transfer to central facility/ private sector

Implementing Green Waste Treatment

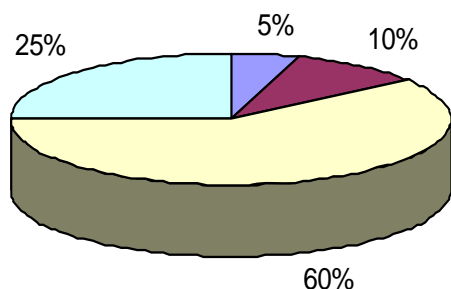
- Practical Considerations
 - Siting
 - ‘Know how’ and experience
 - Seasonality
 - Managing input/output



Uses for Green Waste Compost

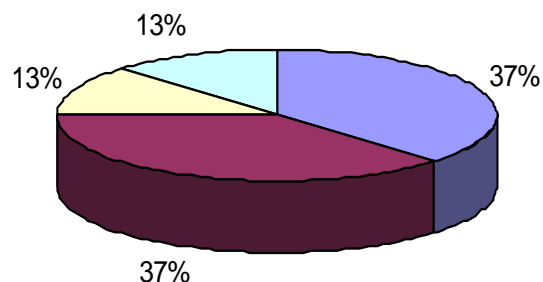
- Depends on the Quality of the Product
- Classification of Samples according to the draft EU Biowaste Directive (never transposed into EU Directive)

Biowaste Compost (n=20)



■ Class I ■ Class II ■ Stabilised Biowaste ■ Non-Conforming

Green Waste Compost (n=8)



■ Class I ■ Class II ■ Stabilised Biowaste ■ Non-Conforming

Uses for Green Waste Compost

- Range of Possible Uses
 - Mulch/ low grade local applications/ landfill cover etc.
 - Higher grade product: landscaping applications in appropriate uses/ soil conditioner/ surface dressing
 - Commercial compost applications (e.g. BNM)
- Other possibilities
 - Biofilters
 - Energy recovery/ biofuel?
 - Structural material in biowaste composting or soil remediation
 - Playgrounds
 - Lots of other potential applications



Thank you for your attention

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