Climate-friendly Urban and Mobility Development

Learning from European Cities

2050 CliMobcity, Final Dissemination Event

June, 20th 2023

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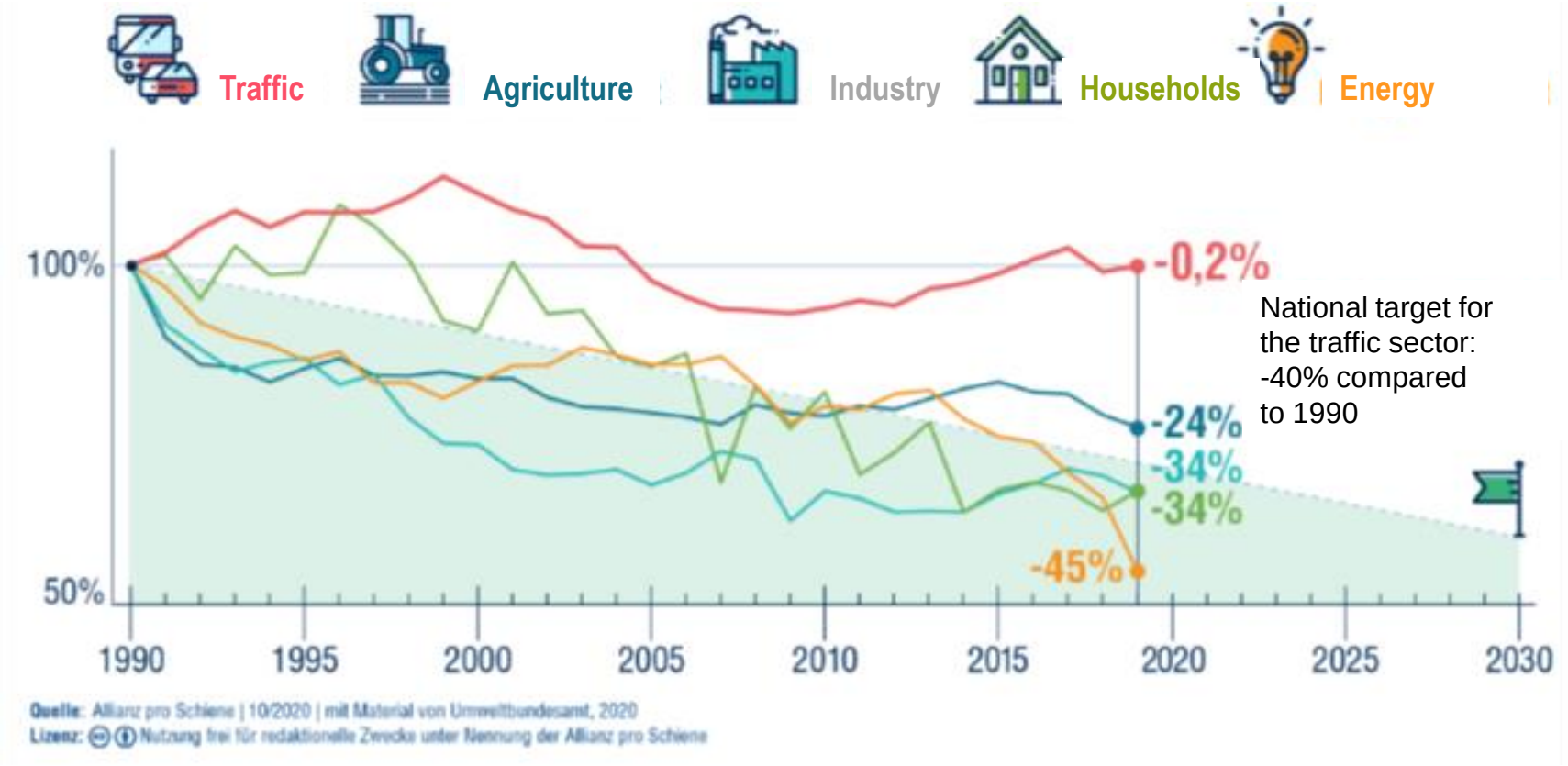
Development of CO_2-Emissions in Germany



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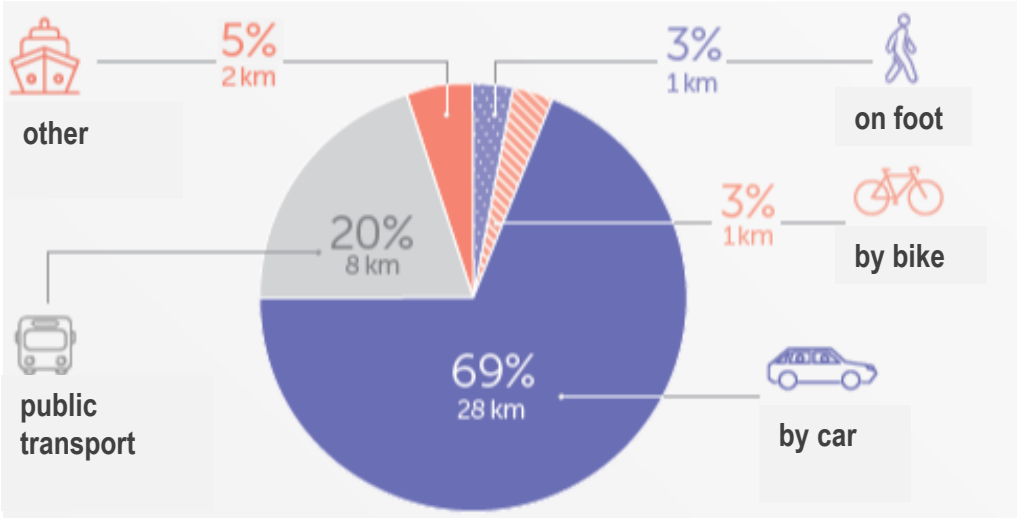
Mobility Action Field

- Emissions from the mobility sector are still very high
- Health hazards from air pollution (e.g. NOx, particulate matter) and noise
- Increased risk of accidents due to traffic
- High land use and high degree of sealing due to traffic areas

Modal split in Germany, kilometers per person and day; percentages of traffic modes (2019)



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Difu-Project – Research Questions

1. Which synergies for climate-friendly urban development and mobility exist?
2. What are particular challenges for German municipalities?
3. What are good practice cases in other European cities which address these challenges?
4. What framework conditions need to be optimized to enable transfer to German municipalities?

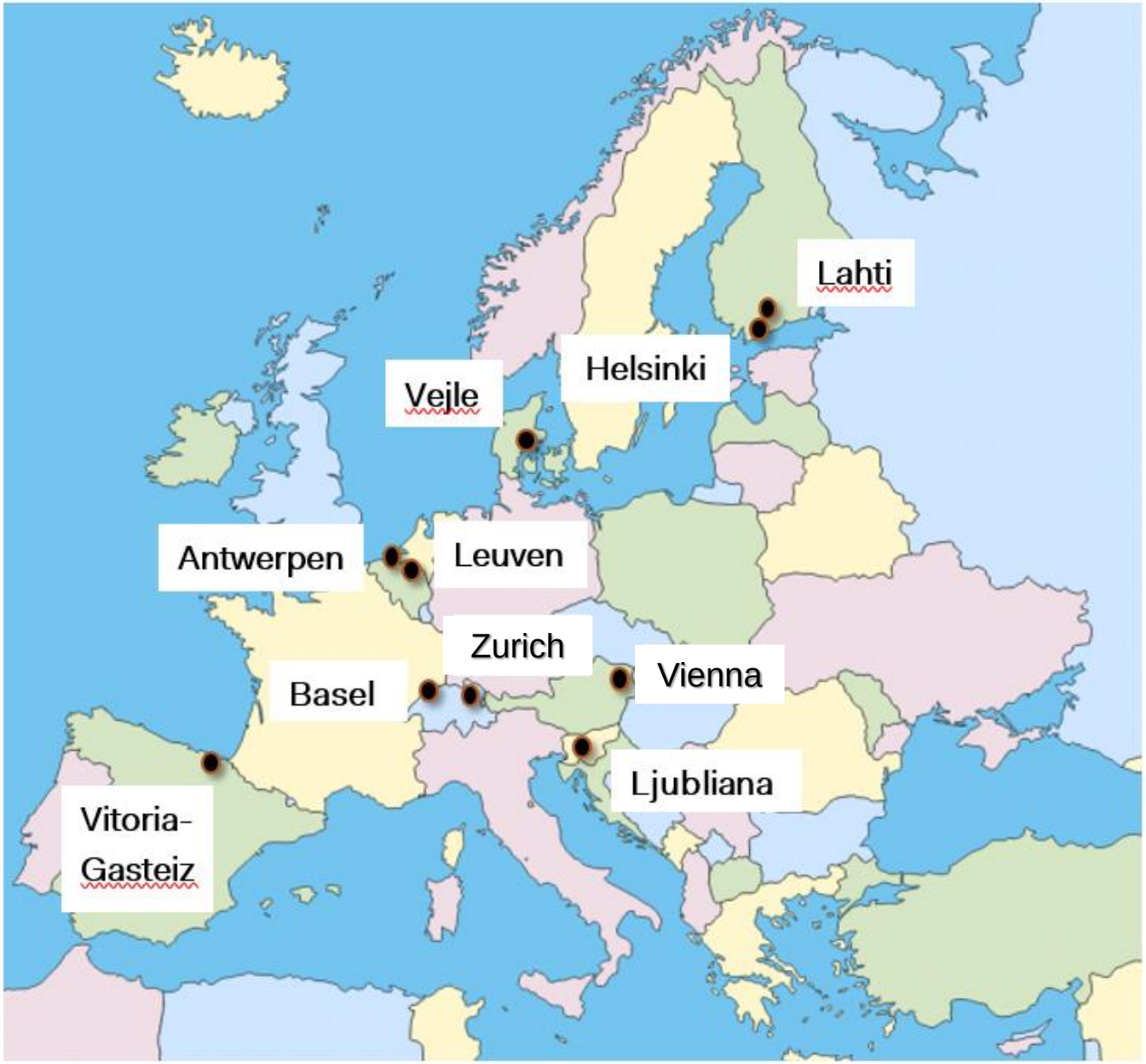
How could climate neutral cities look like?

UBA 2017

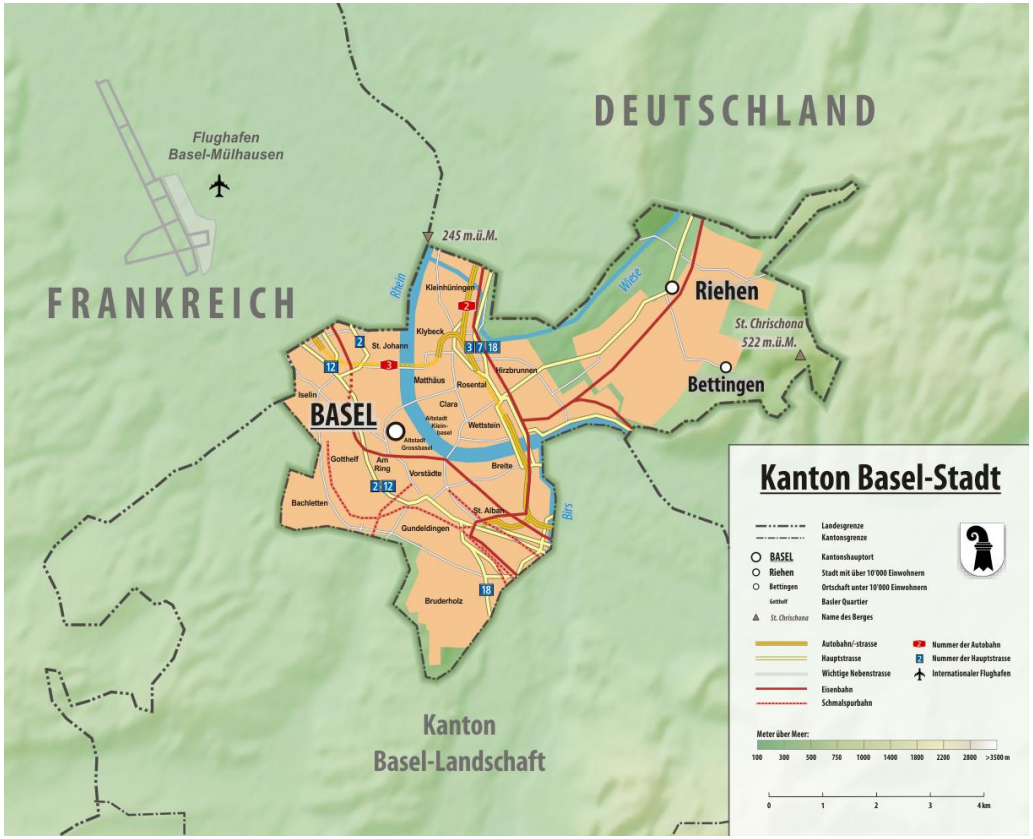
Status Quo of Urban Development and Mobility in German Cities

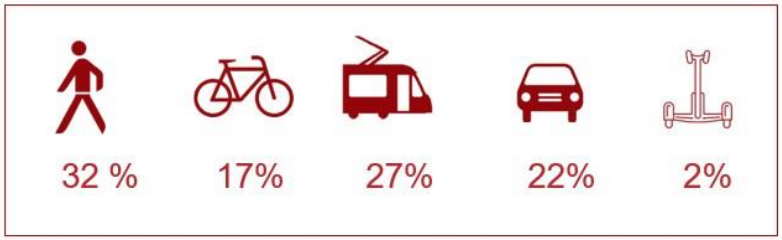
- Climate mitigation and adaptation as well as mobility are among the most important topics of the future urban development.
- Many measures to promote climate-friendly mobility are already being implemented (strategies and concepts, promotion of cycling, increase in parking fees, etc.).
- Challenges: administrative structures in a multi-level system; municipal cooperation, personal situation in the municipal administrations
- City structure as a determinant for traffic areas
- Transformation of the mobility sector takes time
- Acceptance (e.g. exists for the rededication of lanes for cycle paths, but not for unsealing and change of use)

Case Studies



Commuter Fund Canton Basel





- Trinational agglomeration area with Basel as the center
- 200.000 inhabitants
  - Agglo.: 850.000 inhabitants
- 190.000 Employees
  - Agglo.: 470.000 Employees
- 310 Cars / 1.000 inhabitants
- 55% households without own car
- 50% with a public transport subscription
- 105.000 commuters into the city, 50.000 commuters within the city, 23.000 commuters out of the city per day

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What is the Commuter Fund (Mobility Fund)?

- Financing instrument which was launched in 2013
- Objective: Reduction of car traffic and tense parking situation in public spaces (push measure)
- Income from the commuter fund (in the city of Basel, parking cars in public spaces is generally subject to a fee and is limited in time)
  - 80% of the gross revenue of the commuter parking cards (860 CHF / year) and the visitor parking cards (20 CHF / day)
  - Additionally in the future - as a mobility fund - from 20% of the gross income from parking cards for residents (284 CHF / year)
- Fund resources currently available: CHF 2.0 to 2.5 million / year

What is financed?

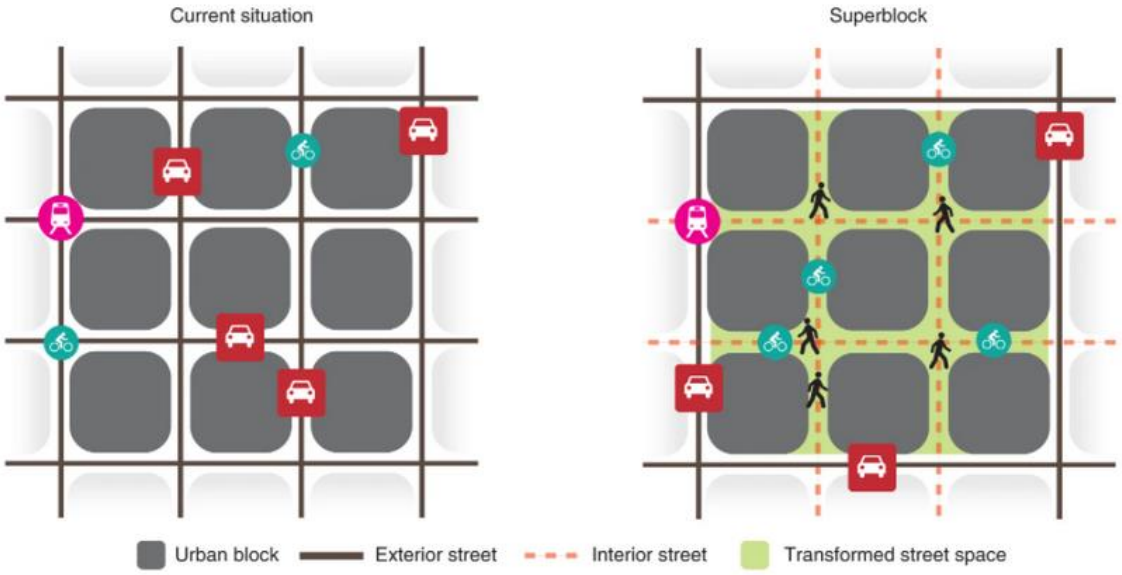
- Eligible to apply: Private and public corporations and institutions inside and outside the canton
- Financing of medium and small projects (pull measure)
- Co-financing of investment costs (max. around CHF 2 million) and operating costs (start-up financing over a limited period)
- Bicycle rental system "Velospot Basel" (2021, CHF 2.15 million)
- Bike & Ride facility Efringen-Kirchen (2016, 2020, 60,000 CHF)
- 10 neighborhood parking spaces in car garage – WG Belforterstrasse (2019, CHF 100,000)

Reclamation of Public Space in Vitoria - Gasteiz

- parking management
- Paradigm shift in public transport (introduction of a modern low-floor tram)
- Implementation of a walking and cycling strategy
- Introduction/implementation of superblocks

What are Superblocks?

- The basis is the "Sustainable Mobility and Public Space Plan" (PMSEP: Plan de Movilidad Sostenible y Espacio Público)
- The idea is to divide the streets into a main network for road traffic (on the edge of the superblock) and streets with pedestrian priority (inside the superblock).



- Of the 72 super blocks planned for 2012, 63 super blocks have been implemented to date => reduction of the car traffic to 25%

Mobility as a Service – Helsinki

Helsinki facts:

- 657.000 inhabitants
- Largest city of Finnland
- gglomeration area (14 communities with approx. 1.5 Mio inhabitants

Definition: “Mobility as a Service" (MaaS) is a "combination of services from public and private transport providers accessible through a uniform portal (e.g. app) that creates and manages the journey and is paid by the users with a single account"(Civitas 2016).

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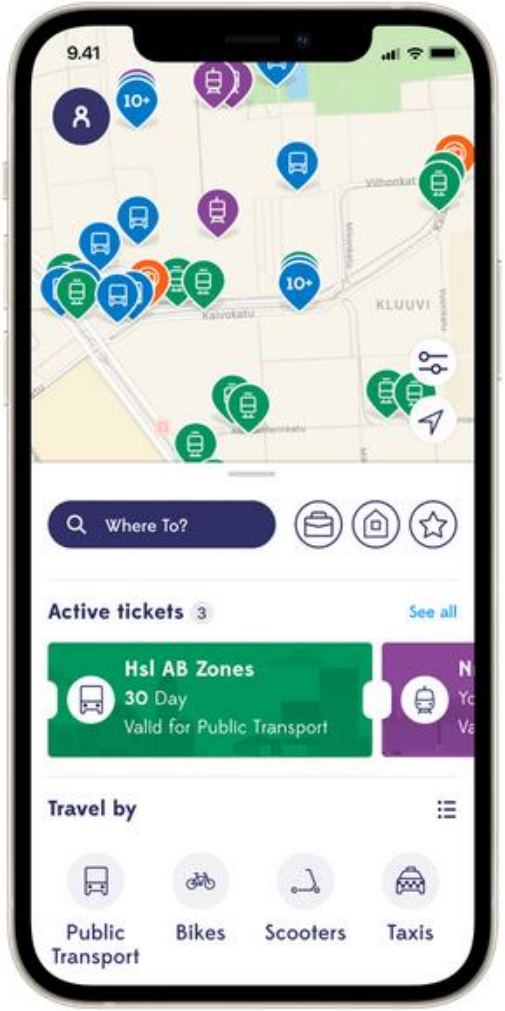
Mobility as a Service – Helsinki

- the city has been offering the service in four fare zones since 2017
- Provider is the Finnish company "Maas Global"
- With the smartphone application “Whim”, users can access the mobility services and buy tickets
- Offers: public transport, a bike sharing service, taxis, car rentals and car sharing



Quelle: HSL

Requirements:

- Finnish legislation: access to ticketing (single tickets and subscriptions)
- hierarchical governance structures

Conclusions

- Particular climate targets are set in the European cities examined, how and in what time frame a CO_2 reduction should take place. The mobility sector is seen as an important action field for CO_2 reductions.
- In all case studies a modal shift, i.e. the changed choice of transport and not a pure drive turnaround to the conversion to electrically powered vehicles, is aimed for.
- The principle of PUSH & PULL (measures) is not as well developed in Germany as in the case studies examined.
- Although the cities examined are so-called pioneer cities in many respects, the transformation of the traffic does not seem to have been fully achieved there either.
- Many concepts/measures for climate-friendly mobility often only address the city centers and less the outskirts or urban regions.
- Many approaches can be transferred to German municipalities. However, it takes courage, especially for the implementation.

Thank you!

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https://difu.de/publikationen/2022/klimagerechte-stadt-und-mobilitaetsentwicklung-von-europaeischen-staedten-lernen

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