



PREP

Promotion of Resource
Efficiency Projects

3rd Topic: Sustainable Transport

Background:

Transport enables individuals to move from one place to another, to go to work or to participate in social life and it allows to carry commercial goods. Transport supports the financial and social development not only of individuals but of whole regions. Therefore it is indispensable in our days and the demand for it is growing world-wide.

Besides all its positive effects transport also has several adverse effects on our health and on the environment. More than 600,000 people are dying every year in road accidents and about 50 million people are seriously injured. The World Health Organisation estimates that traffic accidents will be the second main cause of death and injury in the developing countries by 2020. Additional risks for health are coming from polluting substances emitted by vehicles such as sooty particles, sulphur dioxide and heavy metals.

According to the German Federal Environmental Agency (UBA), in Germany for example up to 150 hectares of land are consumed daily for habitation and transportation reasons especially on greenfield sites. Construction and expansion of transport infrastructure therefore pose a threat on biodiversity by causing habitat fragmentation - the splitting of natural ecosystems into smaller and more isolated units.

Most transport trends are unsustainable and estimates predict that greenhouse gas emissions and energy consumption caused by transport will double by the year 2025. If the developing countries in Asia, Africa and Latin America get motorised to the same degree as the USA and Western Europe, the consequences for the global environment, energy and economy will be devastating.

Due to the background of WISIONS the new PREP-topic 'Sustainable Transport' focuses on promoting good practice examples adopted through innovative strategies, energy efficiency and renewable energy in the field of sustainable transport. This includes for example the improvement of automotive fuel consumption, which is even more urgent against the background of the current high oil prices. Technical improvements like low-weight vehicles or hybrid-concepts can foster the energy efficiency in the transport sector and, alternative drives like fuel cells as well as alternative fuels like bio fuels or hydrogen are in the scope of interest in order to increase the share of renewable energies. Of course, not only passenger cars are of interest but also two wheelers, public transport means and the freight segment.

Next to technical improvements also structural changes in transport activity are essential on the path towards sustainable transport. In view of the ongoing growth of transport it is evident that technical improvements alone will not outweigh this development. Structural improvements mainly focus on decreasing the volume of private car use. Corresponding examples include the enhancement of Public Urban Transport and abatement strategies based on innovative settlement structures and short-distance material cycles.

Fields of Interest:

- Energy Efficiency in the Transport Sector
- Renewable Energy in the Transport Sector
- Public Urban Transport