

The concession model to step up carbon intensity reduction in medium- and long-distance mobility

There are many solutions to reduce transport sector emissions in dense areas and over short distances. However, many of these mechanisms are not ineffective for medium distances (from 10 to 100km). As regards commutes to work in France, two thirds of the working population work outside their municipality of residence. While the share of journeys made to conduct a professional activity only accounts for 29% of the total number of journeys, these journeys nevertheless represent a significant share of total distances travelled. On the motorway network entrusted by concession to VINCI Autoroutes, commutes to and from work account for 41% the distances covered.



Reducing carbon intensity in mobility cannot ignore motorway travel over medium and long distances. Journeys made by motorway account for 6% of France’s total CO₂ emissions and 20% of the transport sector’s CO₂ emissions. To what extent can the concession model step up carbon intensity reduction in medium- and long-distance mobility?

→ **FUNDING WHILE REGULATING VEHICLE TRAFFIC**

A concession agreement is an instrument that enables the State to carry out a public service mission (investment, construction, operation of services) through a concession holder. Through this instrument, the State transfers a large portion of the risks (concerning roadworks, funding, traffic) to the concession holder. In return, the holder collects payment by installing a toll bridge with a view to covering the costs invested by the concession holder for the construction, operation, maintenance and improvement of the infrastructure²⁰⁷. The toll also introduces a cost for using the infrastructure. The concession model is based on the “user pays” principle²⁰⁸, which ultimately limits use of the infrastructure. The toll is a regulation instrument which is also used to cover total external costs²⁰⁹ related to vehicle traffic. A working paper by the French Treasury Directorate states that only the long-distance network comes close to near-total (87%) and even total (125%) coverage of total external costs of vehicle traffic²¹⁰.

Infrastructure tolls on the concession network internalise a large portion or even all externalities generated by vehicle traffic and the amounts of tolls cover the external costs generated by pollution or congestion for example. On the non-concession network, these costs are only covered to a very low extent due to the lack of a mechanism to internalise them.

→ **TAKING A LONG-TERM VIEW OF CARBON INTENSITY REDUCTION**

The concession model is a comprehensive agreement used to create synergies between infrastructure operation and investments made. By entrusting an infrastructure to a concession holder, the State can also promote the development of innovations in the construction and management of road infrastructure.

Various innovations are leveraged to take action on all scopes. These are analysed as part of corporate greenhouse gas assessments. The ranking into scopes creates emissions categories according to various operational perimeters and separates direct emissions related to the company’s activity from indirect emissions. Thereby scopes 1 and 2 focus on direct and indirect emissions related to energy consumption while scope 3 focuses on other indirect emissions which, in the case of motorway concessions, account for the majority of emissions, as these are their customers’ emissions.

In November 2019, VINCI Autoroutes and *Région Sud* entered into a partnership agreement to promote the *Autoroute Bas Carbone* (Low-Carbon Motorway)²¹¹. This approach strives to reduce the carbon footprint of the motorway sector. It is organised into four priorities to act on all scopes.

As regards scopes 1 and 2, the strategy is to reduce emissions generated from the energy consumption of buildings and vehicles used for network operation and to promote the production of renewable energy near points of motorway access (toll bridges, services, etc.) and agricultural areas, recycling of non-hazardous waste collected on the network and of materials used for motorway surfaces and the creation of environmentally-friendly networks.

For scope 3, the challenge for motorway concession holders is to promote the reduction of carbon intensity in everyday forms of mobility. This means that the concession holder wishes to leverage the motorway network to develop new uses of less carbon-intensive mobility, in particular in rural and peri-urban areas. The aim is to promote the provision of mobility which meets the requirements and expectations of French citizens with a view to reducing the share of car journeys. Motorway concession holders are in particular relying on the development of

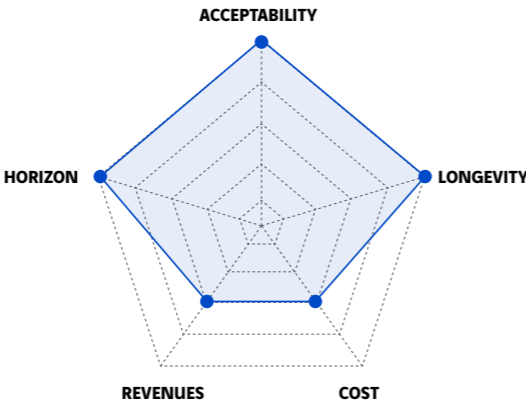
public transportation (express buses, carpooling) or carsharing to reduce the carbon intensity of journeys on the concession network. This ambition also demonstrates the key role played by infrastructure, and therefore the concession holder, in stepping up a transition through several means (carpooling parks, priority lanes, multi-modal transit hubs, etc.). Moreover, other innovations reduce emissions generated by traffic. The presence of 675 non-stop toll collection lanes on France’s concession network prevented emissions of more than 124,000 metric tons of CO₂ equivalent in 2019²¹². Ultimately, the development of free flow lanes ensuring maximum speeds under toll bridges will bring about additional savings in CO₂ emissions. The concession model also allows the concession holder, who is in charge of operating the network, to implement and finance measures with a view to reducing the carbon intensity of mobility²¹³.

→ **THE RISK OF A DISTINCTION BETWEEN COLLECTOR AND OPERATOR**

The current changes with regard to road pricing, in particular aimed at HGVs, create a clear distinction between the management and operation of infrastructure and the collection of the toll. Under the French *écotaxe*, which is set to apply to HGVs on the non-concession network, the company collecting the toll (*Ecomouv*) should have maintained only the gantries. This separation between collector and operator may bring a risk to bear on the long-term continuation of the concession model if a concession holder decides to no longer allocate revenues to road maintenance. It makes systemic action on mobility and the operation of the infrastructure concerned by the concession impossible.



→ **READ THIS REPORT ON OUR WEBSITE BY SCANNING THIS QR CODE.**



 | **Who pays?**



STATE



COMPANIES



TAXPAYER

 | **What scale of implementation?**



LOCAL



NATIONAL