

Energy transition in the transport sector

Summary of the opinion of the Economic, Social and Environmental council

presented by

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France has committed, within the European context, to reducing its GHG emissions by 20% in relation to 1990 and to achieving a fourfold reduction by 2050. Its 2005 POPE Act made fighting climate change a priority with regard to energy policy, the latter aiming to reduce our country's GHG emissions by 3% per year. This requires a combination of energy efficiency and energy conservation, as highlighted in the first section of the 'energy transition roadmap'.

With regard to transport, the energy transition represents a major issue since transport accounted for 26% of France's GHG emissions in 2011, accounting for 32% of total energy consumption and 70% of French oil consumption for energy purposes. Road transport is responsible for 94% of transport-related GHG emissions as opposed to less than 1% for river transport and 0.4% for rail transport.

Energy is a major factor where transport is concerned. Imagining an energy transition requires one to consider the very structure of our society, the materials used and the ways in which they are used, those modes of travel that should be encouraged and the infrastructures that should be put in place, the costs in terms of competitiveness, and the organisation of labour and travel, among other factors.

Mobility needs are increasingly on a worldwide scale, and at the same time it is becoming vital that we deal with environmental issues. The potential markets are therefore huge with regard to public transport, increasingly low-energy and intelligent vehicles, information and transmission networks, infrastructures and transport organisation, among other things. France, of course, boasts a number of assets that will enable it to become a world champion in the field of carbon-free mobility.

This change will need to accommodate the needs of all concerned - individuals, businesses, transport and industrial operators - if it is to be a success, and it is important that we make the transition now. Policies must clearly define the objectives and the means by which they will be

achieved through a series of coordinated long-term initiatives. The ESEC has formulated a series of proposals to reflect this.

1. To include infrastructure choices into the "Factor 4" initiative

To incorporate a prior diagnosis of the ability of current transport networks to meet demand and an analysis of the renovation needs of infrastructure networks in the future *Schéma National de Mobilité Durable* ('National Sustainable Mobility Plan'), entrusting the CNDDGE (future CNTE) with the task of monitoring major infrastructure projects.

To perform a consolidated assessment of the reduction in GHG emissions that would result from the planned development projects as part of this plan, incorporating the GHGs associated with the construction of each infrastructure, specifying alternatives to the planned projects and including any new infrastructure for the purposes of ensuring high environmental quality.

To inventory the stock of existing infrastructure networks and consider a national programme for safeguarding rights of way.

Within the **project hierarchy**, to prioritise the optimisation of existing stock over the construction of new infrastructures, the use of alternatives to road and air transport, taking into account the tipping point for switching from air travel to rail, and modes and projects with the lowest impact in terms of GHG emissions and on the environment.

To select, by means of an updated socio-economic assessment, a number of small, local projects with a strong impact in terms of reducing GHG emissions in the framework of a major national programme on new forms of mobility, with financial support from the State and the AFITF whilst ensuring coordination with renewed governance as an *Agence nationale des nouvelles mobilités* ('National Agency for New Forms of Mobility').

To provide the necessary funding to regenerate the rail network and maintain the existing road network in good condition.

2. To encourage modal shift and intermodality in order to ensure appropriate complementarity between modes of transport

With regard to travellers, to develop high-quality local public transport networks, improve coordination between the relevant organisational authorities in terms of timetable and schedule compatibility, and provide joint information and ticketing services.

To encourage the development of green multi-purpose cycle routes and cycling in urban areas, with secure parking close to intermodal platforms, promote intermodality and sea and river travel within the peri-urban transport sector, and think urban/peri-urban travel at inter-communal level.

To introduce special coach routes covering the longest of journeys in the outer suburbs to complement rail networks by linking them to multi-modal hubs (RER or TER stations, Grand Paris

Express stations, etc.) and to strengthen inter-city connections, particularly by rail, whilst renewing rolling stock appropriately.

To develop a multi-modal instant information system.

With regard to freight, to reinforce the importance of multi-modal travel by creating a number of multi-modal platforms and sufficient land reserves with financial support from the State to achieve this.

To start making rail freight more widespread, encourage the development of local rail operators and provide for priority rail freight routes along high-quality, fully-electrified tracks, making access to such tracks dependent upon the use of electric traction.

To maintain the option of transportation by insulated wagon in order to meet businesses' needs and incorporate platforms of exchange between rail travel and urban logistics into the future national mobility plan to deal with the issue of the 'last mile' connection.

To develop rolling highways from the main ports, along with the necessary logistics platforms, promote river transport by modernising the existing network as part of a plan to revive the waterways and improving river connections to major sea ports, develop LNG production, and equip major ports with methane terminals or methane connections.

To optimise road transport (improvement in the energy efficiency of vehicles, reduction in empty miles, adoption of combined transport systems, etc.) and develop the regulation thereof whilst ensuring that the provisions of the Employment Code and the appropriate traffic regulations are adhered to, particularly with regard to driving hours, speed and load.

To complete the trans-European passenger and freight transport network, intensify standardisation measures with regard to gauge, signalling and safety, and implement transport policy at European level in order to avoid distortions of competition.

3. To influence the evolution of needs and support behavioural change

To devise a form of urban planning that makes towns and cities denser by increasing the private and social housing offerings in town and city centres and encouraging coordination between the various urban planning documents concerned. To incorporate multi-modal platforms that would improve the organisation of urban logistics into urban planning documents. To entrust suburban areas with the task of producing and revising the local urban planning plan and have responsibility for planning permission (building permits, development permits, etc.) transferred to them.

To develop short production, consumption and service chains, encourage the diversity of activities and promote better urban time management with regard to both people and freight.

To develop business and inter-company travel plans that reflect CSR measures for businesses, administrations and schools in the framework of social dialogue and on a voluntary basis.

To take steps towards introducing local mobility units in various forms, designed in conjunction with the region concerned, as the lead partner, with a view to coordinating transport services across the various transport organising authorities, notably with regard to providing passenger information, pricing and the interoperability of ticketing systems in terms of public service pricing.

To provide the financial support required to coordinate new forms of mobility at regional level.

To encourage car-sharing, with secure car parks and trustworthy third parties to secure transactions, **carpooling, notably by means of certification**, with the provision of more special car parks and reserved parking spaces, **and on-demand transport services in sparsely populated areas.**

To promote secure soft mobility policies (cycling, walking, walking routes to schools, etc.) in urban centres, with more parking spaces and bicycle parking facilities.

To make full use of the potential offered by information technologies to encourage sustainable mobility and changes in behaviour.

To encourage smoother road traffic flows, promote eco-driving, optimise road traffic and train speeds and modernise rail and air traffic management practices.

4. To make France an industrial champion of the carbon-free transport sector

- **To redefine the energy mix in the transport sector...**

The ESEC, in its opinion entitled *La transition énergétique : 2020-2050* ('The Energy Transition: 2020-2050') outlines the following: *"By 2020: by accelerating development of the use of electric, hybrid and natural gas and later renewable energy-driven engines in the transport sector, by encouraging new forms of mobility and by drawing on changing consumer behaviours; by 2030, by accelerating the electrification of both private and public methods of transport and by continuing to support the development of the industry"*.

- **To ensure that French R&D is up to the issues at stake, taking into account the European dimension**

To coordinate an industrial policy combining the development of renewable energy sources with the electrification of vehicles.

To reduce the administrative time frames required to launch a project so that they more closely reflect those observed across the European Union.

To develop the vehicle deconstruction and recycling-repurposing sector by providing the French Environment and Energy Management Agency (ADEME) with the control and monitoring resources it requires.

To promote and coordinate mobility services based on smart networks that improve energy efficiency.

To develop centres of excellence whilst improving the long-term legibility of public funding by supporting private investment in R&D projects through to maturity and including SMEs.

To support changes in the mobility sphere within the European context by encouraging cooperation rather than division through project competition and seek European partnerships for major projects requiring significant investment, such as the long-life built-in battery.

To safeguard the intellectual property that protects research and win the standards battle with the involvement of the State and the European Union.

- **To maintain the competitiveness of the various construction sectors**

To accelerate the emergence of a carbon-free automotive market and encourage both progress with regard to electric and hybrid vehicles and at the same time the development of environmentally-friendly 'green' fuels, and biomethane fuel in particular, as part of a European strategy.

To continue to take steps towards reducing consumption in the aeronautical construction sector in order to reduce GHG emissions in the air travel sector.

To strengthen R&D in the ship-building sector in order to improve the energy efficiency of maritime transport and fume cleaning systems, at the same time as introducing methane terminals.

To continue to develop the French public transport sector, and rail travel in particular (in terms of both the industry and engineering), by encouraging cooperation between existing exporters and new players.

To focus on the strengths of different regions to develop strategic partnerships and joint design processes and support the creation of 'sustainable mobility - sustainable city' consortia.

To encourage the development of EIG-type partnerships between French businesses for the purposes of submitting joint tenders and expanding the range of services and solutions offered ('one-stop shop').

To develop export networks that incorporate established companies, new businesses and local support by means of embassies.

- **To fully recognise the importance of employment and training**

To develop regional human resource planning processes, promote the social dialogue required to support change within businesses and branches, and jointly undertake professional training initiatives in the field of technological change (HRP).

To henceforth look ahead to consultation regarding the consequences of 'occupational' changes within sectors, from construction to maintenance, implement the necessary measures and training programmes, and jointly develop social programmes with industrial-economic projects.

5. To put in place the necessary regulatory and fiscal levers

- **To re-evaluate those aspects of the tax system that affect the energy transition and develop an environmental tax system that is both economically and socially acceptable**

To give greater consideration to the issues associated with the energy transition with regard to the re-orientation of existing fiscal levies and expenditure, as well as fiscal measures and public aid from the State and local authorities that encourages the more remote location of industrial estates and urban sprawl.

To incorporate a re-examination of the French environmental taxation system, including energy, in reflection spanning the national taxation system as a whole, combining economic efficiency, fair taxation and the ecological dimension.

To create the conditions necessary for the foreseeability of environmental taxation at both national and European levels in connection with the revision currently under way of the directive on the Community framework for the taxation of energy products and electricity, which will lead to a review of carbon taxation, along with the necessary studies of the economic and social impact of the system.

The ESEC wishes to reiterate the proposals outlined in the opinion entitled *Bilan du Grenelle de l'environnement* ('An overview of the Grenelle environmental initiative') with a view to ensuring that developments in the field aim to observe the polluter-payer principle and the principles of equality with regard to public tax and burdens, and take into account the tax-payer's ability to contribute, particularly where those populations that are the most exposed or in the most unstable of positions are concerned, as well as the cost-effectiveness ratio with regard to the objectives pursued and the necessary competitiveness of businesses, and doing so "with a consistent tax burden".

- **To put in place a series of support measures**

To make use of the possibilities introduced by the Eurovignette 3 directive to increase the resources of the Financing Agency for French Transport Infrastructures (AFITF) and regional authorities by means of the heavy goods tax, and allocate this funding to the modal shift as a matter of priority.

To maintain part of the funding provided for infrastructures from the State budget to the AFITF to finance infrastructures of national interest prioritised in the national sustainable mobility plan.

To create a special savings scheme for investing in infrastructures that require long-term amortisation and public transportation equipment that would help fight energy poverty in the transport sector.

To consider helping to fund localised public transport networks by harnessing part of the capital appreciation associated with the provision of such services and/or bringing the taxation of the kerosene used on domestic flights into line in order to generate revenue for the energy transition in the transport sector and/or the public reclaiming of motorway concessions or a contribution from the profits made.

To support the modal switch policy through the Europe-wide standardisation of regulations in order to avoid distortions of competition.

- **To fight energy poverty in the transport sector**

To guarantee access for all to transport services whilst ensuring that the new infrastructures and public transport services put in place are attractively priced.

To support changes in the transport sector, particularly where peri-urban and rural areas are concerned, in order to avoid a situation whereby the inhabitants of such areas are invariably forced to pay but unable to get around. Travel plans implemented by authorities and businesses, supported, if need be, by national funding, must contribute to this, and some of the effort involved in making the transition must go into offering such individuals alternative transport solutions.