

Research & Experience Day in Hasselt

# #Smart City

## Sharing mobility in a smart city context

**Torsten Merkens M.Eng.**

Manager of European Center for Sustainable Mobility  
at FH Aachen University of Applied Sciences  
Hasselt, 1st October 2019

# **RESEARCH in the field "Sharing Mobility"** **at FH Aachen University of Applied Sciences**

**Founded in 2013**

External Funding (2013-today):  
**6,5 Mio. €**

## **Involved Faculties and Institutes:**

- Civil Engineering
- Electrical Engineering and Information Technology
- Aerospace Engineering
- Mechanical Engineering and Mechatronics
- Design
- Energy Technology (Solar Institute Jülich)

## **Research Focuses:**

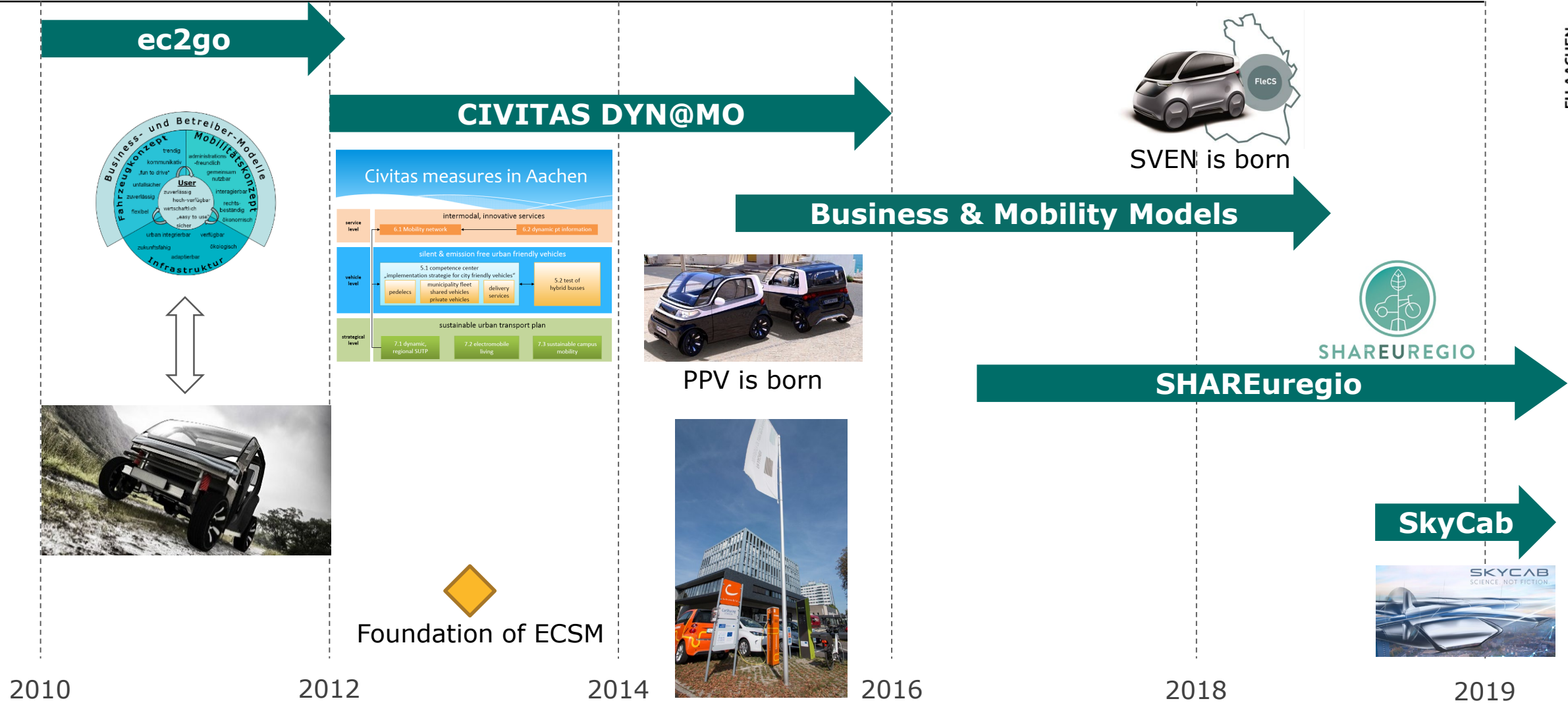
- Integrated Mobility Planning
- Energy and Mobility
- Digitalisation of Mobility
- Vehicles and Infrastructure of road transport
- Vehicles and Infrastructure of rail transport

## **Fields of Activity:**

- Research
- Consultation
- Project Development



# Project Overview



What **MOVES** us...

# What MOVES us and the press already today?

**OVB online** ABO STELLEN KFZ IMMO Suchbegriff eingeben...

Rosenheim Mühldorf Welt Sport Meinung Leben Trauer ePaper Termine Über uns Mehr

Meinung > Leserbriefe > **Energiewende:E-Mobilität kein Allheilmittel**

veröffentlicht: 06.09.19 | aktualisiert: 06.09.19

## Energiewende:E-Mobilität kein Allheilmittel +

## Automobilwoche

DIE BRANCHEN- UND WIRTSCHAFTSZEITUNG

Mittwoch, 11. September 2019, 10.15 Uhr

## Deloitte-Studie zur Mobilität 2035: Autonom in den Stau

**VISION mobility**  
MOBILITÄT KONNEKTIVITÄT INFRASTRUKTUR

## Umfrage: Die Mobilitätswende ist da - und kaum einer fährt mit

09.09.2019 | Johannes Reichel

**PZ-news.de**

Startseite > Pforzheim

## Zukunftsweisend: Mobilitätskonzept für Büchenbronn in Workshops ausgearbeitet

## ZEIT ONLINE

IAA

## "Elektro, Elektro, Elektro"

Bei der Internationalen Automobilausstellung wird es ab Donnerstag viel um Elektrofahrzeuge gehen. Klimaaktivisten fordern autofreie Städte und kündigten Proteste an

## RP ONLINE

Mobilitätskonzept in Krefeld

## Die Stadt will den Autoverkehr deutlich reduzieren

4. September 2019 um 04:40 Uhr | Lesedauer: 2 Minuten

**ZDF**

## Droht der Verkehrskollaps? Was die Hauptprobleme im Stadtverkehr sind

von Christian Thomann-Busse

11.09.2019 07:32 Uhr

**StN.DE** STUTTGARTER NACHRICHTEN

Carsharing in Filderstadt

## „Ein Stadtmobil spart etwa acht Privatautos“

Patrick Steinle, 05.09.2019 - 15:31 Uhr

**Onetz**

WEIDEN IN DER OBERPFALZ OBERPFALZ

30.08.2019 - 15:53 Uhr

## E-Carsharing: Aller Anfang ist ungewohnt



# What MOVES us and the press already today?

## Voorbode verkeersvrij centrum: Deze Hasseltse straten dicht op zaterdag

14/05/2019 om 11:21 door Dirk JACOBS

be  
**good  
move**  
be.brussels

NOS NIEUWS • BINNENLAND • 20-08-2018, 15:30

## Als het spoor straks vol is en de weg ook, wat dan?

In de buurt > Sint-Niklaas

## Nieuwe 'mobipunten' op komst: "Plekken creëren waar alle vervoersvormen samenkomen"

JVS | 25 september 2019 | 09u29

## Met de auto, via een hub, naar de trein en deelfiets, zo zou reizen in 2030 zijn

NOS NIEUWS • BINNENLAND • WO 12 JUNI, 20:13

12 juni 2019 | NIEUWS

## Deltaplan Mobiliteit om Nederland in beweging te houden

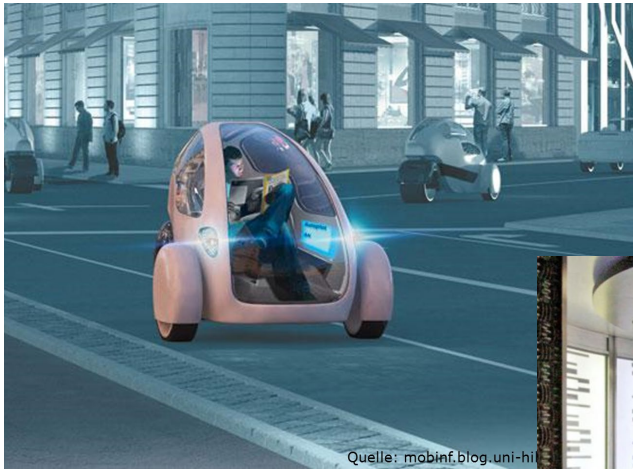
WEEK VAN DE MOBILITEIT.BE  
16-22 SEPTEMBER

MOBILITEIT EN VERKEER 19/03/2018 - 18:30

## Hasselt gaat naar autovrije binnenstad

# What will MOVE us in the future?

What will  
MOVE us in  
the future?

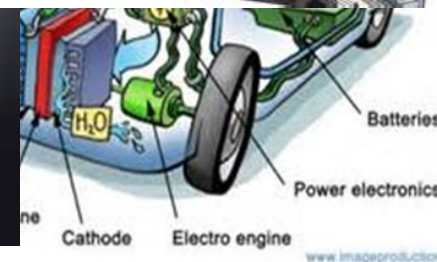


Quelle: mobinf.blog.uni-hi



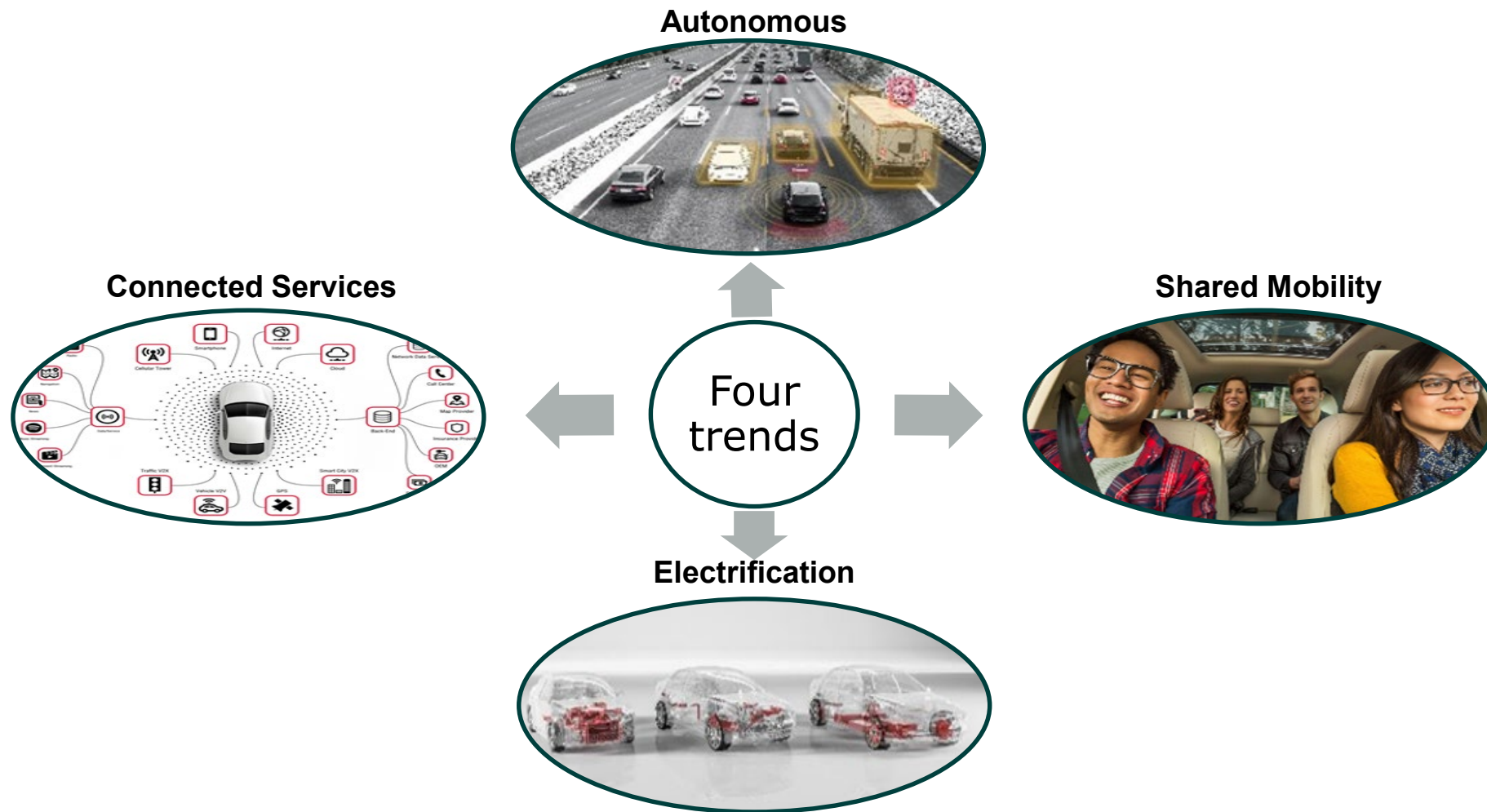
n.

Testen Sie jetzt den DHL Paketkopter.

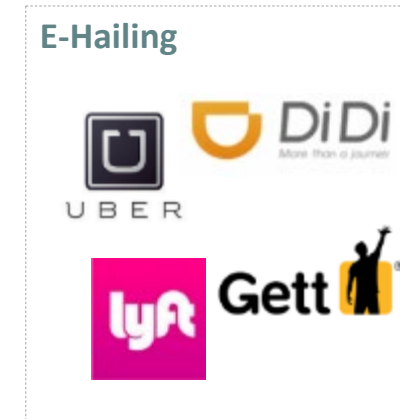
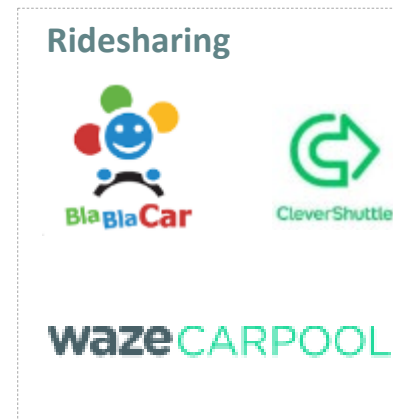




# 4 disruptive trends



# Sharing mobility options / New mobility services



Source: Spulber et al. (2017)

**What does it mean for our CITY / REGION...**

# Strengthening short-range/urban mobility

## Transport:

- ▶ Equal rights for cycling, walking, car and PT,
- ▶ Relief of urban infrastructures urbane spaces

## Society:

- ▶ Access to mobility (costs, reducing barriers, ...)

## Health:

- ▶ Moving keeps healthy, prevention of diseases

## City as a living space:

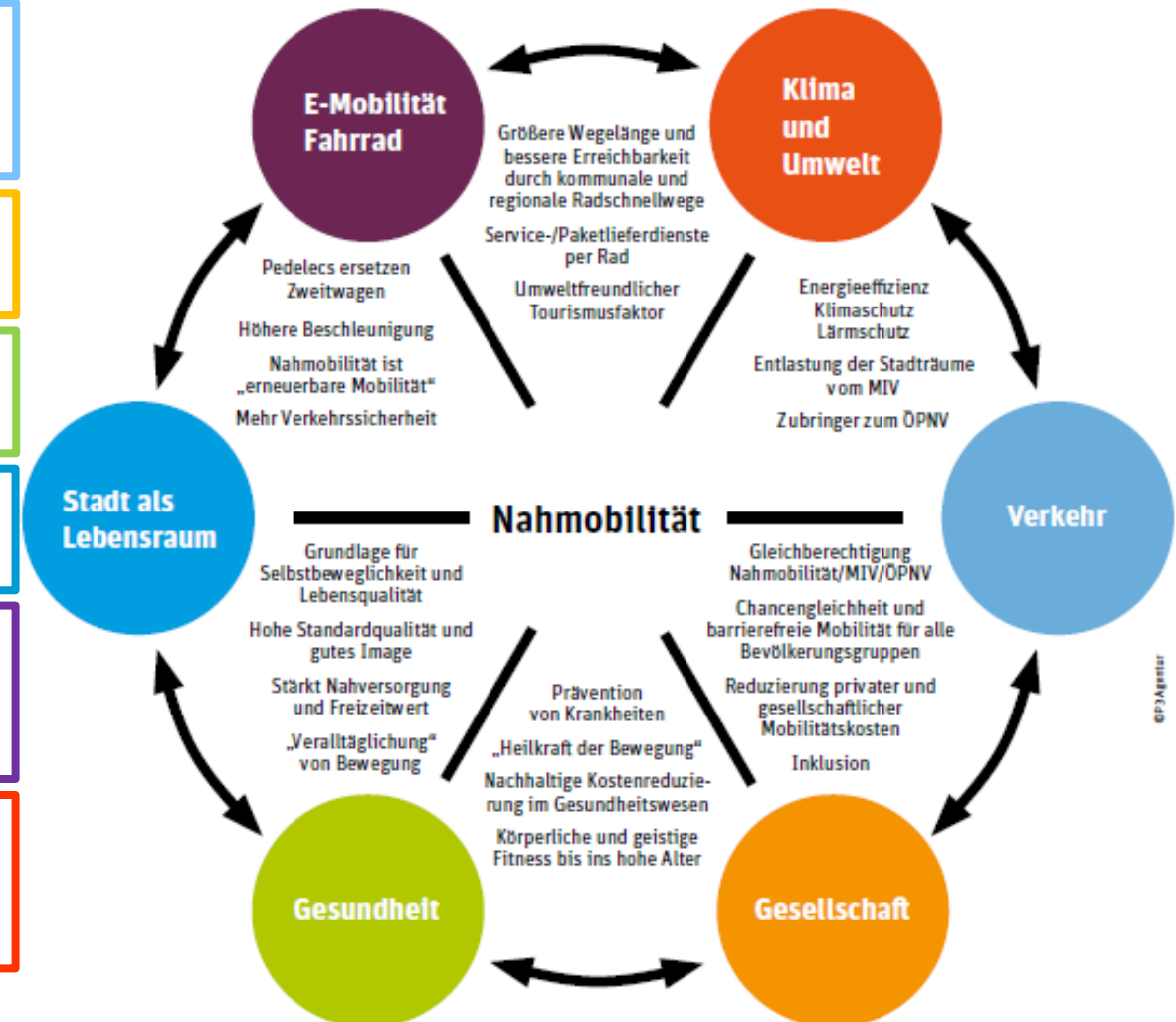
- ▶ Quality of life (Safety, activity, ...)

## E-Mobility and Cycling:

- ▶ Sustainable Mobility,
- ▶ longer travel distances, better access

## Climate and Environment:

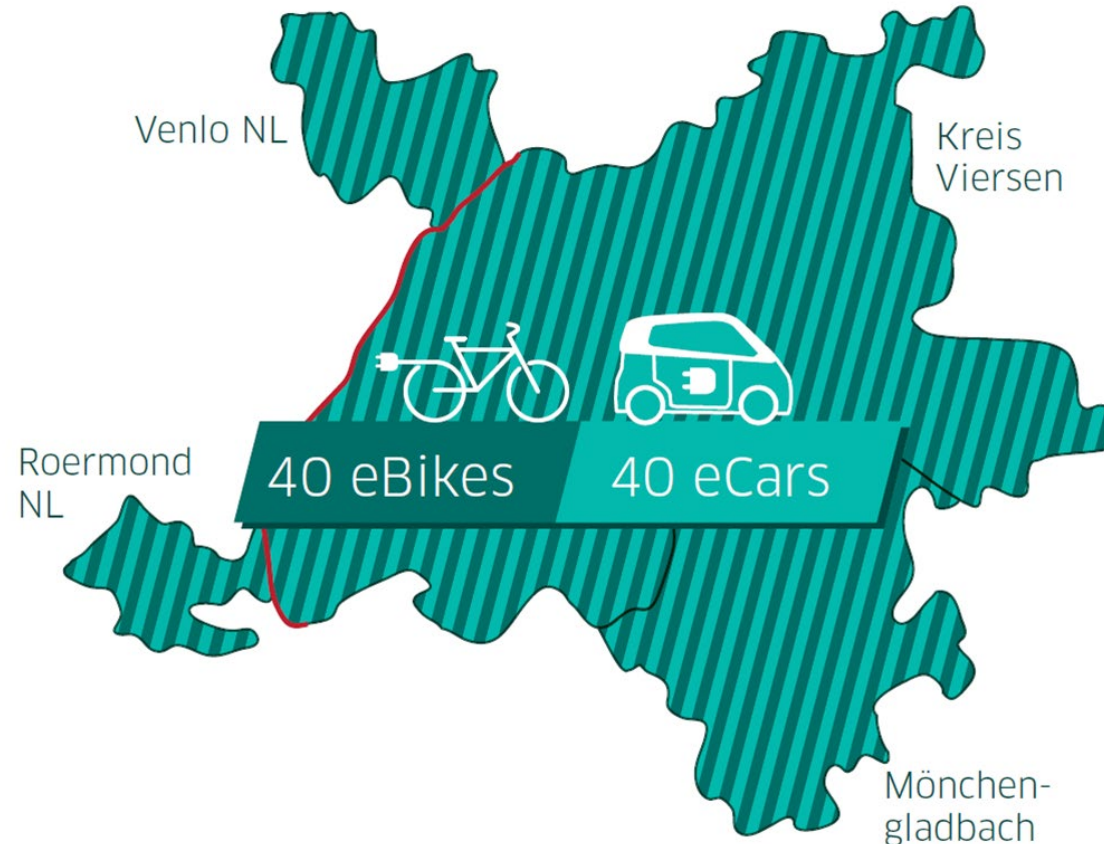
- ▶ Energy efficiency, renewable fuels, reduction of pollutant and noise emission



Source: AGFS, P3 Agentur, 2015



# Development of new mobility options and services: E.g. INTERREG-project “SHAReUregio”



Ministerium für Wirtschaft, Innovation,  
Digitalisierung und Energie  
des Landes Nordrhein-Westfalen



provincie limburg



# Conclusions

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- While cities in the entire Euregio face similar questions in their attempt to make mobility more sustainable, they have different experiences and ideas. This creates opportunities for cooperating in research and learning from each other.
- Mobility solution do/must not end at national borders.
- Climate and Health Protection as an initiator for a “transportation change”.
- One of the actual disruptive trends is “Shared Mobility”, not owning the car, but sharing the vehicle (car, bike, scooter...) or the ride.
- To improve the transportation system and the quality of life in urban areas, the strengthening of short-range mobility (like walking and cycling) is the backbone.
- Now, a lot of research work at ECSM is necessary in the fields of car, train, bicycle, Public Transport, Flight Units and many others.

# Thank you for your attention!

## Do you have any Questions?

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### Contact

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SAVE THE DATE

**3. ECSM-Symposium, 15<sup>th</sup> November**  
**in Aachen (German)**