

Lisbon`s Electronic Waste Management



4ª Conferência
“Cidades Inteligentes
Cidades do Futuro”
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Summary

- Waste Management Lisbon 's Main Figures
- Waste Collection Systems
- Innovation and technological development as Strategic Goal
- Expected Results/Outputs

1

Lisbon's Main Figures

Lisbon's area:
86 km²

Resident population
552 700 inhab.

Total population =
2x Resident population
≈ 100.000 companies

1

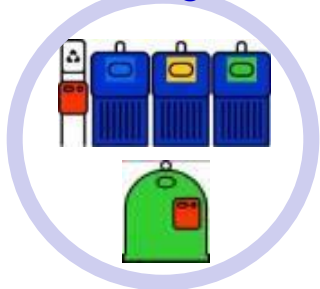
Waste Management Main Figures

- **1050** Workers
- **219** Collection trucks
- **183.404** Bins
- **134** Collection routes /day
- **100** km/day per route
- **800** t/day urban waste
- **23%** Selective collection rate

2

Waste Collection Systems

15% Bring banks



Big public bins (street bring banks)



2,5 m³



Sub.: 3 m³



18% Street bins
(1,0/1,1 m³)



1,5 m³



1,1 m³

2

Waste Collection Systems



67% Door-to-door collection



90-240 litres



Municipal plastic bags 30 litres



cardboard bales



- Downtown / historic zones
- Big waste producers

2

Waste Collection Systems



By request



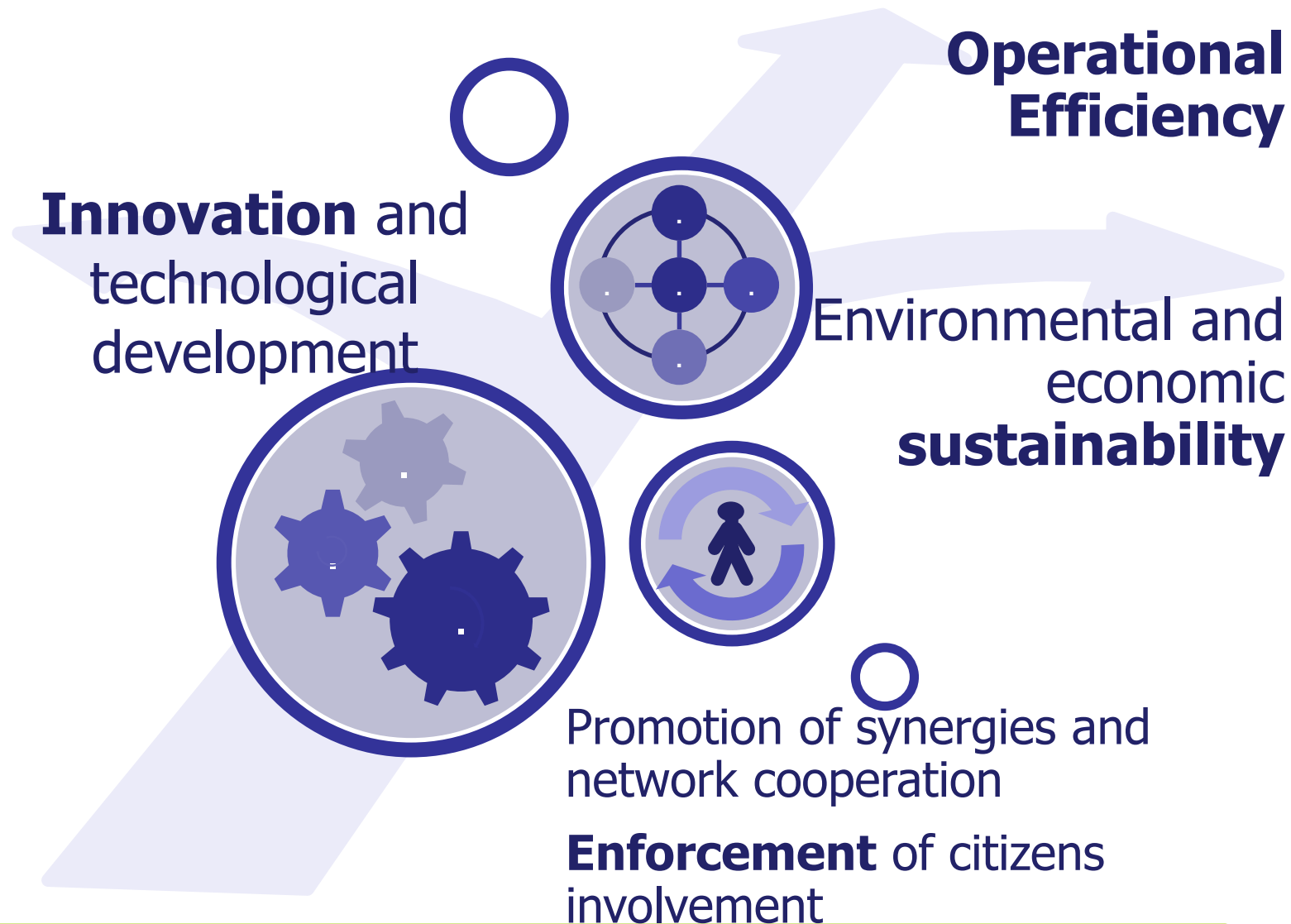
Collection by request / on demand



- Bulky waste
- Furniture
- Green waste
- Construction and demolition waste
- Electric and Electronic Waste

There are also specific routes

(For free if $\leq 1\text{m}^3$)



New Procedures

- Sensors for underground containers and other collective bins
- Waste Management Platform using RFID technology and GPS on vehicles

New Information Technologies in Waste Management

Monitoring on real time (WHEN and WHERE?)





Reduce Costs:

Fuel and vehicles maintenance

- Adjusting the collection frequency to the real services needs
- Simplification of the routes planning

4

Expected Results



Sustainable and clean city

Less Carbon Emissions

4

Expected Results



Increase Recycling Rate



Minimising Municipal
Mixed Waste generation

4

Expected Outputs



Improve the data quality

Antes

Depois



Implementation on the PAYT model

SMART PROJECTS FOR SMART CITIES

The future...

Available information for the citizens

Integrate this platforms (sensors, COI and GIS)
with others to help us to do it better



Thank You!



Lisbon Waste Department

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