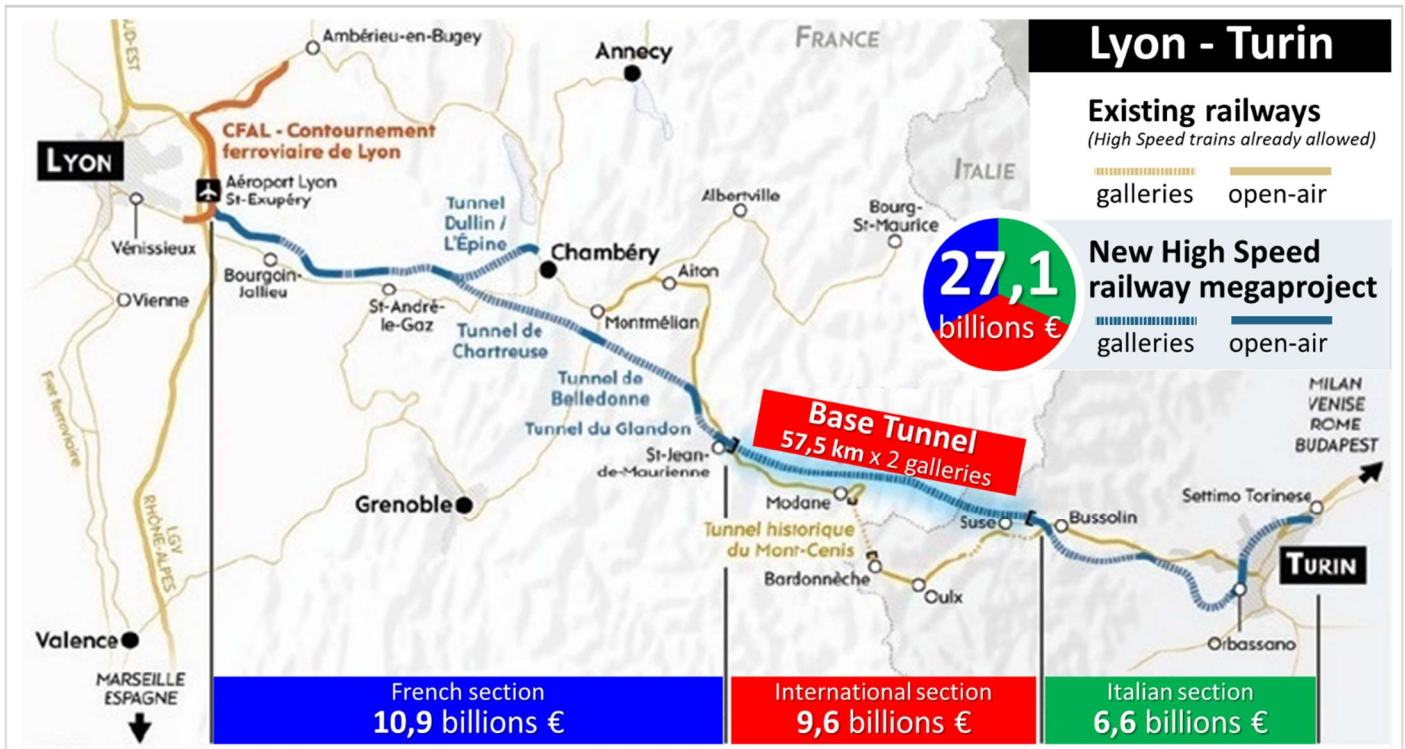


Megaprojects and Climate Emergency

The case of the new railway line Lyon - Turin

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Megaprojects against the climate emergency

The budgets of the European Union and the Member States continue to commit tens of billions of euros for investment in new transport infrastructure. Their implementation will immediately lead to a significant increase in greenhouse gas emissions, due to the enormous excavation and construction work and the production of large quantities of materials (in particular cement and steel).

In many cases these are oversized megaprojects, based on forecasts of economic growth, consumption of fossil fuels and use of natural resources, or scenarios completely incompatible with the reductions needed to combat global warming. These projects will be largely unused, not producing useful results in terms of reducing greenhouse gas emissions.

The assessment of these investments does not include rigorous analyses of these aspects. The resources currently committed to unnecessary new infrastructure are being diverted from the necessary short-term actions on the climate emergency.

The case of Lyon Turin

Conceived at the end of the 80's, on the wave of economic theories based on infinite growth, the megaproject Lyon - Turin is an emblematic case. It would be the largest public works project in Europe, with a total investment of over 27 billion euros to build a new high-speed railway line. This infrastructure would duplicate the existing railway lines between Italy and France, which already allow the transit of freight and passenger trains (including high-speed trains).

A project that never started

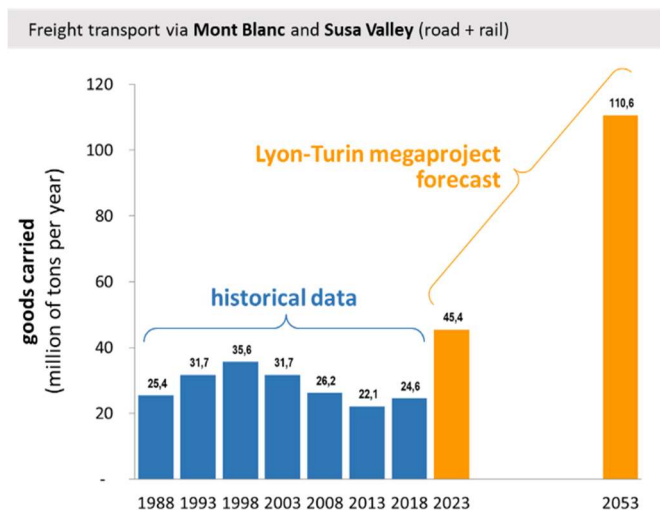
The main work would be the Base Tunnel, consisting of two tunnels 57.5 km long each, at a cost of almost €10 billion. After 20 years of preliminary work, with a cost of over 1.5 billion euros, the final work for its construction has yet to begin. Yet this Tunnel continues to commit resources in the budget of the European Union that

would like to pay more than half of the cost (more than 5 billion euros), the remainder should be paid by Italy and France.

In order for the Base Tunnel to be fully operational, Italy and France would have to spend an additional €17 billion to connect it to Lyon and Turin with two additional railway lines. To date, France has postponed this decision until after 2038; Italy has not yet defined a project for the implementation of its part.

Wrong traffic forecasts

The new Lyon-Turin railway line has been designed mainly for the transport of goods. To justify the size of the megaproject, a strong increase in future demand for freight traffic in the Alps and in particular on the mountain passes between Italy and France (Mont Blanc and Susa Valley) was assumed. The historical trend of freight flows has shown that this hypothesis is unrealistic (figure), as recognized by the proponents of the work. Moreover, such a large growth in freight transport in Europe is incompatible with the urgency of reducing its impact on global warming.



Using existing infrastructure

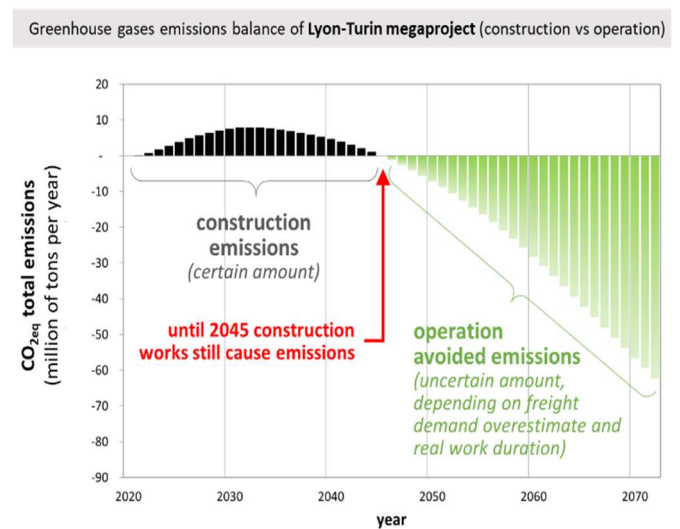
Freight transport by rail is certainly preferable to road transport by lorry. When existing railway infrastructure is underused, it is absurd to build new infrastructure. In the case of Lyon-Turin, the existing railway has a capacity that can accommodate increases in freight transport of 5 to 10 times the current traffic. French high-speed trains (TGV) already run on the same line; from

2020, Italian high-speed trains (Frecciarossa) will run on it, reducing travel times from Milan to Paris by one hour, without the need for any work or cost.

The impact of the project on the climate

The proponents of the new railway line Lyon-Turin have calculated that the construction would cause (in 20 years of construction) total emissions of 13 million tons of CO₂eq (about a third of the annual emissions of Piedmont). If construction started today, these additional emissions would occur between 2020 and 2040, i.e. in the same period in which Europe would instead have to zero its emissions to try to slow down global warming.

According to the proponents, the operation of the new line would begin to generate reductions in greenhouse gas emissions (transferring goods from truck to train) only 24 years after the start of construction, reaching results at full capacity, i.e. well beyond 2040. However, these potential positive effects are largely overestimated as they are based on erroneous traffic demand forecasts and an implementation programme that is no longer valid today (particularly in France).



Air pollution in Turin

Air pollution in Turin and Piedmont is a real emergency. On average 240,000 vehicles a day pass through the Turin ring road (of which about 80,000 trucks), a traffic equal to 40 times that of the Fréjus motorway tunnel, between Italy and France. As in many urban areas of Europe, investments are needed on local transport and not on megaprojects such as Lyon-Turin.