SUSTAINABLE INFRASTRUCTURES

Sustainable mobility requires appropriate infrastructures: challenges with the construction of modal-shift infrastructures.

Shifting passenger and freight transport to sustainable transport modes requires the implementation of smart incentive systems as well as the development of high-quality infrastructures. Especially for rail transport, the further extension of infrastructures is necessary to avoid bottlenecks and time losses. For freight transport, this includes the construction of further combined transport terminals to facilitate intermodal solutions but also the further development of major railway lines. Some crucial projects have already been completed, with the Gotthard base tunnel being one major milestone. Other projects like the base tunnels on the Brenner and Lyon-Turin routes are still under development. Infrastructure development in the sensitive Alpine environment however leads to some specific challenges, especially regarding impacts on nature and landscape. But also, potential social conflicts need to be considered as all new infrastructures in the narrow Alpine valley have impacts on existing settlement structures and land-use.

Intermodal terminals and ports for combined transport

The principle of combined transport is that long-distance, mainly international transports are subdivided into a long-distance leg on rail (or sea) and a short-distance leg on road for the local distribution of goods. The hubs of such logistic chains are multimodal terminals or seaports, mostly at a central location within a region. Combined transport is more sustainable than transport on road only. However the time and cost of transshipment and still inefficient bundling of goods, are obstacles to combined transport. To guarantee efficient multimodal logistic chains, investments in terminal infrastructure and technology are necessary.

Base tunnels across the Alps to support modal shift

Cost-intensive large-scale infrastructure tunnel projects are considered fundamental by the EU as well as Switzerland to cope with increasing traffic volumes on the transalpine corridors. With the construction of tunnels, the impacts on nature and landscape and noise are reduced to a minimum. At the same time, significant time savings on long-distance routes are achieved. The Gotthard Base Tunnel is a major railway project in Siwtzerland which opened in 2016 with a route length of 57 km. The Brenner Base Tunnel, when opening in 2026, will be the longest railway tunnel in the world with a total length of 64 km between Austria and Italy. The Lyon-Turin high-speed railway line will better connect the two cities and link Italian and French rail networks. The core of the project will be a 57 km base tunnel predicted to open in 2025.

» see conflict #BalancingNature&Landscape
» see conflict #AvoidingSocialConflicts

Friuli Venezia Giulia: enhancing cooperation among nodes and connections to the TEN-T

FVG is rich with multimodal infrastructures, with three ports and four railroad terminals. Yet, the existing infrastructural and administrative bottlenecks prevent to exploit their full potential. FVG region is committed to enhancing cooperation among nodes and their connections to the TEN-T corridors in order to support modal shift to sustainable means of transport.