

# Replenishing cities via sustainable supply chains







#### MULTIMODAL BY INNOVATION

2022

Multimodal heat transport -> Flemish Climate Fund



2021 Flemish innovation award

2019 Start Brussels consolidation centre

2016

Start River Terminal Wielsbeke

#### 2015

Quay operations Brussels

#### 2009

Launching trimodal harbor terminal at Kallo

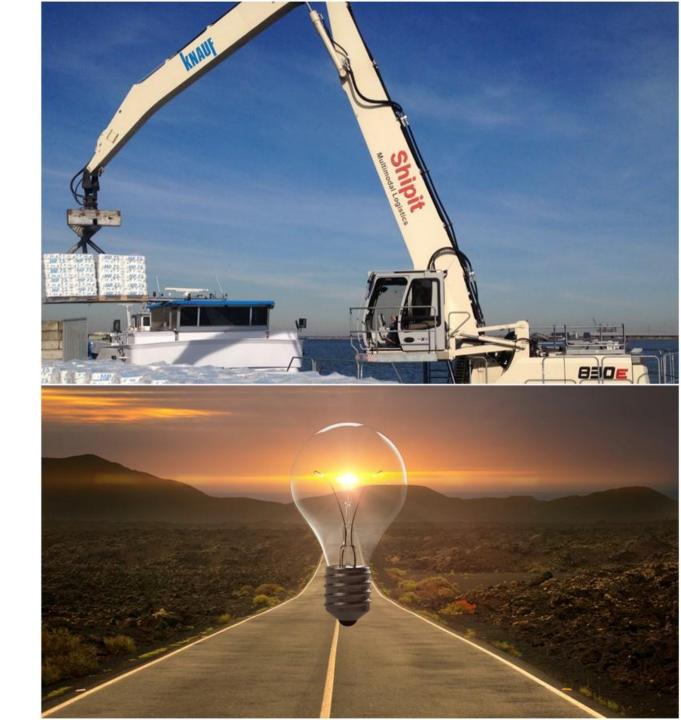
> <mark>2004</mark> Founding

2013 Put in service unique crane ship

2006 I<sup>st</sup> big multimodal project

# Our today's logistics challenges are hardly comparable to what we were facing yesterday

As a logistics innovator, Shipit would like to challenge this changing market with YOU





Since 2003

600 meter own quay

11 own barges

#### 20 chartered barges

Bulk & Pallets: ca. 2 MIL TONS/YR

Saving of about 8,000 tons of CO2 / year





**Example BRUSSELS** 

The challenge

# Brussels is **growing**

#### + 2500 appartments each year

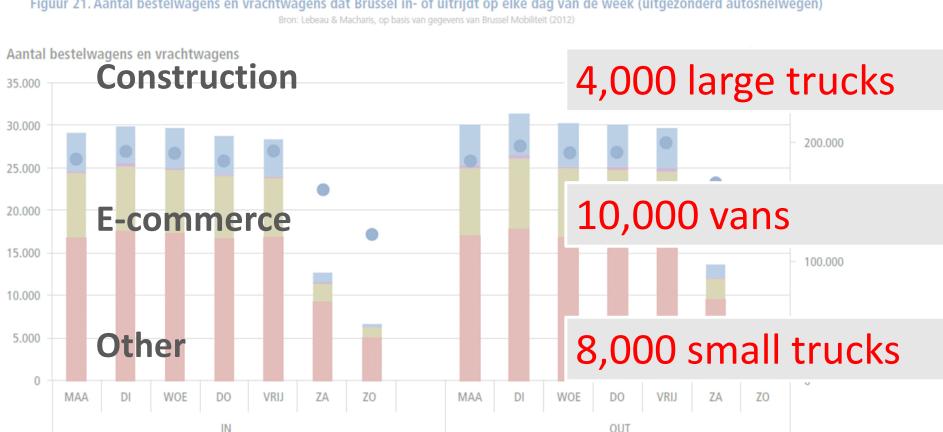
#### + 5000 consumers each year

Source Statbel





# Considerable volumes each day into Brussels

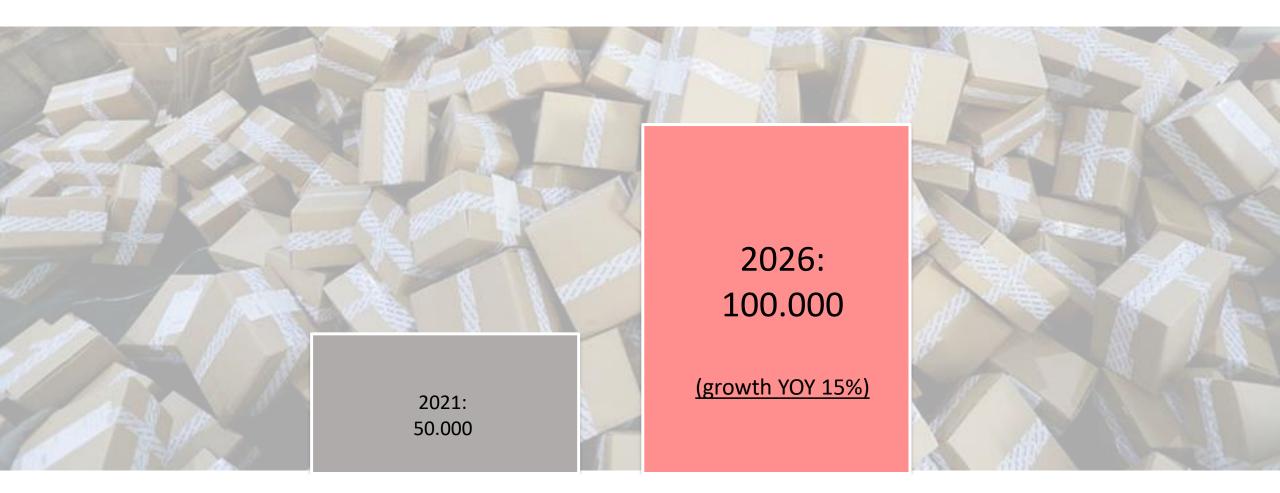


Figuur 21. Aantal bestelwagens en vrachtwagens dat Brussel in- of uitrijdt op elke dag van de week (uitgezonderd autosnelwegen)

Source: Lebeau & Macharis. MOBI/VUB



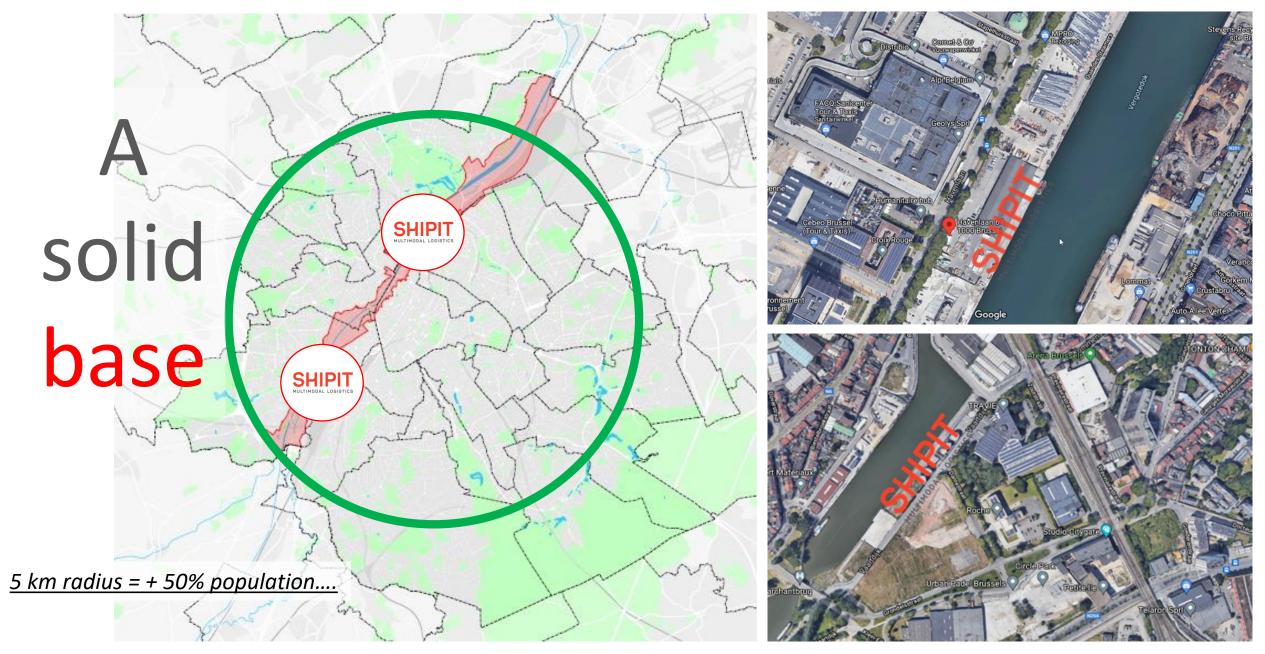
# Brussels daily "e-challenge" for the future





# **BEST** KILOMETER = **None driven** KILOMETER

Plan

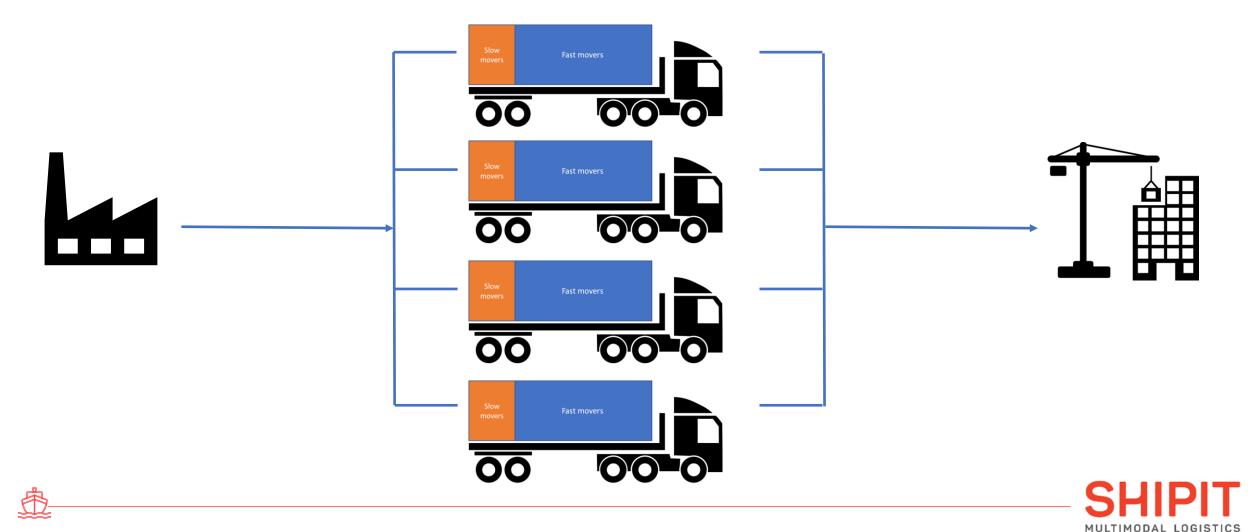




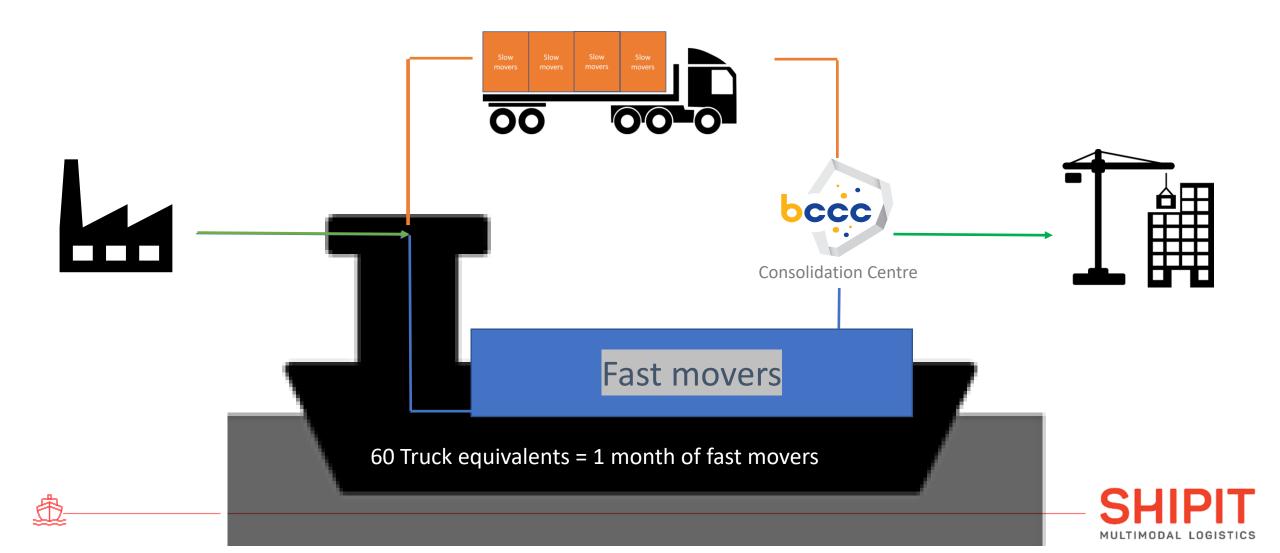


Construction

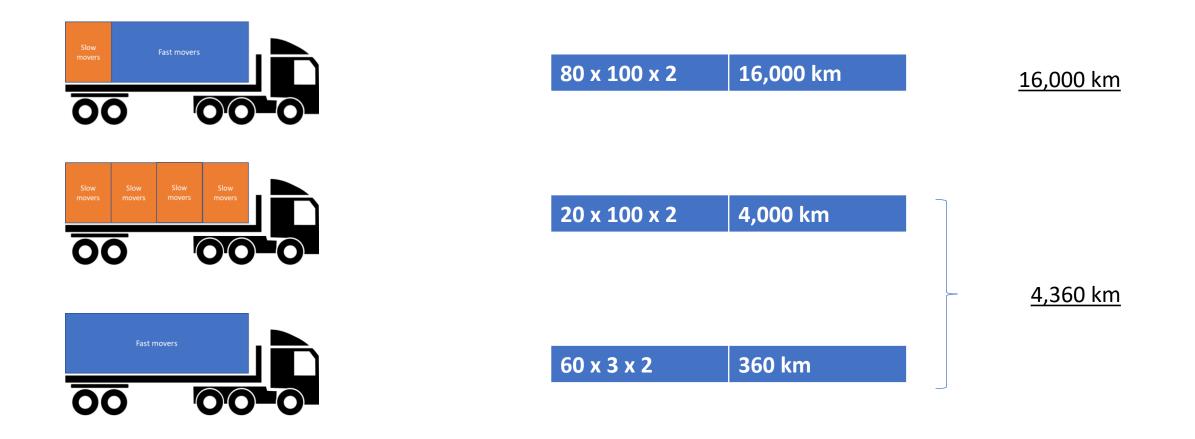
### Logistics concept / "pure truck" 80 trucks / month (4 daily trucks)



#### Fast movers via ship, slow movers via truck



## Saving +11,500 road kilometers each month...





# **Consolidation center =** answer to different challenges

# real life experience abroad

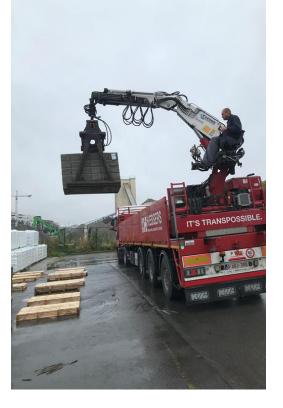
shows:

- 69% less transport movements
- 68% less CO2
- 15% less waste on site
- 25% less accidents
- 95% in time on place
- Transport capacity use of 90%
- 39% higher labor productivity

















the **inside walls** for a large Brussels construction site were loaded in Wielsbeke and unloaded at the BCCC...

### Also the outside walls, loaded in Burcht were brought into

Brussels via craneship MS Oorderdam







Out of the BCCC we can consolidate and deliver Just In Time **Complete buildings** in the city center, *while* **avoiding the extra mile**...







# Kitting nets of reinforcing steel to provide the prestigious Brussels Astoria Hotel

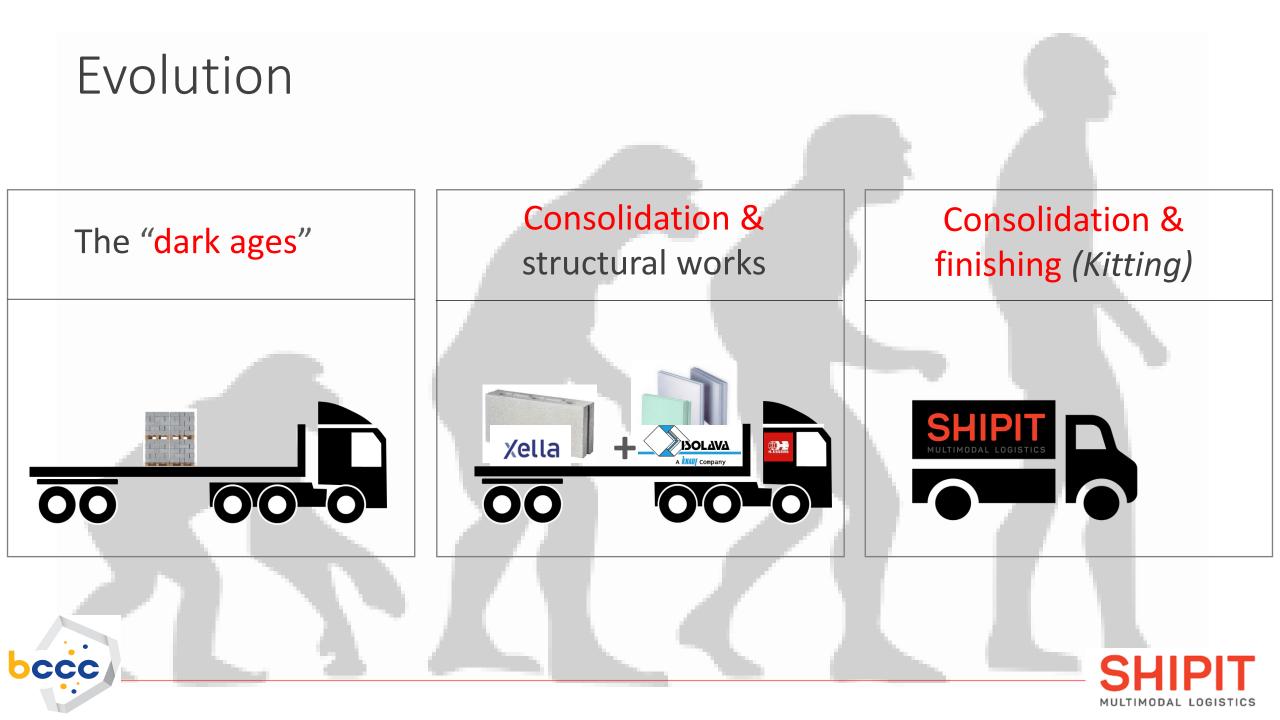






## Biestebroek today

MAAM





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SHIPIT MULTIMODAL LOGISTICS



#### Parcels & FMCG

# What about **electrifying** our fleet ?



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# **BEST** KILOMETER = **None driven** KILOMETER

Plan

# A solid partnership, offering sustainable solutions for e-commerce





# Proposing daily operations to replenish the city with parcels & pallets while doing less KM

	1	
Day (-1)	Presorted parcels & pallets arrive at HUB OF ENTRY	
Day 0 05:00	Ship is loaded and leaves HUB OF ENTRY	
Day 0 05:45	Ship unloads at first X-dock (Vergote)	
Day 0 06:30	Ship unloads at second X-dock (Dansaert) not active yet	
Day 0 08:00	Ship unloads at third & last X-dock (Biestebroek)	
Day 0 12:00	Ship starts loading return cargo	

## Replenishing Brussels, today vs. tomorrow

	City entry	Middle mile	Intermediate HUB	Last Mile	Last mile efficiency
<u>Today</u>	НИВ		НИВ		Estimate: 30 km rounds



# In short...

<u>We assist</u> in excavation via inland waterway transport



<u>We assist</u> in building via the Construction Consolidation Centers



<u>We deliver</u> consumers via Inland Waterway Transport & via cargobike





always further

### Research & Development



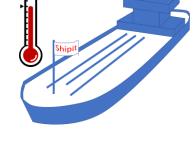
- Brussels Construction Consolidation Centre (BCCC)
  - 2018-2021 supported by Innoviris 634K
  - In cooperation with WTCB, Confederatie Bouw, VUB, ...
- Floating Heat
  - Low Temperatures
    - 2019-2021 supported by Vlaio
    - In cooperation with BASF, Indaver and Fluvius
    - Demonstration partnering Luminus
  - High Temperatures
    - 2022 supported by Vlaio



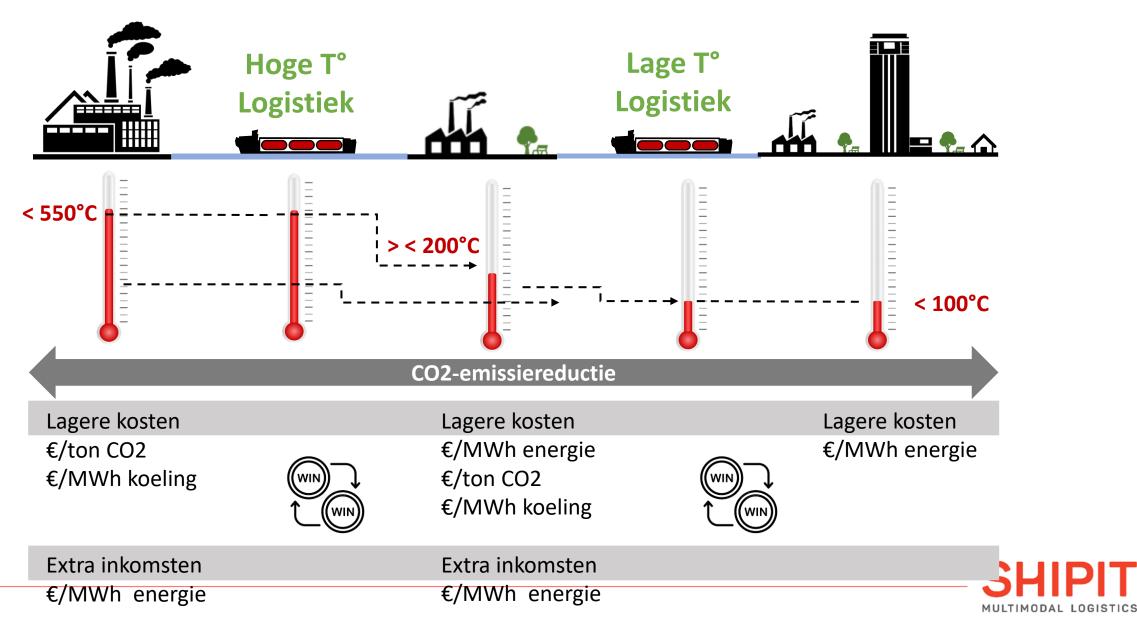
- Hyport
  - Hydrogen/Methanol/Carbondioxide
  - 2020-2025 seeking EU support
  - In cooperation with DEME



www.bccc.brussels

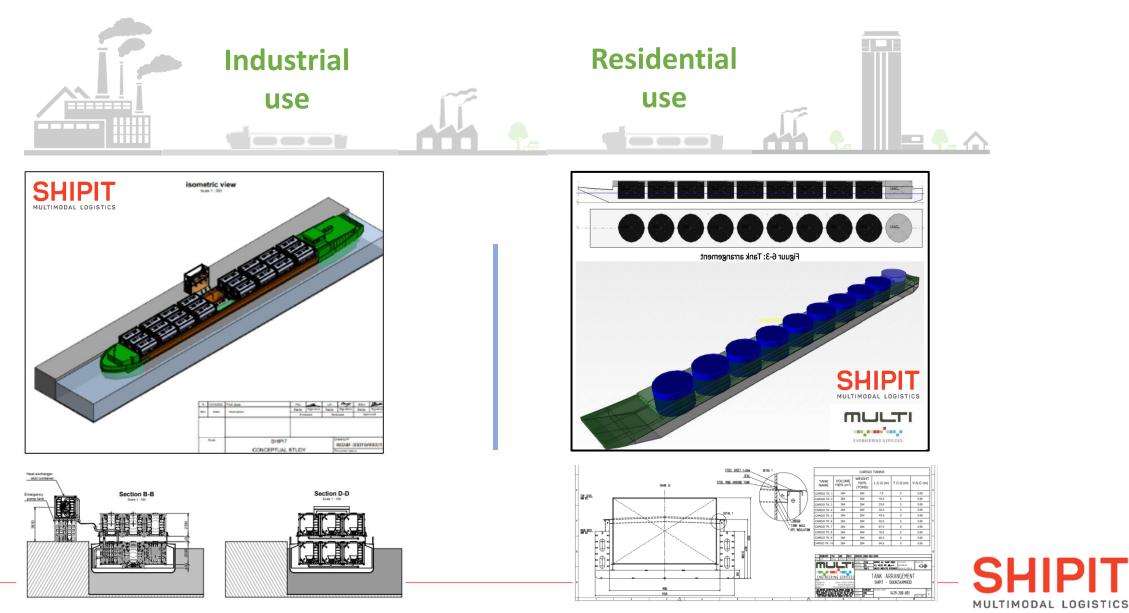


#### Onze visie: rest/proces-warmtecascade



### Design: integrated know-how





mark.goossenaerts@shipit.be

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