

Transport

France's transport policy aims to reduce greenhouse gas emissions by 20% by 2020 along with the sector's dependence on hydrocarbons. In order to achieve that, the priority has been given to modal transfer and complementary and less polluting means of transport by reducing unnecessary travel and developing innovative systems meeting economic, ecological and social cohesion requirements.

Means of execution

National judicial framework

An entire chapter on the Grenelle 1 programming Law (Section 1, Chapter III, articles 10 to 17) is dedicated to transport issues.

Amongst the main points adopted:

- For merchandise transport, the priority is given to multimodality with the objective of increasing the modal or non-road and non-air transport portion from 14% to 25% by 2022.
- Promote the development of rail and sea highways.
- Ensure rail and river access to ports.
- For passenger transport, reduce the use of hydrocarbons, increase energy efficiency and prioritise collective transport, including dedicated site public transport (TCSP).
- For vehicles, reduce average CO₂ emissions from 176 g/km to 120 g/km by 2020.
- Draw up a national transport infrastructure plan.
- A quest for innovative solutions for funding infrastructures, equipment and transport services.
- Modulation and regulation of use in travel trends, so as to combat congestion.

Education, training, awareness raising

Information campaigns, such as "Bougez autrement" (a different approach to travel)¹, are organised each year in September as part of the European Mobility Week. The purpose of these campaigns is to inform the public on the issue of urban transport and encourage them to modify their behaviour in favour of alternative forms of transport.

The "eco-citizens" space on the ADEME site proposes many tools for rapid calculations of the impact of each travel solution and suggestions to reduce it. Other sites, such as the SNCF², also propose eco-calculators which allow you to compare the environmental costs of several means of transport (train, plane, car, etc.).

Eco-driving, which appears in article 11 of the Grenelle 1 Law, is now compulsory in basic and vocational training for professionals of the road. Since the summer of 2006, questions concerning eco-driving are included in the driving test. They raise awareness amongst new drivers as to the least polluting driving habits and which can bring fuel savings of 13%.

Also, the website www.toutsurlenvironnement.fr contains an area dedicated to

¹ www.bougezautrement.gouv.fr/bougezautrement/

² www.voyages.sncf.com

transport. It carries information on transport and its interaction with the environment, and in particular on the environmental impacts of different forms of transport and technological innovations in vehicles. It also proposes explanatory datasheets answering the most frequently-asked questions in this field, for example less energy and fuel hungry driving.

In parallel, the Grenelle 2 bill should accelerate the distribution of information on the CO₂ content of different travel solutions³.

Capacity building of institutions

The Directorate General of Infrastructures, Transport and the Sea (DGITM) is one of the eight general entities of the MEEDDM. Its main mission is to promote a modal transfer policy (switch from one form of travel to another), placing the sustainable development priority at the heart of each decision making stage. The DGITM Directorate General was created in July 2008 so as to prepare and implement the terrestrial and maritime multimodal policy respecting sustainable development principles. It plays a cross-sector role, taking responsibility for all issues relating to terrestrial and maritime transport, but also the planning of airports.

Engagement of financial resources

The finance law voted annually by Parliament contains two conventional headings: "Transport infrastructures and services" and "Maritime safety and affairs" and a specific heading: "Research in the field of transport, equipment and housing". For the first time in 2009, a multi-year finance bill was voted to provide longer term visibility on the financing of major infrastructure operations. The use of public-private partnerships is developing progressively to finance such projects. A particular example of this is the funding of the high-speed train link (LGV) South-Europe-Atlantic.

The French Transport Infrastructure Financing Agency (AFITF), set up in 2004, represents a cornerstone of funding for major transport infrastructure projects sponsored by the State, in conjunction with additional funding from local authorities, public establishments and European funds. It accompanies the government's policy in the implementation of a multimodal equipment policy, providing the State's contribution as well as multi-year programming, with greater clarity for all those involved.

Cooperation frameworks and partnerships

As part of the work of the National Public Debate Commission⁴, major transport and infrastructure projects are subject to a compulsory public consultation procedure. The Grenelle Laws include a reworking of this procedure. On the subject of good sustainable development practices, voluntary commitment charters between federations of companies and the State can be signed. They allow the initiation or reinforcing of practical actions with a view to going beyond mandatory minima in terms of sustainable development, such as reducing vehicle fuel consumption and

³ Article 85 of the Grenelle 2 Law: "The beneficiary of a passenger transport or goods transport service is informed by the Transport Commissioner, or failing that by the transporter, of the quantity of carbon dioxide emitted by the different forms of transport allowing the operation to be completed. Decrees establish the implementation of these provisions and in particular specifying the minimal length of travel, which cannot be less than 100km, beyond which information is compulsory, methods for the calculation of carbon dioxide emissions and information procedures for the person using the service."

⁴ www.debatpublic.fr

CO₂ emissions.

Theme-based issues

Policies led and progress achieved in access to transport

Article 13 of the Grenelle 1 Law states that the development of collective transport is a priority issue in peri-urban and urban zones. This development contributes to the disenclaving of sensitive areas, in particular as part of the *Espoir Banlieues* plan (set up in 2008). This article also lays out the development of dedicated-site public transport outside the Île-de-France area (public transport which uses dedicated lanes or areas) so as to increase the total length of dedicated routes from 329 kilometres to 1,800 kilometres. The investment cost of this programme is estimated by the authorities concerned at 18 billion Euros. Article 15 of Grenelle 1 modifies Law No. 82-1153 of December 30th 1982 on the orientation of domestic transport and requires that transport policy *"in its infrastructure planning, takes into account the challenge of disenclaving, development and competitiveness of territories, including cross-border issues"*.

Supporting "clean" fuels

In order to promote the development of bio-fuels, a penalty in the form of a supplement to the General Tax on Polluting Activities (TGAP) is levied upon fuel retailers who do not achieve the objective of incorporating 5.75% of bio-fuels into their products according to Community directive 2003/30/EC. Furthermore, there is partial exemption from the TGAP for bio-fuels and total exemption for pure vegetable oils used as agricultural fuel.

On October 9th 2008, the "decarbonised vehicle" plan was set up to develop a French business sector for batteries and powertrains for hybrid vehicles and electric vehicles. A national infrastructure deployment strategy for recharging stations required for these vehicles was launched on February 17th 2009. Its purpose is to accelerate and coordinate the installation of infrastructures: rapid charge points, or even battery exchange stations. Its objective is to accompany the transition that the French automobile industry will undergo in favour of products which are non-fossil fuel dependent, consume less energy, emit fewer emissions and are less polluting. The workgroup set up by the Government for this purpose is currently running a development programme for these infrastructures.

Directive 2009/28/EC of April 23rd 2009 on the promotion of the use of energy produced from renewable sources, establishes an objective of 10% renewable energies in the transport sector. A national action plan will produce an information chain between economic players (producers, transporters, distributors) so as to validate these environmental criteria, including the quantity of greenhouse gases emitted throughout the chain, production and distribution.

Promotion of energy performance

Since December 5th 2007, France has practised an ecological "bonus/malus" system. The system rewards those buying new cars which emit less CO₂ through a discount at the time of purchase, and penalises those who opt for the most polluting models through a higher sale price.

The Grenelle 1 Law requires fuel suppliers to undertake actions to reduce fuel consumption.

The State reiterated its determination to develop the use of hybrid or hybrid-electric

vehicles in its circular of December 3rd 2008 on the exemplarity of the State in respect of sustainable development in its operations, services and public establishments. On September 23rd 2009, the Ecology Minister announced a project for the purchase of 50,000 electric vehicles by the administration.

Governance concerning transport

Under the Domestic Transport Organisation Law of December 30th 1982, promoting the principle of organising public transport, urban transport is the responsibility of transport authorities. Territorial authorities at any level can take responsibility for collective transport (region, county, community of communes or even commune) and be "Transport authorities" themselves.

Article 12 of the Grenelle 1 Law states that:

"In order to promote heightened governance in terms of transport cooperation in metropolitan areas, and the best possible coherence of the urban and peri-urban collective transport systems in the major population areas, experiments may be set up to allow the transport authorities concerned to entrust a semi-public syndicate – the metropolitan authority for sustainable mobility – with extended powers in terms of organisation and coordination of public transport in a given area."

Also, the development of multi-modal transport solutions, as alternatives to the use of private cars or trucks, is favoured. It concerns in particular the organisation of complementary transport solutions and associated services such as the French Multimodal and Ticketing Information Agency (AFIMB) which is currently being set up, as well as the promotion of alternative forms of transport. Finally, the mobility and transport of passengers and goods must be reconsidered in respect of environmental, social and health issues, with guaranteed accessibility, safety and security. This will mean in particular taking priority collective needs of public transport into account in urban planning decisions.

Particular attention is paid to hazardous merchandise transport with the setting up of a mapping system to monitor the main routes followed.

Planning urban transport and urban transport policies

Law No. 82-1153 of December 30th 1982 on the orientation of domestic transport, amended by the Grenelle 1 Law, organises the domestic transport system so as to satisfy the needs of users under the most beneficial economic, social and environmental conditions for the locality.

The Grenelle 1 Law prioritises public transport and limits the development of road and airport projects (article 11, Grenelle 1). Travel plans are encouraged as are little or non-polluting transport solutions. Emphasis is placed on improving transport infrastructure in Île-de-France (article 13, Grenelle 1).

Article 11 of Grenelle 1 "*The development of the use of public passenger transport is a priority. To this end, for inter-urban and peri-urban travel, in terms of infrastructure, priority will be given to rail investments over the development of road or airport projects.*"

Article 11, Grenelle 1 "*I – In urban and peri-urban zones, the sustainable transport policy seeks to reduce greenhouse gas emissions, pollution and other nuisances. To this end, the State will encourage the introduction of company, administration, school or industrial site travel plans as part of their urban travel plans, as well as the development of car sharing, car-pooling and teleworking, walking and cycling, particularly through the adoption of a charter of road users... III. – Outside Île-de-France, there is a plan to develop dedicated-site public transport so as to increase*

their length from 329 kilometres to 1,800 kilometres within fifteen years..."

Article 11, Grenelle 1 "*In Île-de-France, an advanced public transport plan will seek to increase the fluidity of travel and in particular from suburb to suburb. To this end, a structuring ring road with an automatic metro will be launched after consultation with the transport authority and in addition to the other transport infrastructure projects already undertaken as part of the State-region projects contract. The public consultation procedure will take place in 2009 on the ring road project as a whole. [] Finally, the RATP and Francilienne SNCF network will have to be renovated, rolling stock modernised and the punctuality of trains improved, along with travelling conditions for passengers. This will have to allow real time, easily-accessible information on traffic conditions throughout the network, delays and cancellation of trains.*"

Furthermore, the National Transport Infrastructure Plan (SNIT), which is currently in preparation, establishes guidelines for the State regarding maintenance, modernization and development of transportation networks under its competence, reduction of environmental impacts, use of agricultural or natural land and subsidies for local governments to develop their own networks. It seeks to prioritise conditions for transfer to the most environmentally friendly means of transport. The SNIT mentioned above will be reviewed on a global and regular basis, as a national planning instrument

Marine system norms

Appendix VI of the MARPOL Convention (or Convention of London) has been revised for the prevention of pollution by ships. [The amendment considerably lowered the existing limitations:](#)

These limitations apply to all diesel motors with a power above 130kW, regardless of the size or navigation type of the ship. Each motor must have an EIAPP certificate delivered for the entire lifetime of the motor.

- Definition of a new threshold (level 2), 2,5g/kWh lower than level 1. This threshold will apply to all motors installed after January 1st 2011 (major transformation or new ship)
- Definition of a new threshold (level 3), 80% lower than the level 1 that is currently enforced. This threshold will apply to all motors installed after January 1st 2016, and when the ship enters an Emission Control Area (ECA = Channel, Northern Sea and Baltic Sea))
- Diesel motors installed on ships built between January 1st 1990 and January 1st 2000 with an existing power above 5MW and an engine capacity above 90L per unit must cut down emissions according to level 1 limitations.

The schedule for cutting down the quantities of sulphur in fuels is as follows :

-
-
- 1% in ECAs by July 1st, 2010
- 3,5% globally (outside of ECAs) by July 1st 2012
- 0,1% in ECAs by July 1st, 2015
- 0,5% globally (outside of ECA's), by July 1st 2020 or 2025, depending on whether the fuel is available
- a ban on the use of refrigerant gases in refrigeration equipment which have been classified as substances damaging to the ozone layer,

-

Planning in anticipation of the effects of climate change

Responding to article 42 of the Grenelle 1 Law, a national adaptation climate change plan is currently in preparation. It will be finalised by 2011. The purpose is to organize the review of reference sets for the construction and maintenance of transport networks and to establish new traffic management doctrines based on risk analyses, preparation, surveillance and management of extreme weather episodes. Locally, it will upgrade adaptation strategies to address climate risks.

Numerous climate change adaptation plan initiatives are being developed at sectoral or infra-national levels (Nord-Pas-de-Calais Region and Bassin de la Loire, for example).

Development of research and development into all technologies linked with transport (public and private sectors)

Since 1990, France has been equipped with a coordination tool providing incentives for research and innovation in the terrestrial transport field: the Research and Innovation Programme in Terrestrial Transport (PREDIT). The fourth programme (2008-2012) was launched on June 19th 2008. Six priority themes were identified:

- Energy and environment
- Quality and safety of transport systems
- Mobility in urban areas
- Merchandise logistics and transport
- Competitiveness of the transport industry
- Transport policies

Elsewhere, within the MEEDDM's General Commissariat on Sustainable Development, the Research and Innovation Division (DRI) has defined orientations for national research and innovation policies in the areas of environmental development, planning, transport and energy. In coordination with the Directorate Generals of the MEEDDM, it is piloting the ministry's research programmes and ensuring their implementation, as well as assessing and exploiting their results. It is implementing the Grenelle 1 Law priorities on research. Its main functions are to run the MEEDDM research network and its operators, pilot strategic orientations of the MEEDDM's scientific and technical network and support eco-technology innovation and the promotion of ecological competitiveness, including in the transport field.

Finally, MEEDDM operates a scientific and technical network (RST) made up of some 15,000 individuals from thirty study, audit, expertise, research and teaching bodies, public establishments and State services. The remit of the RST is to produce the scientific and technical knowledge required for public action in the ministry's fields of expertise: transport, urban planning, development, civil engineering, housing, environment, risk prevention, knowledge of the earth and marine and coastline areas, meteorological phenomena.

General conclusion

With the Environment Grenelle, the French State has engaged with all actors to develop and integrate its sustainable development policy.

In the field of transport, France's priority is to reduce greenhouse gas emissions through, in particular, support to inter-modality and low emission transport. Working in support of projects and professionals, a major research network is seeking to meet the challenges of tomorrow, whilst information campaigns targeting the general public flourish.