

RESULTS OF THE MORE CIRCULARITY, LESS CARBON CAMPAIGN

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DIFFERENT WASTE MANAGEMENT





Treated quantities in kg/cap



OVERALL CARBON FOOTPRINT



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Carbon footprint per capita (in t eq. CO2 per capita)

IMPACTFUL FRACTIONS

Carbon impact for each key waste fraction (in t CO2 eq. per capita)



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DIFFERENT CARBON FACTORS



Carbon factors for the recycling of food waste, plastic waste, and textile waste (in t CO2 eq. per tonne of waste)



KEY CONCLUSIONS

SOME SIMILARITIES

- Dominating impact of waste generation
- Common critical waste fractions: textile, plastic, food
- Waste management has a small, mostly positive impact

SOME NUANCED RESULTS

- The carbon footprint differs depending on the fraction, with recycling having a more or less impactful contribution
- Several local factors impacts the carbon footprint of municipal waste (energy, composition, etc.)
- Some aspects of waste management do have an impact: treatment of residual waste, recycling routes, re-use

SOME LIMITS

- Underreported quantities (WEEE, textiles)
- Lack of data on the actual composition of critical fractions
- Lack of data on recycling and recovery routes



REACHING -25%?

- Focus on key fractions : food waste, textile waste, plastic waste
- Focus on prevention and re-use
- Need for very ambitious targets: if focus on 3 key fractions, then reduction targets should be set between 30% and 50% depending on the territories
- Recycling will help, but will not be sufficient: in Belfast, increasing the recycling rates of plastic, food, and glass waste up to 90% would lead to a -10% reduction of the carbon footprint
- Some interventions on eco-design and production processes out of the scope of local and regional authorities



MORE CONCRETE ACTIONS

Reducing food waste

- Setting ambitious food waste prevention strategies as part of food strategies
- Improving food labelling
- Promote self assessment of food waste
- Develop a quantitative monitoring system
- Promote food donation

Improve textile waste management

- Setting a real local governance with clear targets and responsibilities
- Strengthen existing collection schemes and address underperformances
- Promote second-hand purchasing and players
- Wait for an EPR system to extend collection to all textiles
- Circular tender for professional textiles (including GPP)

Improve plastic waste management and prevention

- Ensure quality of sorted fractions
- Door to door collection and PAYT schemes tend to give higher yields
- DRS gives the highest collection rates
- Regional policies can promote reuse (e.g. in HORECA sector) or bans several singleuse plastics (disposable cups in public events and administrations, etc.)





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2023 Update

CONCLUSIONS

- Waste generation and composition condition its carbon footprint
- Waste management has a limited impact, but improving both quantities captures, and the actual recycling routes do have a certain potential
- Following the waste hierarchy generally lead to more carbon savings.
- Local and regional authorities do have a role to play, even if many other essential interventions fall out of their scope
- Envisioning waste management within a circular economy approach is a proper way to ensure that it delivers better performances in terms of climate change mitigation



BEYOND THE RESULTS ?

- Key similarities are likely to be **transferable** to other contexts
- Reconsidering the weight-based approach is necessary, but challenging to operationalise
- Priority actions might be out of the scope of waste management policies, or even out of reach of the local organisation
- How to promote waste strategies aligned with climate change mitigation in absence of legally-binding targets on the top priorities?





Thanks !

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