



Waste collection toward the circular economy-Challenges concerning plastics

Violetta Koutsogiannopoulou

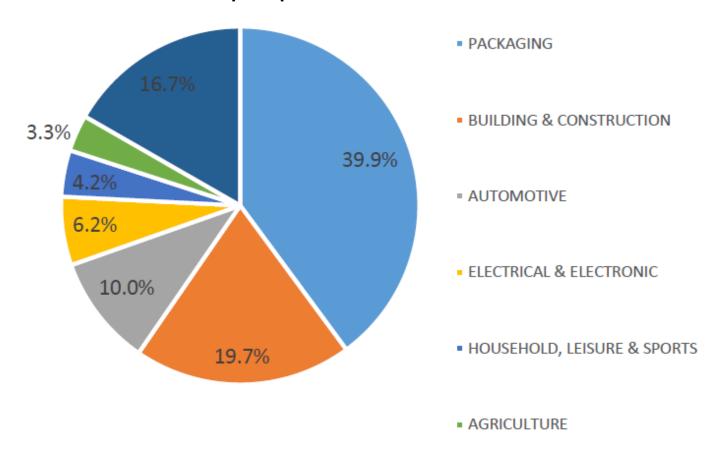
Project Manager

plastecoproject@gmail.com

Usage of plastics

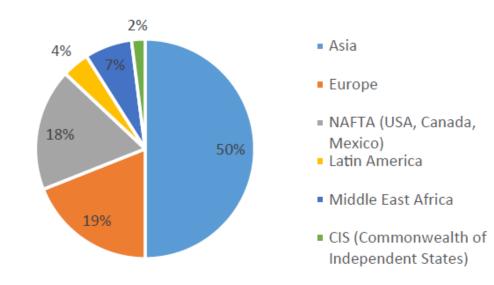


Distribution of European plastics converter demand





World plastic production



 OTHERS (includes appliances, mechanical engineering, furniture, medical etc.)

Negative externalities of plastics



- greenhouse gas emissions, ecological damage.
- usually non-biodegradable;
- may pose risks to human health and the environment;
- in some cases, difficult to reuse and/or recycle.



Toxic chemicals from plastics can accumulate in living organisms and throughout nutrient chains.

Challenges



Economic

- ☐ Fluctuations in the quality and the quantity of supplies delivered to recyclers and end-users
- □ Increasingly complex packaging
- ☐ High landfilling rates and the absence of bans on landfilling
- ☐ High levels of exports to non-EU countries

Social

- ☐ Negative image and health concerns associated with the use of recyclates
- ☐ Lack of consumer awareness or enthusiasm and reluctance to accept recycled products

Regulatory

- ☐ Inadequate and unharmonized monitoring of the flow and performance of plastics
- ☐ Limited consideration of plastics in key legislation



Plastics value chain



The Global plastics value chain ranges from the extraction of raw materials for plastics production to final disposal of the plastics





Petrochemical companies

Plastic producers

Compounders

Packaging manufacturers

Brand owners and consumer good companies

Retailers

Users

Resource management companies

Materials Recovery Facilities (MRFs) or sorting facilities

Reprocessors/recyclers



Managing the challenges



- ☐ Increase awareness & change of mentality
- Design for recycling
- Correct sorting
- ☐ Increase availability of stable supply of recycled plastic raw materials
- ☐ Collaboration among actors of plastics value chain
- ☐ Protocols for recycling standardization
- ☐ Policy instruments including fiscal and regulatory measures



Contribution of PLASTECO



PLASTECO plans to help the different players of the plastic value chain to **collaborate** in a better way to improve, among others, high quality recycling of plastics.



Players of the plastic value chain will:

- participate in: a) group meetings, b) interregional exchange of experience
 events c) study visits
- provide input on the policy measures to be included in the action plan
- □ be involved in both the design and the implementation of measures included in the action plans

- resolve potentially inhibiting conflicts
- networking and awareness raising activities







Thank you!





