

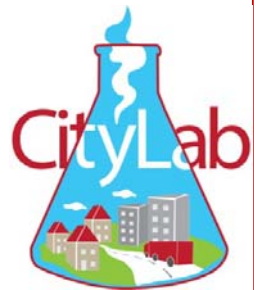
# CITYLAB Rome Implementation: Activities, Lessons Learned and Next Steps



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# Overview

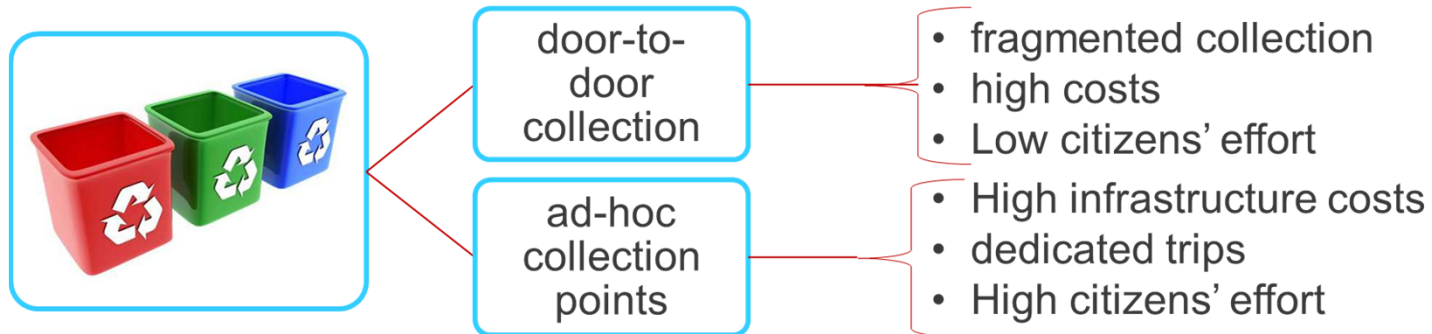
- Motivation and objectives
- Main idea
- Rome Living Lab activities
- Implementation
- Lessons learned
- Next steps



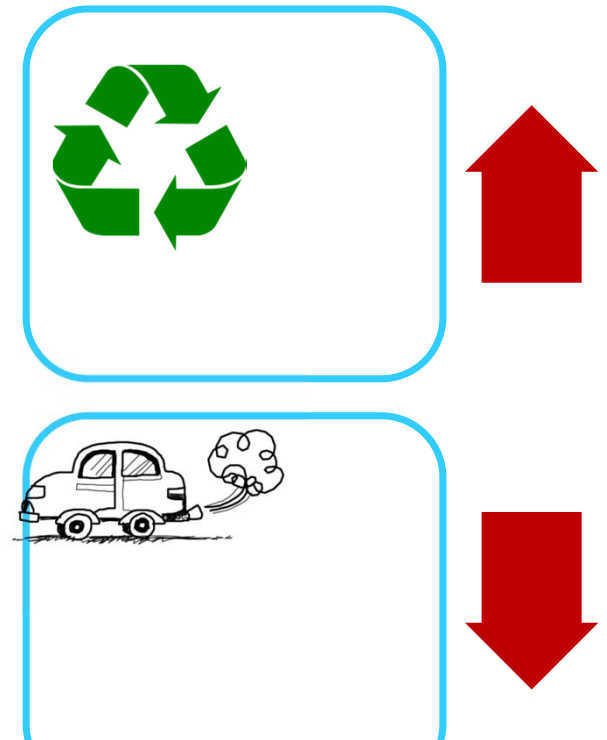
# Motivation and objectives

Axis for intervention: Urban waste, returns and recycling

## Motivation:



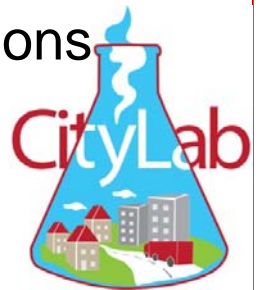
## Objectives:



**Logistic management is critical**

# Main idea

- Propose an innovative system for **integrating direct and reverse logistic flows** in urban areas.
- In particular...integration of an already existing frequent distribution system (e.g. mail delivery) with free capacity on return trips, aimed at recycling clean waste.
- Thus...involve the national postal operator, already delivering mail/parcels all around the city, in the pick-up (via electric vehicles) of recycled materials during the same transportation route.
- The system represents an hybrid waste collection strategy with respect to the two collection types, using large attractors as intermediate locations with dedicated recycling facilities.



# Rome Living Lab: main activities



DATA COLLECTION

IMPLEMENTATION

TWO-STEP PROCESS



RECYCLED MATERIALS

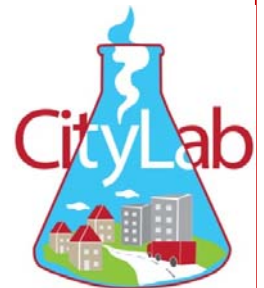
SURVEYS



Meware

ALERT SYSTEM

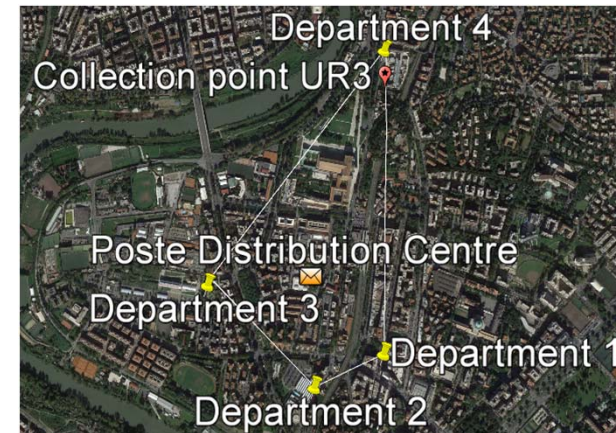
ECO-TOTEMS



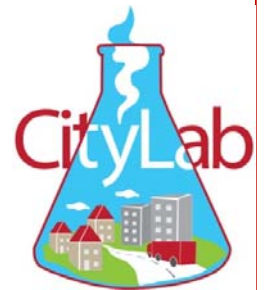
# Small scale implementation

## Recycled material: plastic caps

- Feasibility from the industrial point of view
- Easily recyclable & economic type of plastic
- Existing collection system at UR3 not sustainable/efficient



Involving large attractors: University buildings





# Implementation

## Before CityLab



## After CityLab

Easier alert-system

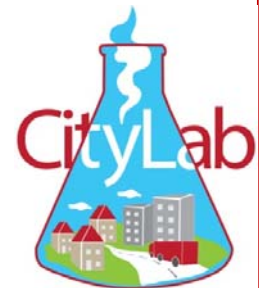
Ecological vehicles

Increased load factor

No dedicated trips

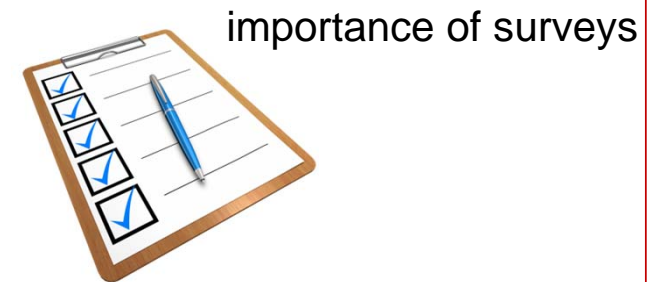


Eco-totem



# Lessons learned (1/2)

Regulatory/contractual constraints



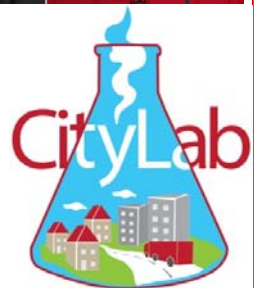
Box dimensioning



Alert system is problematic



need of advertising



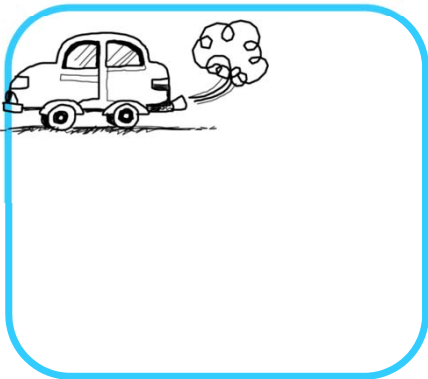


# Lessons learned (2/2)

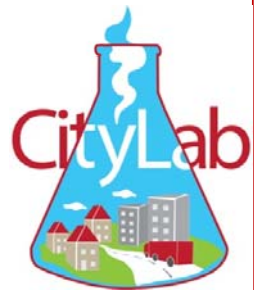
Small scale



+153%



- 40Kg of CO<sub>2</sub>  
(monthly)



# Next steps

- ▶ The second LL cycle will explore the opportunity to:
  - ▶ upscale the implementation geographically and in terms of materials
  - ▶ include the solution proposed in the actual logistics process for urban waste management in Rome in line with the action plan of the Environment Dept.

