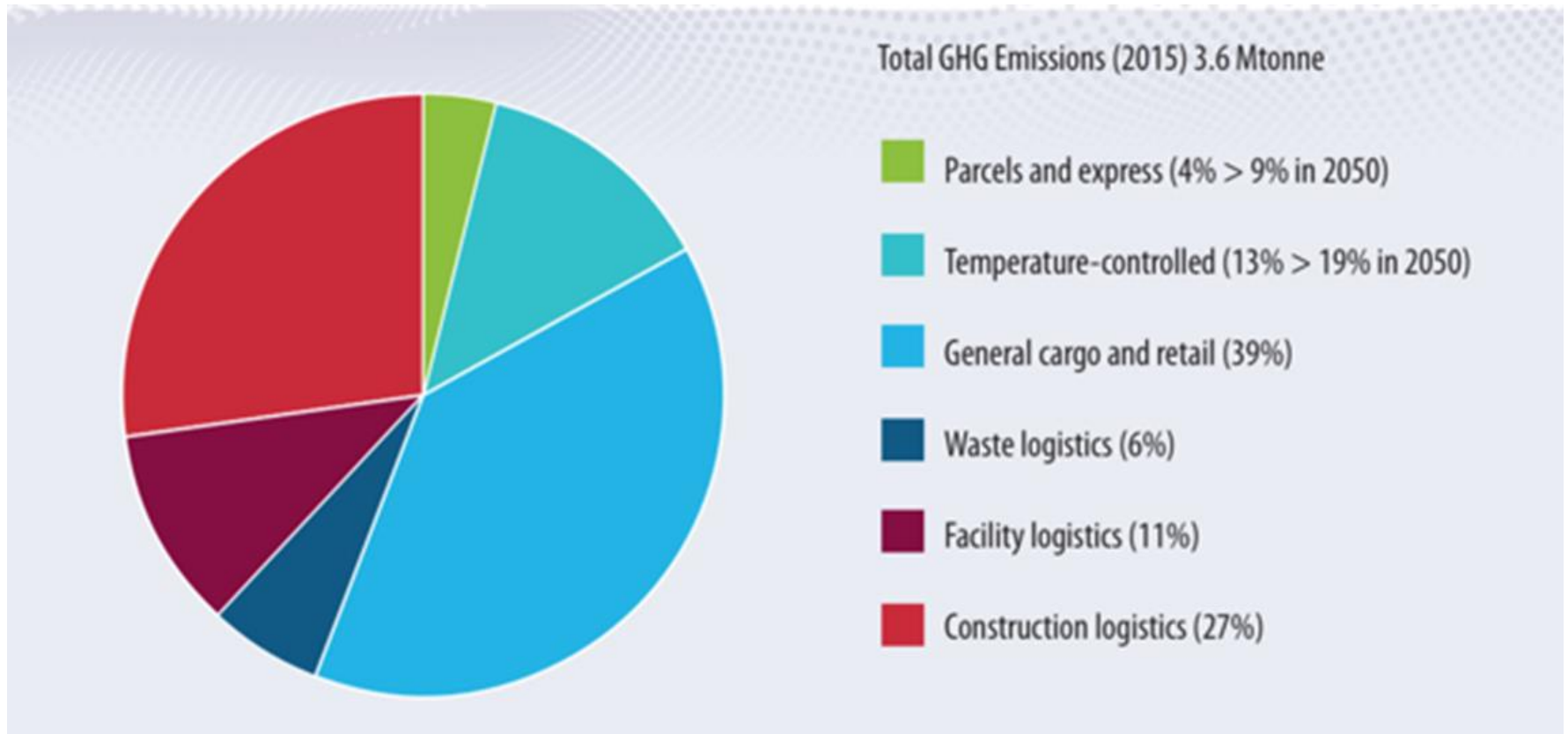


The journey: floating depot, light electric vehicles (e- cargobikes), microhubs and public procurement

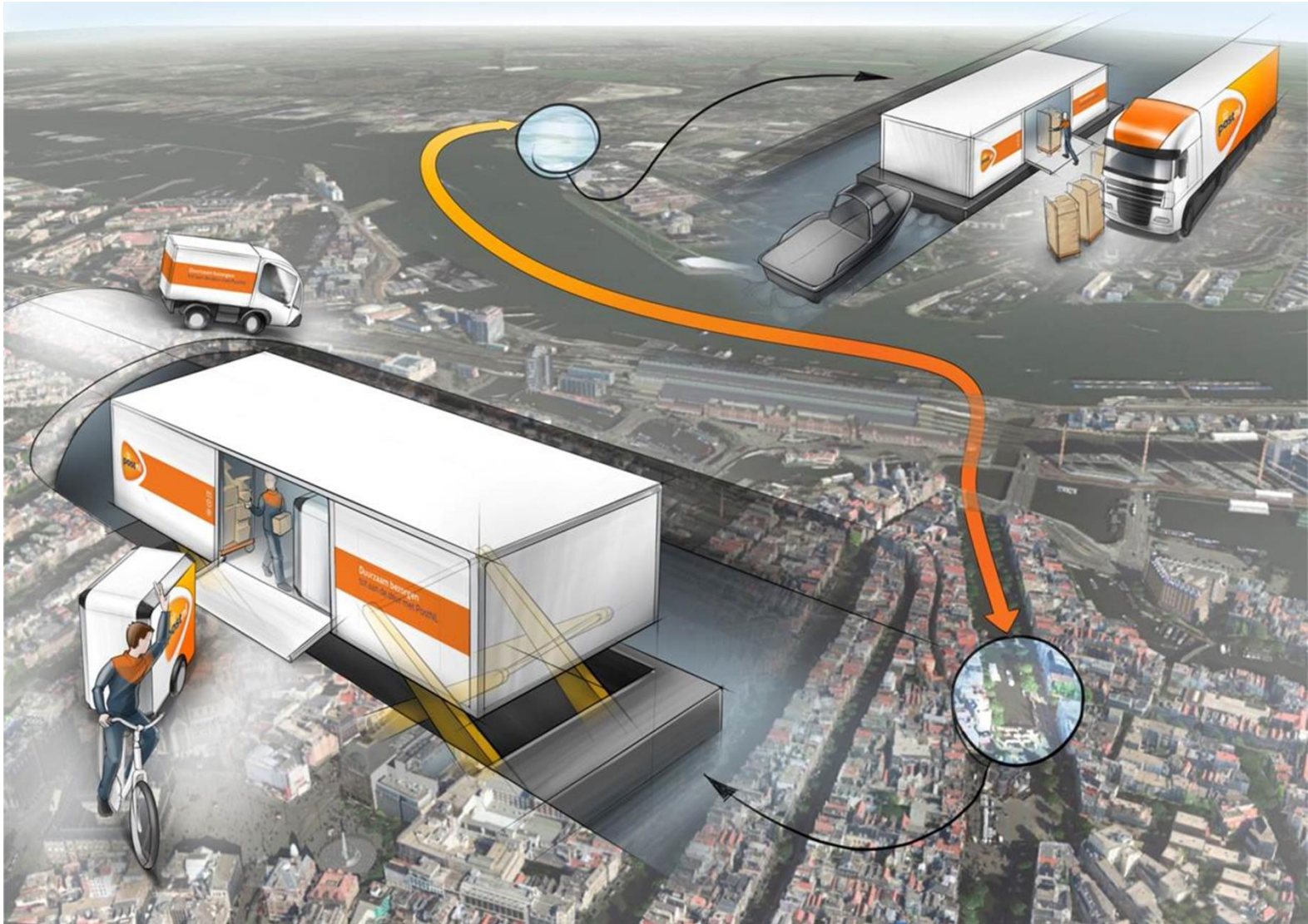
Amsterdam March 8 2018

- Laurens Tuinhout
- Director sustainability & innovation
- 06 224 76 832

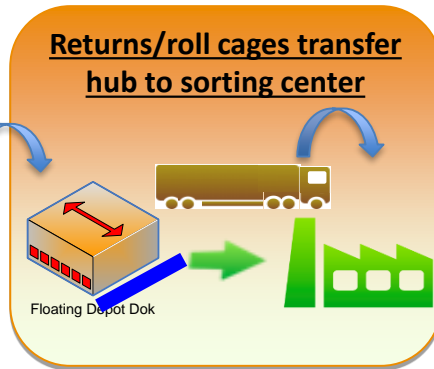
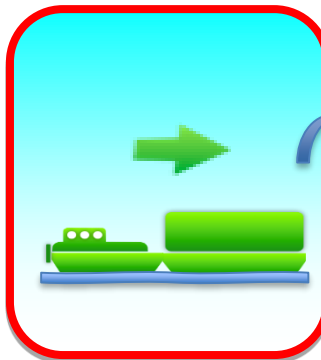
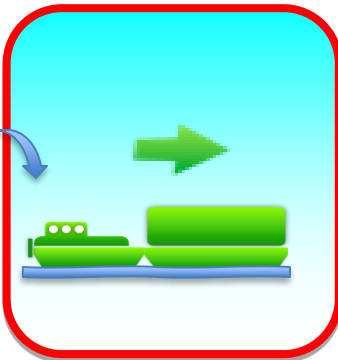
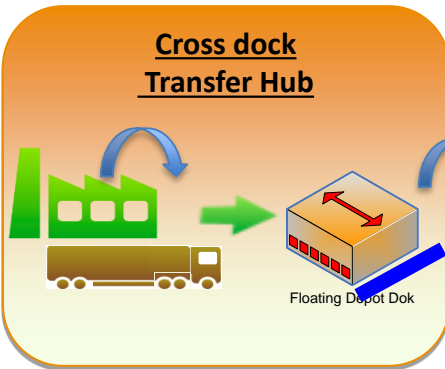
Feelings & Facts: Outlook City Logistics 2017 (Topsector Logistiek/Connekt/TNO/CE Delft/HvA)



The original dream....floating depots and Light Electric Vehicles...



Original design of supply chain: floating depot or floating truck?



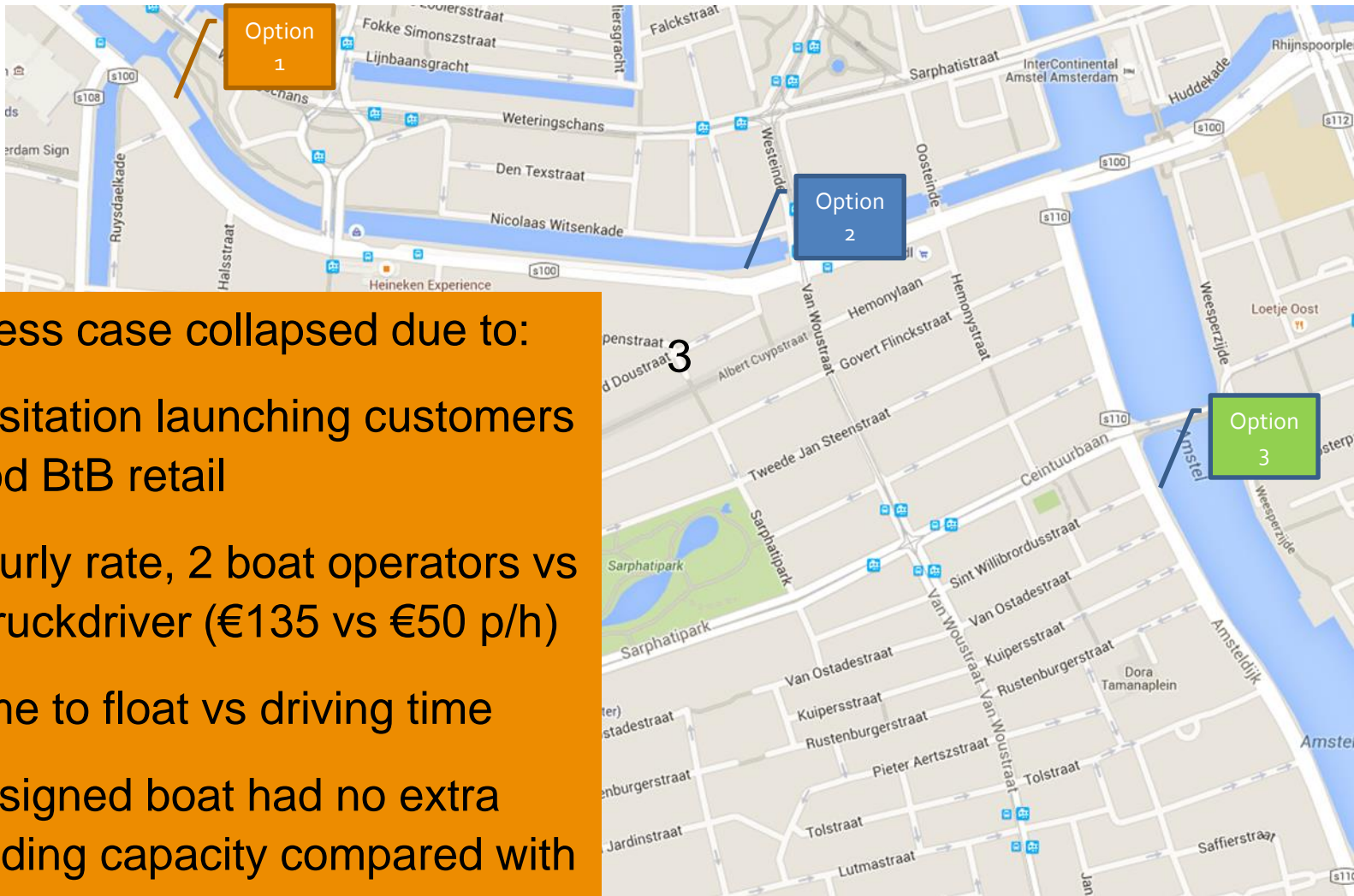
Original design was wiped off the table due to new logistic sorting/distribution centers parcels



Sorting center is designed for vans not light electric vehicles



Floating Depot Fase II: food delivery to dense district “De Pijp” Amsterdam



Business case collapsed due to:

- Hesitation launching customers food BtB retail
- Hourly rate, 2 boat operators vs 1 truckdriver (€135 vs €50 p/h)
- Time to float vs driving time
- Designed boat had no extra loading capacity compared with a truck

20 sorting/distribution depots PostNL Parcels: >600k parcels p/day . Average delivery routes 150-200 stops require bulk solutions , however.... Last mile city delivery might change.



Fase III: Pilot & roll out: Microhubs & E-cargobikes/light electric vehicles



Next steps: Public procurement is very effective push for national Green Deal Zero Emission City Logistics (living labs, in 2025 zero emission delivery in city centers)



Amsterdam University of Applied Sciences **UNIVERSITY OF AMSTERDAM**

CENTRAL DELIVERY AUAS-UVA

Official opening July 2017

A project of:

Suppliers	Logistic service providers	Receiver / purchaser
Canon MAAS heijmans CWS	DEUDEKOM postnl	Amsterdam University of Applied Sciences UNIVERSITY OF AMSTERDAM

Topsector Logistiek **Zero Emission Stadslogistiek**

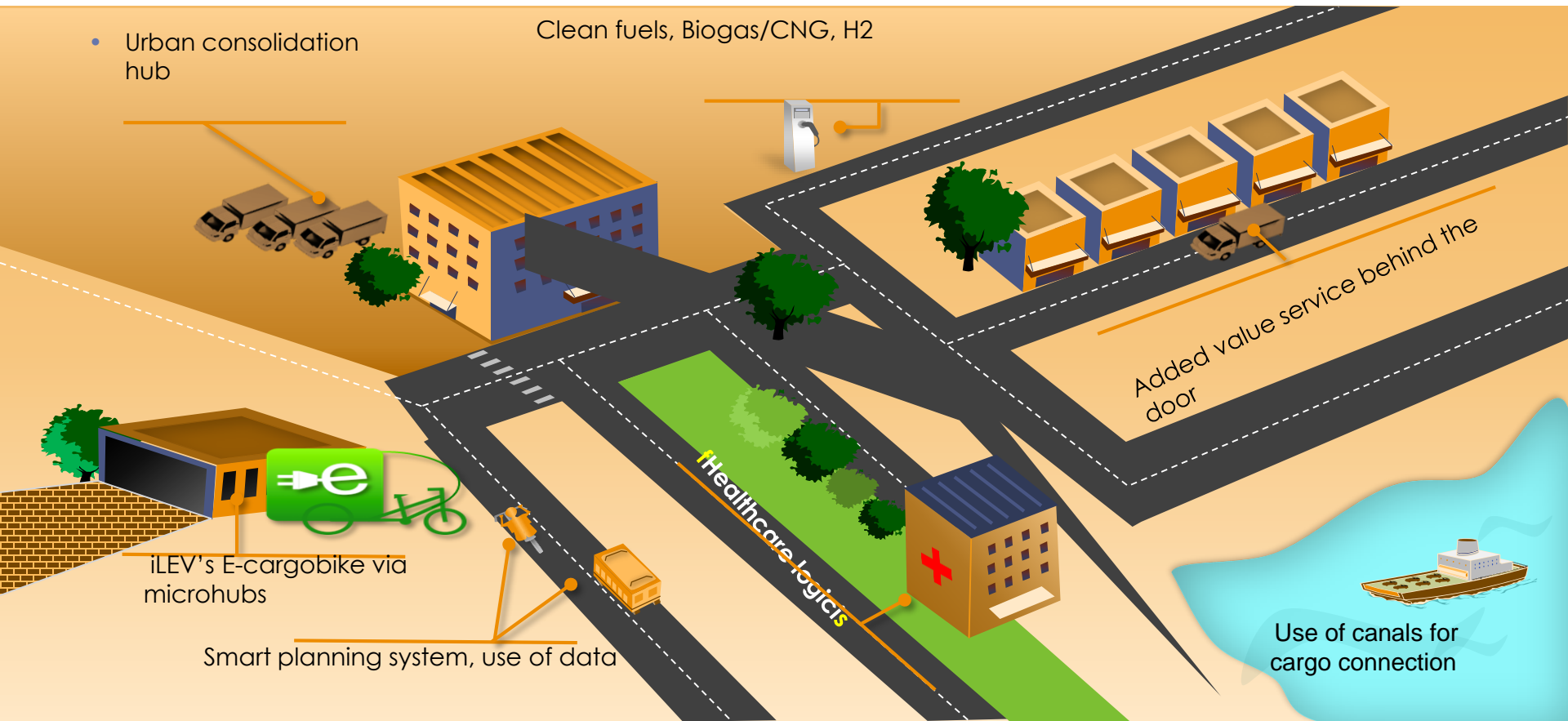
- HvA/UvA, Municipality of Amsterdam use procurement power to force suppliers to deliver via hub/zero emission
- PostNL is logistic provider of Urban consolidation center Deudekom Amsterdam

Opportunities for PostNL by solving emission/congestion issues in urban area



- Urban consolidation hub

Clean fuels, Biogas/CNG, H2



Future fase? Possible revival floating depot as floating microhub for E-cargobikes or autonomous boats....

