

# Sustainable Transport Systems

## Definition

### Current Applications

[Urban transport in developing Asia](#)

[Key Transport Developments in Europe](#)

### Potential Applications

[Alternative motor fuels](#)

[Biofuel-Cities](#)

[Hydrogen for transport](#)

### Regulations

[Summary Regulations](#)

[Legal Texts](#)

[General Provisions](#)

[Transport and the Environment](#)

[Combined Transports](#)

[Trans-European Network](#)

[Satellite Navigation](#)

[Telematics in the Transport Sector](#)

[Pricing in Transport](#)

[Cooperation with Third Countries](#)

### Resources

[Commission](#)

[European Parliament](#)

[Council of the European Union](#)

[Documentation](#)

## Definition

Sustainable Transport is a phrase, which was coined in the late 20th century to describe all forms of transport, which minimise emissions of carbon dioxide and pollutants. The term is based on the phrase sustainable energy and includes public transport, car sharing, walking and cycling. However, we believe the focus should be on the less obvious manifestations of sustainable transport technology such as electric and hybrid cars, biodiesel, the broader issue of efficient highway design and architecture, promotion of public awareness and alternative applications of existing technologies.

## Current Applications

### Urban transport in developing Asia

Policy-makers are facing demands to meet the changing mobility needs of citizens in ways which are economically, socially and environmentally sustainable.

[SUTP-Asia](#) is a partnership between the German Technical Cooperation (GTZ), the Bangkok Metropolitan Administration (BMA, CITYNET and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) which aims to help developing Asian cities

achieve their sustainable transport goals, through the dissemination of information about international experience and targeted work with particular cities.

Many developing Asian cities retain a relatively high density, low levels of motorisation, relatively high public transport and bicycle usage, high density corridor orientations radiating from the city centre, and generally mixed land uses. Such characteristics, while increasingly under threat from rapid motorisation and urban sprawl, constitute a solid potential basis for sustainable urban development. Policy decisions made now will have implications for city living far into the future.

SUTP-Asia is funded by GTZ and has office support provided by UNESCAP. A major aspect of the project strategy is to work within existing networks and information dissemination channels (e.g. already-planned workshops on related topics; related GTZ project work; existing CITYNET newsletters and information channels; already-planned BMA promotional events, etc.) to achieve project objectives.

The focus areas and cities were determined in a planning workshop held in June 2003. The project mainly draws from the following topics:

- The Role of Transport in Urban Development Policy
- Economic Instruments
- Raising Public Awareness
- Transport Demand Management
- Mass Transit Options
- Bus Rapid Transit
- Bus Regulation & Planning
- Non-motorised Transport

Most of these topics centre around or involve promoting 'modal shifts'; that is, promoting alternatives to the use of private motor vehicles. The project aims to promote environmentally 'sustainable' and economically efficient modes of transport, such as public transport, walking and non-motorised transport, as alternatives to cars and motorcycles. The topic of fuel and vehicle technologies is also crucial to any sustainable urban transport policy framework, but this topic already receives a high profile in existing initiatives involving information dissemination such as the World Bank's [Clean Air – Asia](#), and the Asian Development Bank's [Vehicle Emission Reductions](#) website, re-launched in December 2003 as [cleanairnet.org](http://cleanairnet.org). The issue of modal shifts is also closely related to issues of equity (the lower income majority rely more on public and non-motorised transport), traffic congestion, efficiency of short trips, and general urban liveability.

## **Key Transport Developments in Europe**

[Sector integration and sustainable development](#)

[Beyond Helsinki - where are we and what's next?](#)

[Making integration work at the operational level](#)

[Land use planning and transport policy](#)

[Planning to promote railway transport in the Helsinki-Hämeenlinna-Tampere zone, Finland](#)

[Regional Spatial Plan for Long Term Urban Development in the Jæren Region, Norway](#)

[Housing subsidies in promoting public transport in North-Rhine-Westfalia, Germany](#)

[Public-private partnership and networks as tools to create opportunities for intermodality](#)

[The TEGRI project - combined rail / short sea shipping in Italy and Spain](#)

[The clean and clever intermodal connection France-Italy](#)

[Freight villages and intermodality: The Italian experience](#)

[Introduction of distance-related motorway user charges for heavy lorries](#)

[The Influence of Road Infrastructure on the Regional Economy](#)

[Transport Impact Assessment for Infrastructure](#)

[Fiscal Responsibility and Decision Making for Public Transport Infrastructure: Practical Experience and Lessons to Learn](#)  
[Improving public participation in UK transport planning & project delivery](#)  
[Sustainable Freight Transit Solutions in Sensitive Areas](#)  
[Integration Transport, Environment and Health: The Challenge of Small Islands - the example of Malta](#)

## Potential Applications

### Alternative motor fuels

The primary aim of the EC's research call in this area is to establish European partnerships for innovative demonstration of alternative fuels and energy efficient vehicles. In particular, one in the field of biofuels (European Partnership: Biofuel-Cities) and a second one in the field of hydrogen (European Partnership: Hydrogen for transport). These Partnerships could be composed of new integrated projects financed by this call as well as on-going projects that will constitute a coherent set of European demonstration activities. The two Partnerships will be supported respectively by a Coordination Action. These two coordination actions will give shape to the partnership, provide visibility to it, as well as ensure a common monitoring and assessment framework for the projects.

### Biofuel-Cities

The purpose of Biofuel Cities is to demonstrate the use of new and innovative technologies that will permit extensive use of biofuels in cities covering the complete chain from feedstock to biofuels production, distribution and utilisation in vehicle fleets. In particular the following topics have been prioritised:

1. Demonstration of alternative motor fuel vehicle fleets such as: buses; post distribution; waste collection; taxis; local delivery; airport fleets; and passenger vehicles. These fleets should demonstrate new ways of using biofuels in energy efficient vehicles, with particular attention to high blends of bio-fuel (higher than 5%) and also the use of pure bio-fuels fleets. Introduction of innovative energy efficient concepts such as the combination of electric hybrid technologies with high blends of biofuels will be given priority. However, work on wholly electric vehicles will not be supported.
2. Innovative, energy efficient, cost-effective and safe large scale production, storage and distribution of biofuels that could supply fuel to the abovementioned demonstration fleets.
3. Assessment and monitoring from the perspectives of socio-economic, energy efficiency, environmental and safety perspective.
4. Communication and dissemination.

### Hydrogen for transport

The Hydrogen for Transport partnership will provide a coherent European framework for hydrogen demonstration activities. It will coordinate, monitor and assess new and on going projects. This call will supplement existing efforts with new Integrated Projects (IPs) addressing the priority topics (a-b-d-e and when relevant c) of this section embracing all links in the Well to Wheel chain:

1. Demonstration of hydrogen fleets. Priority will be given to innovative captive fleets that complement, from a technology point of view, technologies currently under demonstration in Europe, for instance hybrid fuel cells buses. Appropriate fleets could be: buses; post distribution; waste collection; taxis; local delivery; airport fleets; and passenger vehicles.
2. Demonstration of innovative, cost-efficient and safe production, storage, distribution and fuelling systems of hydrogen.

3. Exploring synergies between sector and technology pathways. Demonstration of the benefits for transport and stationary applications of using hydrogen simultaneously for both cases. Demonstration of the potential benefits of linking biofuels and hydrogen technology pathways.
4. Assessment and monitoring from a socio-economic, energy efficiency, environmental and safety perspective.
5. Communication and dissemination.

## Regulations

### Summary Regulations

- [Panorama](#)
- [General provisions](#)
- [Road transport](#)
- [Rail transport](#)
- [Maritime transport](#)
- [Air transport](#)
- [Combined transport](#)
- [Trans-European networks](#)
- [Satellite navigation](#)
- [Applicant countries and the Community \*Aquis\*](#)

### Legal Texts

- Treaty establishing the European Community ([Articles 70 to 80](#))
- [Legislation in force](#)
- Legislation in preparation and monitoring of the decision-making process between institutions
  - [Search in the Legislative Observatory of the European Parliament](#)
  - [Search in the Public Register of the Council of the European Union](#)
  - [Search in PreLex](#)
  - [Opinions of the European Economic and Social Committee](#)
  - [Opinions of the Committee of the Regions](#)
- [Recent case-law of the Court of Justice and the Court of First Instance](#)

### General Provisions

- [Carriage by Road](#)
- [Rail Transport](#)
- [Maritime Transport](#)
- [Air Transport](#)
- [Competition In Transport](#)
  - [Cohesion and transport](#)
  - [Sustainable mobility: 2000-2004 action programme](#)
  - [Developing the Citizens' Network](#)
  - [European Energy and Transport Forum](#)
  - [White paper: transport policy for 2010](#)
  - [Strengthening passenger rights within the European Union](#)

## Transport and the Environment

- [Use of biofuels](#)
- [Petrol and diesel engines](#)
- [Emissions from agricultural or forestry tractors](#)
- [Emission of gaseous pollutants from diesel engines](#)
- [Management of noise at community airports](#)
- [Integrating the environment into air transport](#)
- [Reduction of atmospheric emissions from ships](#)
- [Maritime safety: prohibition of organotin compounds on ships](#)

## Combined Transports

- [Combined transports of goods between Member States](#)
- [Combined transport: PACT programme \(1997-2001\)](#)
- [MARCO POLO programme](#)
- [Intermodality of goods transport](#)
- [Intermodal loading units \(ILUs\)](#)

## Trans-European Network

- [Community guidelines for the development of the trans-European transport network](#)
- [European high-speed train network](#)
- General rules for [the granting of Community financial aid](#) in the field of trans-European networks
- [Connecting the infrastructure network](#)

## Satellite Navigation

- [Global navigation satellite system](#)
- [Trans-European satellite navigation system](#)
- [Galileo](#)
- [Galileo - development phase](#)
- [Satellite navigation: implementation of the deployment and commercial operating phases](#)
- [A coherent European strategy for space](#)

## Telematics in the Transport Sector

- [Introduction of telematics systems in the transport sector](#)
- [Telematics on the highways](#)

## Pricing in Transport

- [Fair and efficient pricing: Green Paper](#)
- [Common charging framework: White Paper](#)
- [Interoperable electronic fee collection systems in Europe](#)

- [Reduction of excise duties on biofuels](#)

### Cooperation with Third Countries

- [Euro-Mediterranean cooperation](#)
- [Development of a Euro-Mediterranean transport network](#)

## Resources

Open frontiers and affordable transport have given Europeans unprecedented levels of personal mobility. Goods are shipped rapidly and efficiently from factory to customer, often in different countries. The European Union has contributed by opening national markets to competition and by removing physical and technical barriers to free movement. But today's transport patterns and growth rates are unsustainable. [Find out more...](#)

Useful reading: [Europe at a crossroads: The need for sustainable transport](#)

### Commission

- [Transport](#)
- [Grants](#)

### European Parliament

- [Committee on Transport and Tourism](#)

### Council of the European Union

- [Transport, telecommunications and energy](#)
- [The European Ombudsman](#)
- [European Investment Bank](#)
- [European Maritime Safety Agency](#)
- [European Aviation Safety Agency](#)
- [European Railway Agency](#)

### Documentation

- [Press releases](#)
- [Bulletin of the European Union](#)
- [General Report on the Activities of the European Union](#)
- [Publications](#)
- [Statistics](#)