

# The untapped potential

*The Zero Waste strategy as the toolkit for Circular Economy:  
role and importance of biowaste management*



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*Chair, Scientific Committee,  
Zero Waste Europe*



LINEAR ECONOMY



RECYCLING  
ECONOMY



CIRCULAR  
ECONOMY





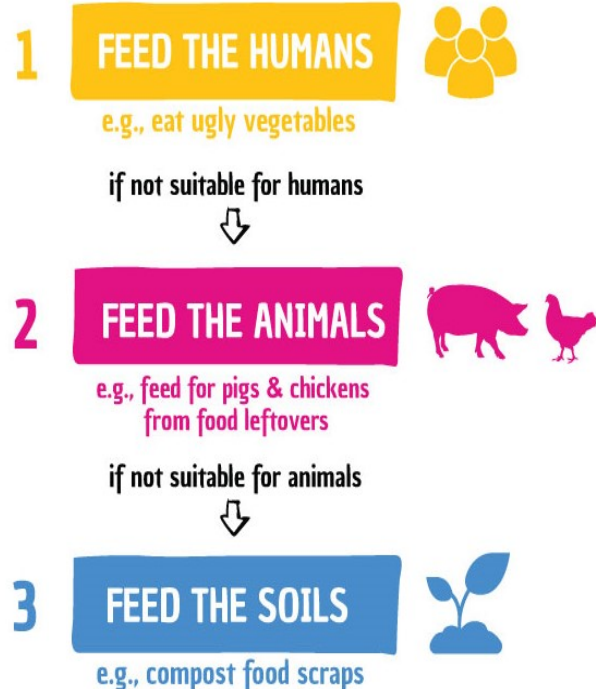


# The cascading principle

1. Food Banks

2. Used as Feedstock for  
Animals

3. Composting (and AD)



# Why a focus on biowaste?

- Fundamental to meet highest material recovery targets, including the EU ones (65% “preparation for reuse and recycling” by 2035)
- Obligation for separate collection (art. 22 WFD)
- At the intersection of various env policies (waste, CAP, climate change...)

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# The key role of organics (*food waste!*)

- **QUANTITATIVE:** fundamental to achieve highest material recovery rates
- **OPERATIONAL:** minimising food scraps in residual waste makes it possible to cut collection rounds
  - ✓ cost-optimisation
  - ✓ further driving effect for increased separation of dry recyclables, too)





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# BIC/ZWE Report

- EU policy drivers for bio-waste
  - Results
    - ✓ Current capture levels
    - ✓ Comparison to potential
  - A few best practices
  - Country fact-sheets
- <https://biconsortium.eu/biowaste>

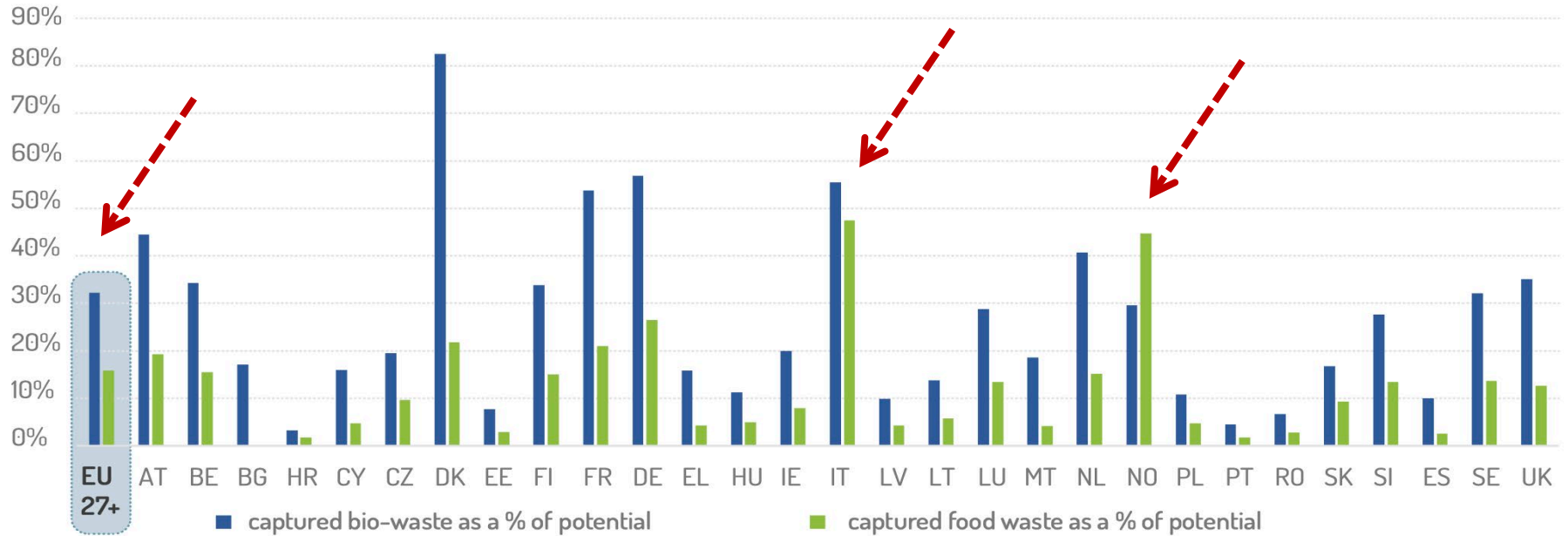


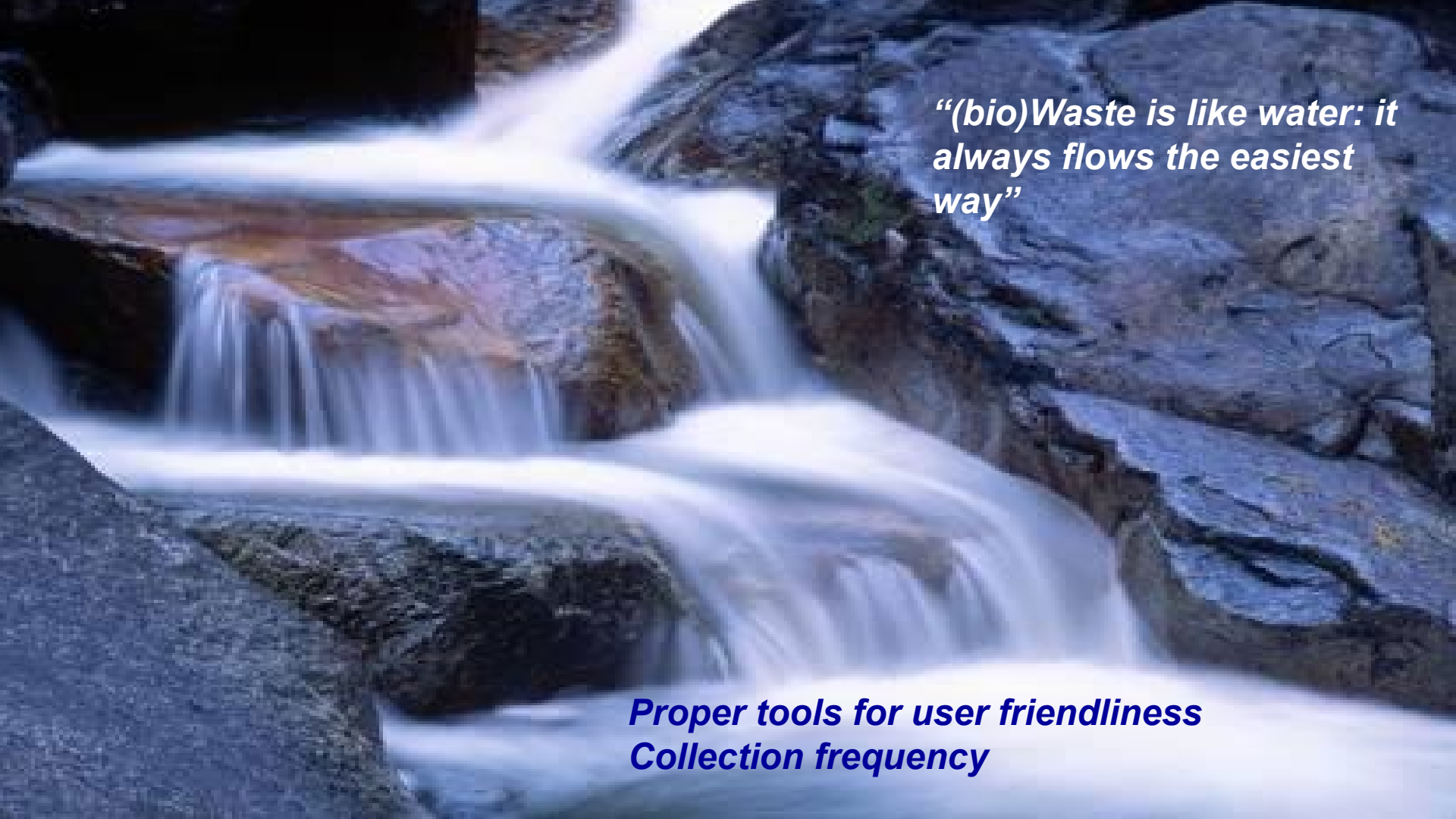
Bio-waste generation  
in the EU: Current capture  
levels and future potential

# Biowaste strategies in EU Countries

- Mandatory separate collection
  - ✓ Germany (2015)
  - ✓ Netherlands (1995)
  - ✓ Italy (2022)
  - ✓ Catalonia (Spain)
  - ✓ ...many more aligning (e.g. lately Romania)
- Targets
  - ✓ Recycling targets (e.g. UK, Italy in the past)
  - ✓ Biowaste targets (Sweden)

# The “*distance to target*”





*“(bio)Waste is like water: it always flows the easiest way”*

***Proper tools for user friendliness  
Collection frequency***

# Collection models

- Garden waste only
- Biowaste (garden + food waste)
  - VGF/GFT (NL, Flanders - no meat/fish)
  - *Bioabfall* (Central Europe - includes meat/fish, commingled with garden waste)
- Dedicated collection: “bespoke” food waste schemes





# Importance of dedicated schemes for food scraps: cheap, open lorries



# Making the system user-friendly



# CITY OF MILAN

## Key numbers



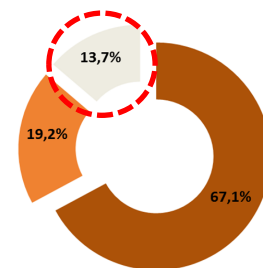
**1.35 million**  
inhabitants

**7,200**  
Inh./km<sup>2</sup>

**800,000**  
Commuters/day

**11 millions**  
Tourists in 2016

**= 65% sep. collection**  
**= 103 kgs food scraps**  
**= 87% of organics generated**



- Residential food waste
- Commercial food waste
- Food waste left in residual waste



# Bratislava

To every household in Bratislava we distributed :

- 10 l kitchen waste caddy,
- 150 pc of compostable bags,
- Information leaflet (for each city district was different leaflet)



# Ethnic communities in Milan in 2021 (276.776 foreign residents)

Philippines	39.536
Egypt	39.388
China	33.871
Peru	16.729
Sri Lanka	16.637
Romania	13.440
Bangladesh	10.643
Ecuador	10.587
Ukraine	8.312
Morocco	8.135



# Key takeaways

- Food waste key to Circular Economy, but still a **“largely untapped potential”**
- Many drivers boosting interest (and activities)
  - ✓ Schemes already diffused, **also in densely populated areas**
- Room for improvement!
  - ✓ Also in those areas with a long established tradition (e.g. Central Europe)
  - ✓ **User friendliness** of the system seems to be key to highest performances
  - ✓ Opportunities coming mainly from **design** (collection rounds) and **tools**
- **Collection of biowaste widespread**
  - ✓ mainly propelled by **garden waste**
  - ✓ **food waste** potential still to be fully captured (art. 22 new WFD) → Targets!



*«[...] we recommend adopting a binding reduction target on the amount of bio-waste included in mixed/residual waste (i.e., before landfill, incineration or mechanical and biological treatment)»*

To: Frans Timmermans, Executive-Vice-President of the European Commission  
Virginijus Sinkevičius, Commissioner for Environment

Brussels, 19 April 2023

**Subject: Waste Framework Directive - Inclusion of bio-waste targets needed**

Dear Executive-Vice-President Timmermans,  
Dear Commissioner Sinkevičius,



# Thanks for your attention



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