



Observatory: WG 2 Data Presentation and Analysis

ACR+ 2011 Annual General Meeting and International Conference

Recycling Society

26-27 October 2011 | Genoa | Italy

Simone Orsi – Amsa

Paula Mendes - Lipor

Working Group 2

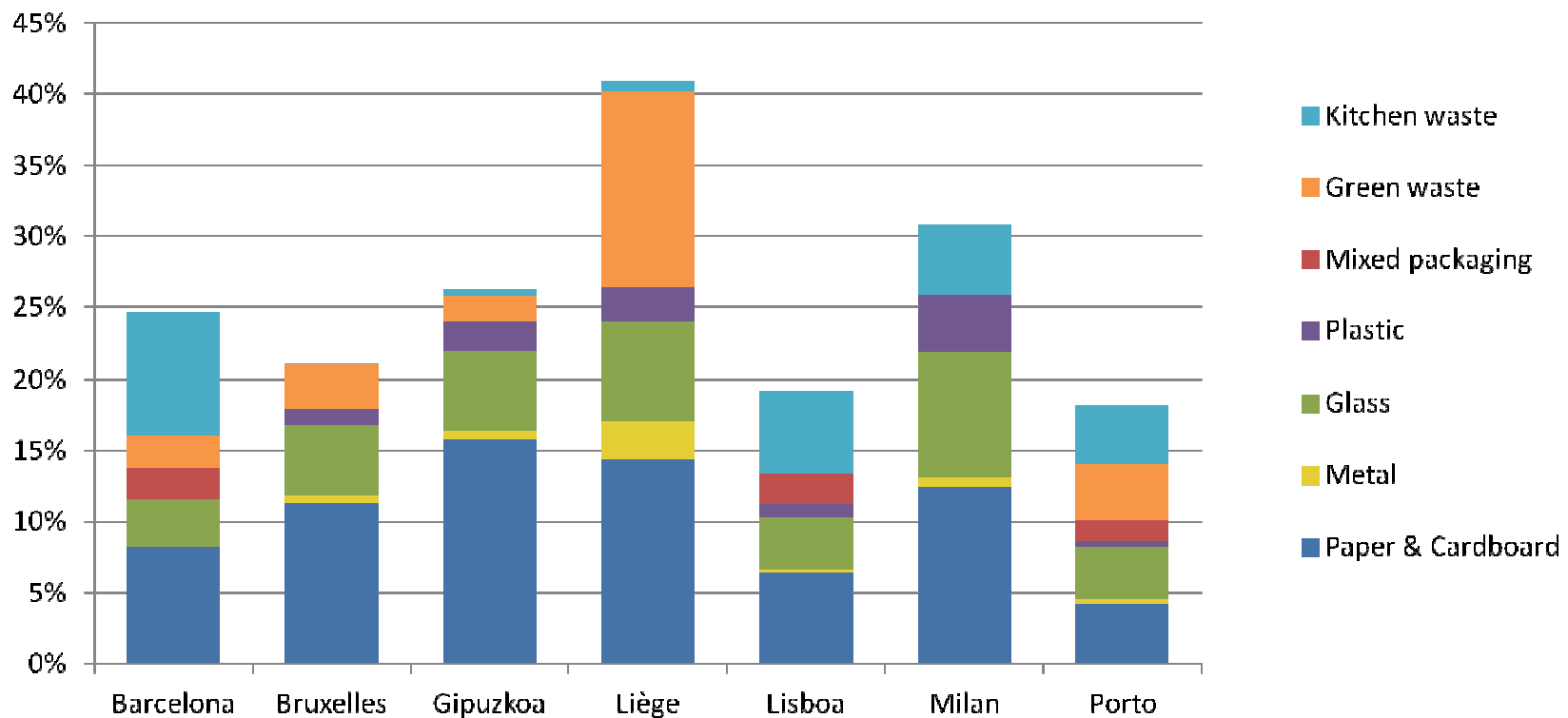
- AMSA - Milano (IT)
- Lipor - Porto (PT)
- IBGE - Bruxelles (BE)
- Area Metropolitana de Barcelona (ES)
- INTRADEL – Liège (BE)
- Municipality of Lisbon (PT)
- Regional Council of Gipuzkoa (ES)

General data (year 2009)

	Barcelona	Bruxelles	Gipuzkoa	Liège	Lisboa	Milan	Porto
Population	3.192.778	1.068.532	723.128	990.608	479.884	1.303.964	969.970
Total MSW arisings (tonnes)	1.606.674	475.641	405.440	408.754	327.576	711.290	511.182
Waste generation per inhabitant (kg/inh per year)	490	445	561	410	708	545	543
Selective Collection Rate (%)	31,2%	28,3%	43,2%	58,2%	19,5%	35,7%	19,3%

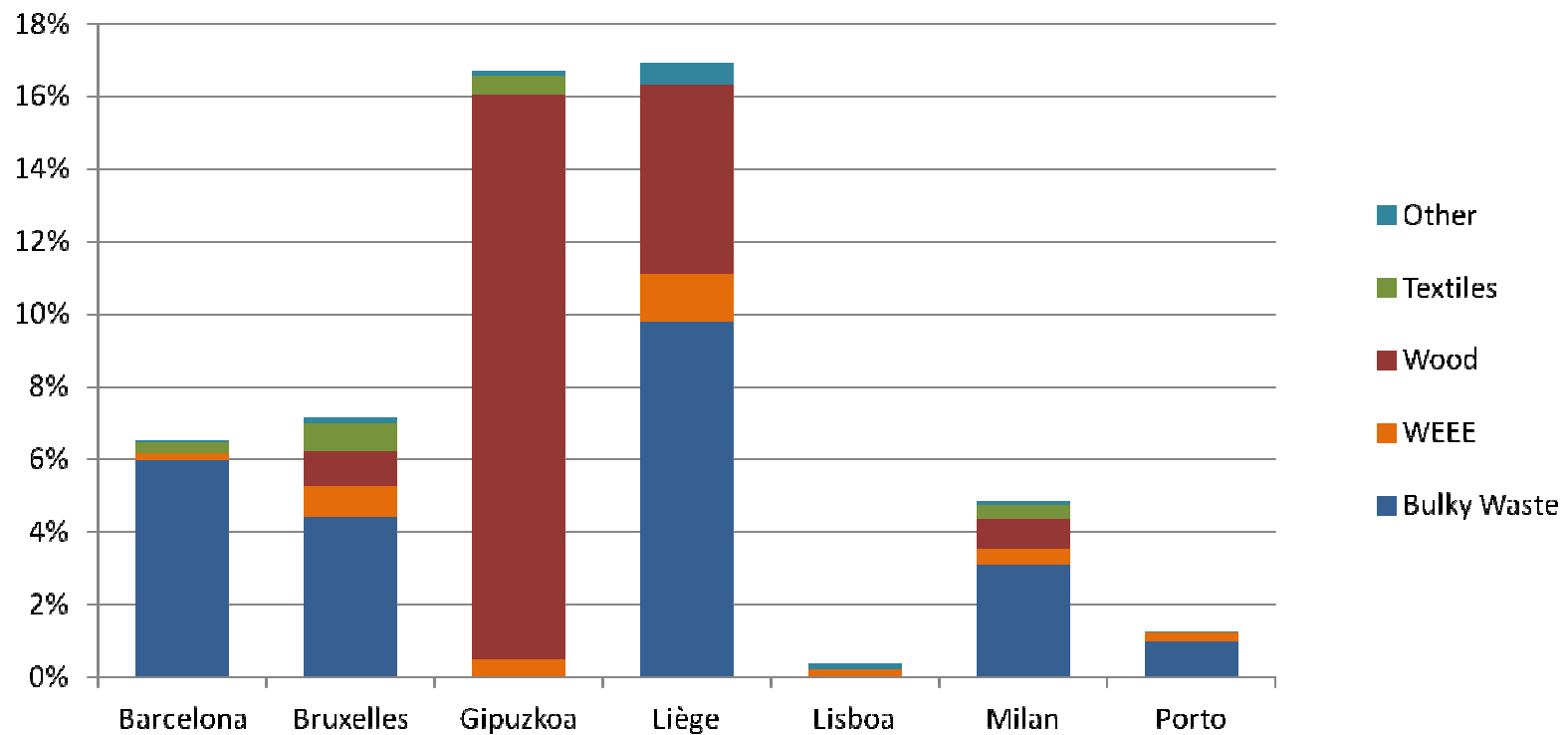
Selective Collection per material

Main fractions %



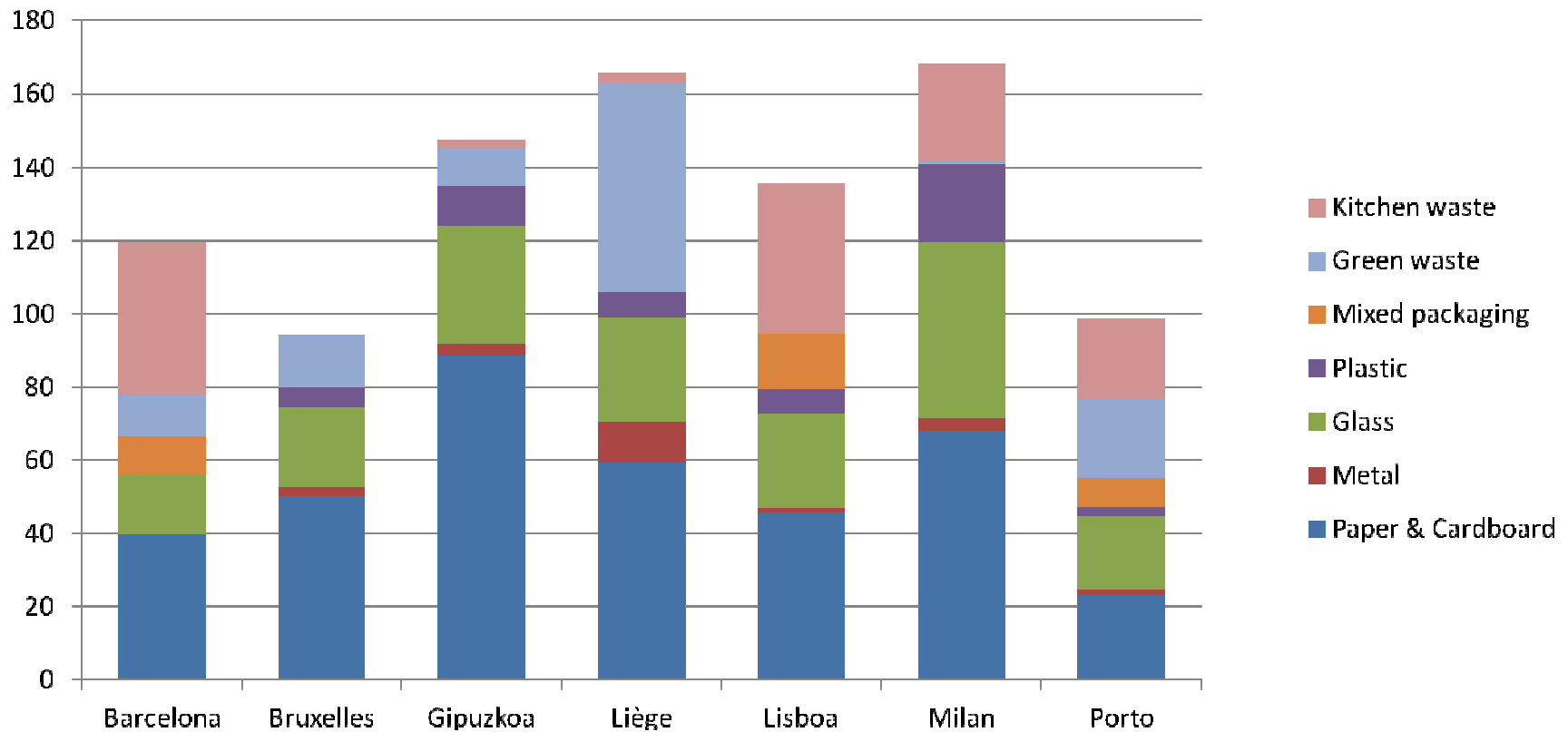
Selective Collection per material

Other fractions %



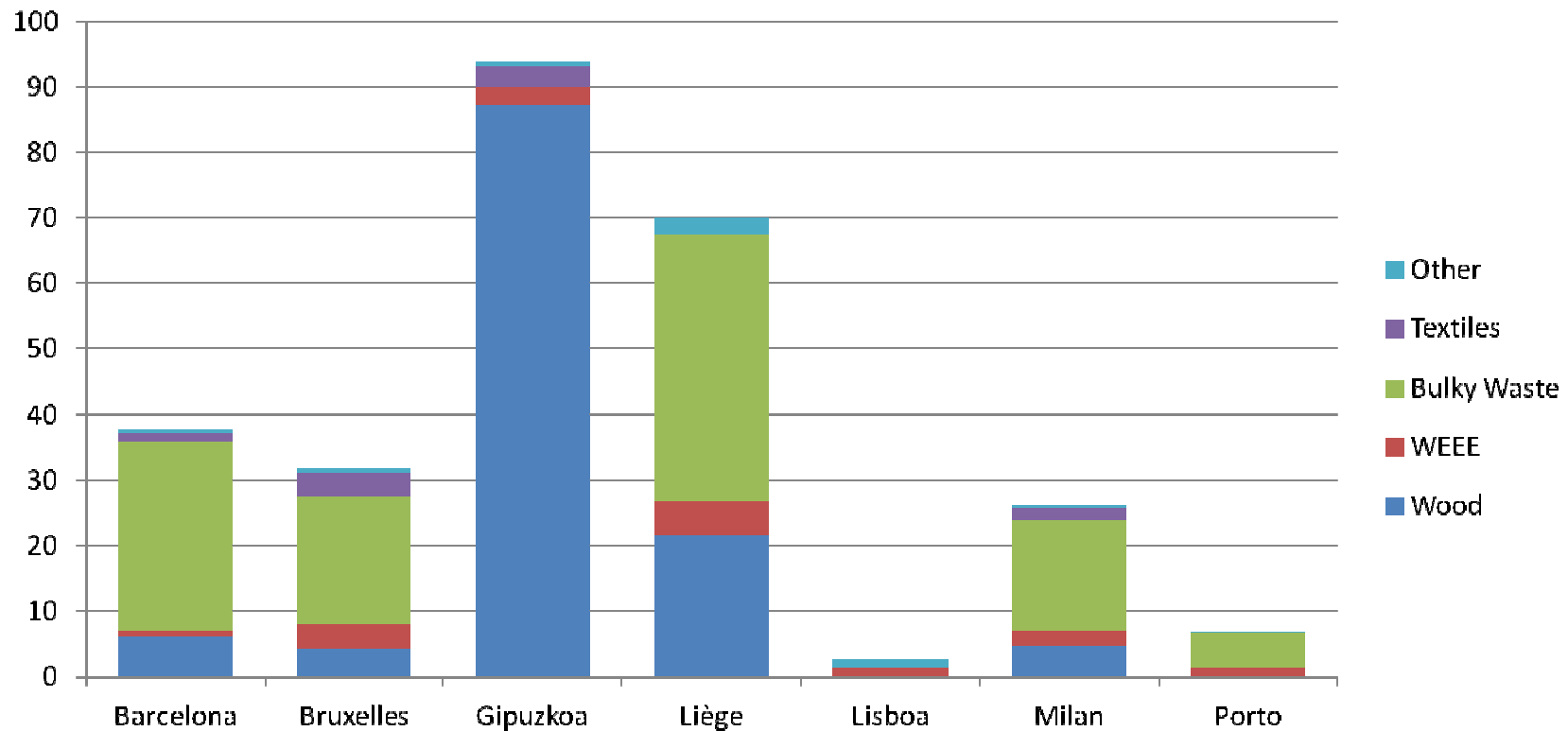
MSW collection per inhabitants

Main fractions (kg/inh per year)



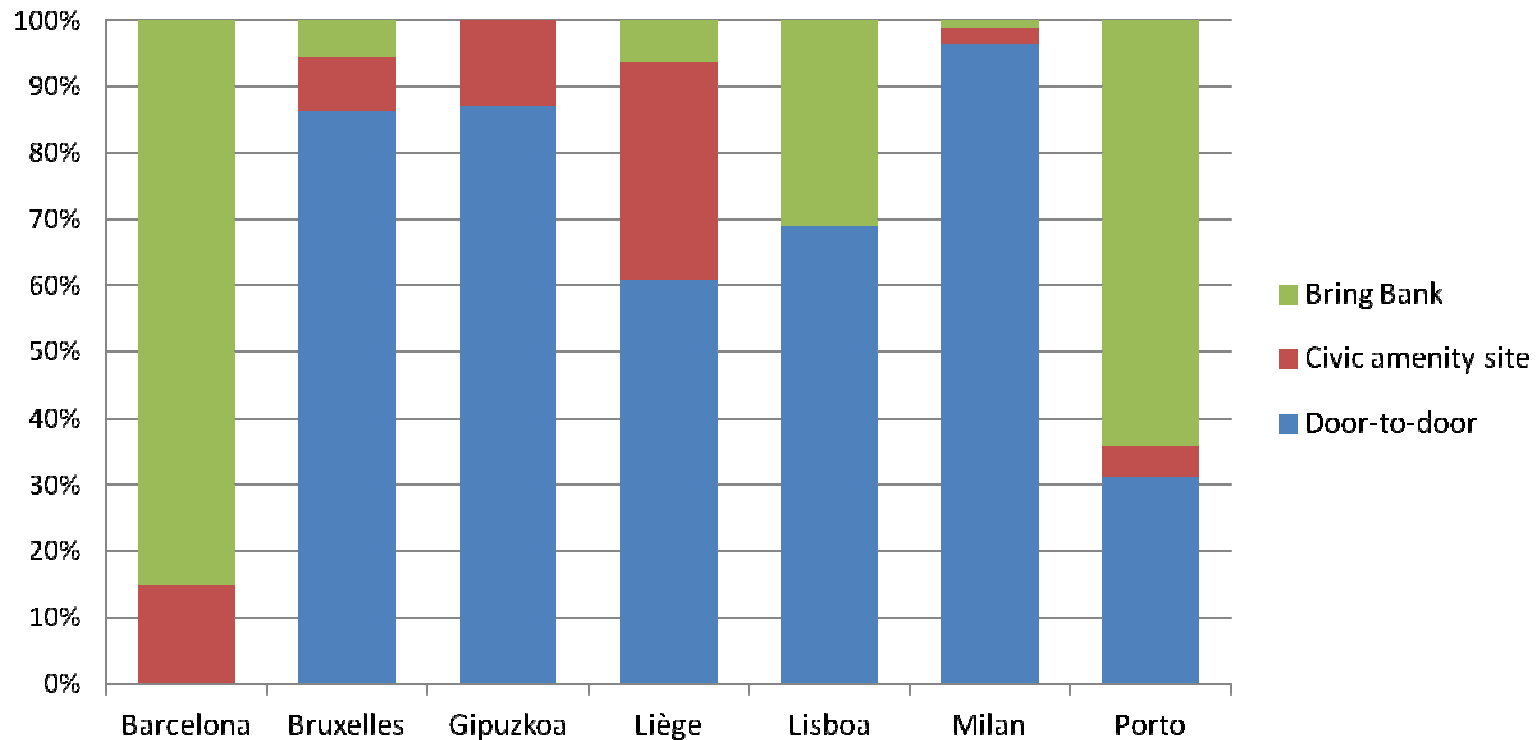
MSW collection per inhabitants

Other fractions (kg/inh per year)



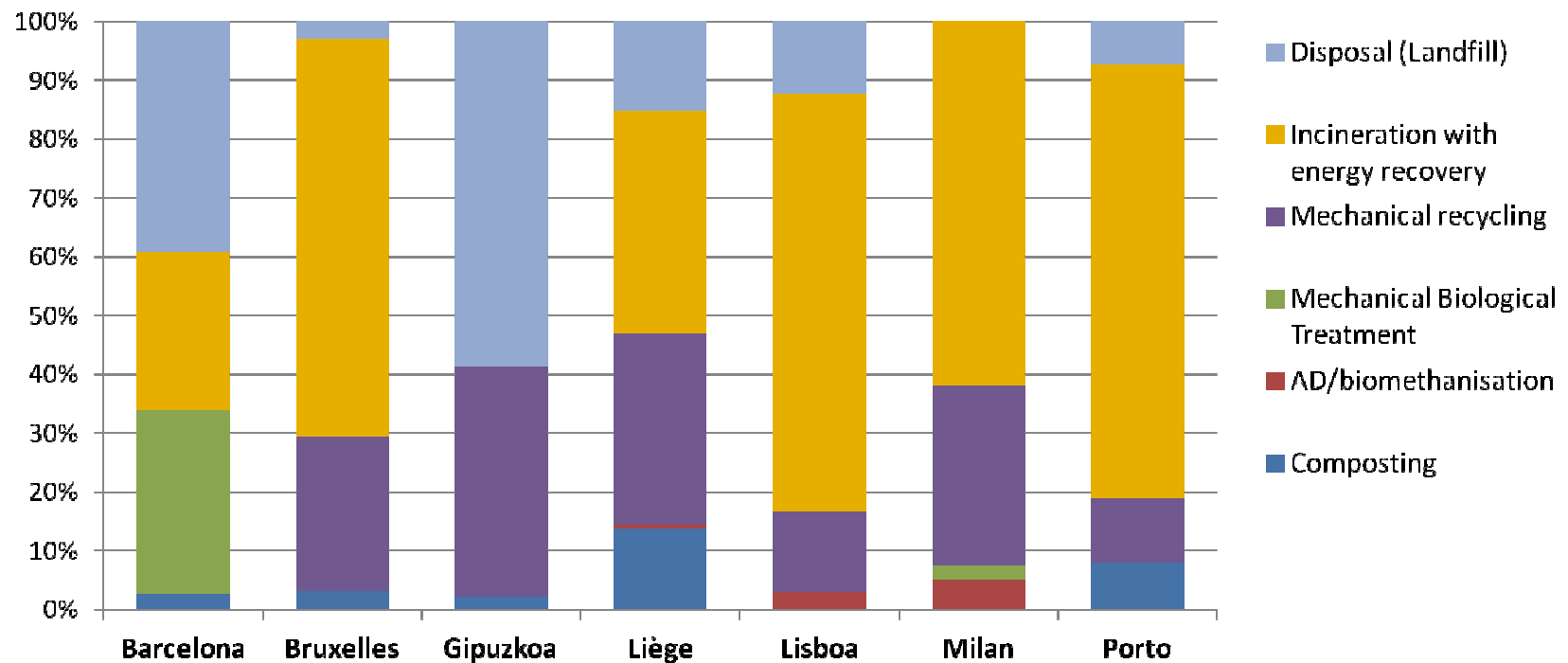
Collection system - 3 sources

Main sources of MSW (%)



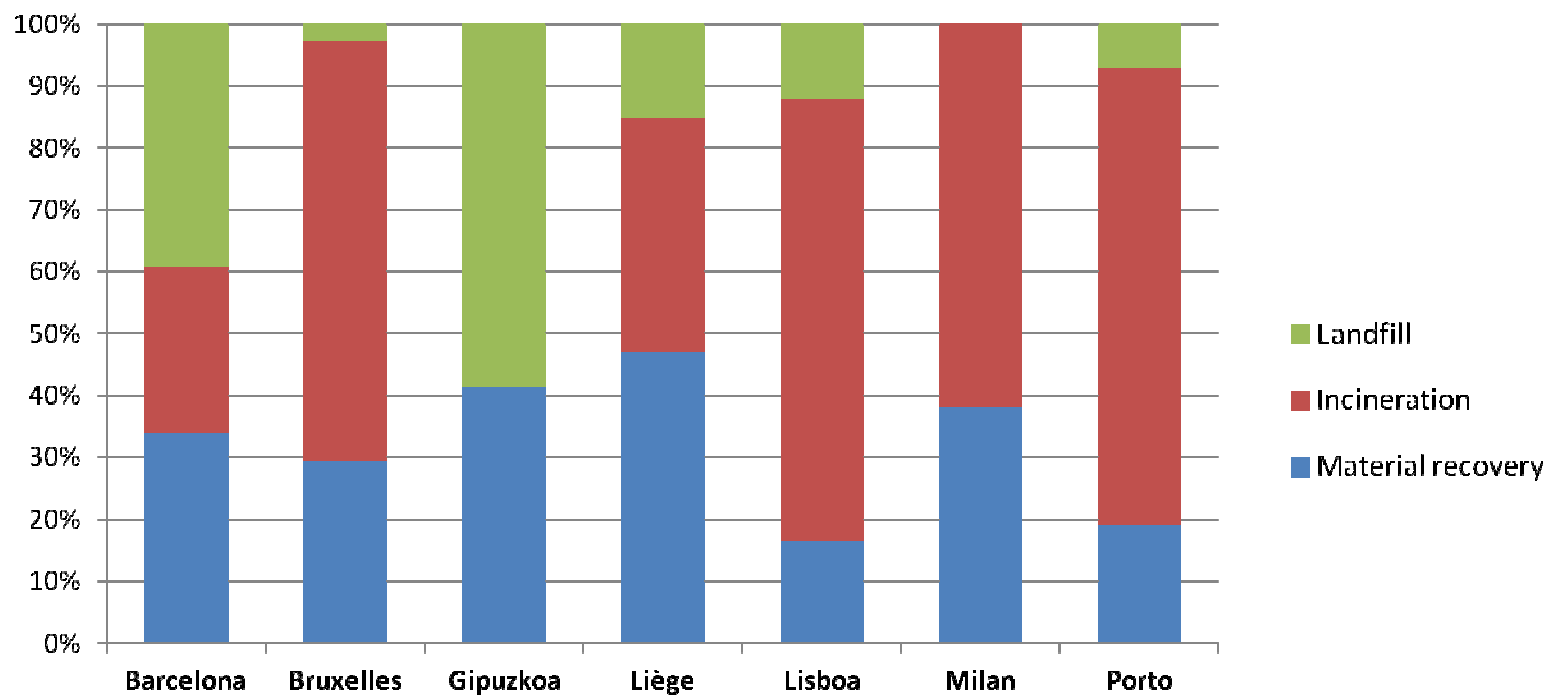
Treatment methods (%)

MSW treatment (%)



Final treatment destination (%)

MSW final treatment (%)



Important Considerations

- We are comparing performances between regions and cities (different geographical typologies);
- In some cases we noticed significant differences in population data – ex. Barcelona has 3.192.778 inhabitants and Lisboa 479.884 inhabitants;
- All participants have included *household waste and similar waste* (similar waste: commercial premises, schools, churches, fairs);
- We had some difficulties in separating packaging from non packaging data (ex: blue flow = paper and cardboard, mix of packaging and non packaging materials);
- We had some difficulties in separating flows (ex: yellow flow = metal and plastic packaging);
- Some participants gave us quantitative data after collection and others after pre-treatment;
- Fluctuation population.

Final Conclusions

- Some doubts in methodology implementation (because of the considerations we explained in previous slide);
- Some doubts about the information (equality?);
- The dimension of cities and regions influence the results;
- It is very important to exchange ideas with partners and better understand the way how different cities/ regions work in Waste Management;
- Learn with the others participants;
- Share Good Practices.

Good Practices: selective collection & recycling



- Green Waste Selective Collection in Cemeteries (LIPOR experience):
 - Since 2004, LIPOR started a project for sorting green waste from cemeteries;
 - LIPOR has a specific sorting line for green waste from cemeteries;
 - In 2010 we made selective collection in 90 cemeteries of Greater Porto; we collected around 3.500 tons of green waste (65% was flowers and flowers branches);
 - In this stream we also sort waxes and paraffin, cups of candles, plastic packaging, metals and cardboard. This materials are sent to recycling;
 - We have a team with 8 workers that work every day in this project.

Thank you for
your attention!

