



HERAKLION 2019 7th International Conference on Sustainable Solid Waste Management Crete Island, Greece, 26–29 June 2019

Understanding the material recovery by material flows in food retailers: Jumbo supermarket, a Chilean case linking consumption to materials

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Rome Declaration (World Food Security, 1996)



Food Retailers can contribute to food se reducing in the cost of liver providing access and availability to high a right spatial distribution is achieved throughout the country



Food Retailers have the big chall Food ght Losses Food Achieve goals of Extended Producer Respon Achieve a Sustainable Waste Management

Recycl., 94, pp. 56-65



Christoph Teller, Christina Holweg, Gerald Reiner, Herbert Kotzab, Retail store operations and food waste, Journal of Cleaner Production (2018), doi: 10.1016/j.jclepro.2018.02.280

Food Waste



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Our aim was assess the main materials discharged that can be recovered by material flows analysis linking production (material's packaging) and

CENCO's GROUP





Wastes produced by packaging





Material	Jumbo & Santa Isabel (Ton)
Glass	1,782 (31%)
Paper & Cardboard	1,068 (19%)
Metal	859 (15%)
PET	706 (12%)

Balance of Masses by COnsumption

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Paper &	1,068 (19%)
Cardboard	
Metal	859 (15%)
PET	706 (12%)







Discussi on

The materials discharged that can be recovered are strongly linked to consumption driven by income (food budget) Indeed, the consumption is linked to cooking behaviour and customs. The main materials are related to "Food & Beverages" category.

Against of common sense, the most important materials to be recovered are glass and paper & cardboard meanwhile plastics are below of aluminium and metals.

Conclusi on



"Food" category is a big classification, the contribution to wastes is reduced just few products.

These food products are related to high demand according to cooking uses and unitarian packaging e.g. flour, cooking oil, pasta, sugar; etc. and linked to budget allocated to dairy cooking uses.

Finally, the strategy to reduce food wasted and wastes (packaging) needs to be focused on highly demanded products linked to cooking behaviour. The analysis of composition of packaging will be key to determinate and forecasting how much materials food retailers can recover as well as which containers and wrapping they need innovate.

This result shows the relevance of composition and weigh of packaging of every food product as well as the feasibility to be recycled and recovered as well.





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