

Swedish and European views on Smart Sustainable Mobility



TRAFIKVERKET

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- 20% CO₂ emissions
from transport by 2030

- Global solutions to reduce emissions (IMO, ICAO)
- Polluter pays principle
- Modal shift

DECARBONISATION



SINGLE TRANSPORT AREA
FOR



GLOBAL LEADERSHIP



INVESTMENT

- Innovative financing mechanisms (EFSI)
- Infrastructure investment (CEF)
- Strategic Research and Innovation

CEF €24 bn for 2014-2020



**deployment
of connected vehicles
on European roads by 2019**



- Intelligent Transport Systems (ERTMS, SESAR, VTMS, RIS)
- Collaborative Economy
- Drones

DIGITALISATION



PEOPLE

- Safety and Security
- Passenger Rights
- Jobs

Halving road deaths by 2020



Six Transport Trends



Pressure on transport system as demand increases and concentrates



Transport system becomes integrated



Car dependence decreases in cities



New era in city planning



Transport system becomes connected

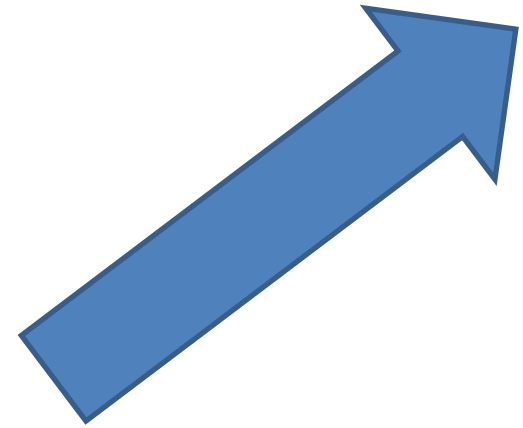


Adaptation to the environment and climate change

By 2030, we'll need a fleet that is independent of fossil fuels.



Development up to 2030



Both rail and road traffic has grown by more than one percent a year in recent decades.

By 2030 transport volumes increase by 1.9% per year on average:

- Road 1.99% pa – 59% by 2030.
- Rail 1.33% pa – 37% by 2030.
- Waterways 1.99% pa – of 61% by 2030.

Where will there be capacity?

To extend the railway is very expensive and takes a very long time.

Coastal shipping might be able to relieve the pressure on the railways.

The railways need to focus on meeting the forecast traffic growth.

Any significant shift from road to rail is less likely to 2030.

Examples of on-going activities

- Electric highways
- Mobility as a Service
- Automation of road transport
- Transports outside urban areas



Electric Roads for Heavy Traffic

Why E-highways?

- reduce energy use.
- reduce CO2 emissions.
- leverage existing infrastructure.
- create a new national field of knowledge and a new industrial branch.
- are a great field for cooperating between the political, administrative and industrial entities.





Demo site opened 22 June 2016

Scania/Siemens 40 ton
5 axles semitrailer on
E16 outside Sandviken Sweden



Mobility as a Service / Combined Mobility

- GO:SMART
- UbiGo
- A growing interest from companies and public transport authorities
- A national study on the ecosystem to support MaaS
 - Value proposition
 - Subsidising service provision
 - Legislation and policies



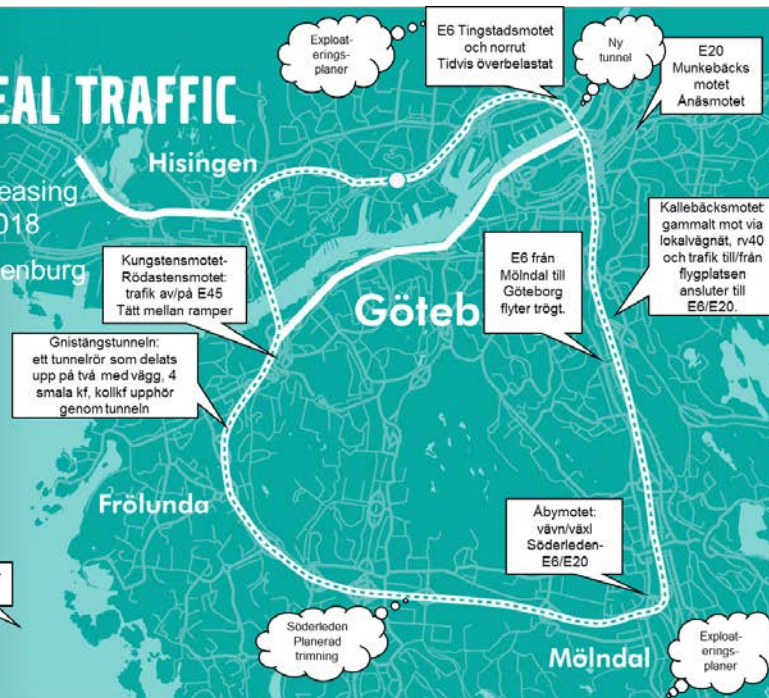
Automation of road transports



100 'normal' families will experience self-driving Volvo XC90s on public roads in Gothenburg

TEST PROBES IN REAL TRAFFIC

- 100 Volvo cars to selected leasing customers between 2017-2018
- Approx. 50 km around Gothenburg
- Typical commuter routes in and around Gothenburg
- Several lanes
- Frequent queues



- The project was kicked off in 2013, and the pilot begins in 2017
- Similar pilots will later be run also in London and China

Opportunities and challenges in mobility outside urban areas

Social dimension of sustainability

Collaboration for collective transport

Focus on accessibility

Freight distribution



Thank you for listening!
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