



Bio-waste – Need for EU Legislation? Brussels, 9-10 June 2009

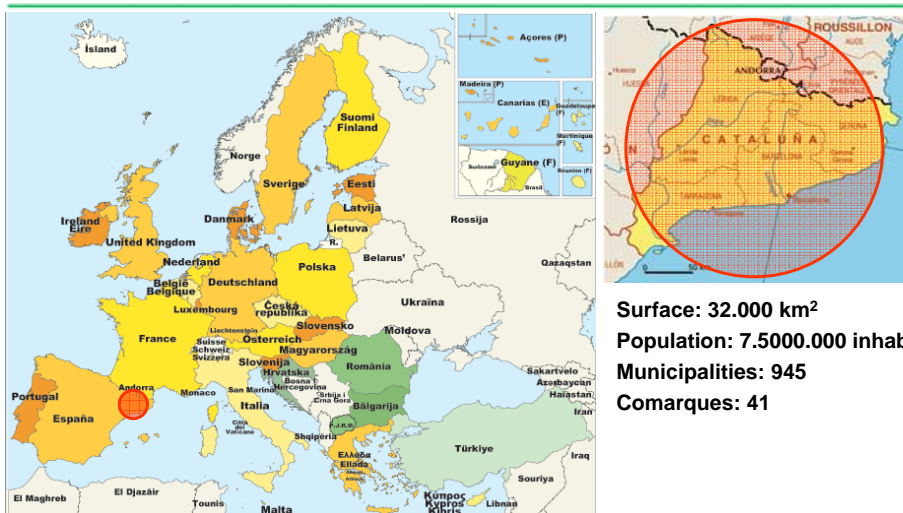
Challenges in Mediterranean Countries The case of Catalonia (Spain)

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Catalunya (Spain)– The challenge of separate collection in Mediterranean countries



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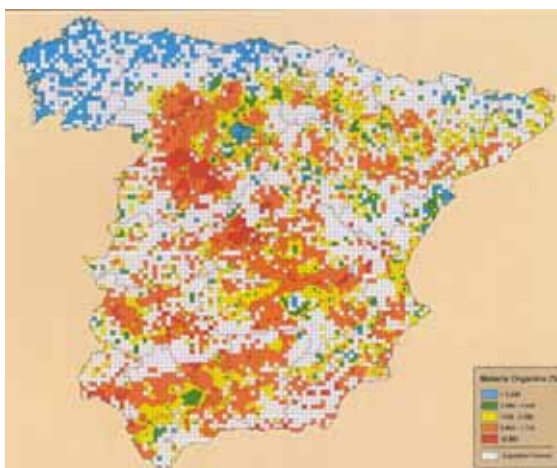


Catalunya, as a Mediterranean representative region of Europe

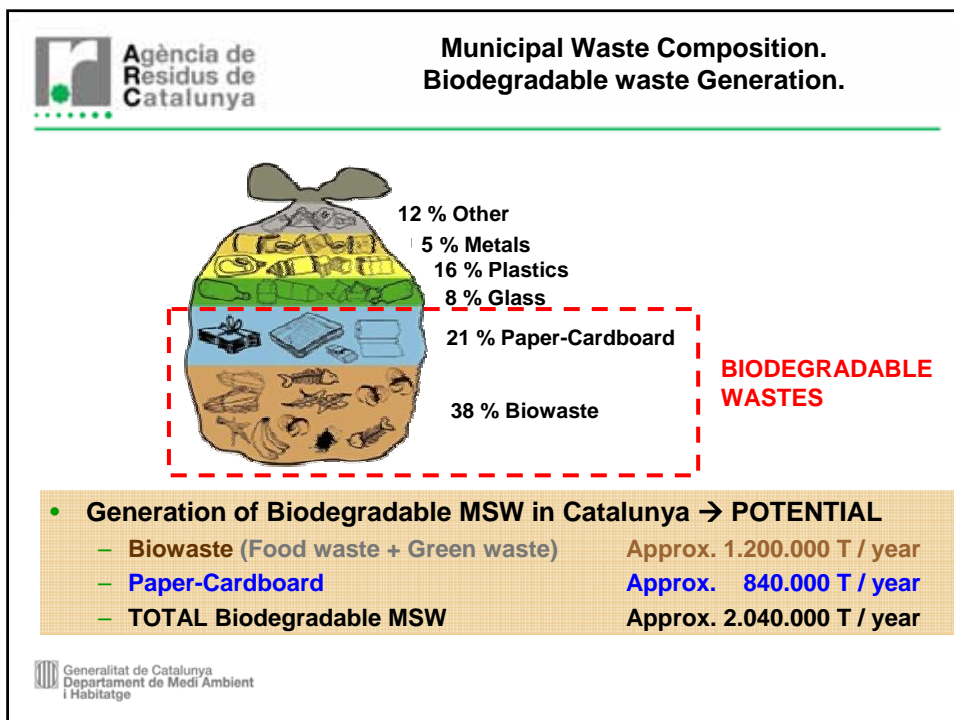
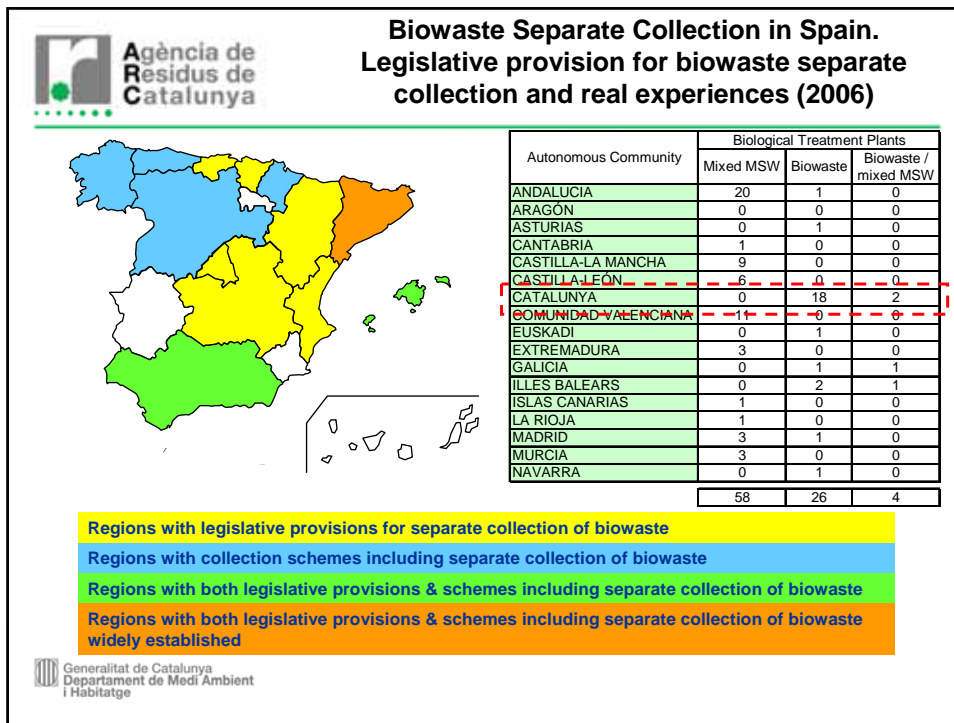
- Similar characteristics of biowaste [30-40 % in MSW, in weight; food waste with high water content, high density & high putrescibility ; green waste with low density and seasonal generation]
- Most part of MSW produced is landfilled (> 50% of MSW)
- Similar behaviour and the mentality of the people
- Similar climate conditions
- Similar status of the Mediterranean soils (soil organic matter depletion, erosion, forest fires, etc.)



Study on organic matter and heavy metals in agricultural soils and grassland in Spain. INIA(MEC), MAPA, MIMAM 2004

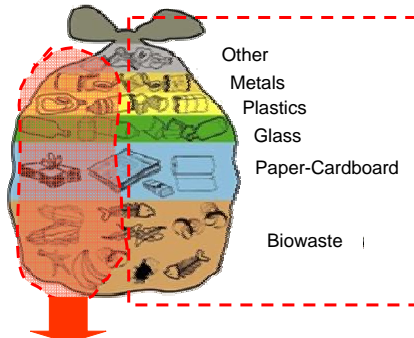


- 50 % of agricultural soils & grassland in Spain has less than 1,7 % SOM (1 % SOC)
- According to *Communication Towards a Thematic Strategy for Soil Protection*, there exists a real risk of desertification for the 50 % of agricultural soils & grassland in Spain
- High quality compost applied to soils can contribute to solve the problem



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Possible pathways for biodegradable MSW management



- **Separate Collection of:**
 - Glass
 - Paper-cardboard
 - Packaging
 - **Biowaste**
 - *Biological Treatment through Composting [C] and/or Anaerobic Digestion [AD]*

- **Collection of mixed MSW:**
 - *MBT [Mechanical-Biological Treatment]*

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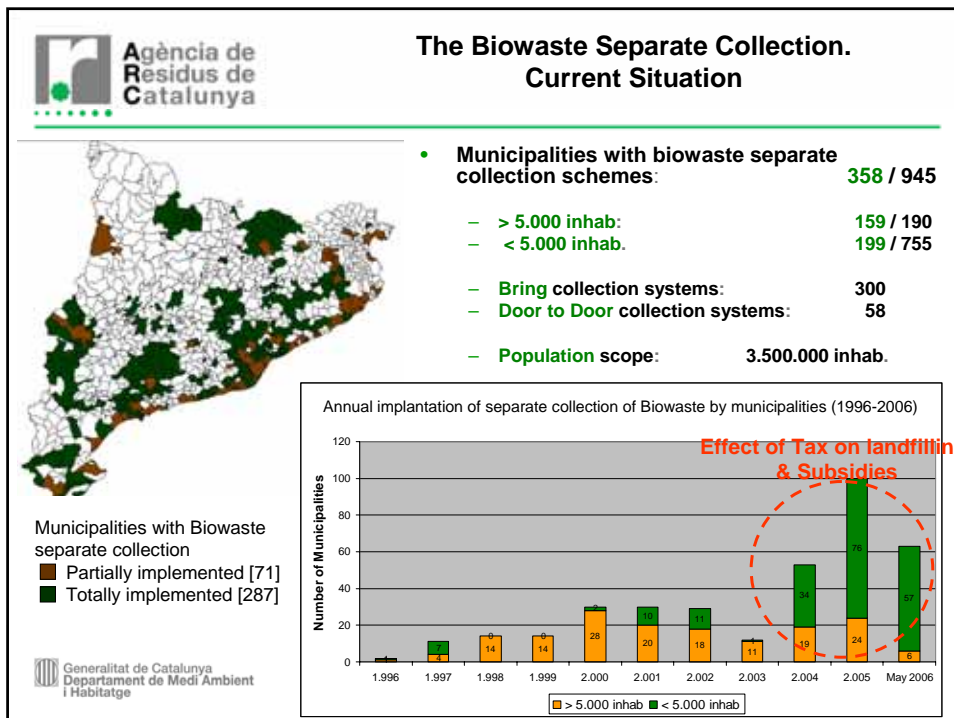
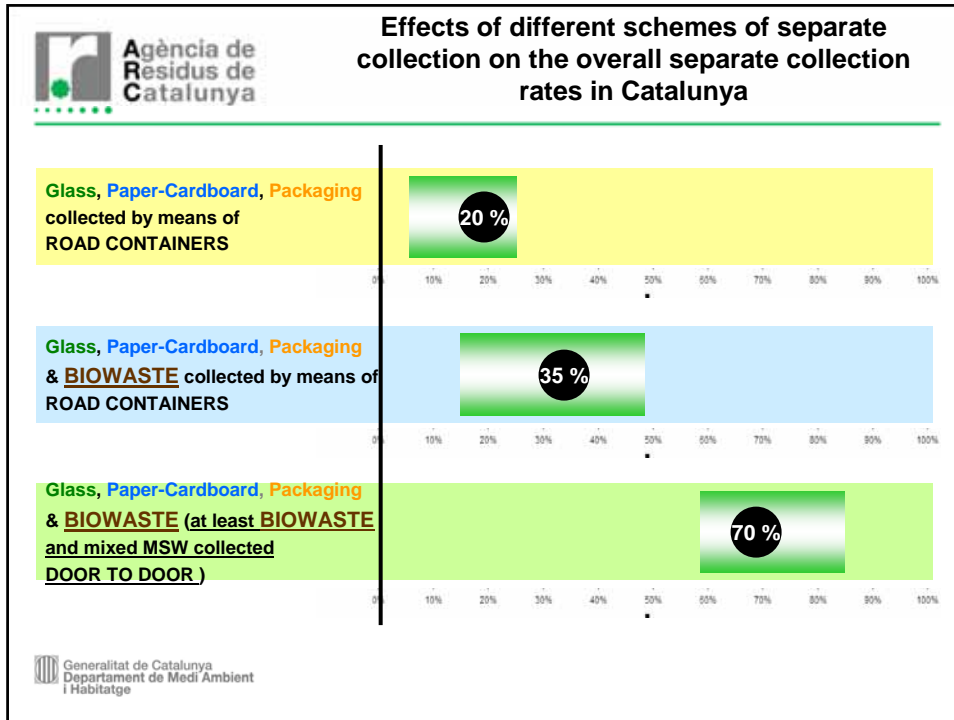
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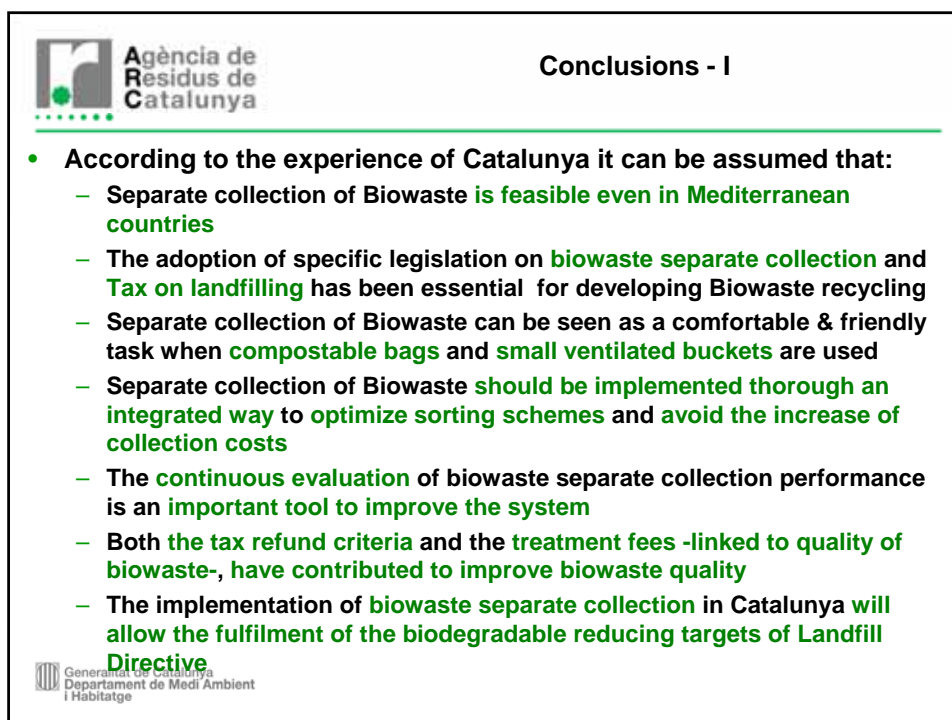
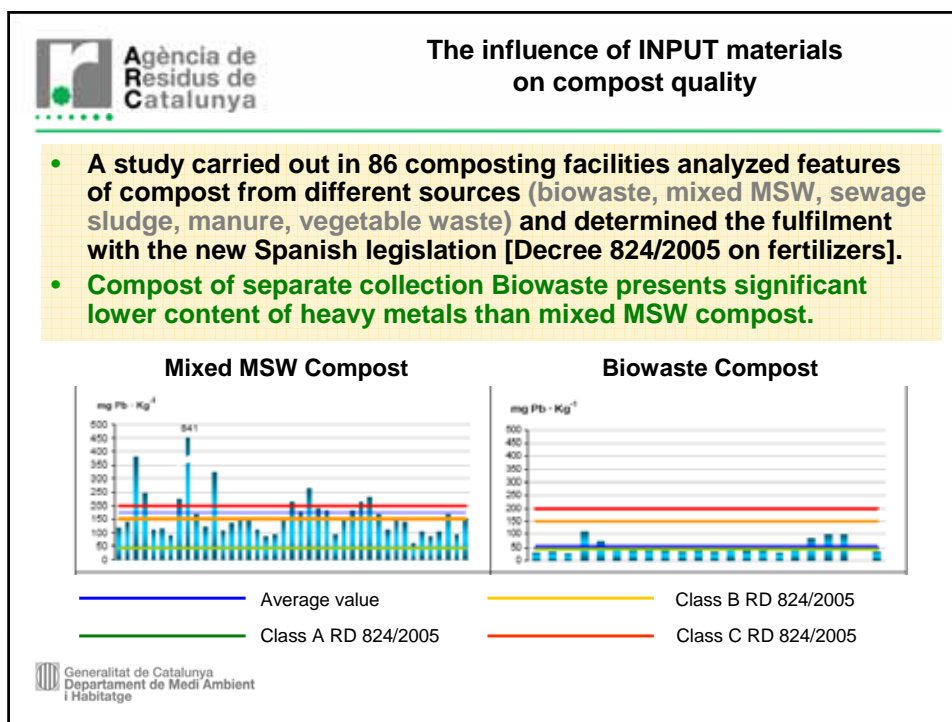
Keys for a successful separate collection of the biowaste

- The key is the **separation of BIOWASTE at source** (not allowing mixing)
 - **Separate Collection of food waste and green waste**
 - **Consider all kinds of food waste** (vegetable & fruit, meat & fish scraps, shells, bones, meal waste, etc.)
 - **Use of compostable bags for the biowaste collection.**
- **Comfortable and friendly separate collection** [no smells, no flies, reduction of weight (water)] is possible thanks to the combined effect of using **compostable bags and small ventilated buckets**



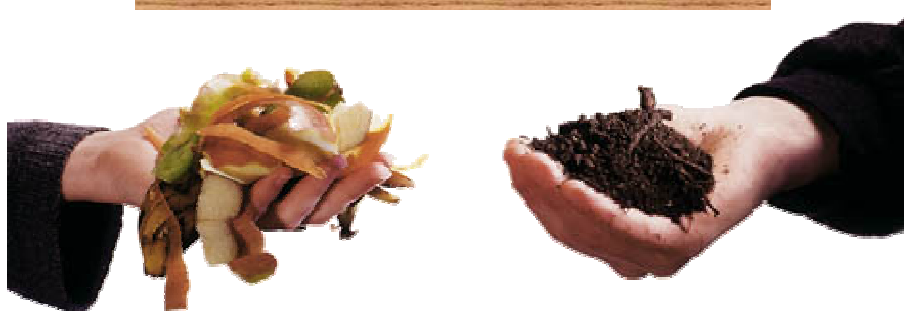
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- Separate collection of Biowaste allows for a significant increase the overall separate collection rates of paper, glass, packaging, etc. Door to Door collection has shown to be the most efficient system
- Compost from separate collection of Biowaste presents significantly lower content of heavy metals than mixed MSW compost
- We consider that regulation of final product, by itself, is not enough to promote biowaste recycling
- While biowaste separate collection is increasing year by year, MBT treatments of mixed MSW should still be necessary. In this sense, it should be very important to clarify the quality of both materials and its use limitations.
- Last but not least, we consider that without one European Regulation on Biowaste, it is also possible to work, but it will suppose to enter in an uncertain and longer way, spending time and money. So, it's clear that Spanish considers that an EU regulation on Biowaste is needed.

LET'S RETURN TO EARTH
WHAT IT HAS PROVIDED US



Thank you very much !