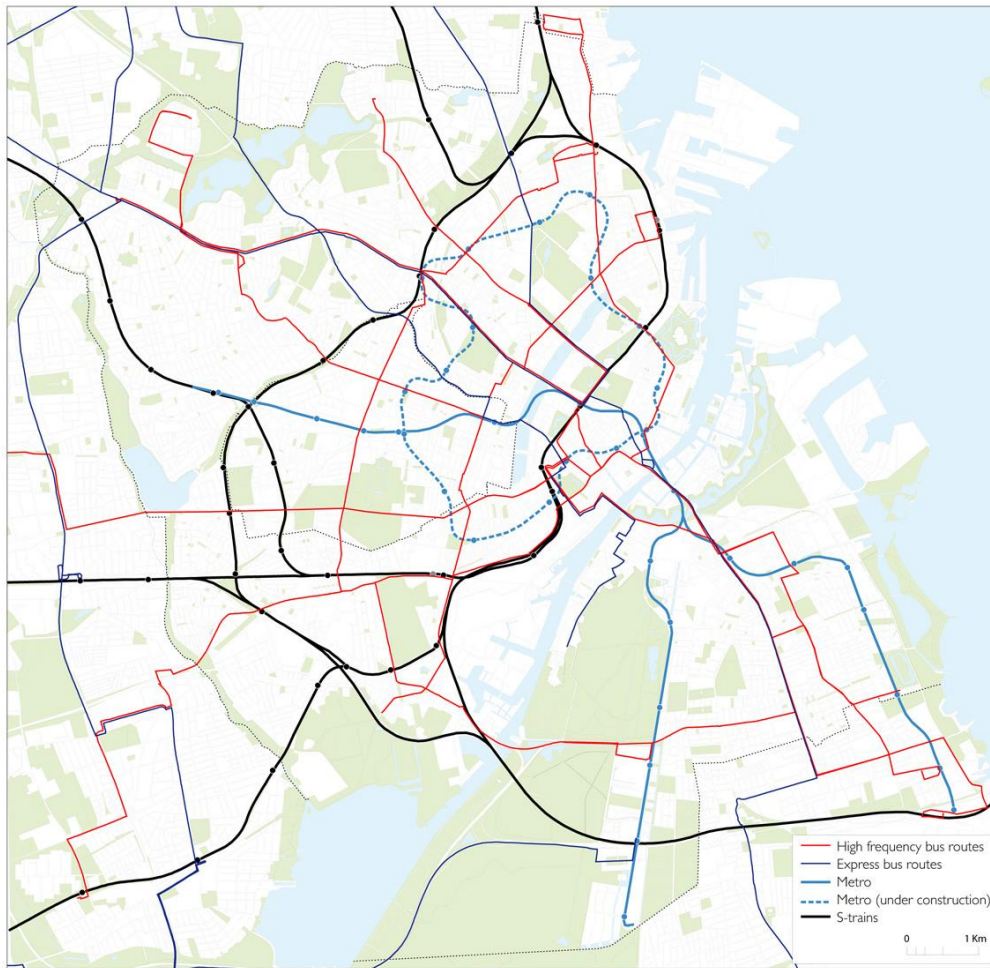


<p>2. Local transport</p>	<p>Plans and Visions</p> <p>There are five main plans/visions setting goals for transport planning and actions:</p> <p>The Transport and Environmental Plan 2004: The overriding objective is to assure a fully functional transportation system for the city causing substantially less environmental impact than today. The plan contains an action plan on 20 initiatives.</p> <p>Copenhagen's Cycle Politic 2002-2012 is the first overall action plan for the cycle conditions in the city. More cyclists, safety, speed, comfort are some of the subjects in focus. Eco-metropolis 2007: Has 4 themes and 13 measurable goals. One of the themes is Copenhagen as the World's Best City for Cyclists. Especially important for transport is the objective saying "50 % of all people going to work or education in Copenhagen will go by bike".</p> <p>CopenhagenClimate Plan 2009 contains 15 initiatives for transport and the goal is to reduce CO2-emissions from transport by 10 % from 2005 to 2015. The lighthouse initiative is electric and hydrogen cars running on wind energy.</p> <p>Municipal Strategy 2009: The overall objective for the modal split in Copenhagen is that for all trips "on wheels" at least 1/3 must be by public transport, at least 1/3 by cycle and less than 1/3 by car.</p> <p>The key efforts of the plans for transport are</p> <ul style="list-style-type: none"> • The City of Cyclists • Improved public transport • Traffic calming and parking restrictions • Environmental efforts like low emission zones, possible congestion charging and environmentally friendly vehicles <p>The City of Cyclists</p> <p>The City of Copenhagen has set itself the overall goal to be the world's best city for cyclists, and since 2007 this has set the framework for measures in the cyclist area. The goal is to have 50 % of people cycling to work or their place of education in Copenhagen in 2015 (in 2010 there was 35 %), thereby contributing to meeting the goal of CO2-neutrality by 2025. Since 2006, more than EUR 67 million has been spent on the cycling area to implement a large number of initiatives, e.g. two pedestrian/cycle bridges over water courses and major road arteries (Bryggebroen and Åbuen).</p> <p><i>Length of designated cycle lanes in relation to total number of inhabitants in the city;</i> As at October 2010 there were:</p> <ul style="list-style-type: none"> - 346 km designated, physically separated lanes, i.e. 0.64 m per inhabitant - 23 km designated, marked and signed only lanes, i.e. 0.04 m per inhabitant - 42 km green cycle lanes removed from the road network, i.e. 0.08 m per inhabitant <p>Mixed lanes are not calculated by the City.</p> <p>Improved public transport</p> <p>Local S-trains, the Metro and the high-frequency A-bus network are the foundation of the public transport system in Copenhagen. A city ring for the Metro is under construction and is expected to open in 2018. About 234,000 passengers are expected on the city ring on week days, 3,000 new journeys in the greater Copenhagen area, and about 3.4 % more journeys by public transport. In the longer term it is proposed to supplement the Metro system with more lines, including to two large urban development areas. The map shows Metro and local S-train links and high frequency and express bus routes.</p>
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At the same time as the Metro city ring is under construction, the rest of the public transport service is being adapted in order to ensure the best possible interplay between modes of transport (bus, cycle and train) when the city ring opens.

In addition the City is improving accessibility for buses on central road stretches. Bus lanes are being established with traffic-light priority for buses, and bus stops for the high frequency A-bus network are being upgraded with good shelters and real-time information about bus arrivals.

Share of population living within 300 metres of an hourly (or more frequent) public transport service;

- 98 % of Copenhageners have less than 350 m to public transport (unfortunately the City of Copenhagen does not calculate the figure for less than 300 m as requested above).
- For high-frequency lines (Metro, S-train and A-bus): 78 % have less than 350 m and 94 % less than 600 m.

Proportion of all journeys under 5 km by private car;

There are no statistics on total number of journeys under 5 km in Copenhagen. However, there is a breakdown of journeys under 5 km to and from work or educational institution, see below:

	< 2km	2-4.9 km	< 5 km	Proportion (%)
Walk	30,000	6,000	36,000	21

Bicycle	35,000	67,000	102,000	58
Car	3,000	18,000	21,000	12
Bus	1,000	9,000	10,000	6
Train/Metro	1,000	4,000	5,000	3
Total	70,000	104,000	174,000	100

In addition to physical initiatives, the City works to influence transport habits through campaigns, branding and information. Special focus is on cycling with, e.g. the brand "I bike CPH", distribution of rolls in the morning, bike lights, saddle covers etc. The most recent campaign was to spread "good cycle karma" by giving out chocolate. And the City will draw up transport plans for all administrations to encourage the employees to change transport habits.

Proportion of public transport classified as low emission

In Copenhagen trains and metro are considered the lowest emission public transport modes. Their CO₂-emissions per passenger km are less than half those of buses. The number of passengers in public transport is approx. 750,000 per weekday, and a little less than half are by train and metro.

Copenhagen is served by approx. 575 buses and the proportion on standards is as follows:

Standards	Proportion	
	2007	2010
Euro II + filter	16 %	7 %
Euro III + filter	38 %	37 %
Euro IV	7 %	8 %
Euro V	8 %	12 %
EEV	8 %	34 %
LPG	23 %	2 %

Traffic calming and parking restrictions

The City of Copenhagen is working in several ways to reduce traffic. The City wants to introduce congestion charges in the same way as e.g. Stockholm. This would reduce traffic in the city. It looks as if a majority of the newly elected Parliament will vote in favour of a legislative amendment to allow congestion charges.

The City has changed and expanded its parking strategy in order to reduce incoming traffic - especially commuter traffic. The area with parking charges in Copenhagen has increased three-fold and prices have increased. Furthermore, the Municipal Planning for 2009 introduced a set of parking standards to ensure that Copenhageners are able to park their cars near their homes and that commuter traffic by car is limited.

In addition, the City is trying to encourage use of car-share schemes, by e.g. making available reserved parking spaces for licensed shared cars.

Finally, the City has adopted a road-network plan in the Municipal Plan, the principle of which is that traffic should primarily be on main roads, and that roads should be designed to suit their function. E.g. Nørrebrogade is being redesigned with no through traffic and improved conditions for pedestrians, cyclists and buses.

Environmental efforts

All the above initiatives have an impact on the environment, both CO₂ emissions as well as air and noise pollution. In addition special initiatives are planned/have been started to limit noise and air pollution, e.g. low emission zones and a noise action plan. See sections 5 and 6. Finally, the electric and hydrogen car project is very ambitious and this will have a large environmental impact in the long term (see section 10).

The development in transport the past years

Since adoption of the Traffic and Environment Plan, the City has regularly evaluated progress in traffic developments and realisation of the plan in its "traffic accounts" known as "Trafikken i København". The 20 initiatives have almost all been implemented, except for congestion charges, which require a parliamentary majority. From 2010, evaluations of the City's environmental initiatives, including for the transport area, will be gathered in the Copenhagen's Green Accounts, which are described in section 11.

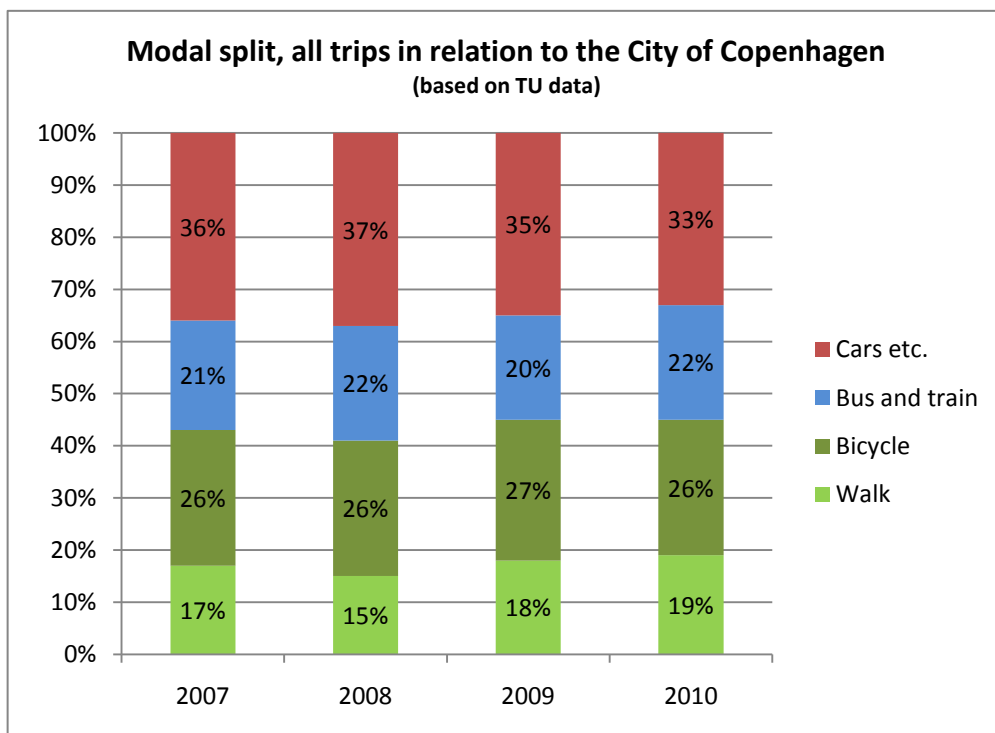
Overall, developments have been moving in the right direction over the past 10 years. This is particularly apparent if changes in employment and population are compared. Cycle traffic and public transport in Copenhagen have increased more than car traffic, even though the population is increasing and there are more jobs. Initiatives are therefore working.

Population: +7 %
 Jobs: +10 %
 Cycle traffic: +13 %
 Number of people using public transport: +10 %
 Car traffic: +5 %

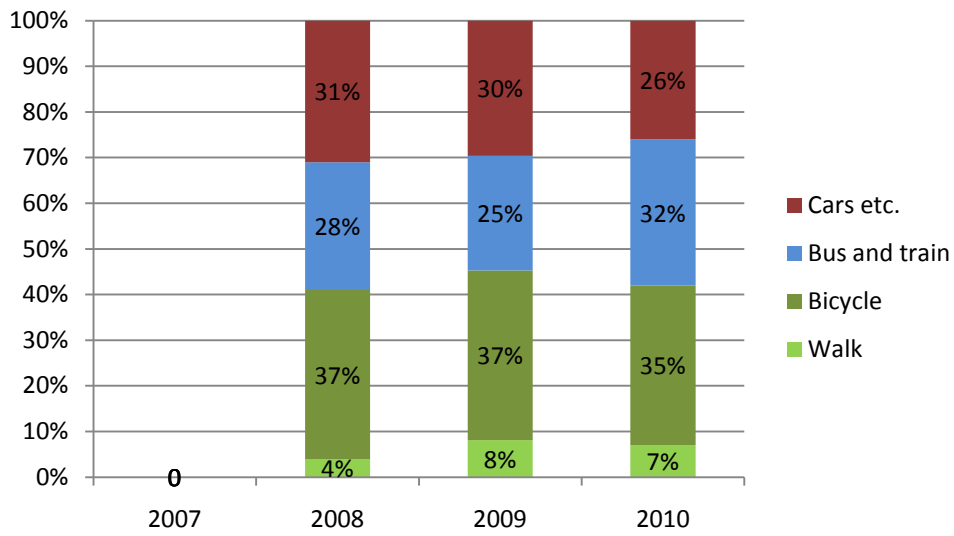
For many years, the City of Copenhagen has worked to improve conditions for cyclists in the city and to encourage more people to choose their bike. And we have succeeded. Since 1998 the number of km cycled has increased by about 30 %, despite a general fall in cycling in Denmark of about 30 % since 1990.

Modal split:

The breakdown of vehicles also shows that developments are moving in the right direction. Car traffic has decreased both for all journeys and for journeys to and from work.



Modal split, all trips to work or education in the City of Copenhagen (based on TU data)



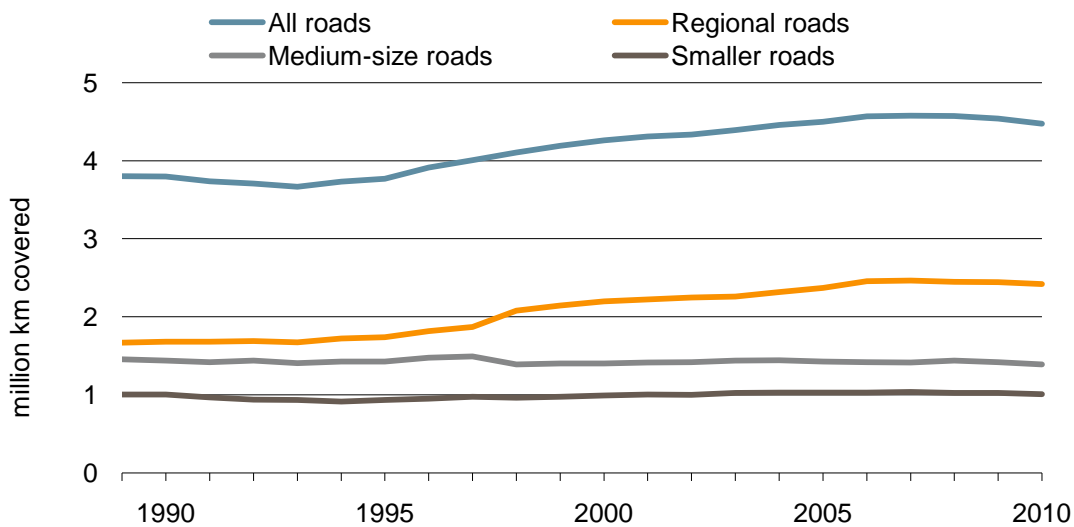
Modal split, trips to work or education in the City of Copenhagen, only Copenhagen residents (based on TU data)



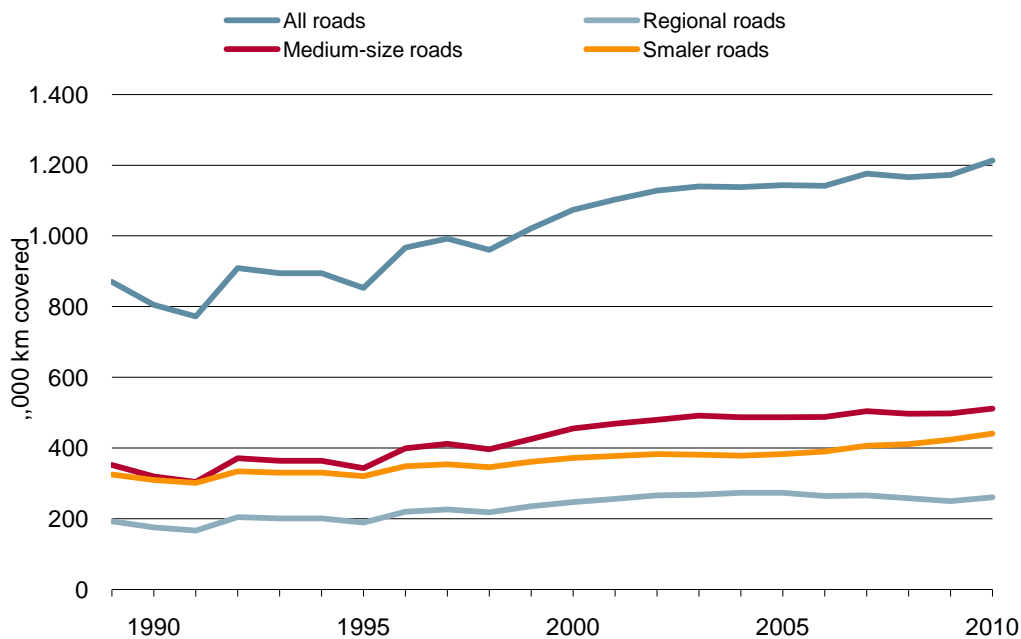
Developments in traffic performance.

As the two figures below show, car traffic performance has fallen, and the policy of having regional roads take most traffic has worked. Similarly, cycle traffic performance has risen on all types of road.

CAR TRAFFIC IN COPENHAGEN MONDAY THROUGH FRIDAY (DAY AND NIGHT)

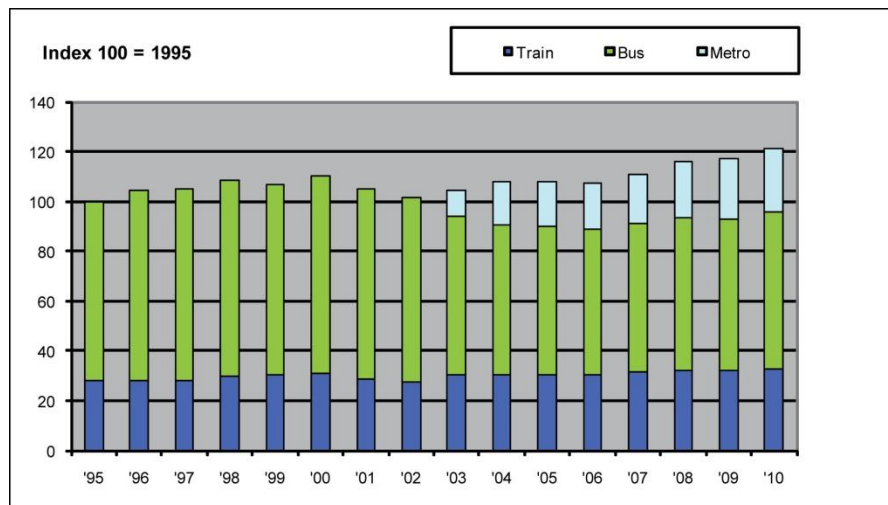


CYCLE TRAFFIC IN COPENHAGEN MONDAY THROUGH FRIDAY (DAY AND NIGHT)



Changes in public transport:

More passengers have started using public transport. Total passengers over the past 10 years have increased by about 10%.



Development in public transport in the City of Copenhagen and City of Frederiksberg municipalities 1995 - 2010 (data from the City of Copenhagen municipality).

As the table earlier in this section shows, developments in the bus fleet are also moving in the right direction. The percentage of Euro II busses dropped from 16 % to 7 % from 2007-2010, while the percentage of EEV busses increased from 8 % to 34 %.

Cyclist key figures in year 2000 and 2010:

	2000	2010	Increase (%)
Cycled km per weekday (Mil. km)	1.05	1.21	15
Cycled km between serious casualties (Mil. km)	2.4	4.4	83
Km cycle tracks	307	346	12
Km green cycle routes	31	42	35

For further information:

http://www.kk.dk/sitecore/content/Subsites/CityOfCopenhagen/SubsiteFrontpage/LivingInCopenhagen/CityAndTraffic/~/_media/439FAEB2B21F40D3A0C4B174941E72D3.ashx

Extended parking scheme:

The effect of the extended parking scheme has been that car traffic to and from the inner city has dropped by about 6 % from 2007-2009.

CO2 developments, road traffic:

Calculated CO2 emissions from road traffic (1,000 tonnes per year) show that developments here are also moving in the right direction. Since 2005, emissions have fallen about 5 % and in the last two years alone by almost 7 %.

	2005	2008	2009	2010

Cars	279.1	285.4	265.4	254.3
Vans	49.6	50.3	64.8	67.3
Trucks	34.5	36.5	28.0	25.5
Busses	31.7	32.9	27.7	29.5
Motor cycles	1.5	1.6	1.4	1.7
Total	396.5	406.7	387.3	378.2

Lessons learned

The City of Copenhagen has demonstrated a clear political willingness to improve conditions for public transport and in particular for cyclists, e.g. through broadening of cycle lanes and increasing the height of the curbs separating these from the car and bus lanes to improve security for cyclists. This political support is necessary in order to really change transport habits and patterns.

A effective tool to support the policy decisions has been the Cycle Accounts and the Traffic Accounts/Green Accounts, which evaluate initiatives by the City, goal achievement and what residents/users of the city think. With this backdrop, the direction in which the city is moving becomes very clear, and whether initiatives are working as intended. Politicians and officials can use this to adjust and develop initiatives.

For example the Cycle Accounts clearly show that it is important that physical changes in the streets are followed up with campaigns, visible branding and other soft initiatives, which are more communicative. Great impacts are only made when physics, visibility and campaigns go hand in hand.

Plans to meet or revise key targets for the future and proposed approach to achieve these.

Refer to:

1. *Reduction of overall demand for transport;*
2. *Reduction of individual motorised transport;*
3. *Promotion of less environmentally damaging modes of transport.*

The Traffic and Environment Plan 2004 still applies, but the City of Copenhagen is currently preparing a new plan called "Action Plan for Green Mobility".

The action plan is both a vision for green mobility and a plan with concrete initiatives. The vision is that "mobility in Copenhagen is to be more efficient and more green in order to stimulate growth, contribute to a carbon-neutral city and to good city life". In other words the best framework must be established for green transport, i.e. walking, cycling, public transport and alternative electric and hydrogen vehicles as well as car-share schemes. The plan is holistic and it links spatial planning closer to traffic planning. Therefore the basic philosophy in the plan is first to address the lay-out of the city so that the conditions for green mobility are enhanced in both existing and new urban areas. This will be followed up with improvements in green transport programmes and adaptation of the road transport system to achieve more sustainable traffic development. These two schemes will be supported by direct campaigns to influence people's choice of transport through taxes and mobility management. The Action Plan for Green Mobility therefore aims at point 1-3 above.

In addition, on the basis of the Copenhagen Climate Plan, work has been initiated on a climate action plan with the goal of CO2 neutrality by 2025. This action plan contains four focus areas, including green mobility. Under this focus area, six projects have been defined, each with action points:

- Alternative means of propulsion (aims at point 3 above)
- Mobility management (aims at point 1-2 above)
- ITS (aims at point 1-3 above)
- Public transport (aims at point 2-3 above)
- E mobility (aims at point 3 above)
- Cycle City (aims at point 1-3 above)

Each of these projects is to contribute to making Copenhagen carbon-neutral by 2025.



These two strategies which are currently under preparation/political adoption:

The pedestrian strategy which is to encourage more people to walk more. The vision is: “we will organise the city so that people choose to walk, and this will contribute to a living city with good city life and a good urban environment (...)”. The goal is that in 2015 pedestrian traffic will have increased by 20% compared to 2009.



The cycle strategy which ensures that Copenhagen is the world’s best cycle city. A number of goals and initiatives have been drawn up to be implemented up to 2025. Initiatives are to ensure that it is even safer, quicker and easier to cycle than it is today and that the goal that 50% cycle to and from work/education in Copenhagen can be achieved (the percentage includes both those commuting into the city and Copenhageners themselves). See

http://kk.sites.itera.dk/apps/kk_publicationer/pdf/681_GektAxfnog.pdf

Both strategies aim at point 1-3 above.

A very important initiative in the “Action Plan for Green Mobility” and in the “Copenhagen Climate Plan” is congestion charges. Charges will have a great effect on congestion and on the climate, environment, urban environment etc.

From 2010 the City has been taking part in a large collaboration project, Formel M, to profile mobility management in Denmark. The project is being funded by the Danish government and the Capital Region of Denmark. Work by the City concentrate on demonstration trials to establish a network of enterprises in order to have them draw up transport plans, learn from each other, and possibly establish common solutions. The next step is collaboration with hospitals on their transport and possibilities to reduce car transport as well as encouraging behaviour changes in residents in a specific part of the city.