NRP 71 Transport and mobility

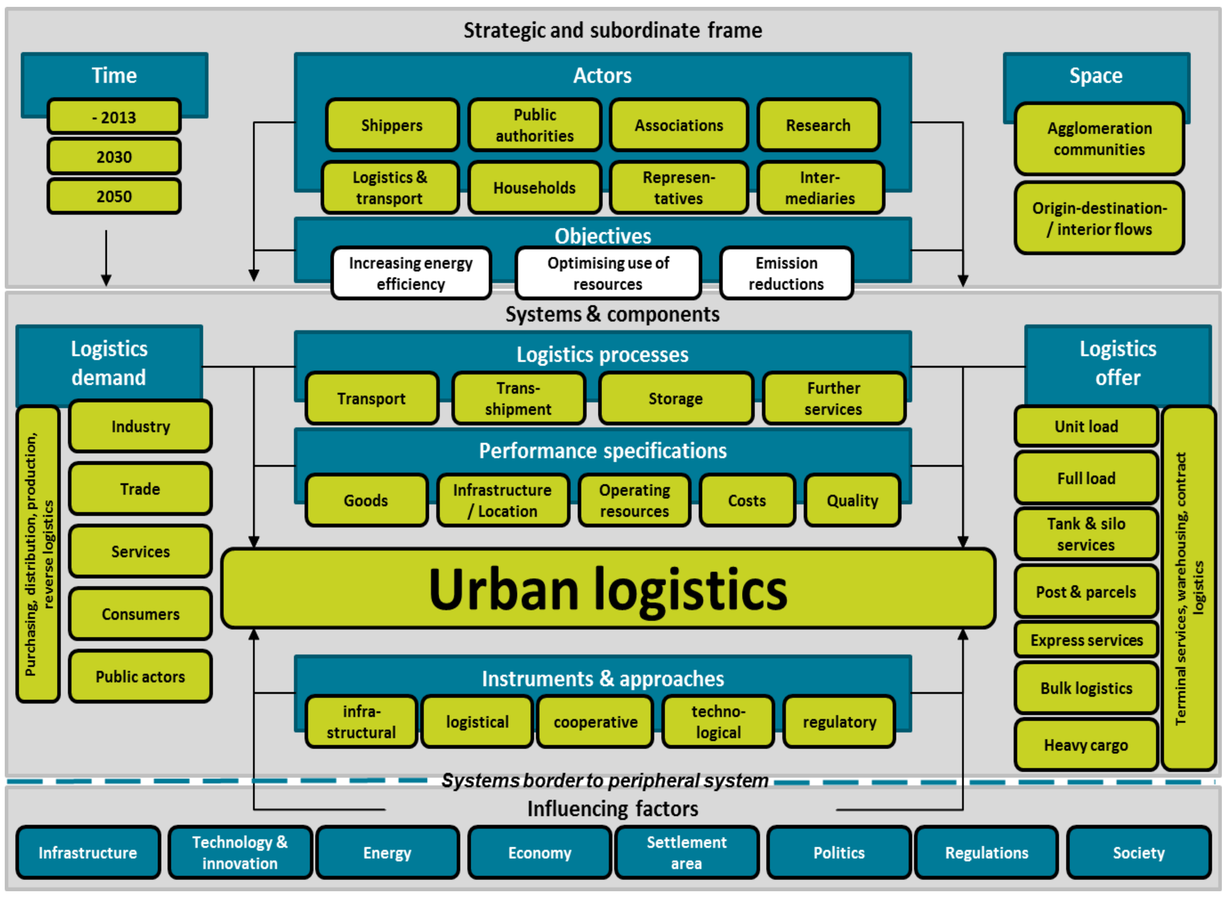
Smart Urban Freight Logistics

Overview

Urban logistics

Urban logistics is essential for the supply of the economy and the population with goods and services; in its significance comparable with power and water supply. Trends, such as e-commerce with home deliveries, reduced storage space, smaller consignments and increased delivery frequency impact and form the urban logistics systems. At the same time logistics activities are continuously displaced from central locations, leading to a logistics sprawl. This results in increasing freight traffic intensity and energy consumption per tonne-kilometre and shipment.

Urban logistics system

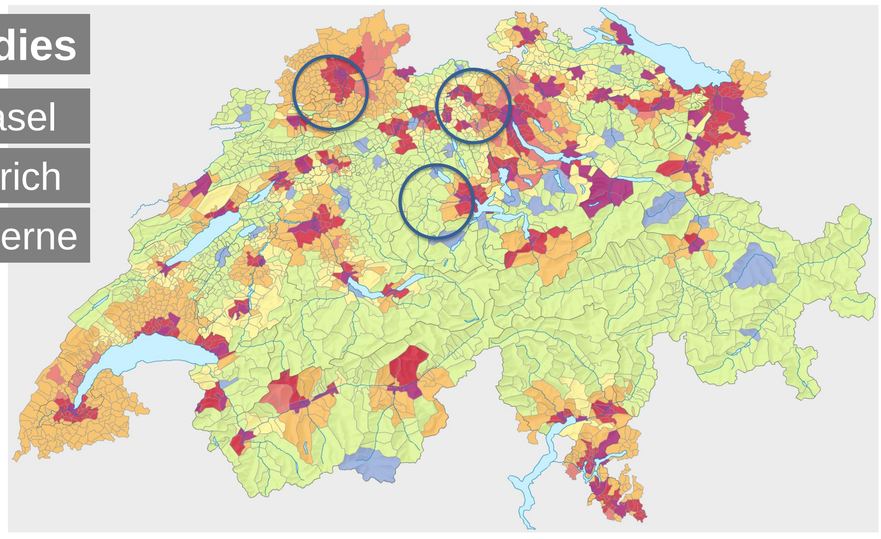


Research approach

- ✓ Desk research, data analysis and calculation for the current state
- ✓ Scenario forecasting including characteristics, trends and drivers in transport, logistics and urban development
- ✓ Case studies in three cities: Basel, Zurich and Lucerne
- ✓ Backcasting approach: devising an action plan to reach the vision
- ✓ Close cooperation with project partners and cooperating international institutes

Case studies

- Basel
- Zurich
- Lucerne



Source: adapted from atlas.bfs.admin.ch

Project goals and benefits

- ✓ Profound analysis of urban logistics and its role in the total energy consumption, greenhouse gas emissions and use of non-renewable resources
- ✓ Identification of trends, innovations and drivers in freight transport and logistics
- ✓ Scenario based prognosis for freight transport and logistics in urban areas until 2050
- ✓ Logistics vision 2050 and tailored action plans for the development of energy efficient and CO2 -free Swiss cities
- ✓ Building a network with private and public stakeholders and scientific institutions

Partners and Collaboration

- **Further financing partners**

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Federal Office of Energy
Federal roads office
Federal Office of Transport

Canton of Zurich
Department for Economic Affairs
Office of Transport

Bau- und Verkehrsdepartement des Kantons Basel-Stadt

Stadt Luzern

- **Project partners**

Leading Swiss partners involved in transport, industry, logistics, urban development and efficient transport solutions

- **International cooperation**

Leading international institutes involved in urban logistics

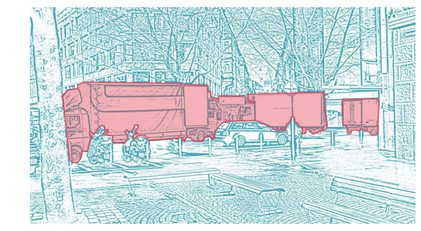
Energy Turnaround

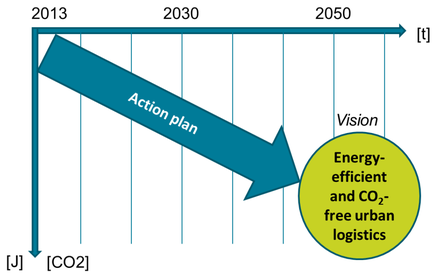
Our project vision for 2050:
Energy efficient and CO_2-free urban logistics

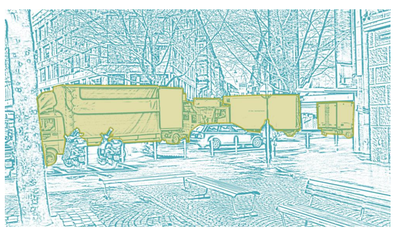
In transport, and especially freight transport, there is a high potential to contribute to energy savings, substituting non-renewable energy sources and reducing energy requirements (“eco-sufficiency”).

Innovative and competitive approaches reducing energy consumption, greenhouse gas emissions and non-renewable energy use in urban logistics are researched:

- ✓ Logistical approaches
- ✓ Cooperative approaches
- ✓ Technological approaches
- ✓ Regulatory approaches







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