



Quality products from waste through efficient waste separation

Meeting name

Place, xx/xx/xxxx

Speaker's name

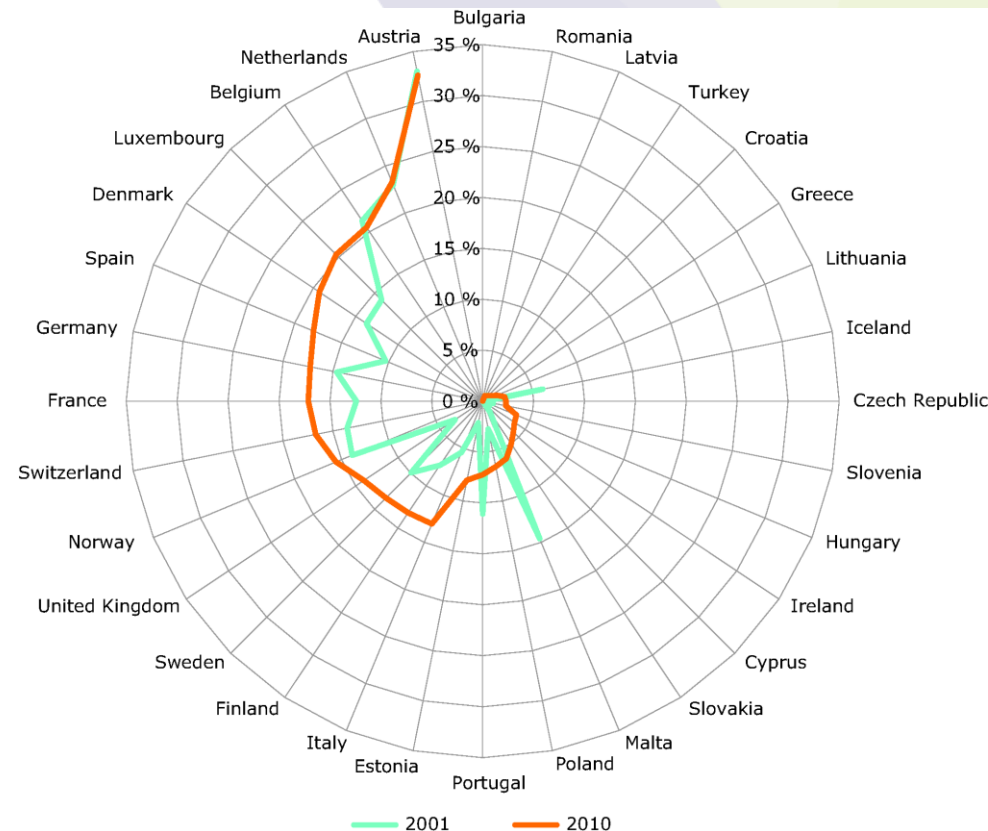
Organisation's name



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Recycling of bio-waste

- Recycling rates of bio-waste fall behind the growing rates of material recycling
- Majority of 88 million t/a of European bio-waste is still lost through landfilling (40%) and incineration (20%).



Bio-waste recycling as a percentage of municipal waste generation in 32 European countries (2001 and 2010)

Obstacles to bio-waste recycling

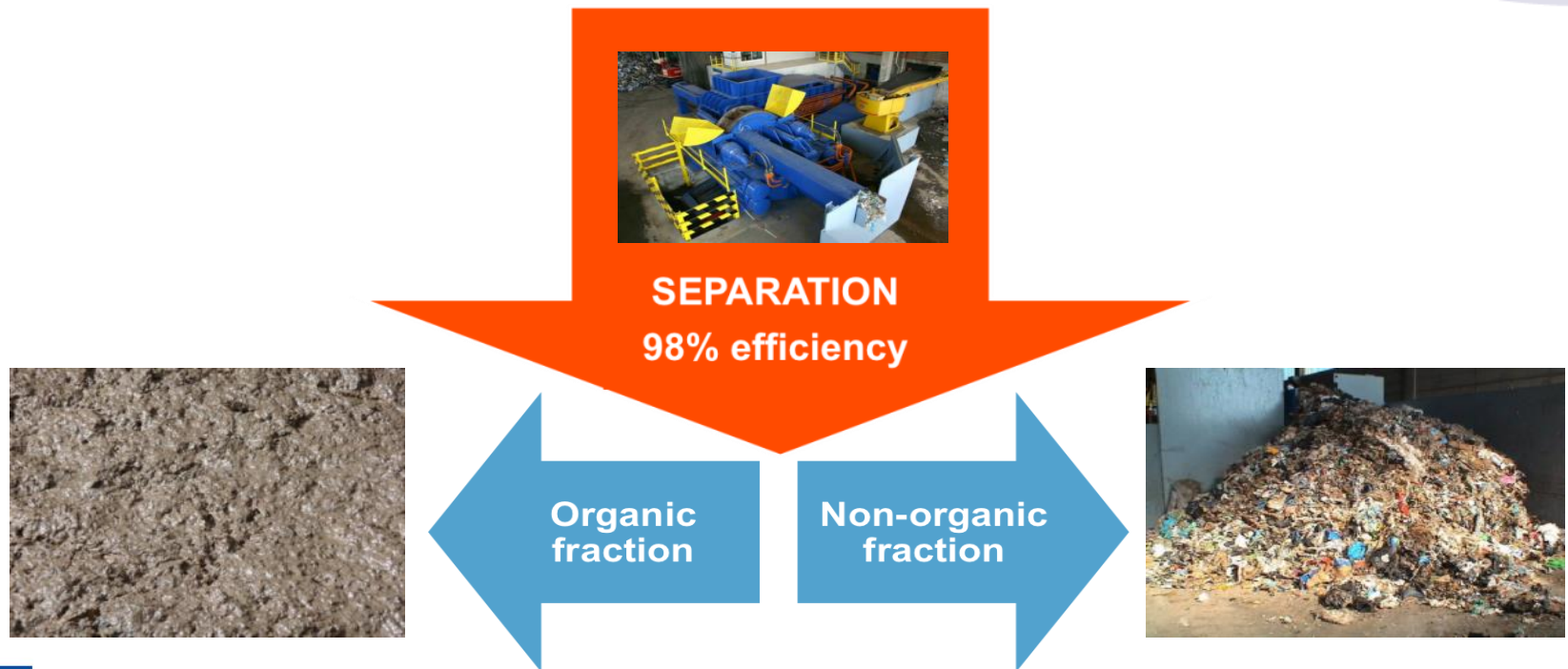
- On the policy side:
 - Absence of an EU-wide obligation to recycle bio-waste
 - Lack of common quality standards for compost/digestate
- On the practical side:
 - Difficulty in effectively separating bio-waste from other waste fractions and the impurity of the organic matter, even from separate collection, which causes problems for anaerobic digestion

Enabling high-quality recycling of bio-waste

- Bio-waste can be valorised twice:
 - Anaerobic digestion
 - Compost and fertiliser production
- ➔ **Efficient separation and purification of waste is a key enabler for high-quality recycling into high-quality products:**
 - Biogas
 - Compost/fertiliser
 - Recyclables
 - RDF

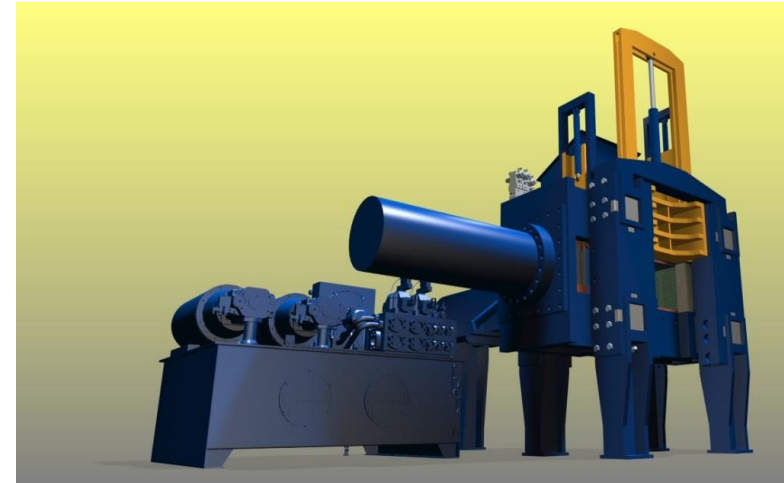
SEPARATE – The technology

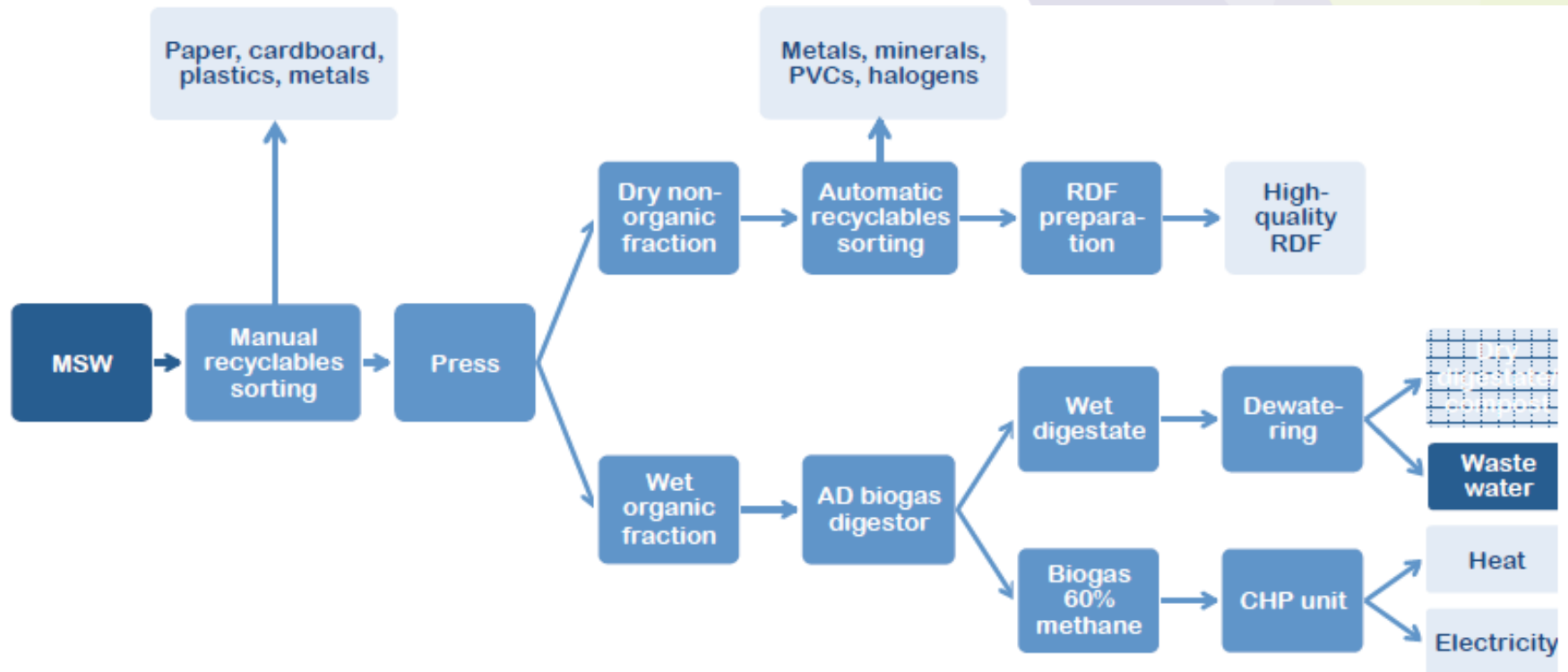
- The European project 'SEPARATE' supports the market entry of an innovative technology that separates organics from non-organic waste with an efficiency of more than 98%.



SEPARATE – The advantages

- High separation efficiency results in a range of **high-quality products and key advantages** for waste operators and municipalities:
 - Optimal use of organic matter due to high **separation efficiency (>98%)**
 - **Lower maintenance costs and improved biogas digester performance** (<0.5% plastic and inert material remain in organic fraction)
 - **More gas yield** per input unit due to broken cell structures of organic matter
 - Lower investment costs through **shorter retention times**

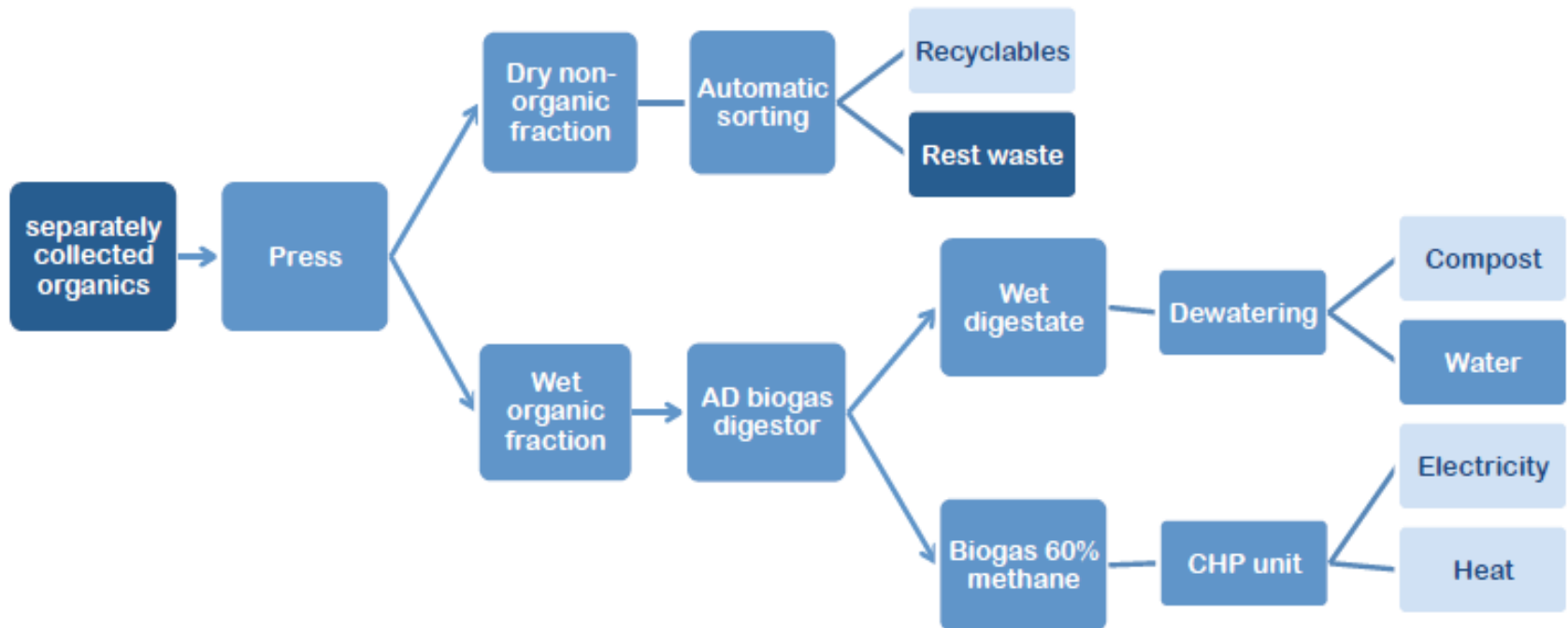




MSW = Municipal Solid Waste
 AD = anaerobic digestion
 CHP = combined heat and power
 RDF = refuse-derived fuel

Dry digestate / compost is a product or a waste, depending on laws and quality
 Waste water is water from the process that needs cleaning

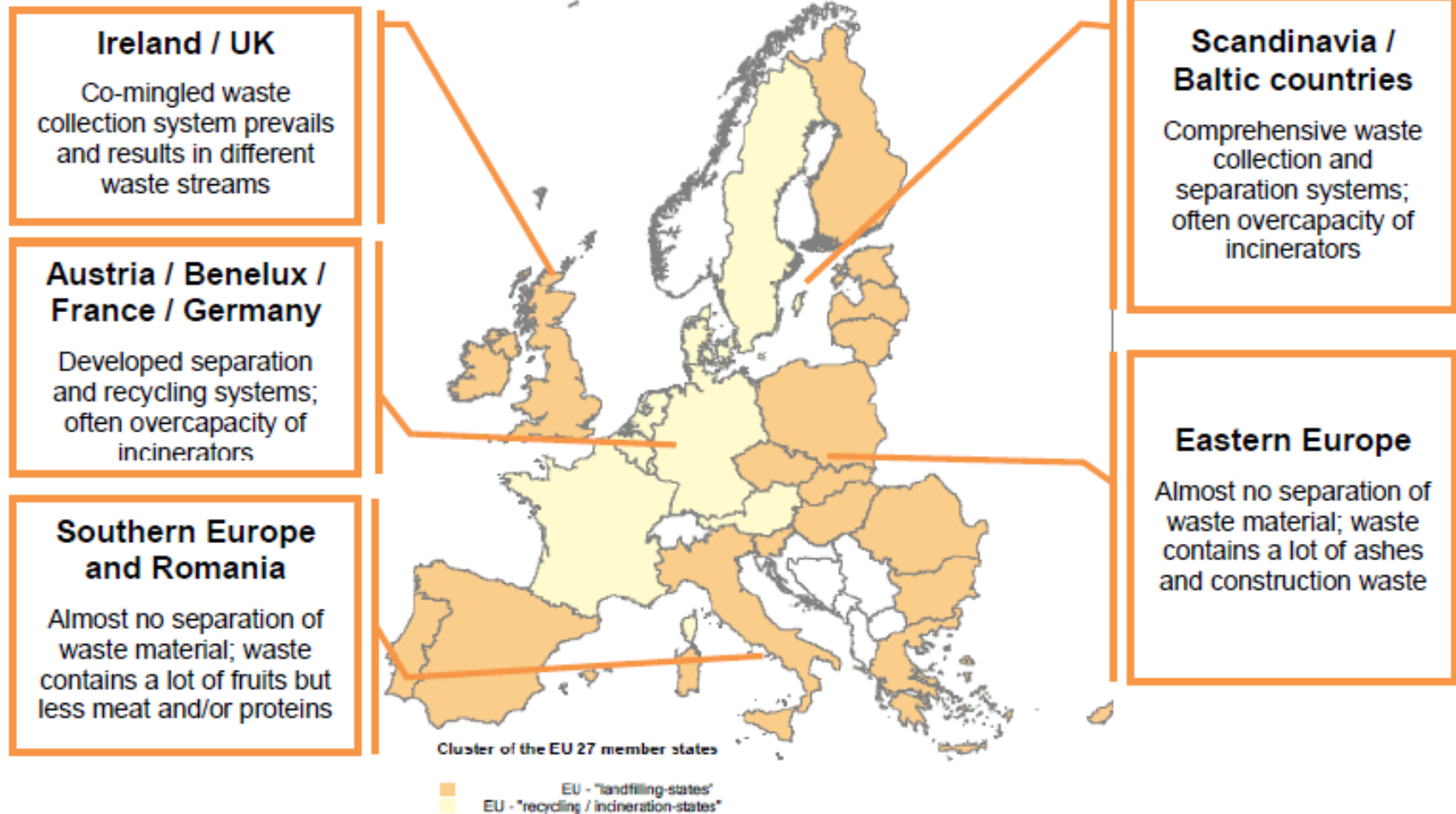
SEPARATE Waste System for separately collected bio-waste



SEPARATE – The activities

- Design and construction of mobile testing unit
- On-the-spot tests of different waste streams (MSW, separately collected bio-waste, mono-streams)
- Analysis of quality and characteristics of waste separated with the SEPARATE technology
 - Quality of the organic feedstock
 - Substances contained
 - Eventual suitability for composting
- Certification of results by renowned institutes and laboratories

SEPARATE – Country grouping





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