



# Sustainable transport – better infrastructure

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The Danish Government

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The Danish Government intends to work towards a better connected Denmark in terms of both its traffic and the environment.

Traffic in Denmark has increased by more than 50% in the last 20 years and is expected to continue to increase at the same rate in the foreseeable future.

This is a necessary and positive development: high levels of mobility are an integral part of a strong society in terms of individual freedom, dynamic impetus and economic growth.

But the strategy we adopt for developing the traffic of the future depends on which type of society we want.

The Government wants a society in which we combine economic growth and high mobility with a better environment, higher priority for and better preservation of nature, reduced traffic noise and measures to combat climate change.

It is an ambitious target, and the transport policy is crucial to its success.

The Danish Infrastructure Commission has pointed out that the country faces significant transport-related challenges for which long-term planning is essential.

## Government objectives:

- Less CO<sub>2</sub> – transport-associated CO<sub>2</sub> emissions must be reduced. The trend must be reversed.
- Greener vehicular traffic – shift to green car tax.
- More public transport and cycling – public transport and bicycles must carry the greatest part of the projected growth in traffic.
- A better railway network – the rail network must be reliable, safe and state-of-the art.
- Better roads – congestion must be reduced.
- New green technologies – Denmark must be a green technology testbed for transport.
- Greater regard for nature – bridges, roads and railways must not destroy irreplaceable natural assets.
- Reduced noise and air pollution in urban areas – cars are the main source of noise and air pollution in our towns and cities.

The transport sector currently accounts for approx. 25% of Denmark's CO<sub>2</sub> emissions, and this figure is expected to rise in the years to come; and although in recent years there has been reduction in toxic emissions from traffic, the problems with noise and pollution remain.

This is a trend which the Government intends to reverse.

## A long-term green transport plan

The Government intends to take Denmark's transport policy in a green direction, without sacrificing our world class infrastructure.

This is a major undertaking. This is a necessary undertaking. And it is an undertaking which requires us to rethink our transport policy.

This publication sets out the Government's long-term green plan the transport of the future:

A plan introducing green taxes which will make Danes think about CO<sub>2</sub> and the environment when they buy a car; and intelligent road pricing and charges which will make us use our car when and where it causes the least congestion, noise and pollution.

A plan whereby the increased demand for energy-efficient cars will stimulate production using new technologies such as modern electrical cars: a technological development which we also aim to underpin by investing in research and innovation.

A plan whereby green taxes will encourage more and more people to opt for public transport instead of the car. But this in turn means that public transport must be made a viable alternative. The Government will therefore invest heavily in getting trains to run on time and in high speed intercity trains.

When more Danes use public transport, congestion on our roads will be relieved. Intelligent traffic systems will do their bit here, for example by showing the best road to take to avoid traffic jams. Once pressure on the roads in general has been relieved, investment in roads can be targeted at those areas where congestion is really serious.

This plan combines the Government's initiatives on green car taxes, research into new technologies, massive investment in public transport, intelligent traffic systems and new roads in a tightly knit strategy.

The Government's master plan covers the transport system in its entirety, steering the course of its development in a green direction. This is a long-term, comprehensive and coherent plan.

The Government envisages radical improvements to the transport options available for the Danes. It is therefore particularly important that these changes should be thoroughly thought through and that the solutions chosen should be efficient and flexible in everyday practice. Sufficient time must be devoted to developing a simple model for road pricing, free of red tape; and to put through major investments in the traffic sector, such as high-speed trains.

The major planks of the plan will therefore be put in place gradually over the next 10-15 years. The Government's green transport plan will be implemented in full in a measured, purposeful manner, developing a better, sustainable transport system which works flexibly for families and the business sector alike, reduces noise and pollution and safeguards our countryside and natural assets.

## Greener cars and less CO<sub>2</sub>

For many Danes, the car is essential for running their daily life. The car will continue to be important in future, but we must discourage the use of so-called petrol-guzzlers in favour of energy-efficient models.

Therefore the Government will effect a fundamental restructuring of the taxation of cars. We will shift the tax so as to make it cheaper to buy an energy-efficient car. At the same time we will introduce smart road pricing so as to make it more expensive to drive in the

rush hour in the cities than in the evening in the country.

It already costs Danes a great deal to have a car, so overall taxation on cars cannot rise. Road pricing must, in total, be offset by a lower registration tax. The restructuring will thus be achieved within the limits of the tax freeze.

The green restructuring of car tax will reduce congestion, noise, pollution and CO<sub>2</sub> emissions. At the same time it will increase demand for public transport.

The restructuring will also provide the framework for the rolling out of new transport technologies. Electrical and plug-in hybrid cars have a significant part to play in reducing CO<sub>2</sub> emissions in the transport sector without sacrificing high levels of mobility.

Intelligent traffic systems will help to improve road traffic. Information on alternative routes and speed limit control will even out the flow of traffic, thus saving both time and fuel and improving road safety.

## More public transport and more bicycles

Most of the traffic growth in future must be in public transport.

The Government's primary stratagem is to invest massively in rail transport. The train must increasingly be a viable alternative to the car.

Public transport must be modern and efficient, with an extensive network of routes and options, particularly in densely populated areas. High speed trains between our major cities will result in a journey of only three hours between the Danish capital of Copenhagen and the town of Aalborg in North Jutland.

Passengers must be able to rely on trains running on time. The Government will therefore carry on with the programme of repairing and replacing rail track and bridges. Modern signal systems, designed to cope with high speed trains, must replace the old.

The interfaces between the different forms of transport must be improved. For example, there must be better facilities for parking cars or bicycles by the station before taking the train.

Road conditions for cyclists must be improved, not only to alleviate congestion and protect the environment but also to improve our own health. The Government will therefore ensure that there are better cycle paths for commuters.

## New green technologies

The Government's long-term aim is to make Denmark independent of fossil fuels such as oil and gas.

Reorganising the transport sector will bring us closer to this target.

The Government's vision is to make Denmark a green technologies testbed for transport. We must improve fuel efficiency so that we use less energy, and we must become an attractive country for trialling and implementing new transport technologies, including electrical and plug-in hybrid cars.

The Government is about to carry out a globalisation strategy, whereby, starting in 2010, we spend one full percent of the Gross National Product on public sector research and development. This represents DKK 15-20 billion every year.

We must achieve productive interaction between public sector research and private sector organisations, reinforcing the "green growth" and ultimately benefitting users.

## Care for the natural environment

It is the Government's aim to hand over the Danish nature in a better shape than when we inherited it from the previous generation. Nature is of unique value for human beings.

Recognising this, the Government will have greater regard for the value of nature when carrying out urban development projects and building roads and railways. This policy is exemplified by the decision to route and build the new motorway to the town of Silkeborg so as to preserve the wildlife and scenery around the river Gudenå – even though it is not yet a universally popular policy.

## A green investment plan

The Government's high ambitions for the green transport of the future will require considerable investments. The Government will invest more than DKK 150 billion in our infrastructure in the period taking us up to 2020.

Two large-scale projects, the Fixed Fehmarn Belt Link and the Metro Circle Line, which are being financed partly by tolls outside the Finance and Appropriations Act, account for approx. DKK 60 billion.

The remaining amount of DKK 90 billion is being financed by a new Infrastructure Fund, which will be responsible for the major investments in roads and railways in the coming years. The government will inject more into the fund in line with the emergence of new, sustainable financing.

The Government will plan a rolling investment programme. We must maintain our focus on key challenges and targets.

Every other year current construction projects must be evaluated, on the basis of analyses and decision-making criteria. And every four years decisions must be made as to which projects will be subject to new analysis, so that future investments in infrastructure take place on the basis of a rolling investment programme.