

ROADMAP

Title of the initiative: **Communication on the promotion of clean transport systems, accompanied by a European fuel strategy and appropriate legislative and financial measures**

Lead DG/contact person: DG MOVE

Expected date of adoption of the initiative (month/year): November 2011

PART I – Initial IA screening & planning of further work

A. Context and problem definition

(i) What is the political context of the initiative?

In its EU 2020 strategy, the Commission proposes the Flagship Initiative “Resource efficient Europe”. This initiative includes proposals aiming at cleaner and more sustainable transport.

(ii) How does this initiative relate to past and possible future initiatives, and to other EU policies?

The Framework Programmes for **Research and Technological Development** have financed projects for developing clean technologies for all transport modes. In order to facilitate applied research, Regulations (EC) 71/2008 and 521/2008 establish Joint Undertakings for accelerating development of i) clean aircraft, and ii) fuel cell and hydrogen technologies including for transport.;

In addition, the market up-take of clean technologies is supported by the following legislative acts:

- **Clean road transport vehicles:** The Directive on the promotion of clean and energy efficient road transport vehicles (2009/33/EC), the CO₂/cars Regulation ((EC) No 443/2009), setting standards for CO₂ emissions from cars, and EU legislation on type approval of vehicles to gradually reduce pollutant emissions.

- **Greenhouse gas intensity of transport fuels:** The Fuel Quality Directive (2009/30/EC) requires a reduction of the life cycle greenhouse gas intensity of fuels, by 6% by 2020, and sets out conditions for additional indicative 4% reductions.

- **Use of alternative fuels:** The Renewable Energy Directive (2009/28/EC), requiring a 10% share of renewable energy in transport by 2020, and the Directive on the taxation of energy products (2003/96/EC), enabling favourable treatment of alternative fuels substituting oil.

- **European strategy on clean and energy efficient vehicles:** The Commission Communication COM(2009)186 lays out an action plan on green vehicles, referring to the Commission intention to propose a long term strategy in 2011 in a Strategic Transport Technology Plan and in a Communication on Clean Transport Systems.

What are the main problems identified?

- **Increasing environmental and GHG emissions:** Transport is a major source of local pollution and of GHG emissions. The overall increase in transport volumes has led to a continued increase in CO₂ emissions, and local pollution remains a source of major concern despite considerable improvement in recent years.

- **Oil dependency:** Fossil oil, the main energy source for transport overall, is supplying nearly 100% of road transport fuels and aviation today.

- **Insufficient market up-take of clean transport technologies:** New technologies, which have been developed over the past decades, have difficulties to bridge the gap between demonstration and market take-up due to initial high costs of infrastructure and equipment which result from the lack of critical mass, fragmented markets, and a lack of internalisation of external costs.

(i) Is EU action justified on grounds of subsidiarity? (ii) Why can the objectives of the proposed action not be achieved sufficiently by Member States (necessity test)? (iii) As a result of this, can objectives be better achieved by action by the Community (test of EU Value Added)?

Research and development of clean transport technologies are very capital-intensive. Therefore, the industry developing and operating technologies for transport systems works in a global market. Action on EU level and co-ordination of national activities are therefore required to ensure competitiveness of European industry. Otherwise European industry would be confronted with a fragmented home market, whilst other regions in the world are providing harmonised large volume home markets, which allow economies of scale and market readiness for new products more quickly.

The regulatory framework for transport is EU-wide (for road, rail and inland waterway transport) respectively international (for aviation and maritime), and transport markets have been opened to competition across the EU. In order to ensure the integrity of the internal market and avoid distortions of competition, it is necessary to foresee an EU-wide regulatory framework for clean transport technologies. For aviation and maritime transport, a European coordinated position strengthens the European voice and credibility in the relevant international *fora* and vis-à-vis other world regions and third countries.

B. Objectives of EU initiative

What are the main policy objectives?

- Progressive substitution of fossil energy sources as major energy source for transport by alternative fuels;

- Further increase of fuel efficiency of vehicles, trains, ships and aircraft;

- Improvement of energy efficiency of transport infrastructure and equipment;

- More efficient transport management.

Do the objectives imply developing EU policy in new areas or in areas of strategic importance?

Promoting low carbon transport is of strategic importance for the EU's credibility in climate action. The proposed Communication, the European fuel strategy and the accompanying legislative and financial proposals build on existing policies.

C. Options

(i) What are the policy options? (ii) What legislative or 'soft law' instruments could be considered? (iii) Would any legislative initiatives go beyond routine up-date of existing legislation?

The base line would be the situation with all existing measures implemented and no additional action. The business-as usual scenario would be a continuation of the different policies, including future projected revisions and updates where applicable (in particular with regards EURO standards under type-approval legislation).

The integrated Clean Transport Systems scenario will include complementary measures for the whole transport sector. At the level of research and development, it would increase the funding for clean transport projects. At the level of market take-up of clean transport technologies, it would include additional financial and regulatory measures. At this stage, the following instruments are considered:

- Co-ordination of public and private actors and resources on EU, national, and regional level, both at the research and development level (e.g. facilitation of joint research projects) and at the market up-take level (e.g. pooling of purchase of clean vehicles; coordinated roll-out of electric vehicles in urban areas).
- Mobilisation of additional financial instruments under the Research and Development Framework Programme, through the European Investment Bank, and under the Structural and Cohesion Funds.
- Regulatory measures on transport infrastructure, transport management and control systems; non-monetary incentives for clean technologies (e.g. preferred access and/or access restrictions to urban areas; modulation of regulatory charges; green public procurement).

A package of measures will be developed and validated in the impact assessment, such that soft, incentive, and regulatory measures complement and enhance each other.

Does the action proposed in the options cut across several policy areas or impact on action taken/planned by other Commission departments?

The action proposed involves the following policy areas:

Energy policy (DG ENER): Security of energy supply, increasing share of renewable energy, energy efficiency

Industrial policy (DG ENTR): competitiveness of European industry; market access regulation, technical standards;

Information Society (DG INFSO): Development of information and communication technologies and common standards required for the integration of clean transport systems.

Research and Technological Development (DG RTD): EU support to the development of clean transport systems from funds of the Community Framework Programme.

Economic and financial policy (DG ECFIN): Support to development and deployment of new clean transport systems through funds of the EIB and the EBRD

Internal market and services (DG MARKT): Public procurement in support of a rapid market introduction of new clean transport systems.

Taxation policy (DG TAXUD): Support to the deployment of new clean transport systems through possible tax incentives

Climate policy (DG CLIMA): Reduction of CO₂ emissions from transport

Environmental policy (DG ENV): Improvement of air quality

Regional policy (DG REGIO): Financing of the deployment of clean transport systems through Structural and Cohesion Funds and coordination of regional activities

Social policy (DG EMPL): Development of new skills and restructuring in industry required for a broad market deployment of clean transport systems.

Consumer policy (DG SANCO): Health aspects and consumer acceptance of new clean transport systems

Explain how the options respect the proportionality principle

The options envisaged should ensure timely and cost-effective achievement of low carbon transport and substitution of fossil oil as an energy source for transport. They support action by the directly involved parties, by providing co-ordination, financial support, and a level playing by setting a common regulatory framework.

Integration of the measures in a package should enable synergies both within and between transport sectors, thereby minimising the extent of policy intervention.

New EU legislation maybe required to prevent market fragmentation and enable access of new key technologies to the broader market.

D. Initial assessment of impacts

What are the significant impacts likely to result from each policy option (cf. list of impacts in the impact assessment guidelines pages 32-37), even if these impacts would materialise only after subsequent Commission initiatives?

The most important impacts expected are an acceleration of the process towards low carbon transport, a better cost/benefit ratio of individual measures through integration in a package covering all modes, and improved competitiveness of European industry by supporting broad market uptake of innovative clean vehicle systems through concerted and common action. Considerable spin-off potential to other applications areas can be envisaged from key components and systems, such as ITS, power electronics, batteries, fuel cells, smart grids underpinning competitiveness in other sectors.

Quantitative assessment of the impacts of the different options and a prioritisation will be carried out in the impact assessment. A package of actions and measures will be retained, which have a large long-term potential, are consistent in the frame of the overall decarbonisation strategy, and are mature for implementation.

Could the options have impacts on the EU-Budget (above 5 Mio €) and/or should the IA also serve as the ex-ante evaluation, required by the Financial Regulation?

Several options considered imply impacts on the EU budget. Concrete proposals will be made, including recommendations for priority funding from FP8, EIB support, and possible subventions for pilot actions.

Could the options have significant impacts on simplification/administrative burden or on relations with third countries?

The options could potentially have significant impacts on simplification/administrative burden at EU level.

Proposals on harmonised standards, rules, could simplify market access procedures and remove the necessity of national administrative acts. Common requirements on infrastructures on EU level would facilitate the market introduction of new technologies requiring the build-up of new infrastructures. Setting standards on EU level would have an impact on trade relations with third countries, as non-EU industries would need to comply with EU standards. The impacts and the trade-off between non-regulated development, EU regulatory measures, and EU proposals for international standards/agreements will be considered in the impact assessment.

The options could have significant global impacts, as the market for transport systems is highly globalised, and energy supply to transport is a global business.

Impacts on manufacturers and part suppliers for transport carriers, infrastructure, and energy suppliers will be considered in the impact assessment.

Who is affected?

Most manufacturers of transport systems, vehicles and equipment, energy suppliers, public authorities on national and regional level, and most transport operators and users.

E. Planning of further impact assessment work

What information and data is already available? What further information needs to be gathered? How will this be done (e.g. internally or by an external contractor) and by when? What type and level of analysis will be carried out (cf. principle of proportionate analysis)?

Information and data are available from the preparatory work for the White Paper on a common transport policy 2010-2020, including expert group work, public consultation and study work. Information and data have also been provided in the frame of the preparation of a revision of the TEN-T Guidelines with stakeholder expert groups. Information and data from the study on greenhouse gas emissions in transport by 2050, commissioned by DG ENV, will also be used.

Further information will be provided by a stakeholder expert group on future transport fuels, established by DG MOVE in February 2010. Three meetings are planned for 2010, and a strategy report will be provided by October 2010. Following up on that work and the Transport White Paper 2010-2020, the expert group will work on concrete measures in 2011 and provide another report with recommendations for implementation.

A study will be contracted out to assess the options and quantify possible impacts, using

models developed for the Commission, such as TRANSTOOLS and TREMOVE:

In addition there are well researched reports from EU funded R&D projects and other independent sources that will merit consultation.

Which stakeholders & experts have been/will be consulted, how and at what stage?

Stakeholders have been consulted in an extended process on infrastructure aspects of clean transport systems in the frame of the preparation of a revision of the TEN-T Guidelines.

The new Commission expert group on future transport fuels comprises experts nominated by the relevant EU organisations of all major stakeholders in fuel, vehicle/transport carrier, infrastructure supply, operation and use. It will assess economic, technical, environmental, industrial, and social aspects and design scenarios towards decarbonisation of transport and full substitution of oil as fuel.