

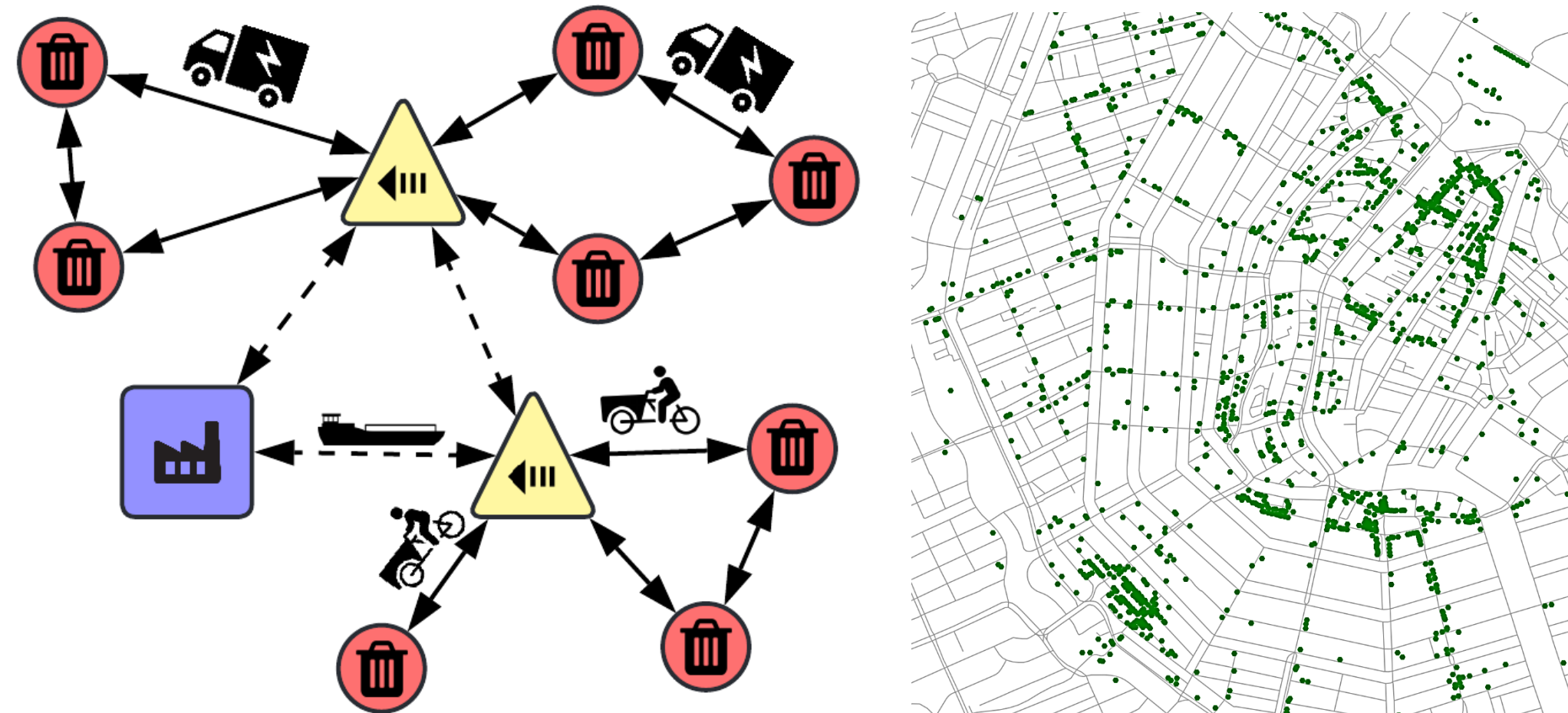
This metaInnovation aims to optimize vehicle routing in multimodal waste collection logistics with transshipment points, addressing real-world traffic conditions and demand uncertainty.

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Data Requirements

- Topological data
- Demand data
- Fleet information



Methods

- Branch-and-Price



Decisions

- Scheduling of road-based fleet and barges

In an effort to reduce street litter and limit the use of heavy vehicles, the city of Amsterdam is exploring an alternative waste collection system that integrates light electric vehicles, cargo bikes, and barges. Utilizing the city's extensive canal network offers promising opportunities to improve urban logistics, including waste collection. The challenge is to ensure seamless interoperability between the different parts of this multimodal network.



Scalability

- The goal is to solve medium- to large-scale instances