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Swiss Confederation

Federal Department of the Environment,
Transport, Energy and Communications

Federal Office of Transport

Global Rail and Energy workshop

Rail transport in Switzerland

24th September 2018

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Rail transport in Switzerland

Topics:

- Swiss transport policy
→ challenges and measures
- Performance trends
- Swiss energy policy for public transport

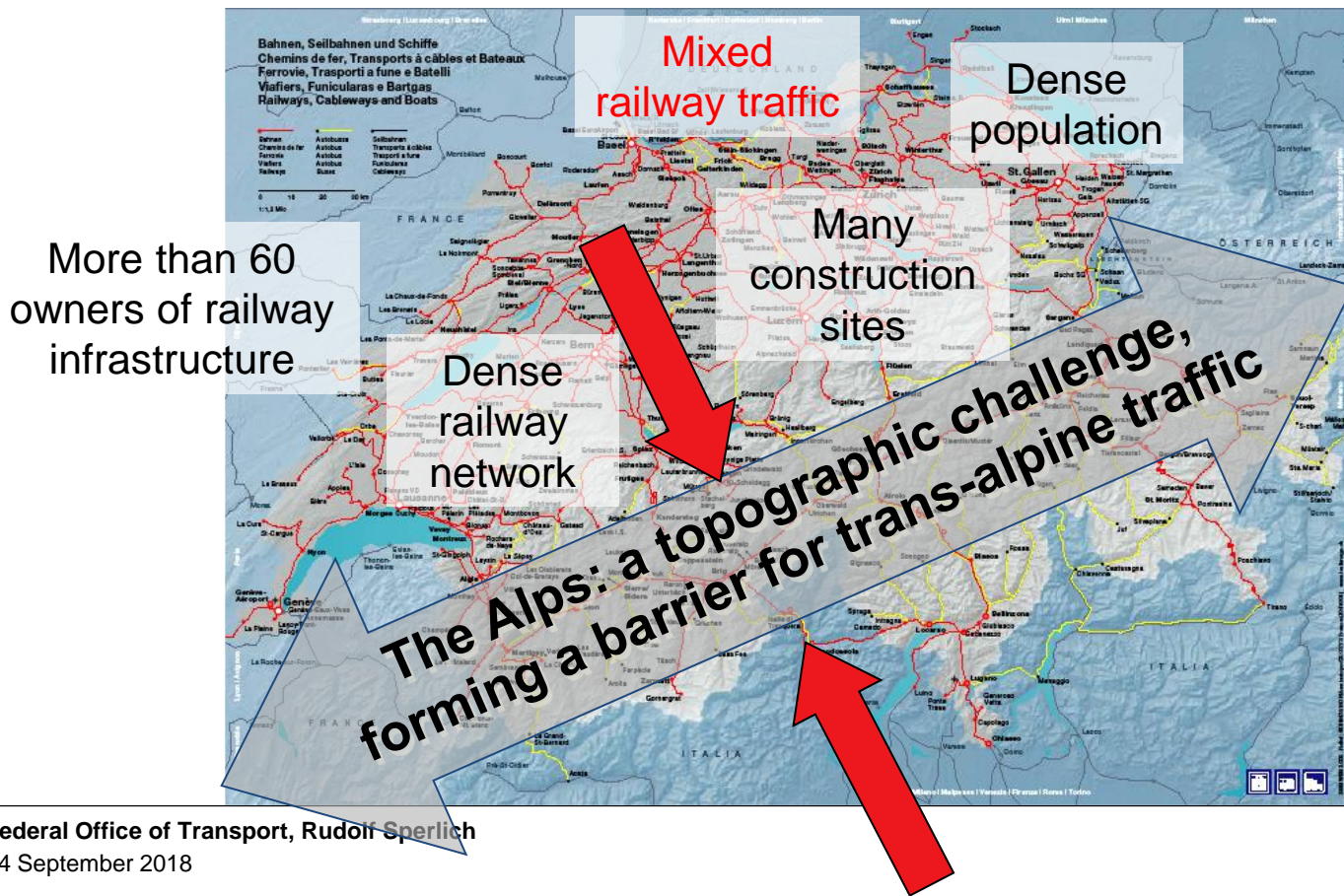


Switzerland: in the heart of europe but not a member of the EU

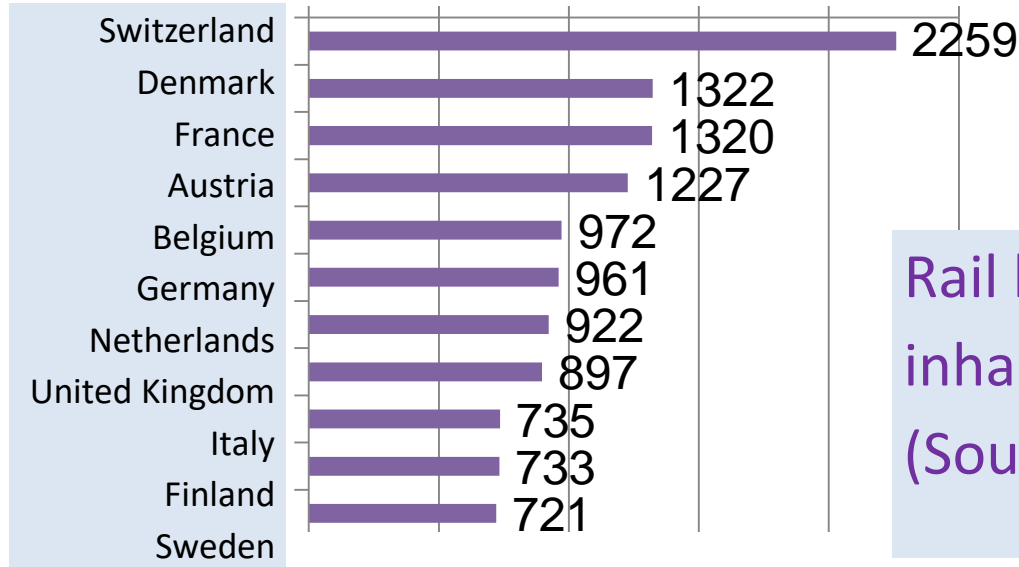




Switzerland: challenges for rail transport



A country of rail travellers in a very dense railway network



Rail kilometres per
inhabitant per year
(Source: UIC/Litra)

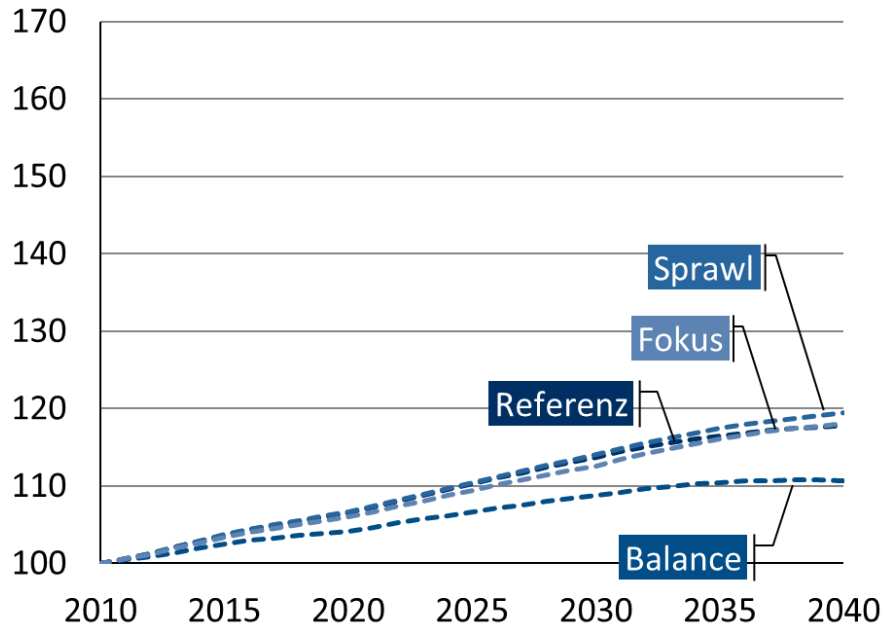
The Swiss are the European champions of train travel.
Only Japan has similar figures.



passenger traffic: performance trend scenarios

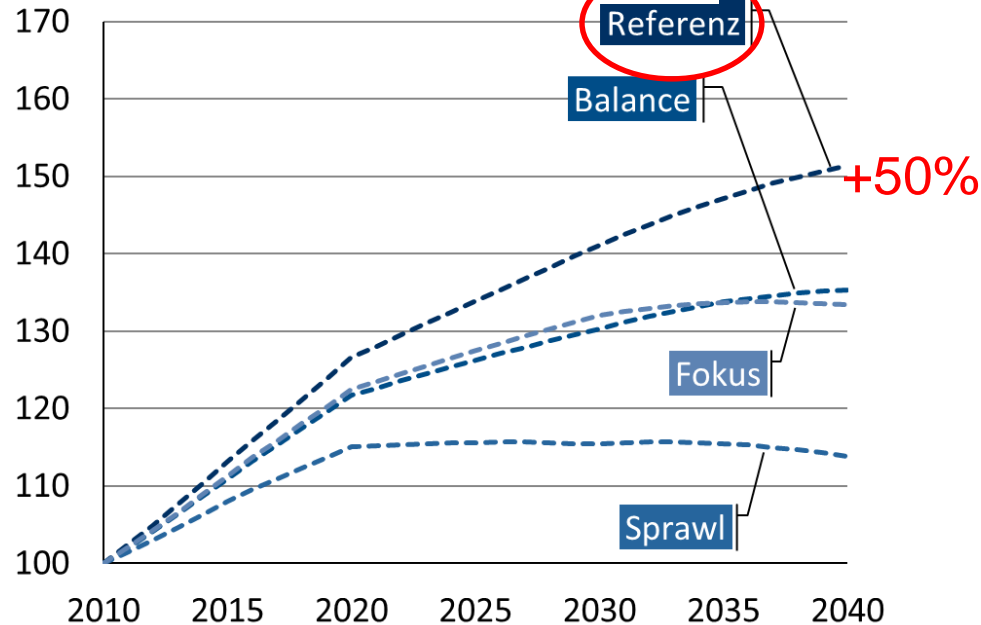
road traffic

Index (2010 = 100)



public transport

Index (2010 = 100)

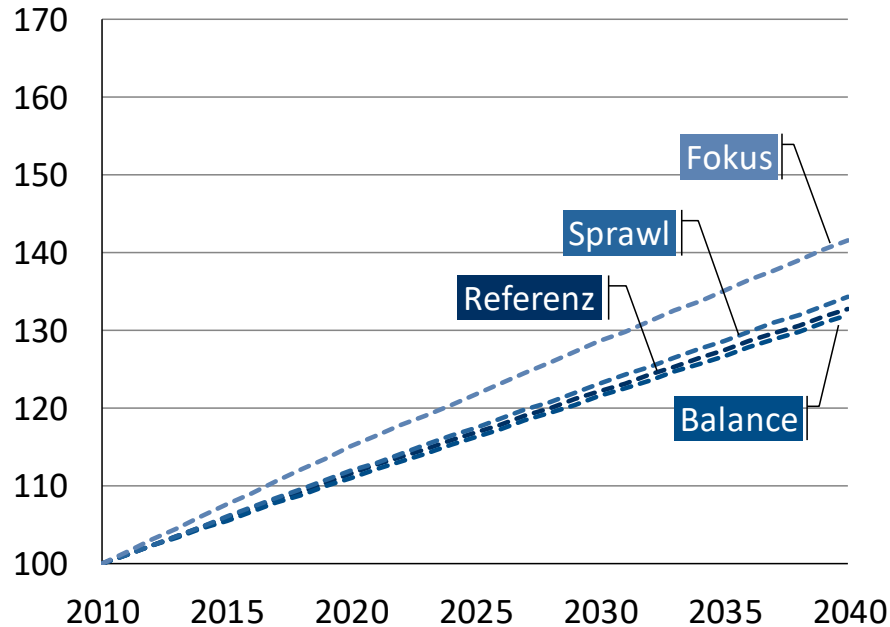




goods traffic: performance trend scenarios

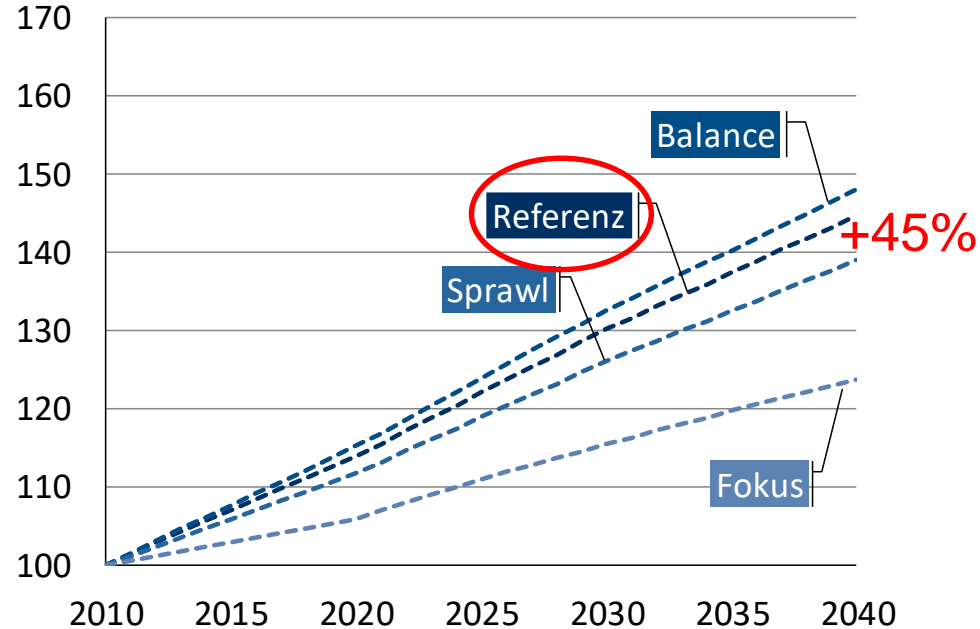
road performance

Index (2010 = 100)



rail performance

Index (2010 = 100)



Swiss transport policy in brief



- Development of an environmentally and socially sound transport and traffic system...
- ...economically sustainable...
- ...and embedded in the European environment



Adoption of the 1994 Alpine Initiative: mandate for a shift of goods transport from road to rail

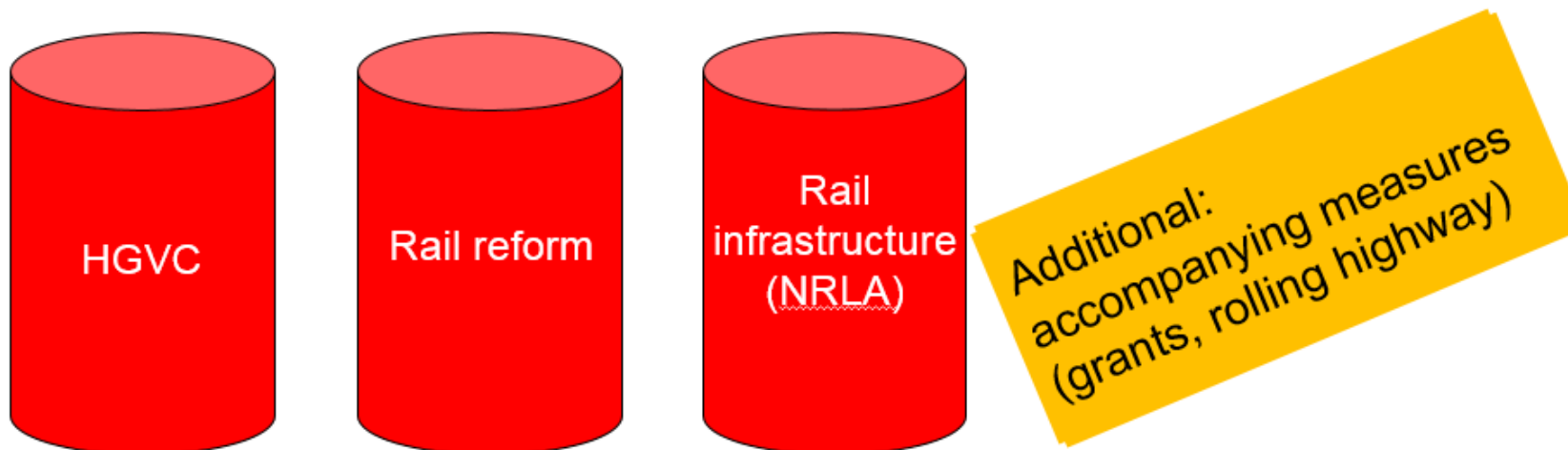
- Requirement: Goods traffic passing through the Alps should be shifted onto rail from border to border
- Justification for Swiss modal shift policy
- Implementation: does not discriminate foreign countries





Implementing the modal shift mandate: three pillars

Target: Reducing trans-alpine road transports to 650,000 by 2018





Heavy goods vehicle charge (HGVC)

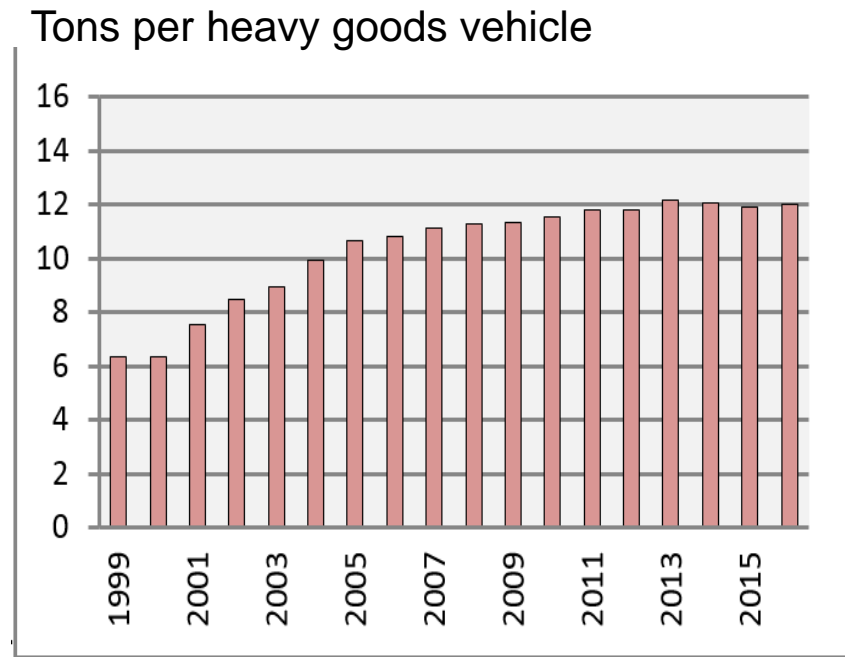
A funding and steering system

- Applies to all heavy goods vehicles over 3.5 t
- Mileage and emission dependent
- A lorry weighing 40 t is charged approx. CHF 1/km
- 2/3 are used for financing rail infrastructure,
1/3 distributed to the cantons



40 tons and HGVC: road traffic gets more efficient

- More freight transported with less trucks
- Faster renewal of the vehicle fleet:
2017: 92% = EURO V and VI





Increased competition thanks to rail reform



Rail reform



The new railway link through the Alps (NRLA)





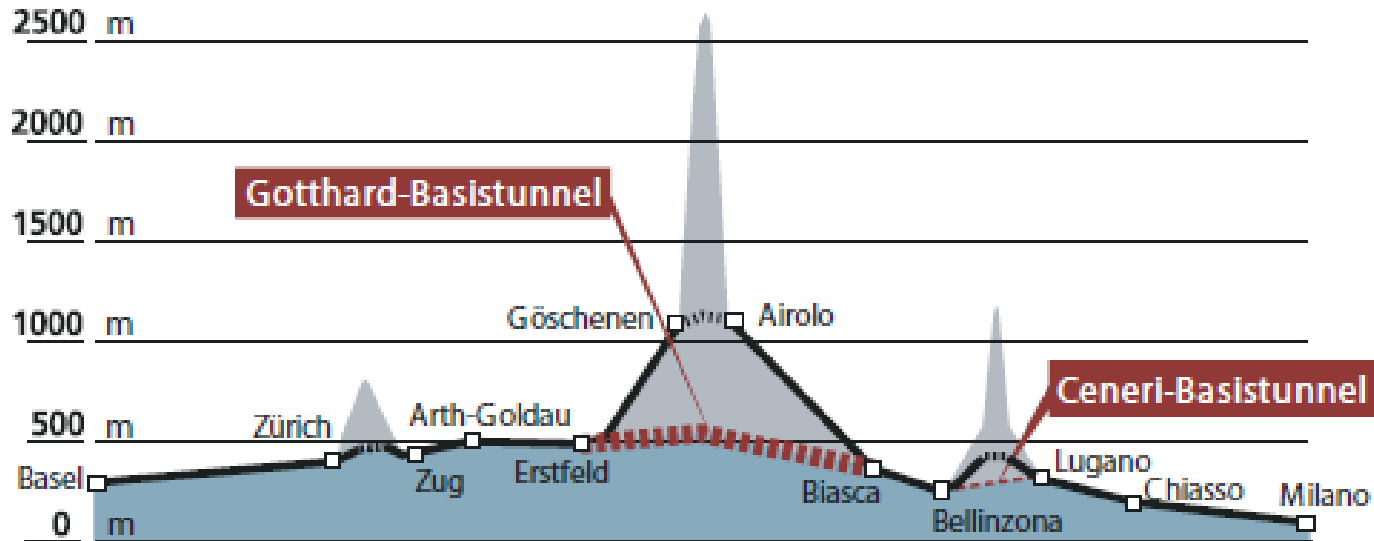
The Gotthard and Ceneri base tunnels



- Longest railway tunnel in the world – 57 km
- Two single-track tubes
- Highest point 550 m above sea level
- Daily capacity of 260 goods trains and 65 passenger trains
- Journey time saving of 45 minutes once the route is complete (2020)

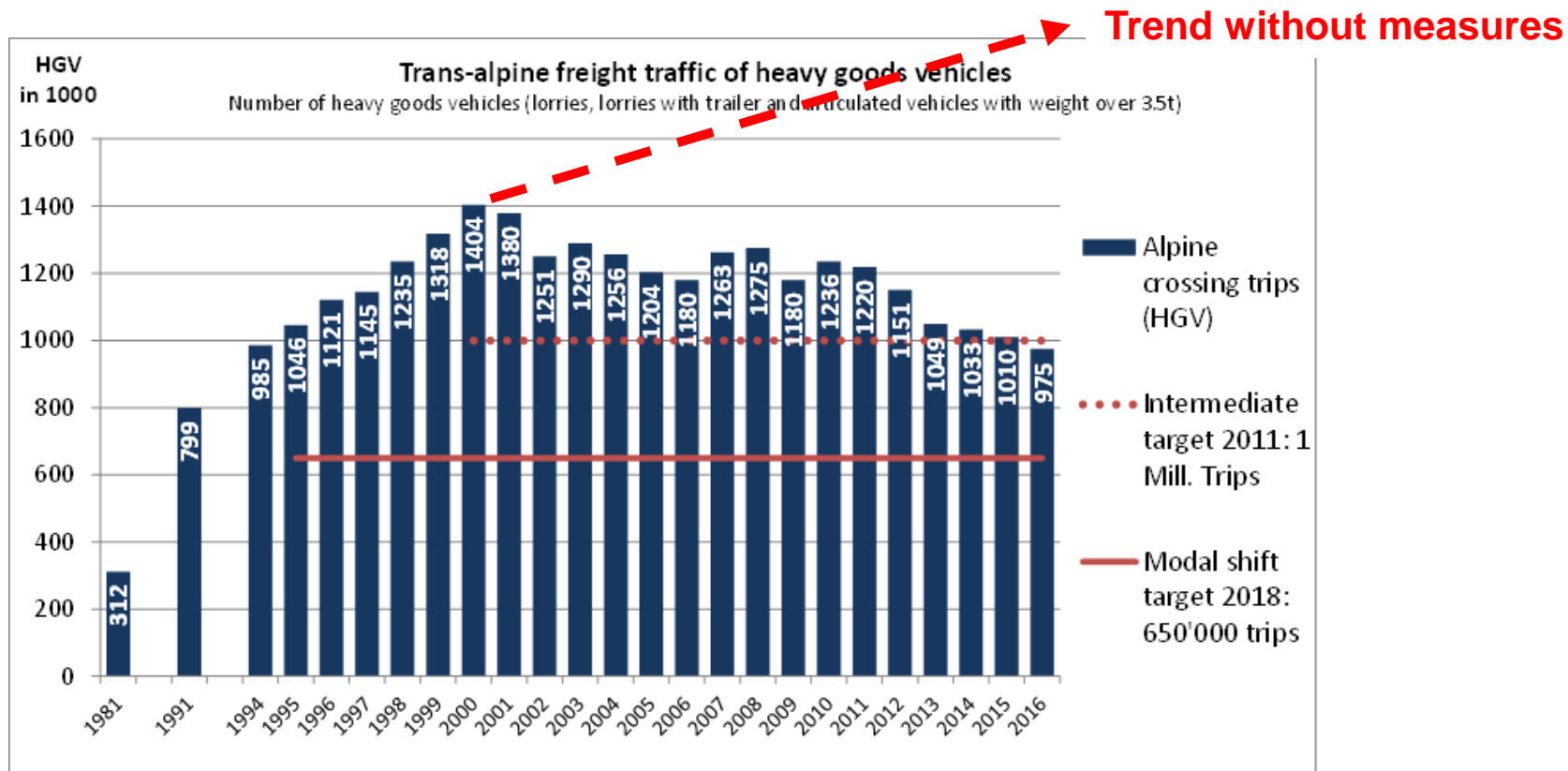


Gotthard Base Tunnel: Crossing the Alps without slopes





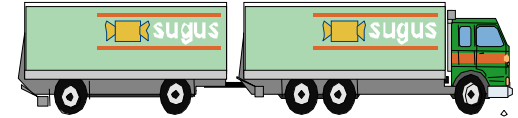
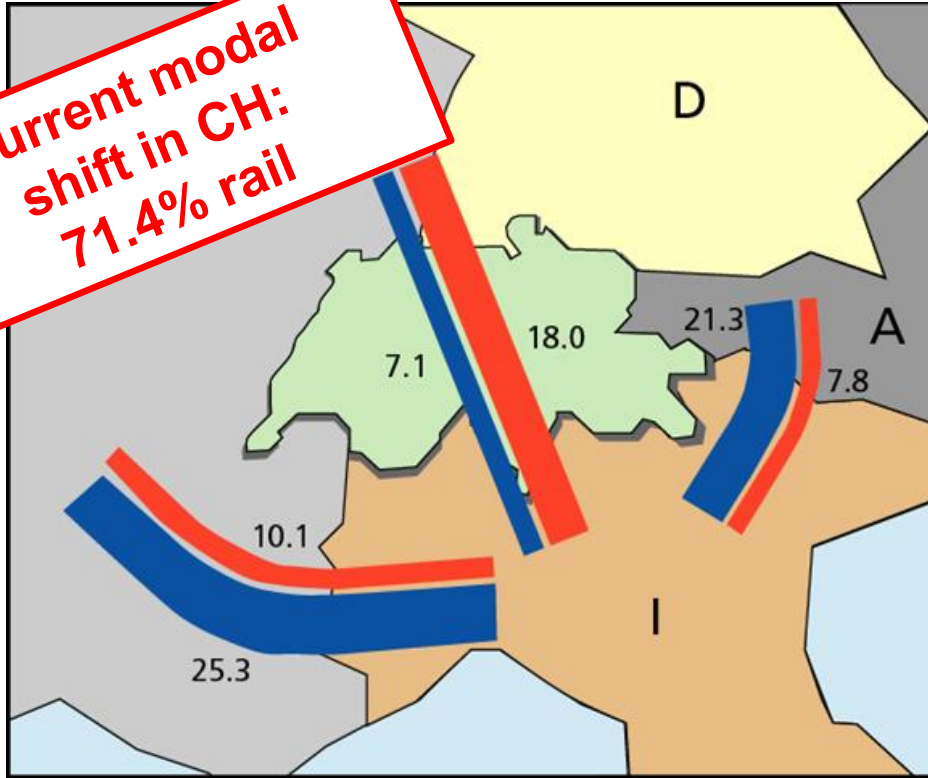
Trans-Alpine freight traffic on the road



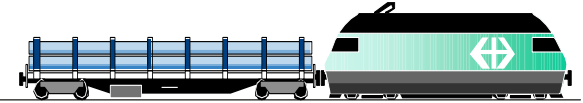


Modal shift on the alpine goods transport corridors

current modal
shift in CH:
71.4% rail



Road

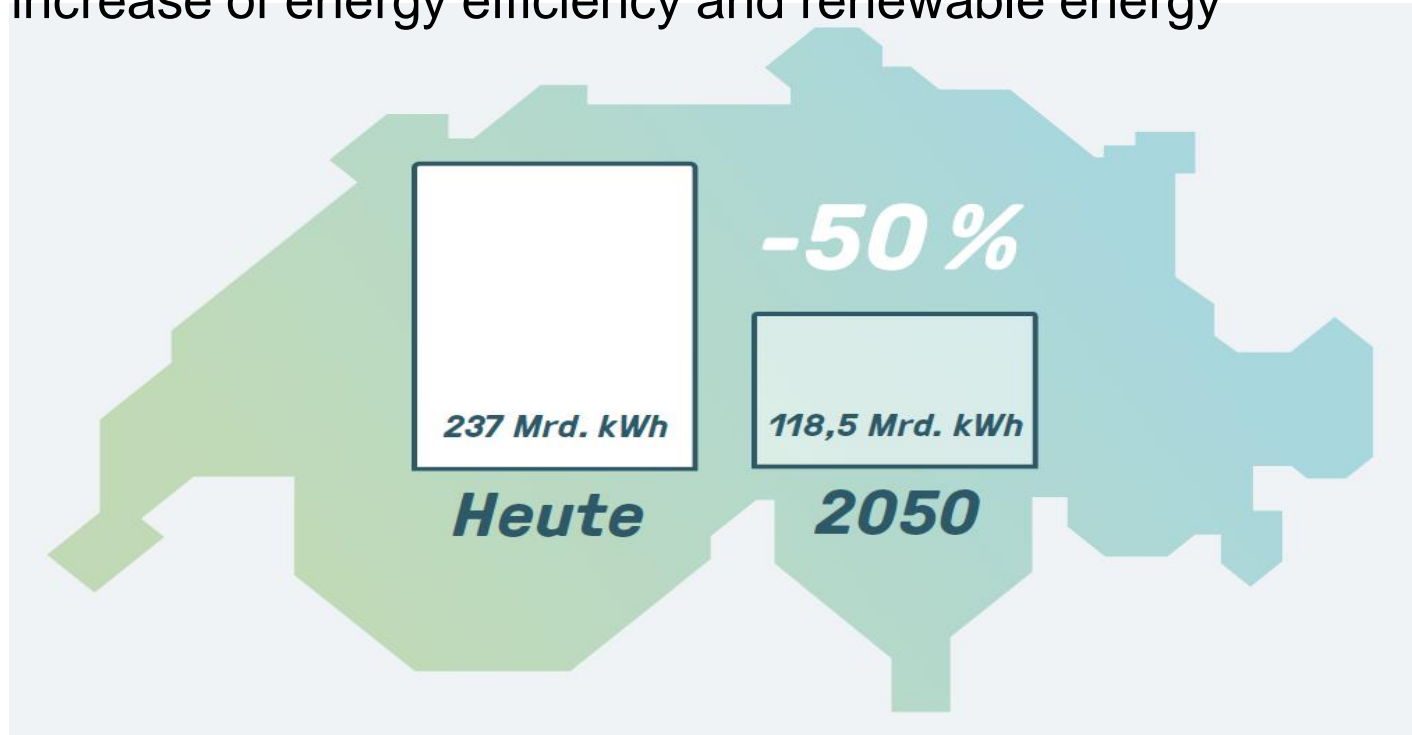


Rail



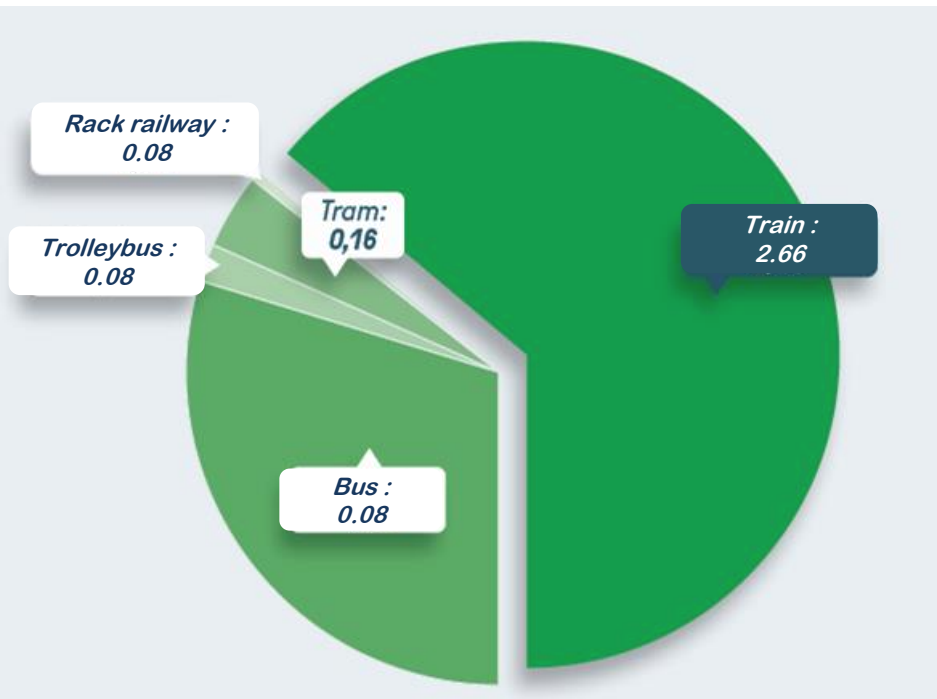
Goals of the Energy Strategy 2050

- reduction of energy consumption
- increase of energy efficiency and renewable energy





Energy demand in public transport



PT energy use in 2017: 4 Mrd kWh

Goals of Energy Strategy for Public Transport 2050 (ESPT 2050)

1. Increase energy efficiency
2. Produce renewable energy
3. Reduce CO₂ emissions
4. Opt out of nuclear energy



Structure of the Programme ESPT 2050

The programme has three main approaches:



Financial support



Knowledge

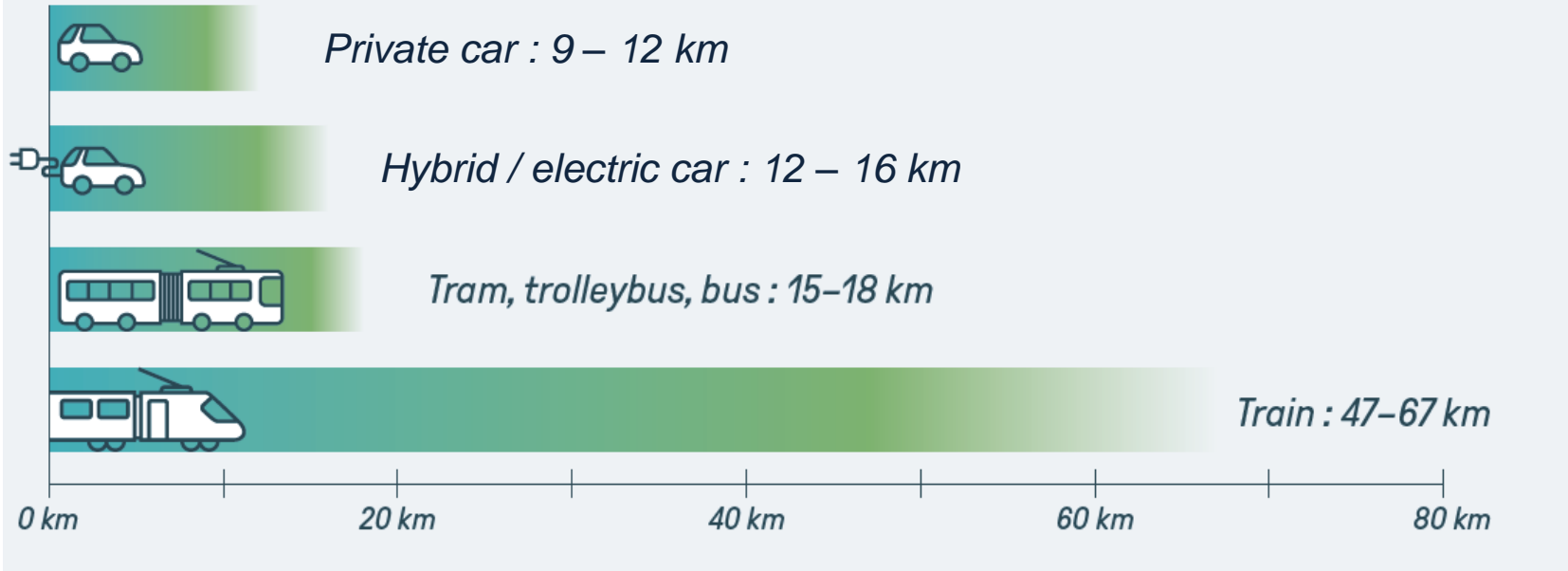


Info network



Making the most out of specific competitive advantages of all transport modes

How far can I go with 1 liter fuel - or 1kWh ?



Conclusion: factors of success

- Transport and energy policy are supported by the Swiss population
- Political and social culture: in Switzerland, railway is the «good» transport system
- Make investments in rail infrastructure to ensure the needed capacity improvement
- Create the right incentives for market players
- further improve the competitive advantage of all public transport modes in terms of energy efficiency



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A scenic landscape photograph showing a Swiss high-speed train (TGV) traveling through a lush green valley. The train is red and white, with the Swiss flag logo on its side. In the background, there are snow-capped mountains under a blue sky with scattered clouds. The foreground is a field of yellow wildflowers.

Thank you!