PROJECT

UTOPIA

Urban Transport: Options for Propulsion Systems and Instruments for Analysis

Funding: European (4th RTD Framework Programme)
Duration: Jan 1998 - Jun 2000
Status: Complete with results

Background & policy context:
Cleaner vehicles and alternative fuels can help to achieve Europe's goals for air quality, carbon savings and security of energy supply. However, there are many barriers to the introduction of these new technologies, such as high capital and lifetime costs and a lack of refuelling infrastructure. Certain niche applications such as public sector fleets can provide a way of lowering some of the barriers, and demonstration projects are important in developing market acceptance. City authorities, national governments and the European Community have a vital role to play, both in funding projects and in establishing a strong framework of supporting policies.

Objectives:
The UTOPIA project aimed to provide project managers and policy-makers with the necessary information base, tools and guidelines to support the introduction of promising urban transport solutions based on cleaner vehicles.

Parent Programmes:
FP4-TRANSPORT - Specific research, technological development and demonstration programme in the field of transport, 1994-1998

Institute type: Public institution
Institute name: European Commission; Directorate-General for Energy and Transport (DG TREN; formerly DG VII)
Funding type: Public (EU)

Partners:
NA

Organisation: Energy Saving Trust
Address: 21 Dartmouth Street
Zipcode: SW1H 9BP
City: London
Contact country: United Kingdom
Telephone: n/a

Key Results:
UTOPIA developed four major outputs, available on the World Wide Web at http://utopia.jrc.it/

1. An assessment of the most promising applications for cleaner vehicles and supporting measures, from a city perspective.
This report assesses fuel options and applications for cleaner vehicles, and describes how best to introduce clean vehicles into cities using well-targeted demonstration projects backed by policy actions. It is illustrated by examples drawn from across Europe. 2. Recommendations on policy actions at the
European and national levels to promote or facilitate market introduction and demonstration.

2. This report examines the potential benefits of cleaner vehicles, including the results of European-level modelling. It looks at government activities across Europe: programmes of pilot and demonstration projects, and supporting measures such as tax incentives, emissions standards and green procurement. Finally, it presents recommendations for:

- best practice in the design of programmes of pilot and demonstration projects;
- key supporting policies, which can make a major impact on the introduction of cleaner vehicles in European cities.

3. A good practice guide to setting up and running pilot and demonstration projects, aimed at potential project champions.
   These guidelines cover the decision points and evaluation phases through the entire lifecycle of a demonstration project. Guidance is given on what to do and consider at each stage. This is supported by examples and good practice recommendations derived from a wide variety of European project experiences. The guidelines focus on urban applications of two-wheelers, cars, buses, vans and trucks.

4. A software framework ('NAVIGATE UTOPIA') which provides information and assessment methodologies covering clean transport solutions.
   This is primarily to support people at the local level (such as city transport planners) in pre-screening options and building the arguments in favour of a local initiative. It is a user-friendly web-based tool. Within its structured framework, it provides a wide range of information, case studies and decision aids generated within the wider UTOPIA project. It also incorporates a multi-criteria tool for assessing the promising transport options for a specific city situation according to local policy objectives.

Policy implications

UTOPIA concluded that there is a need for alternative and renewable transport fuels. However, their current costs and other limitations in vehicle applications mean that market entry will typically be via particular niches such as urban buses. Supporting policies were evaluated:

- The most important policy measures are fiscal incentives. A distinction is needed between incentives to kick-start the market for individual fuels, and efficient incentives in the longer term that are not technology-specific (e.g. differential rates of fuel taxation based on relative environmental damage).
- Demonstration projects have an important role in testing technologies, stimulating the market and raising consumer awareness.
- Eco-labelling and green fleet certification schemes are important, especially where the label remains on the vehicle in everyday use.
- Green procurement by Governments, whether voluntary or mandatory, can be significant in creating an initial market for new fuels and providing a signal to private consumers that these fuels are serious.
- Standards for vehicles and fuels are important in creating a unified market and ensuring consumer confidence.
- Low emission zones that allow city centre access only for clean vehicles, and Quality Contracts and Partnerships between local authorities and fleet operators, are new powerful tools for encouraging cleaner vehicles at a local level. Governments may need to provide the regulatory framework for their implementation and enforcement.

Related Projects:

- FANTASIE - Forecasting and assessment of new technologies and transport systems and their impacts on the environment.
- MAESTRO - Monitoring, assessment and evaluation of transport policy options in Europe.

Documents:

- utopia.pdf (Final report)

STRIA Roadmaps: Low-emission alternative energy for transport

Decarbonisation, Societal/Economic issues, Environmental/Emissions

Transport policies: aspects