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.
Nearly 100 years ago… «Electro-Mobility» with the Crocodile Ce 6/8

100 years later… «Electro-Mobility» with the new SBB double deck train

«Electro-mobility» for sustainable transport…

Challenges for sustainable transport solutions.
Fossil fuel resources...

Climate change...

Land use, congestion, capacity constraints, ...

Traffic as key challenge for CO₂ targets.
How to transfer successful CO₂-reductions in the building sector to the transport sector?

Environmental comparison: rail and road.

Tools for environmental assessments:

- For passenger transport:
  - SBB Ecocalculator in the online timetable [www.sbb.ch](http://www.sbb.ch) or [www.sbb.ch/ecocalculator](http://www.sbb.ch/ecocalculator)
  - Interactive expert tool (incl. plane, e-cars,…): [www.sbb.ch/nachhaltigemobilitaet](http://www.sbb.ch/nachhaltigemobilitaet)

- For freight transport:
  - Ecological Transport Information Tool: [www.ecotransit.org](http://www.ecotransit.org)

- For passenger+freight:
  - Interactive xls-file and calculator: [www.mobitool.ch](http://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 planed.
- 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 a 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.