



Electric mobility – opportunities for sustainable transport by rail and road

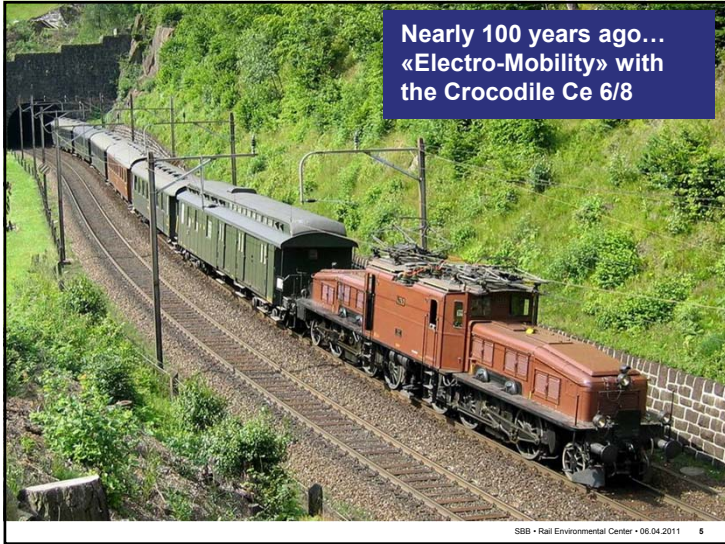
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43rd discussion forum on Life Cycle Assessment, Zürich, April 6, 2011

Agenda.

1. E-Mobility on rail and road.
2. Challenges for sustainable transport solutions.
3. Environmental comparison: rail and road.
4. E-Mobility in the context of “door-to-door” mobility.

E-mobility on rail and road.





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Challenges for sustainable transport solutions.

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Fossile fuel ressources...



Climate change...

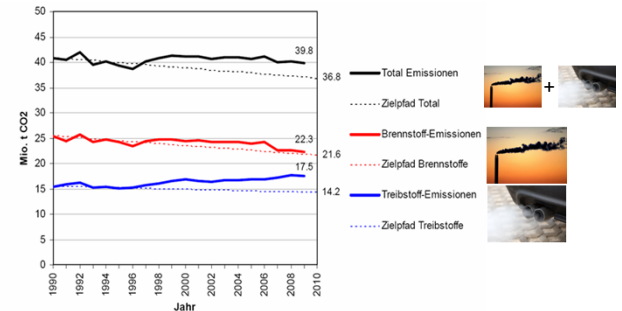


Land use, congestion, capacity constraints,...



Traffic as key challenge for CO₂ targets.

CO₂ emission in Switzerland: target & trend (BAFU, 2010):



How to transfer successful CO₂-reductions in the building sector to the transport sector?



Quelle: M. Kaufmann, BFE: Verkehr als Stolperstein für die Erreichung unserer Energieziele, Lancierung Mobitool, 1. März 2010

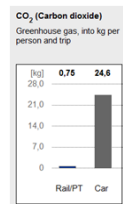
Environmental comparison: rail and road.

Tools for environmental assessments:

→ For passenger transport:

- SBB Ecocalculator in the online timetable
www.sbb.ch or
www.sbb.ch/ecocalculator

- Interactive expert tool (incl. plane, e-cars,...):
www.sbb.ch/nachhaltigemobilitaet



→ For freight transport:

- Ecological Transport Information Tool: www.ecotransit.org

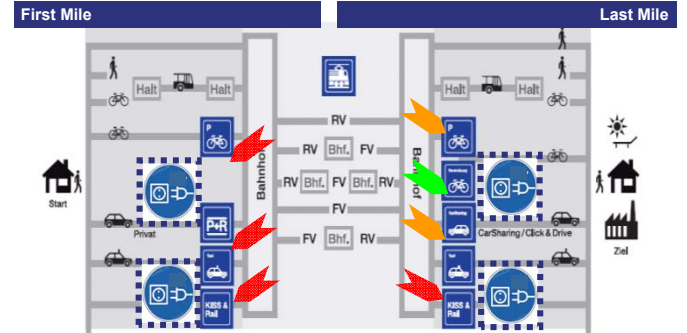
→ For passenger+freight:

- Interactive xls-file and calculator: www.mobitool.ch

E-Mobility in the context of “door-to-door” mobility.



Projects related to E-Mobility 2011+.



Bikesharing system with conventional and E-Bikes

- National system will be established in summer 2011.
- Partners: SBB, PostAuto, Rent a Bike.
- First step: 20 SBB stations (each 6 Bikes and 2 E-Bikes)
- Further roll-out planned.
- RFID-based, can be used spontaneously.



E-Carsharing

- Starting autumn 2011: 2 year test for e-carsharing at stations.
- Partners: SBB, Mobility, m-way, Siemens
- 20 cars at 10 SBB stations planned.
- Target of the test: gathering experiences with availability, usage, acceptance and profitability in every day carsharing use.



Conclusions

- Challenges of growing mobility require innovative and sustainable solutions.
- Just replacing existing cars by electric cars with same weight will not be sufficient. Consumption of energy resources, congestions, accidents and capacity problems will remain unsolved.
- Sustainable development in the field of transport can only be achieved with an holistic approach including measures for reducing traffic, modal shift to more efficient transport modes and technical optimisation of all modes.
- Lightweight, innovative electric vehicles with 2 and 4 wheels are best suited for co-modality with public transport, especially in rural areas with restricted public transport.
- SBB intends to actively support this development and to contribute to a more sustainable mobility.