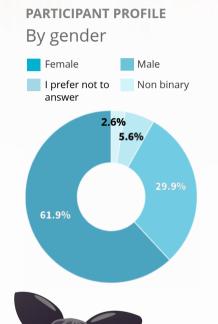
Citizen science action for optimising the separate collection of the organic fraction of municipal solid waste (OFMSW) in Münster region

STUDY RESULTS

EDUCATIONAL GAME TO TACKLE THE COMPLEX CHALLENGES OF CIRCULARITY

By analyzing users' decisions throughout the HOOP Trainers game, we aim to gain a deeper understanding of the citizens' perspectives on biowaste separation, their acceptance of products derived from it, and their recommendations for constructing greener and more circular cities and regions.







HOOP TRAINERS PLAYERS

268

PERIOD 01/03/2023 31/08/2023

Presented below are the results obtained in Münster, which can be analyzed within the Biowaste Club of the region. These findings serve as a basis for transforming data into actionable improvement proposals, fostering collaborative efforts to cocreate a more circular municipality.









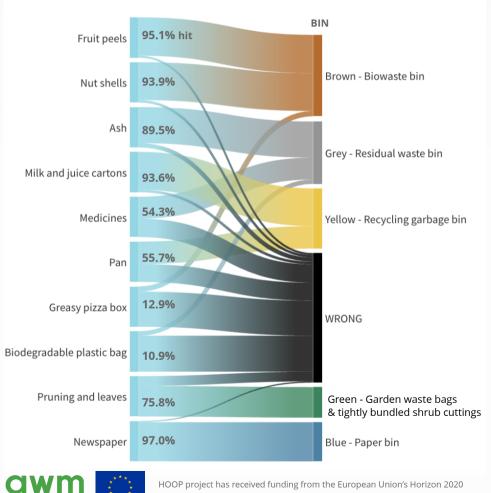
MISSION 1

OBJECTIVE: Properly sort 10 waste items into their respective bins

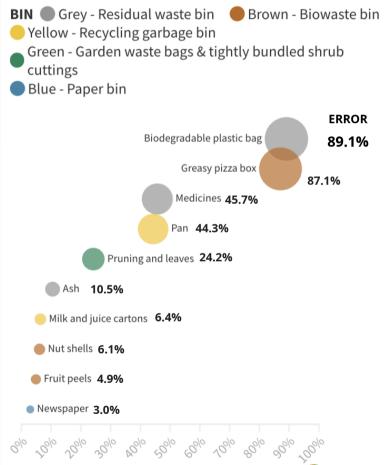
268 **PARTICIPANTS**

Hits and misses by waste item

% ON EACH WASTE ITEM

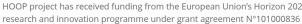


Waste items that raised the most doubts RANKING BASED ON THE % OF ERRORS







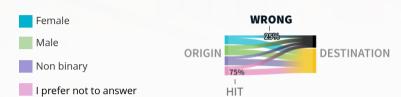


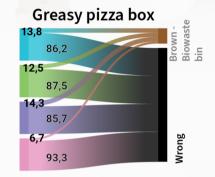
MISSION 1

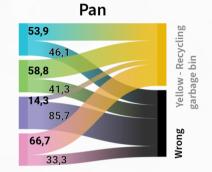
OBJECTIVE: Properly sort 10 waste items into their respective bins

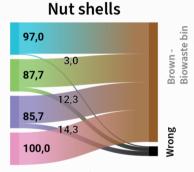


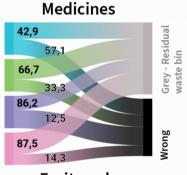
DATA IN % WITH RESPECT TO THE TOTAL OF THE SAME GENDER

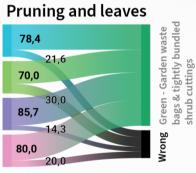


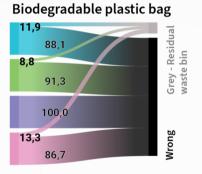


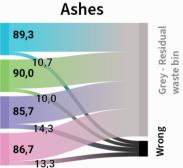


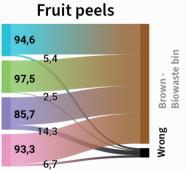


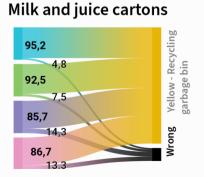


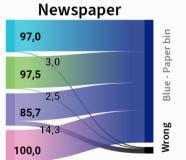
















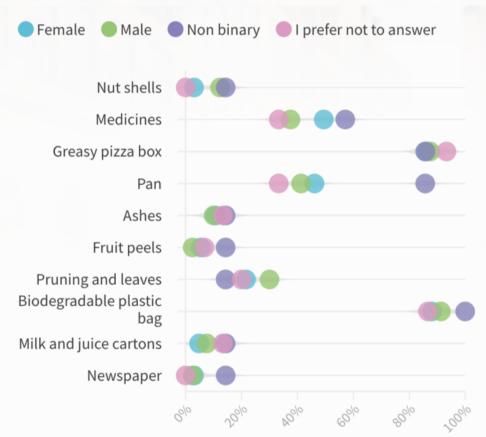




OBJECTIVE: Properly sort 10 waste items into their respective bins

Wrong answer based on gender

DATA IN % WITH RESPECT TO THE TOTAL OF THE SAME GENDER









MISSION 2

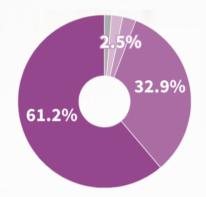
OBJECTIVE: Opinions on 4 questions regarding domestic waste separation

PARTICIPANTS



Key motivations behind separate waste collection

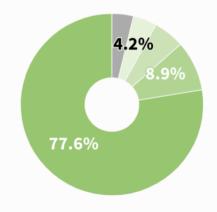
- Turn biowaste into useful products
- Reduce the environmental impact of biowaste
- The practical tips that I've received
- Opportunity to pay less taxes
- None, I'm not motivated enough to separate the biowaste





Channels for obtaining information on waste collection

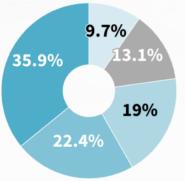
- Local waste management website
- Social networks
- Press Campaigns
- Telephone contact
- I don't know where to find it





Primary obstacles to waste separate Primary obstacles to waste a collection indicated by users

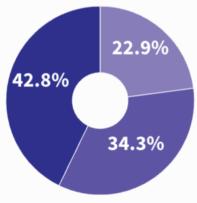
- The separation process takes more effort
- They won't take full advantage of separation (distrust)
- Paper biowaste bags are too dirty and fragile
- Due to advanced separation processes private pre-separation is not necessary
- None of the above





Areas which waste managers should prioritize to optimize the sorting of organic waste

- Provide practical tips to make the waste sorting process easier
- Enhance positive behaviours
- Raise awareness campaigns









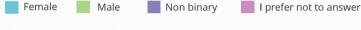
OBJECTIVE: Opinions on 4 questions regarding domestic waste separation

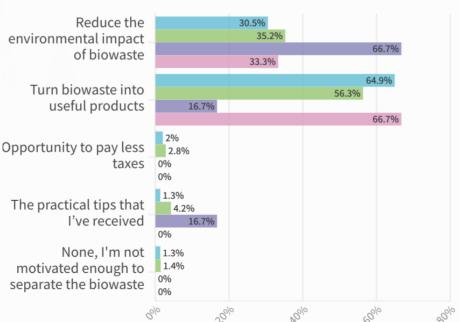


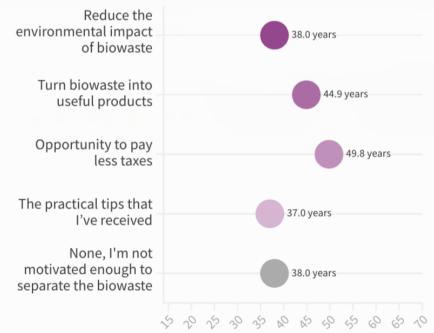
Key motivations behind separate waste collection

Answer preference based on gender

DATA IN % WITH RESPECT TO THE TOTAL OF THE SAME GENDER











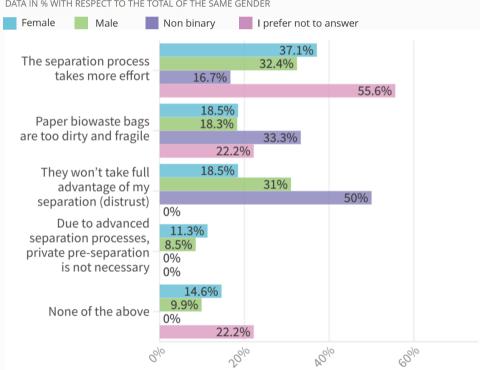
OBJECTIVE: Opinions on 4 questions regarding domestic waste separation

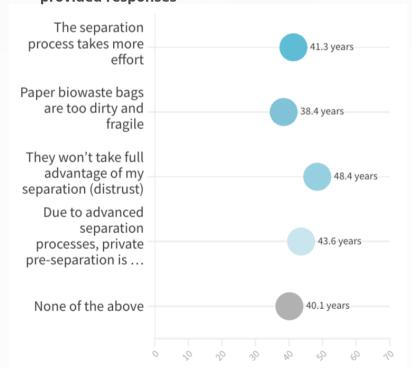


Primary obstacles to waste separate collection indicated by users

Answer preference based on gender

DATA IN % WITH RESPECT TO THE TOTAL OF THE SAME GENDER











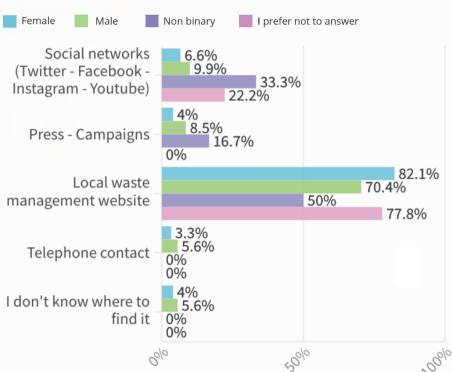
OBJECTIVE: Opinions on 4 questions regarding domestic waste separation

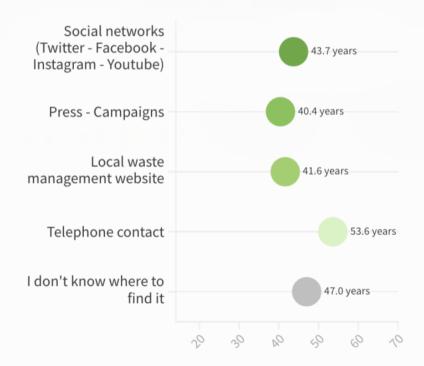


3 Channels for obtaining information on waste collection

Answer preference based on gender

DATA IN % WITH RESPECT TO THE TOTAL OF THE SAME GENDER











OBJECTIVE: Opinions on 4 questions regarding domestic waste separation



Areas which waste managers should prioritize to optimize the sorting of organic waste

Answer preference based on gender DATA IN % WITH RESPECT TO THE TOTAL OF THE SAME GENDER Female Male Non binary I prefer not to answer 35.1% **Enhance** positive 31% behaviours 50% 37.5% 20.5% Raise awareness 29.6% campaigns 33.3% 0% 44.4% Provide practical tips to 39.4% make the waste sorting 16.7% process easier 62.5%





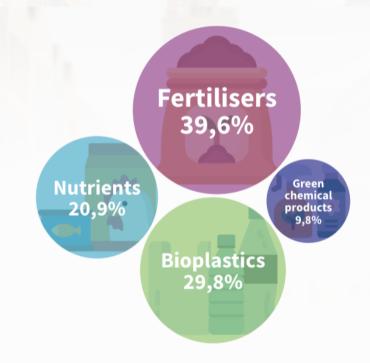


235 PARTICIPANTS

MISSION 3

OBJECTIVE: Select one bioproduct type from four proposed options













MISSION 3

OBJECTIVE: Select one bioproduct type from four proposed options

