

## Sustainable last-mile city distribution by cargo bike

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## In the Brussels region, freight transport accounts for 14% of traffic but contributes to 30% of air pollution



#### Cela représente Chaque jour





Bruxelles Mobilité (2020)

## The European regulatory framework is gradually evolving in favour of integrated sustainable mobility and logistics plans

#### **Sustainable Urban Mobility Plan (SUMP)**

Strategic plan to meet the mobility needs of people and businesses in and around cities for a better quality of life

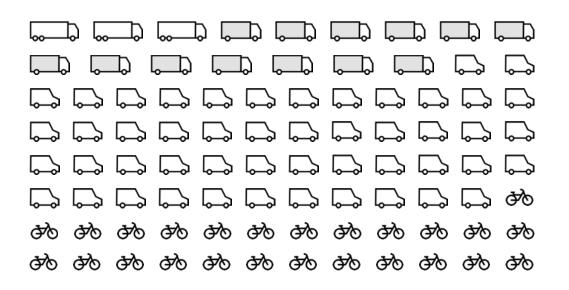
**400+** european cities

Ghent Brussels



New traffic scheme for the City of Brussels implemented in August 2022 as part of the regional Good Move plan

#### The potential of cycle logistics is substantial In most European cities, 1 in 4 deliveries could be made by bike





Source: Cyclelogistics study (2017)

## Can cycle logistics be competitive? Two key factors determine the performance of last-mile logistics models



## We are a **cycle logistics cooperative** company We are **accelerating change** in last-mile urban logistics



## Pillar 1 - Boosting cycle logistics with innovative solutions and integrating with conventional logistics standards



BicyLift (FlexiModal): an innovative bike trailer designed for cycle logistics and compatible with the EUR-pallet standard Watch the full video on https://youtu.be/F9dw9gQJuxU





































#### Rethinking distribution models and functional use of space Containerisation of goods on a city scale

# Regional hubs Filling of containers upstream of the logistics chain Linehaul with high capacity vehicles + reverse logistics

#### Urban hubs (physical or mobile)

The containers are placed in urban micro-hubs in the heart of the delivery areas







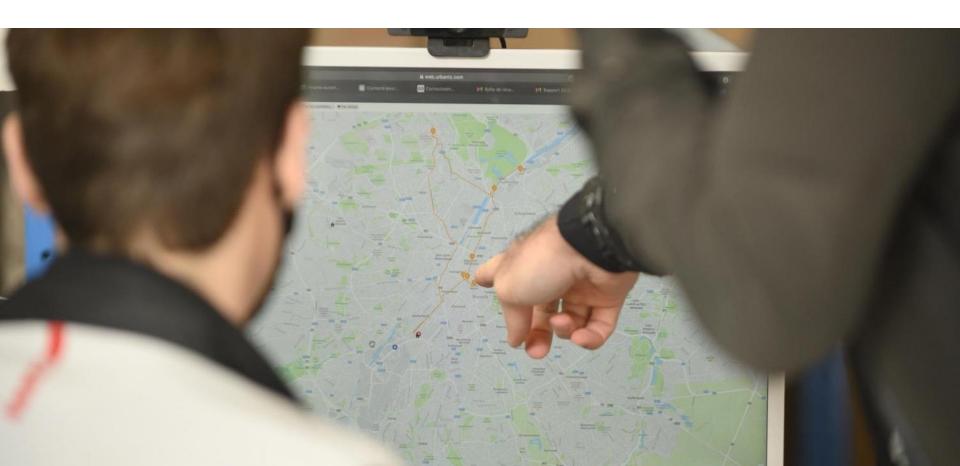


Shared micro-depo

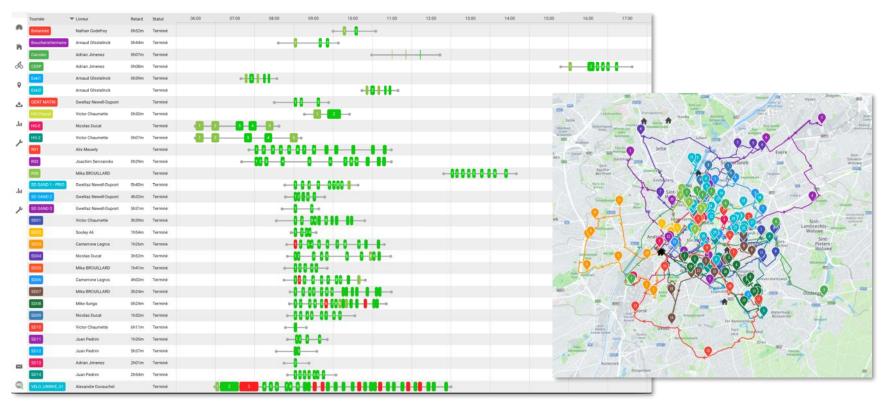
#### Urban distribution (last and first mile) Deliveries and pick-ups with cargo bikes



Pillar 2 - Automation and information management



#### Using IoT to support the development of cycle logistics Route optimisation, real-time tracking, data analysis



View of an operational day at urbike – Screenshots from Urbantz (urbike's Transport Management System)

Pillar 3 - A cooperative social economy economic model



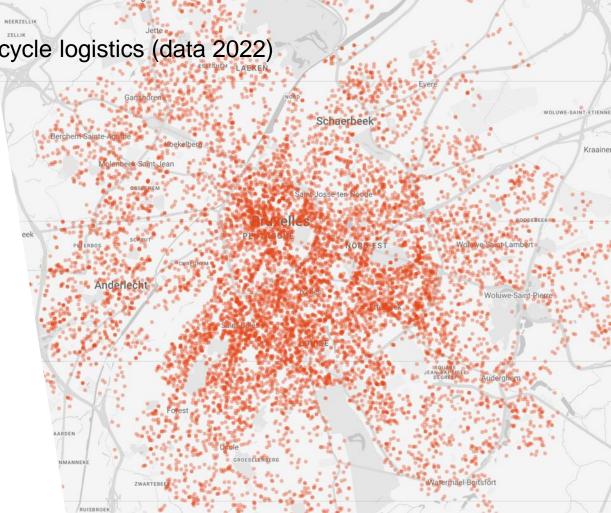
urbike.Delivery Realising the potential of cycle logistics (data 2022)

workers (30 couriers)

**224.735** parcels delivered

96,7% success ratio

153.500 km travelled



## urbike.Delivery A wide variety of customers and transported flows



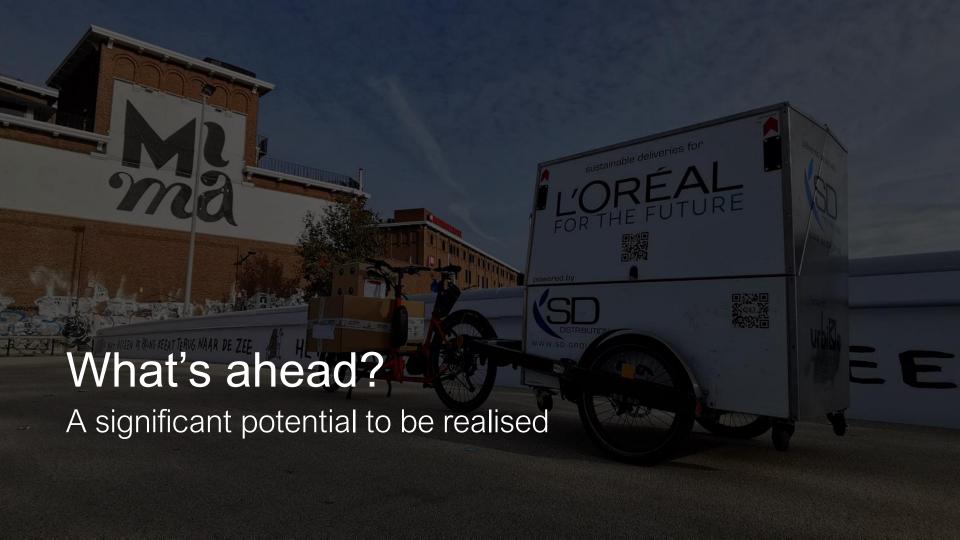












#### Containerisation as a catalyser of multimodal models





Pilot test with ShipIT and urbike in Brussels on a water-road model (2021)

#### A network of (shared) micro- and macro- hubs



KoMoDo Berlin: a shared micro-hub in the city centre (pilot test)



ctPark Amsterdam: the first XXL last mile multistorey and multimodal logistic city hub in the Netherlands (road+waterway)

#### Converting new flows and markets Circular economy as a new opportunity for logistics.







Les Petits Riens (Bruxelles): cleaning of collection points (clothing containers) and preserving collects

Sikle (Strasbourg) : organic waste collection













