



environmental  
guide for  
transport &  
logistics sector

Transport is, the commercial sector with the highest profile in terms of sustainability. Yet it is fair to argue that the topics that make the headlines are just a small part of the overall picture and do not represent the effort and contribution that transport and logistics make to sustainability. This guide can only act as an introduction to what is a complex and wide-ranging subject, but it will give managers a clearer understanding of how the various strands of legislation, thought and best-practice come together - from the search for renewable energy to the impact of infrastructure construction on the environment.

Furthermore it indicates where key legislation has been passed, and the added responsibilities and duties this legislation brings.

The transport and logistics sector has a number of both positive and negative economic, environmental and social impacts. The sector facilitates trade through the movement of goods and materials, supports social mobility, and employs a large number of people, and therefore has a vital role to play in supporting sustainable economic development and growth. Its reliance on significant consumption of fossil fuels makes it vulnerable to resource depletion, and it has a major impact on the environment. Climate change is a particularly important challenge as transport is currently estimated to produce a quarter of total UK emissions of carbon dioxide (CO<sub>2</sub>).

This sector covers many forms of transport, including aviation, ports and shipping, bus and rail, and logistics companies.

# environmental guide for transport & logistics sector

This guide outlines the following areas: Relevant legislation, Key issues for the sector, Climate change, Security of supply, Permission for sites, Safety.

The environmental and sustainability impacts of this sector are therefore wide ranging, and, in addition to climate change, could include air quality, noise and nuisance, security of fuel supplies, loss of land and habitats (through the construction of new infrastructure), relationships with stakeholders (planning authorities and local communities), health and safety of employees and the general public, and relationships with trade unions.

The Department for Transport (DfT) is committed to reducing the impact of travel on the environment and promotes policies to <sup>1</sup>:

- Reduce the fossil carbon content of transport fuel
- Increase the fuel efficiency of vehicles
- Encourage a move towards more environmentally friendly forms of transport
- Work towards the inclusion of transport in emission trading schemes

Government policies and resulting legislation with regards to transport and the environment clearly have direct consequences for companies operating in the transport and logistics sector, and will be the main driver for its approach to sustainability. Addressing these policy issues at a business level could result in many benefits, including operating efficiency and cost reduction.

# relevant legislation

## BIOFUELS IN TRANSPORT DIRECTIVE

The EU Biofuels Directive was adopted in May 2003. It aims to promote the use of biofuels or other renewable fuels as a substitute for petrol or diesel in the transport sector by setting targets for EU member states. A review of the 2003 Directive was presented in January 2008 that proposed “sustainability criteria” due to the concerns raised regarding the impact of biofuels on rising fuel prices, rainforest destruction and rich firms driving poor farmers from their land to convert to fuel crops. For more information:



[www.euractiv.com/en/transport](http://www.euractiv.com/en/transport) and [www.ec.europa.eu/energy/res/legislation/doc/biofuels/en\\_final.pdf](http://www.ec.europa.eu/energy/res/legislation/doc/biofuels/en_final.pdf)

The Renewable Transport Fuel Obligation (RTFO) is due to become the UK's primary mechanism to develop a market for transport biofuels as well as delivering the objectives of the Biofuel Directive. The RTFO will require road transport fuel suppliers to ensure that a proportion of the road fuel they supply in the UK comes from renewable sources. For more information:

[www.dft.gov.uk/pgr/roads/](http://www.dft.gov.uk/pgr/roads/)

## THE CORPORATE MANSLAUGHTER AND CORPORATE HOMICIDE ACT '07

This Act came into force across the UK on 6th April 2008. It introduces a new offence for prosecuting companies and other organisations where there has been a gross failing, throughout the organisation, in the management of health and safety with fatal consequences. In England and Wales and Northern Ireland, the new offence is called corporate manslaughter. It is called corporate homicide in Scotland.

Under a new approach, courts will look at management systems and practices across the organisation, providing a more effective means for prosecuting the worst corporate failures to manage health and safety properly. For more information:

[www.justice.gov.uk/publications/corporatemanslaughter](http://www.justice.gov.uk/publications/corporatemanslaughter)

## CARBON FOOTPRINT

The carbon footprint of an organisation is defined by the Carbon Trust as 'The total set of greenhouse gas emissions caused directly and indirectly by an [individual, event, organisation, product] expressed as CO<sub>2</sub>e.' Establishing the carbon footprint is an important step in planning to reduce that figure. Transport is the only sector in the EU in which greenhouse gases have consistently risen since 1990, so there is significant opportunity for the impact of these emissions to be reduced by transport and logistics organisations looking at their own footprints and how they can reduce them. The Carbon Trust runs free workshops on how to reduce your carbon footprint, visit [www.carbontrust.co.uk](http://www.carbontrust.co.uk) for more details.

## DIRECTIVE TO INCLUDE AVIATION INTO THE EU EMISSIONS TRADING SCHEME (EU ETS)

The revised EU ETS, covering not only power-intensive industries, but also aviation, will come into force on 1st January 2013. It is anticipated that aviation will start trading CO<sub>2</sub> on 1st January 2012. The intention is for the EU ETS to serve as a model for other countries considering similar national or regional schemes, and to link these to the EU scheme over time. For more information:

[www.euractiv.com/en/climate-change](http://www.euractiv.com/en/climate-change)

## MARITIME INDUSTRY AND EU ETS

Until recently, work on reducing CO<sub>2</sub> emissions from ships has been carried out within the framework of the International Maritime Organisation (IMO), and has focused mainly on establishing methods to calculate emissions rather than measures to reduce them. The maritime industry is likely to follow the aviation industry in being brought within the remit of the EU ETS. For more information:

[www.euractiv.com/en/transport](http://www.euractiv.com/en/transport)

# key issues

## CLIMATE CHANGE

Climate change is probably the most significant environmental issue for the transport and logistics sector. In the UK, transport is responsible for 25% of CO<sub>2</sub> emissions, with road transport accounting for around three quarters of this <sup>2</sup>. Transport is also the source of emissions of other gases that contribute to climate change (and poor air quality), such as methane and nitrous oxide (present in exhaust emissions). There is, therefore, significant opportunity for businesses in this sector to make a substantial contribution to reducing their climate change impact.



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Companies could take action in the following ways <sup>3</sup>:

- Shift freight logistics from the road to rail and inland waterways
- Manage logistics planning and systems more efficiently
- Consider Whole Life Costing, including fuel efficiency and reduced emissions, and if the vehicle is fit for its intended purpose when specifying new vehicles
- Consider alternatives or dual-fuel powered vehicles, such as liquefied petroleum gas, natural gas, biomass-based fuels, hydrogen and fuel cell vehicles, hybrid and electric
- Provide training to drivers in fuel-efficient driving styles, such as reducing vehicle speed, avoiding harsh braking and acceleration, and switching off the engine when idling.

Emissions from other forms of transport, particularly aviation, also contribute to climate change. In recent years, the aviation industry has made considerable improvements to aircraft technology and operational efficiency. However, these investments have not been sufficient to compensate for the rapid growth of global air traffic. As discussed in the legislation section above, the European Commission recently agreed that bringing aviation into the EU ETS would be the most cost-effective way of reducing its climate change impact. Interestingly, research in 2007 suggests that the CO<sub>2</sub> emissions from shipping were double those of aviation. As mentioned previously, it is likely that the maritime industry will follow aviation and be brought within the remit of the EU ETS in the future.

2. [www.dft.gov.uk](http://www.dft.gov.uk)

3. [www.freightbestpractices](http://www.freightbestpractices), [www.businesslink.gov.uk](http://www.businesslink.gov.uk), [www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

# key issues

## SECURITY OF SUPPLY

Fossil fuel security of supply is an issue at the top of the political and business agendas. The transport and logistics sector relies upon the use of fossil fuels in order to operate. Global demand for energy continues to grow, resulting in greater competition for a rapidly depleting supply of resources, which in turn results in increased fuel prices. The transport and logistics sector cannot rely on a limitless supply of fossil fuels, therefore demand for these needs to be reduced and alternatives considered, such as liquefied petroleum gas, natural gas, biomass-based fuels, hybrid and electric vehicles and hydrogen and fuel cell vehicles.

## PERMISSION FOR SITES

Developing and maintaining a good relationship with stakeholders, especially local communities, is key to the license to operate and growth of the transport and logistics sector. While central Government policy supports transport infrastructure growth, projects are often delayed by planning debates at a local level. Although they create significant regional employment, large infrastructure developments (such as airport runways, and port, airport, railway and bus termini) are subject to objection from local stakeholders, especially in densely populated urban and environmentally sensitive areas. Community consultation and engagement that is designed to address the views of local stakeholders at an early stage can significantly reduce the level of objection. Where sites are to be expanded, developing long-term relationships with local stakeholders is vital to gaining acceptance and buy-in. In undertaking stakeholder consultation and engagement, companies should define the:

- 1 Stakeholders
- 2 Issues and how to manage them
- 3 Impacts, both positive and negative
- 4 Communication channels and media
- 5 Process for handling complaints, and a procedure for reviewing this process

## SAFETY

Health and safety performance of public transport providers, both in relation to public and employee safety, is integral to their license to operate. A series of high-profile accidents has raised the importance of the issue with Government, regulators and companies within the sector. Performance is linked to franchise renewal negotiations and the risk of litigation and compensation has increased through corporate manslaughter legislation.



It is therefore key to:

- Develop a comprehensive approach to risk management that incorporates health and safety risk
- Be aware of the legislation that applies to the business
- Assign responsibility (at Board-level) for health and safety
- Implement a health and safety management system
- Record and report health and safety incidents
- Monitor and review effectiveness of policies and systems

# conclusion

In such a diverse sector, the issues and impacts are numerous and cover the full spectrum of sustainability – economic, environment and social – issues. The single most significant issue for this sector is climate change. Market mechanisms, such as the EU ETS, will contribute to addressing the CO<sub>2</sub> emissions of the aviation, and perhaps in the future, the maritime industry. However, other industries in the sector such as freight logistics and public transport operators can contribute significantly to reducing the sector's environmental impacts, and to improving the operating efficiency and profitability of their companies.



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## USEFUL LINKS

Department for Transport

[www.dft.gov.uk/pgr/sustainable/](http://www.dft.gov.uk/pgr/sustainable/)

Energy Saving Trust

[www.energysavingtrust.org.uk/business](http://www.energysavingtrust.org.uk/business)

Business Link

[www.businesslink.gov.uk/environment](http://www.businesslink.gov.uk/environment)

Freight Best Practices

[www.freightbestpractice.org.uk](http://www.freightbestpractice.org.uk)



FOR MORE INFORMATION PLEASE  
CONTACT US ON:

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