

Working group B: Sustainable urban logistics

City of Wiesbaden, Germany



1 Institutional setting

Green City Master Plan in 2018



- One set of measures concerns urban logistics. The measures are intended to reduce nitrogen dioxide by 9 per cent until 2030
- Clean air plan for the Rhine-Main metropolitan area.
- Decision of the city council in September 2018, "immediate package for the air quality plan"



Starting point/project goal

Goals:

- comprehensive transformation of urban logistics
- reduce nitrogen oxide emissions
- liveable city

Main challenge:

stakeholder participation



Role of the pandemic:

increase in parcel shipments

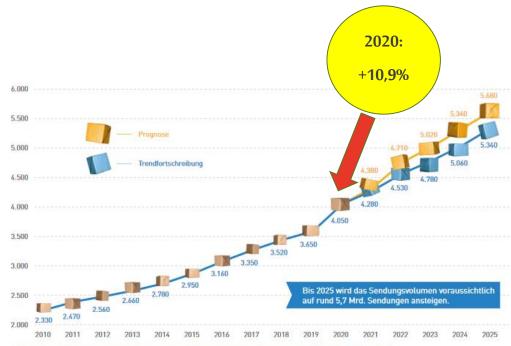


Abbildung 4: Prognostizierte Entwicklung der KEP-Sendungsvolumina bis 2025 (in Mio. Sendungen)
[Quellen: KEP-Studie 2020; KE-CONSULT Marktanalyse und Prognose)



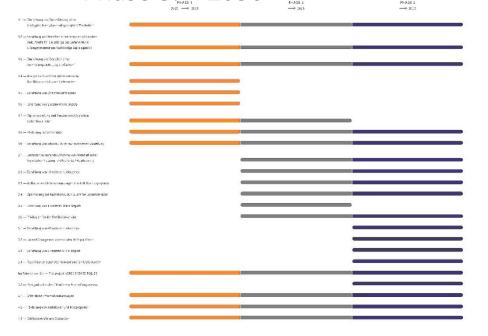
Resolution of the city council in March 2021

Implementation of the measures

Phase 1: 2020 – 2021

Phase 2: – 2025

Phase 3: - 2030



Immediate action

- EMILIE emission free, lowcontact delivery logistics in the corona crisis
- WiLoad "intelligent delivery zones"
- Promotion and improvement of the infrastructure for cargo bikes
- Pilot: retractable bollards
- Micro-hubs (environmentally friendly last mile delivery)



4 Outputs

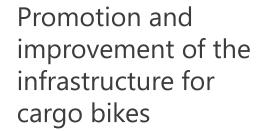


WiLoad - "intelligent delivery zones"

- 1. implement sensors and collect data
- 2. app-controlled access control



Emission free, lowcontact delivery logistics in the corona crisis





5 Lessons learnt

- Time: it usually takes longer than expected
- Legal situation: some things are not possible in Germany
- Personal contacts are very important

Retractable bollards: EU-wide tender takes a long time

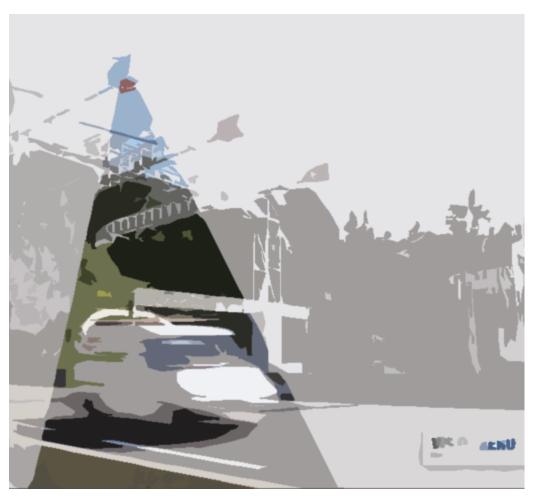


Micro hubs: concession not possible for delivery areas





6 Follow-up



DIGI-L/WP3:

- Recording and processing of data
- Truck access control as a pilot project
- As part of DIGI-V (digitization of traffic)
- Evaluation



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Metropolitan District of Quito, Ecuador



1 Institutional setting

- Based on the Metropolitan Ordinance: 0194
- Supported by the Article 204 of the National Traffic Law
- 600% increase of cyclists in the city
- Intervention by EPMMOP, AMT, EPMTP, IMPU and STHV



Starting point/project goal

- Biggest challenge: Existing habits
- The pandemic: A boost
- Gender issue: Accessibility Increase
- Goal: To make it permanent



3 Approach

- Socialisation and involvement of the community
- Frequent monitoring and evaluation with users
- Specific environmental measurements
- Integration with other projects (TP and Walkability)



4 Outputs

- Increase of users and their permanence
- Infrastructure appropriation
- Increase of industry and related trade
- Highly resilient, affordable, accessible and inclusive system



5 Lessons learnt

- Liaison with the community
- Technical experiences and design
- Cross-departmental management
- Insufficient budget



6 Follow-up

- Can its permanence be guaranteed?
- A plan for the densification of the infrastructure and reinforcement of the inter-modality
- Return to normality of the vehicle fleet
- Lessons learnt from the pandemic?





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Taoyuan City Government and EcoLogistics Community Chair Office









1 Institutional Setting

Taoyuan City and EcoLogistics Community

- **★** One of the most important economic and trade hubs in the Asia-Pacific region
- ★ October 27, 2019 Signed a contract with ICLEI to be the first Chair City of the EcoLogistics Community







*The chair term is 2020-2022





Challenges and Goals

Adverse Impact of Taoyuan Logistics Industry







GHG Emissions



Noise Pollution



Congestion



Waste Production



Land Degradation



Traffic Safety



Urban Quality of Life

8 Principles of EcoLogistics

Health, Safety, People-centered Low-emission, Circular and Regional Economy



Promote multistakeholder decision making structures







Raise awareness and encourage behavior change



Shift to alternative delivery options



Integrate land use planning for freight delivery



Commit to safer urban delivery vehicles for safer streets



Support consolidation schemes for urban deliveries





Approaches



- Public Logistics Platform
- Intelligent Management System



Air Pollution Management

- Diesel cars exhaust inspection
- air-quality sensor



Low-Carbon Transportation

- Low emission fleet
- Replace diesel cars



Green Building

- Wind power generation
- Solar power generation
- Low-energy building materials

Communication and Stakeholder Engagement



Over 30 stakeholder meetings at demo sites





On-site visits to logistics industry and relevant firms



4 Outputs

During COVID 19 (Special Solutions)

PATTERN 1

Restaurants/ Supermarkets → 3rd PL/ Uber Eats/ Foodpanda → Households

* Supported by the City Government

PATTERN 2

<u>Small farmers</u> → 3rd PL/ <u>Local Taxi</u> → Households



5 Lessons learnt

It is time to promote the participation of multistakeholders for a people-centered logistics system.

Research Institutions

Institutions for transportation, industrial, information, public affairs, and natural resource management

Neighborhood

- Nearby residents and stores.
- Takoham Environmental Sustainability Foundation
- The Global Logistics & Commerce Council of Taiwan
- Old Street recreation association
- Relevant citizen groups



Media

- CommonWealth Magazine
- others

Government

Departments, Bureaus, and Sectors in Taoyuan City
Government

Industry

- Logistics
- Clearance
- Retailer
- Vendor



6 Follow-up





 Reduce, reuse, recycle the package.





Smart Warehousing and cold energy

- Automated facilities
- Liquefied natural gas



Green Energy and Land Use

- Clean energy
- Energy efficiency
- · Green the land
- Integrate with urban plans

