

GOOD MORNING!

08:30 Lahti Livable City / Miikka Venäläinen, City of Lahti

08:50 Future mobility /Kaisa Reunanen-Krause, Finnish Transport Infrastructure Agency

09:10 Smart Futures / Andy Brahney, Ramboll

09:30 Further instructions/ Ramboll

10:00-13:00 Clinics: City of Lahti A122 & Uponor A155

11:30-13:00 Sparring (in Teams' rooms)



Lahti – Livable city

Miikka Venäläinen
Manager, Business Development
City of Lahti





1923



1963



Lahti

Rethink Lahti



Three game changers at play...

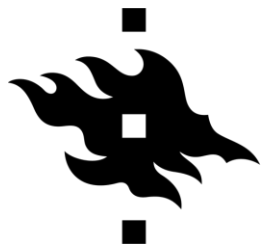
- LUT expanding rapidly
- *Business City*
- Global leader in sustainability



Lahti

Game changer #1: University





**HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI**



Rapid growth

- LUT University
 - 10 000 students by 2030
 - 30 professors situated in Lahti
 - New ones on the pipeline...
 - International university
 - 1/3 of students are international
- LAB University of Applied Sciences
 - Strong player in the field
 - 5 800 students in Lahti
- University of Helsinki
 - Growth?



Lahti

***Game changer
#2: Investments
and growth***



Lahti

 **KEMPOWER**

KEMPOWER



Lahti

FAZER



Lahti

Viking Malt



Lahti

***Game Changer #3:
Global leader in
sustainability***



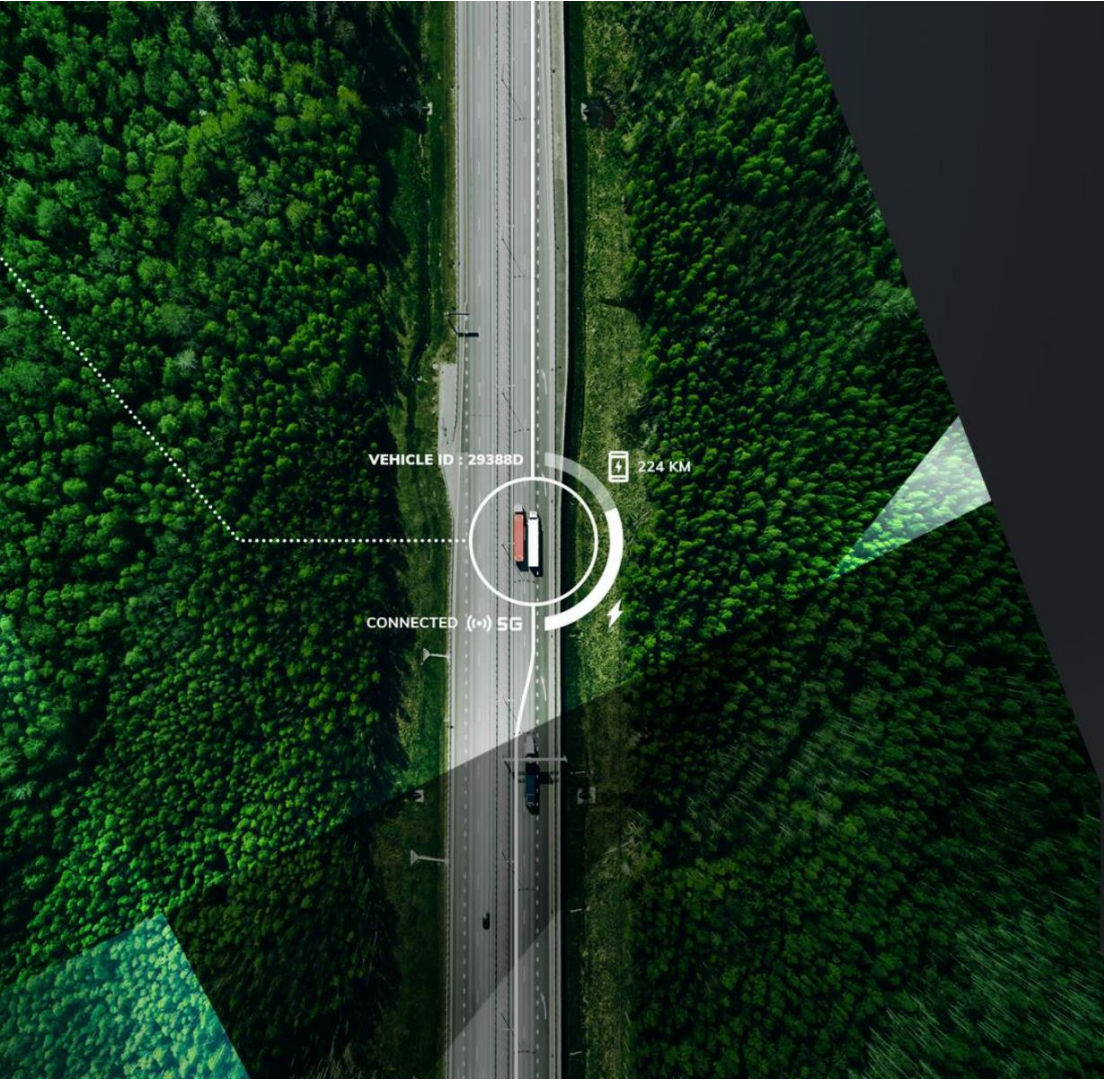
Carbon neutral in a few years

- Investments
 - Ren-Gas
 - Hartwall
- Research
 - LUT/Lahti GEM
- Competitive edge for companies
 - The most sustainable platform for companies in Finland!



LAHTI GEM+

Green Electrification of Mobility Cluster



VEHICLE ID : 29388D

224 KM

CONNECTED (++) 5G

Lahti GEM network



Single Wing Energy



SYSTEMS & APPLICATIONS



ENERGY SOLUTIONS

VEHICLES & COMPONENTS



DIGITAL SOLUTIONS

LOGISTICS & MOBILITY SERVICES



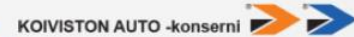
PUBLIC SECTOR



UDT TECHNOLOGIES



RESEARCH & EDUCATION



Lahti

*Events and
culture...*



Lahti

***How can we make the
tide of positive change
visible through out the
City?***

What will Lahti look and feel like in 2040?

- Transportation
- Service industry
- Business world
- Housing and living
- Growing roots in Lahti
- Cityscape



Rethink Lahti!

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Future mobility and transportation

72h Transport Challenge

Kaisa Reunanen-Krause

8.11.2023



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Infrastructure Agency

Väylävirasto



Process of a traffic infrastructure project



Procurement between the various planning phases will take around 1 to 2 years in major projects.

- > Planning takes time, using time is even longer
- > Planning is always to the future needs

An aerial photograph of a bridge crossing a wide river. The bridge features a concrete viaduct section and two truss spans supported by stone piers. The surrounding landscape is densely forested with green trees. A blue semi-transparent banner is overlaid across the middle of the image, containing white text. The sky is clear and blue.

Recent changes in operating environment



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Changes due to Corona-pandemic

Lahden joukkoliikenteen matkustajamäärät yhä kaukana koronaa edeltävistä ajasta

Matkustajamäärien pudotus tekee loven myös tuloihin. Suuret kaupungit toivovat valtion koronatuella jatkoa.



Lahden seudun liikenne bussi odottamassa torin pysäkillä torstaina. Kuva: Petri Niemi / Yle

CITIES AND URBANIZATION

COVID made many of us avoid public transport - what will it take to get us back on the bus?

Feb 4, 2021

Article | [Published: 19 May 2020](#)

Temporary reduction in daily global CO₂ emissions during the COVID-19 forced confinement

Kestävillä kulkutavoilla liikkumisen osuus laski Päijät-Hämeessä

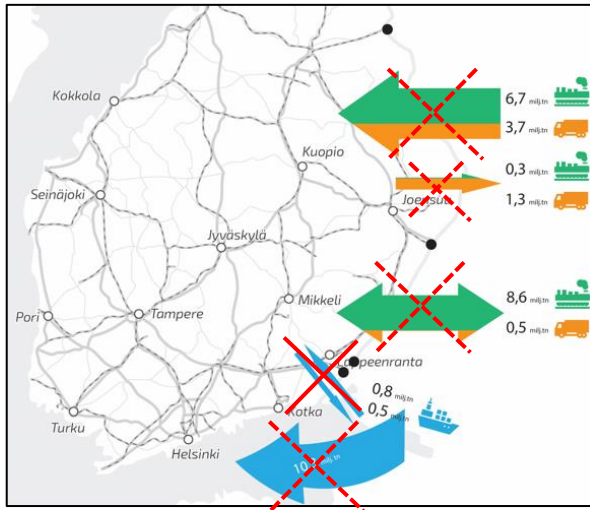
24.2.2023 | Liikennejärjestelmä, Uutinen

Traficom in vuonna 2021 teettämä valtakunnallinen henkilöliikennetutkimus osoittaa, että koronapandemia vaikutti selvästi suomalaisten tekemien matkojen määrään ja pituuteen. Maakunnan asukkaiden matkoista kolmannes tehtiin kestäväillä kulkutavoilla vuonna 2021 ...

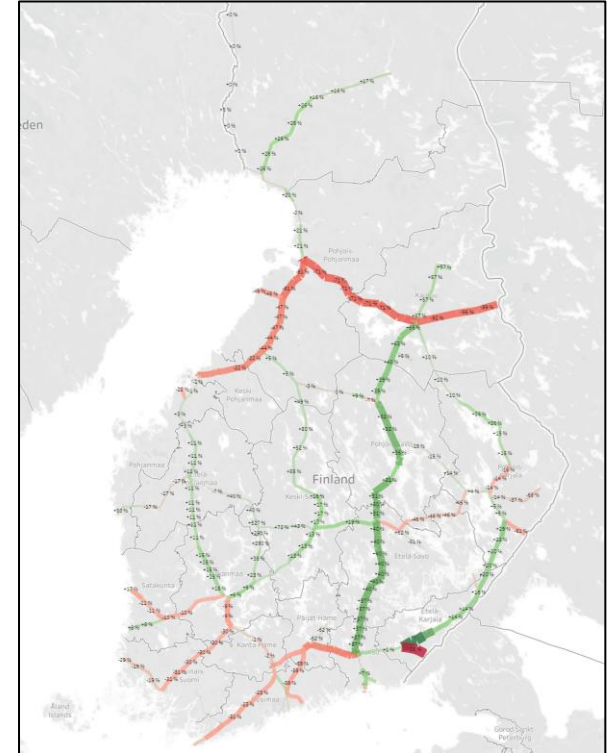
-> Decreased use of Public transportation, Distance working

Changes in freight traffic due to War of Russian aggression

- Import flows of raw materials have changed, especially in raw wood
- Relations between modes of transport have changed, routes have changed
- Changes not only in transport sector, but in industry and business life



Changes in freight traffic



Changes in freight traffic in rails

A hand holding a crystal ball against a sunset background. The crystal ball is held in the center, and the sunset is visible in the background. The hand is in the foreground, and the crystal ball is in the middle ground. The sunset is in the background, with the sun low on the horizon. The sky is a mix of orange, yellow, and blue. The water is visible in the background, and the hand is holding the crystal ball over it. The overall scene is a metaphor for predicting the future.

Predicting future is not easy

Futures research

Principles in futures research:

- **Future is not predictable.** There are multiple possible futures, which we can try to predict.
- **Future is not predetermined,** but we can discuss what could be happening.
- **We can influence the future with our actions and choices,** it is important to know what is possible, what is probable (credible) and what is desirable

-> Prepare for different futures

- In addition to strong drivers of change, attention must be paid to weak signals and surprises, discontinuities, and disruptions
- Resilience (being able to adapt to changes) is needed
- **Best plan works in all the futures**

Tulevaisuuden muutosten hallinta väylänpidossa:
https://www.doria.fi/bitstream/handle/10024/187506/vj_2023-44_978-952-405-083-8.pdf?sequence=1





Trends and themes to consider in planning

Environment



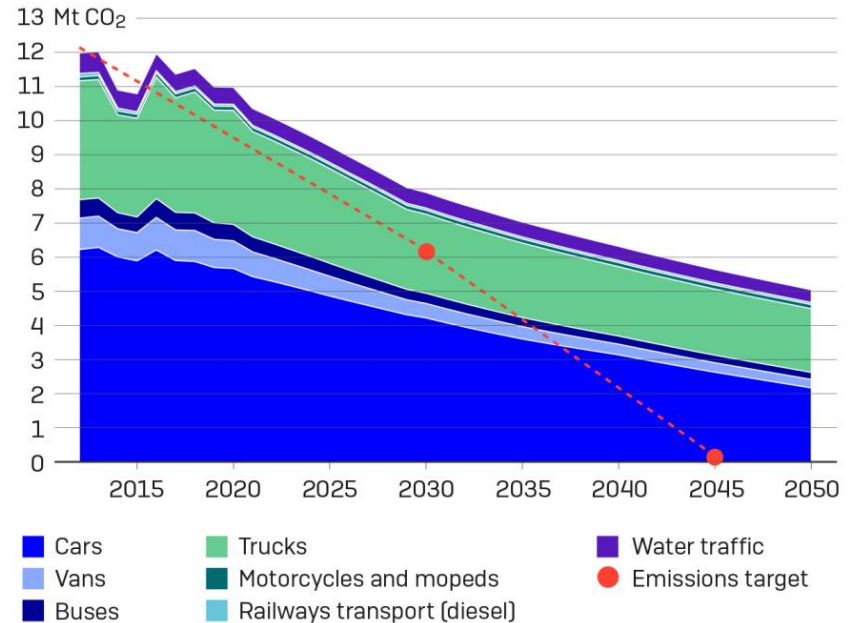
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- Climate change
- Biodiversity
- Sustainability



Green bridges helps animals to cross roads safely

CO₂ emissions from domestic transport, million tonnes, baseline projection



Source: [Government resolution](#) 6.11.2023

Demographics

- Urbanization
- Population aging



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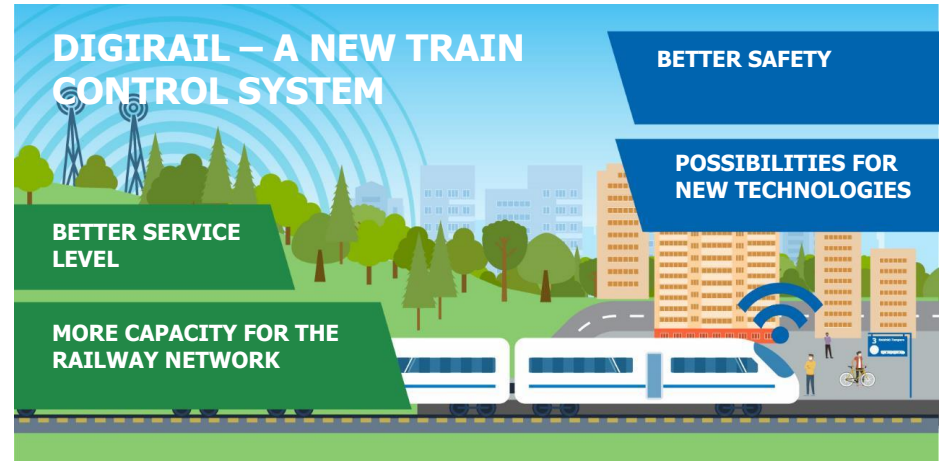
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Technologies and digitalization

- Electrification of vehicles and transport systems
- Autonomous vehicles
- ITS (*Intelligent Transportation System*)
- MaaS (*Mobility as a service*)
- AI (*Artificial intelligence*)



Remote opening of the bridge

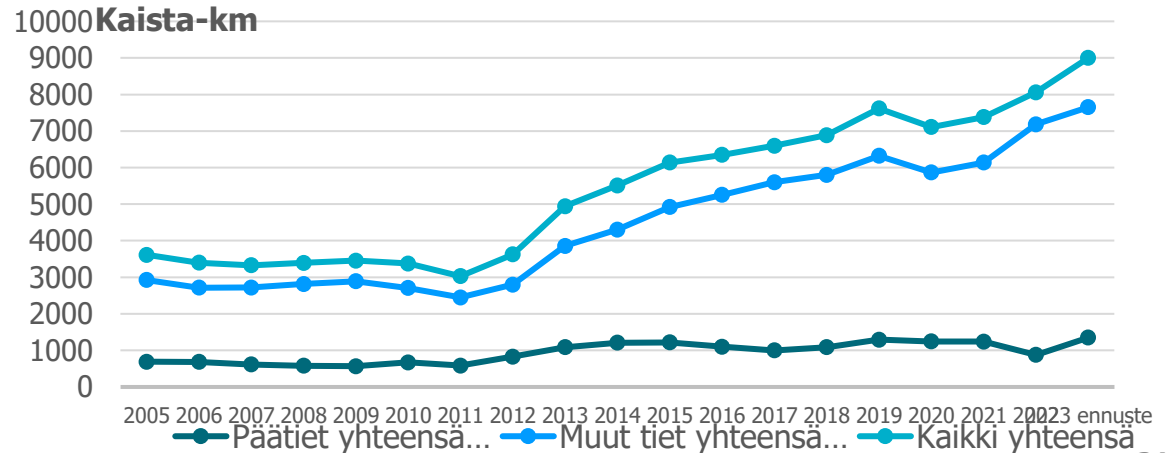


Economics



- Resource efficiency
- Optimizing and prioritizing
- Life span

Amount of road pavements in poor condition





Plans in different levels (city, region, national)

Land use, housing and transport agreements (MAL-sopimus) (Regional level)

- Made between Lahti region (municipalities), regional council and State (ministries and agencies)
- Current plan for 2021-2031, new in process
- The plan represents a long-term approach to the development of the transport system, land use and housing
- Includes 47 measures

- Objectives of the Plan:
 - Sustainable and low-carbon urban structure and transport system
 - Versatile housing options and enough affordability housing
 - Vibrant urban area





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Transport 12 plan (National level)

- The National Transport System Plan (Traffic 12) is an idea of how the Finnish transport system will be developed over the next 12 years
- The plan represents a long-term approach to the development of the transport system
- Objectives of the Plan:
 - **Accessibility**
 - **Sustainability**
 - **Efficiency**



Conclusions and tips

- Explore and be bold, but stay connected to reality and facts
- See things from different perspectives and scenarios
- Listen to others ideas, learn and develop them
- Remember resilience and that we make futures possible!
- Relax and have fun!





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