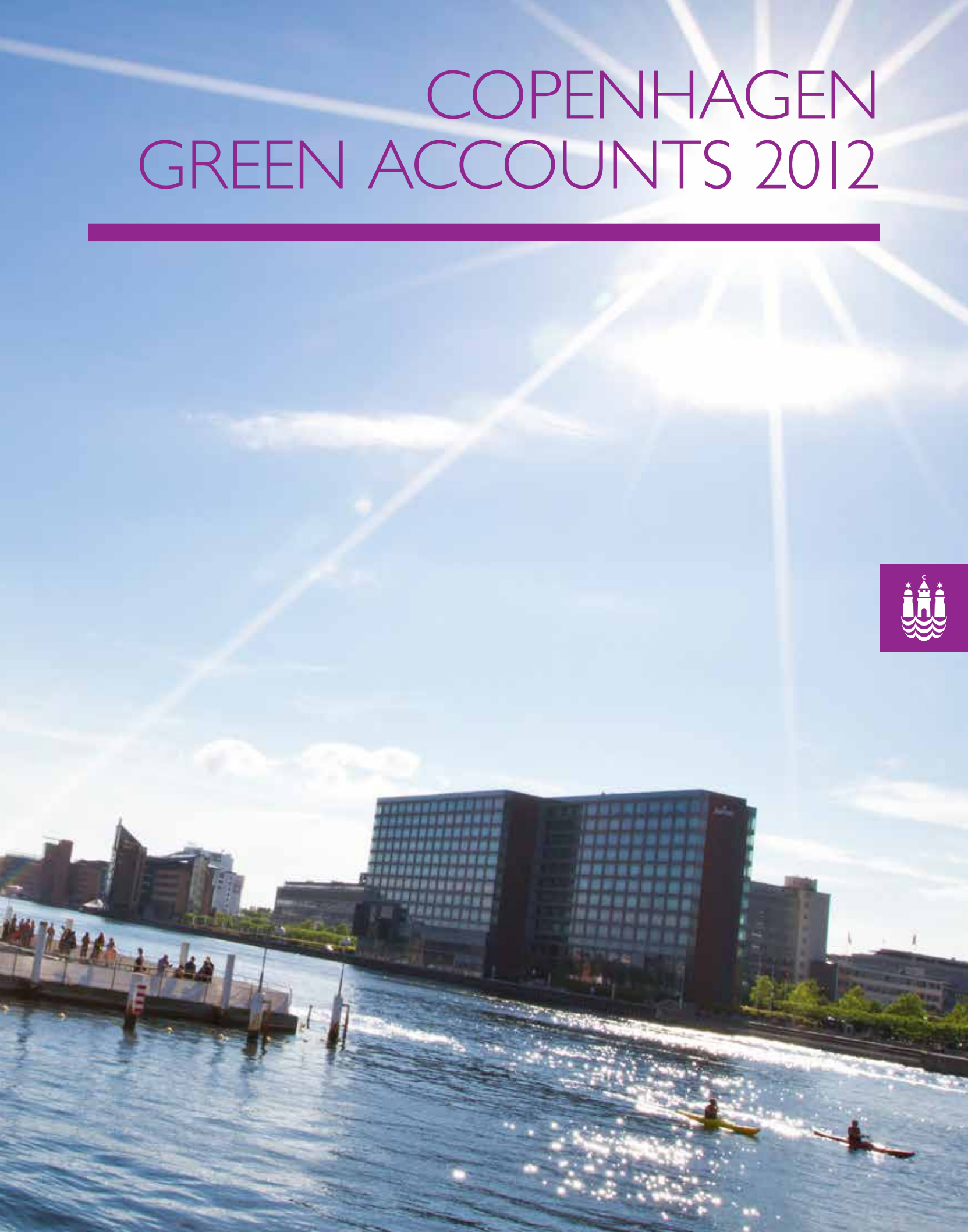


COPENHAGEN GREEN ACCOUNTS 2012



THE GREEN CAPITAL OF EUROPE IS SHOWING THE WAY



Today, Copenhagen has gained a reputation all over the world as a green city, maybe even more so than Copenhageners are aware of themselves. We are well on our way to becoming the first carbon neutral capital in the world, and we have top ratings in several international rankings of green cities. Most recently, Copenhagen won the prestigious European Green Capital Award for 2014, awarded by the European Commission. The award is international recognition of the Copenhagen's efforts to create a sustainable city, where quality of life and green growth are closely entwined.

In the Copenhagen Green Accounts we present an overview of how far we have come with regard to our climate and environment-friendly efforts on the basis of our vision to become an Eco-metropolis in 2015 and be carbon neutral in 2025. You can also read about a number of initiatives that will make us proud of living in the greenest city in the world.

We are on target to meet many of our goals. For example, we have already reached the goals set for reducing CO₂, for creating access to recreational areas and for improving the level of street cleaning. However, an extra effort is required to meet some our goals, and we must admit that a few of the goals may prove difficult to meet fully, despite our extra efforts. For example, the fact that the congestion charge has not been realised is blocking the way for achieving the goal that 50% of people cycle to work or their educational institution as well as the goal to significantly reduce noise from traffic.

The City of Copenhagen is showing the way by energy renovating its buildings and switching to green transport forms

and organic food. However, we will increasingly focus our efforts on involving Copenhageners in meeting our goals by creating awareness and a sense of ownership in our shared ambitions. Because we cannot meet the our goals on our own. Our green success is highly dependent on the daily conduct of the city's citizens: domestic energy use, mode of transportation, and willingness to be a sustainable consumer and treat waste as a recyclable resource. We want to make it easier and more fun to make green choices every day, and we want to break down the barriers that make it difficult to make these green choices.

Moreover, close collaboration with Copenhagen businesses and institutions of higher education is also needed if Copenhagen is to continue increasing the quality of life of its citizens, creating jobs and securing investments in the city, while at the same time phasing out the use of fossil fuels so as to achieve a city independent of such fuels in 2025.

Lord Mayor
Frank Jensen

A handwritten signature in black ink, appearing to read 'Frank Jensen'.

Mayor for the Technical
and Environmental Administration
Ayfer Baykal

A handwritten signature in black ink, appearing to read 'Ayfer Baykal'.

CONTENTS



CAN WE ACHIEVE THE GOALS?	4
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GREEN GROWTH METROPOLIS	6
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THE WORLD'S BEST CITY FOR CYCLES	9
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CLIMATE CAPITAL	10
-----------------	----

A GREEN AND BLUE CAPITAL CITY	12
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A CLEAN AND HEALTHY BIG CITY	14
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CAN WE ACHIEVE THE GOALS?



It will be possible to achieve the goal on time with unchanged municipal efforts.



It will be possible to achieve the goal with reinforced municipal efforts.



It will be possible to achieve the goal with reinforced municipal efforts of considerable extent.



In addition to the City's efforts, assessments may comprise factors that are important for meeting the goals, but that lie outside the responsibilities of the City.

GOALS FOR 2015

CAN WE ACHIEVE THE GOAL?

HOW FAR HAVE WE COME?

THE WORLD'S BEST CITY FOR CYCLES

At least 50% of people to cycle to their workplace or educational institution in Copenhagen.



In 2012 36% of people commuted by bicycle. This figure has remained stable since 2004. One of the preconditions for achieving this goal was the introduction of a congestion charge, however this charge lacked political backing. Because of this, the City assesses that it will not be realistic to achieve this goal before the end of 2015. Measured as the number of kilometres cycled in Copenhagen, bicycle traffic is at its highest level in 50 years. If the percentage of people who cycle is to increase significantly in parallel with the overall increase in traffic, a more extensive grid of high quality cycle paths is needed to deal with the increasing number of cyclists. Focus should be on reducing travel time, increasing convenience and making it safer to cycle. Moreover, collaboration with external partners is needed and new and better solutions should continuously be developed.

The number of seriously injured cyclists in Copenhagen to be halved compared with 2005 (when there were 118 serious injuries).



There were 101 serious accidents and one fatal accident involving cyclists in 2012. This is the same level as in 2009, however slightly higher than in 2010 and 2011. However, seen over a longer period this constitutes a drop. The goal is assessed to be within reach if municipal efforts are reinforced, e.g. by redesigning intersections and stretches of road where there are relatively many accidents. This will require investing in traffic-safety measures in the coming years.

At least 80% of cyclists in Copenhagen to feel safe and secure in traffic.



In 2012, 76% of cyclists responded that they feel safe and secure in traffic. This is an increase of 25 percentage points compared with 2008, when this figure was 51%. This significant increase is assessed to be due to efforts made over the past years, e.g. re-designing intersections, making cycle paths wider and carrying out campaigns that stimulate road and cycle-path users to demonstrate more considerate behaviour. It is assessed that this goal can be achieved by maintaining efforts in this area. The City will continue to concentrate its efforts on intersections, inadequate cycle paths and road-user conduct.

CLIMATE CAPITAL

Copenhagen's carbon emissions are to be reduced by at least 20% in 2015 compared with 2005.



In 2011, Copenhagen had already achieved its goal to reduce carbon emissions from the city by 20% compared with 2005. In 2012 CO₂ emissions have been reduced even more, and today emissions are more than 24% lower than in 2005. This is despite the fact that the population has increased by 10%.

A GREEN AND BLUE CAPITAL CITY

90% of Copenhageners to be able to walk to a park, a beach, a natural area or sea swimming pool in less than 15 minutes.



A new survey shows that today 96% of Copenhageners are able to walk to a large green or blue recreational area in less than 15 minutes. The only parts of Copenhagen where the percentage is lower than 90% are the districts of Valby and Amager Vest. Even though the City has reached its overall goal, we will continue to improve access to the city's blue and green recreational areas.

Copenhageners to visit the city's parks, natural areas, sea swimming pools and beaches twice as often as today (2007) (on average 1 hour every other day in 2007).



The 2012 survey shows that Copenhageners on average visit the city's recreational areas approximately 2.5 times a week for a total of just under 4 hours. The average amount of time spent in Copenhagen parks is 88 minutes. This is an increase of 10% compared with 2011 figures and 37% compared with in 2007. Despite this increase, the City assesses that this goal will be extremely challenging to meet.

A CLEAN AND HEALTHY BIG CITY

Copenhageners to be able to sleep peacefully, free from noise harmful to health from street traffic.



The City has introduced many traffic-noise-abatement measures that have reduced noise from traffic in the city. However, noise from road traffic depends on the source of the noise itself, that is engines and tyres. This means that the noise from the source itself must be reduced and therefore legislation in this area must be tightened.

A great many dwellings will have to be soundproofed, if we are to meet this goal. Lack of financing for the initiatives required to achieve this goal, such as façade insulation and noise-reducing asphalt, means that, as the situation is today, significantly reinforced municipal efforts will be needed.

All schools and institutions to be subject to only low traffic-noise levels during the day.



More than 50% of city schools and daycare facilities are located in areas where noise levels are too high. Therefore significantly reinforced municipal efforts are needed if we are to achieve this goal. The City's plan for fully renovating its schools includes sound insulation of both teaching facilities and outdoor recreational areas. Two schools have been soundproofed in connection with a full renovation, and several other schools will be soundproofed in connection with a planned full renovation or renovation that is already in action.

The air to be so clean that Copenhageners' health will not be damaged.



Nitrogen dioxide pollution remains approximately 25% higher than the EU limit value, whereas the limit values for particles were not exceeded in 2012. In 2013 the City will reinforce its efforts with regard to clean air by introducing an overall plan for clean air in the city to contribute to achieving this goal.

There should be at least 20% organic food in the city's food consumption.



This goal is expected to be achieved in 2015 due to the increase in retail sales of organic products.

At present we do not know how great a proportion of the food served in restaurants, cafés and private canteens is organic. Substantial consumption of organic products by municipal organisations, see the goal below, has a positive effect on the city's overall organic consumption.

The City to lead the way with at least 90% organic food in its institutions.



At the beginning of 2013, the percentage of organic food was calculated at 76%. Thus there has been a steady increase in this area since 2005 due to the City's targeted efforts. The last 14 percentage points to reach the goal of 90% constitutes the greatest challenge and will require a high level of professionalism and targeted efforts in each single facility. Approximately 50 large facilities have now been certified to use the organic food label. This means that they are required to record the actual amount of organic products they buy and not simply give an estimate of this figure. It is assessed that this has led to a slight fall back with regard to organic food consumption, as estimates are often optimistic. Despite this, there has been a positive development in the recorded amounts, from 74% in 2011 to 76% in 2012. Switching to organic food in the city's large central kitchen in 2012 has led to an increase in this kitchen's consumption of organic food from 0% to 18%.

Copenhagen to be Europe's cleanest capital and one of the cleanest capitals in the world.



In 2010 Copenhagen scored 4.1 and thus ranked lowest in a international benchmark survey of street cleaning in six European capitals. However, on the basis of the City's decision to include the current resources allocated to street cleaning as a fixed item in the City's budget, it is assessed that this goal can be achieved as there are only 0.4 points up to the survey's highest ranking city. Efforts will include both more efficient procedures and involvement of citizens and businesses in voluntary schemes and partnerships.

Litter to be cleared from public streets within eight hours.



The City has met this goal since 2011 by systematically clearing litter from public streets within eight hours in the city centre and in other areas with many litter incidences. Moreover, when citizens report more serious litter incidents in public areas, litter will be removed within eight hours.

GREEN GROWTH METROPOLIS

COPENHAGEN IS INVESTING IN GREEN GROWTH AND JOBS

Copenhagen is coupling its goal to become carbon-neutral in 2025 with its goals for growth, employment and high quality of life. By coupling these goals, Copenhagen can underpin green growth at the same time as developing into an even more sustainable and environmentally friendly city, in which new solutions contribute to enhancing the quality of life for Copenhageners. Realising these ambitions requires massive investment from both the City and other players.

BEING AMBITIOUS REQUIRES MASSIVE INVESTMENT

In the budget period from 2013 to 2016, the Copenhagen City Council has earmarked a total of DKK 1.1 bn. for investments supporting green growth. Investments in green mobility include investments in cycles, and in intelligent traffic systems. In addition to renovating schools, the City's energy renovation plans include replacing the existing street lights. Finally, investments in climate change adaptation include initiatives aimed at dealing with cloudbursts and preparing the City's buildings for climate change in general.

In the same period, the Copenhagen 2025 Climate Plan has earmarked approximately DKK 8.1 bn. for investments in green energy, e.g. wind turbines and conversion from coal to biomass at the Amagerværket. The City's own supply company, HOFOR, is responsible for the major part of these investments, however other energy companies and Amager Resource Center, a Copenhagen-based waste and energy company, will also make substantial investments.

In total approximately DKK 9.2 bn. will be invested in green growth in the period 2013 to 2016.

IMPACT ON JOBS

Green investment will not only help reduce carbon emissions, it will also create jobs. It has been calculated that the City's DKK 1.1 bn. investment will have a job impact corresponding to work for approximately 2000 people for one year. If the energy companies' investments are included, this will lead to a job impact corresponding to work for approximately 13,000 for one year.

NEW PARTNERSHIPS

The City of Copenhagen is working with knowledge institutions and enterprises to promote green growth.

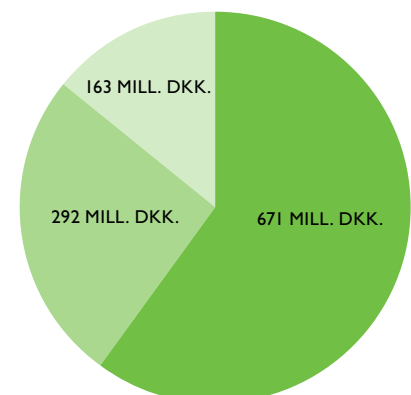


In addition to a partnership agreement with the Technical University of Denmark and a new partnership agreement with Aalborg University on developing innovative urban solutions in Copenhagen, the City of Copenhagen has entered into partnerships with a number of small and medium-sized enterprises.

Moreover, the City of Copenhagen is in the process of establishing a number of new public-private innovation partnerships in climate and the environment. For example within energy renovation (e.g. the 'Climate block' project ('Klimakarré') from 2014 to 2017) and climate adaptation (e.g. projects associated with the 'Climate neighbourhood Skt. Kjeld' project). The objective of these projects is to contribute to realising the City's ambitions within the climate and environment area, while at the same contributing to growth, innovation and competitiveness among participating enterprises and knowledge institutions.

TOTAL CITY INVESTMENTS IN GREEN GROWTH 2013-16

- Energy renovation
- Green mobility
- Climate adaptation



COPENHAGEN AS A CENTRE FOR GREEN GROWTH

Copenhagen businesses are developing the green solutions of the future and creating growth.

PAVING THE WAY FOR INNOVATION AND GROWTH

The City of Copenhagen has a goal of average annual growth in GDP of 5% up to 2020 and it will pursue this goal by, for example, strengthening the position of the Greater Copenhagen area as a centre for green growth.

Copenhagen will test new green solutions in the city and act as an international showcase. In this way Copenhagen will become a breeding ground for innovation and growth and it will underpin developments in green enterprises, which supply products and consulting services to reduce pollution and resource consumption.

GREEN PRODUCTION AS LOCOMOTIVE FOR GROWTH

In the period 2006-2010, the revenues of green enterprises in the greater Copenhagen area grew by 12%, and Copenhagen's green goods exports increased by 21%. In comparison, no other sector has seen growth in revenues over the same period.

Also, in terms of absolute figures, green enterprises are responsible for a significant contribution to the Danish economy. In 2010 green goods exports amounted to approximately DKK 6.1 bn., corresponding to approximately 3% of total exports from Copenhagen businesses. In the same year, the total revenues of green enterprises were DKK 21 bn., corresponding to about 5% of the revenues of manufacturing industry. These significant results are partly due to the high



GOAL FOR EMPLOYMENT IN 2015

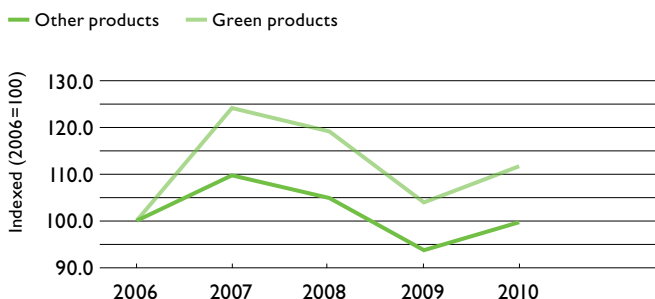
- There is to be growth of 20% in employment in clean tech enterprises in the capital region compared with 2011.

and rapidly growing productivity of green enterprises, which is 40% above the average for Danish businesses.

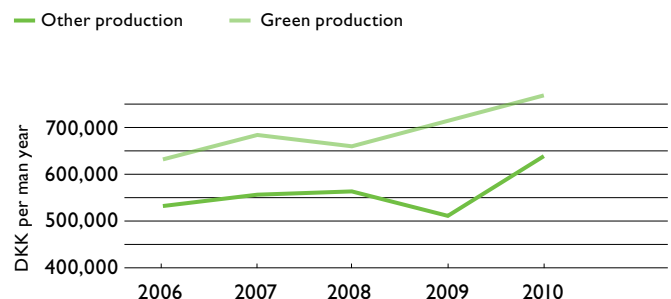
STRENGTHENED COMPETITIVENESS BUT FEWER JOBS

Green enterprises in the Capital Region of Denmark account for around 30,000 jobs, of which about 8,000 are in Copenhagen itself. Despite these impressive figures, employment in the green sector in the Capital Region of Denmark has fallen by approximately 10% since 2006. As revenues and exports have increased significantly in the same period, this drop in employment can be explained by considerable improvements in productivity in the sector. This has strengthened the sector's competitiveness and thus paved the way for future growth.

REVENUES TRENDS IN THE CITY OF COPENHAGEN



PRODUCTIVITY TRENDS FOR ENTERPRISES IN THE CAPITAL REGION OF DENMARK





COPENHAGEN IS THE EUROPEAN GREEN CAPITAL IN 2014

In 2012 Copenhagen won the European Commission's prestigious European Green Capital Award 2014. The award recognises Copenhagen's efforts to create a green and sustainable city that is attractive to live and invest in. Moreover, the award also recognises efforts made by ordinary Copenhageners.

The jury chose Copenhagen because the city serves as a good role model for urban planning and design and because Copenhagen is a pioneer with regard to sustainable transport solutions. They emphasised the City's partnerships with businesses with focus on green growth and employment. Moreover, the jury found that the City's 'green laboratory' development project in the port area of Nordhavn is particularly well suited to be copied in other urban areas and big cities. Finally, the way in which the City of Copenhagen has succeeded in involving its citizens in its green solutions was emphasised as being particularly effective.

The European Green Capital Award means that Copenhagen has committed itself to acting as a role model for other cities, and that green Copenhagen solutions, such as the city's district heating grid, its sea swimming pools and cycle paths, are to be showcased even more in 2014. In collaboration with its citizens, educational institutions, enterprises, and other cities and partners, the City of Copenhagen has planned a number of events for 2013 focusing on Copenhagen's experience as a green city.

THE WORLD'S BEST CITY FOR CYCLES

MORE CYCLES LEAD TO BETTER URBAN LIFE

Bicycles afford a healthy and improved city environment, and as a carbon-neutral mode of transport, bicycles are also a major contribution to the City's long-term goal of a carbon-neutral city in 2025.

The City of Copenhagen is targeting its efforts to improve conditions for cyclists, and in autumn 2011, the City agreed on a new strategy for this area up until 2025 called 'From good to the world's best, Copenhagen's cycle strategy 2011-2025'. The strategy's key words for future efforts in the cycle area are: urban life, convenience, speed and safety.

In 2012 the percentage of cycle commutes to and from work and places of education was 36%. This percentage has been stable over the past years. Therefore significantly reinforced efforts in the cycle area are needed, for example introducing restrictions on car traffic, if the goal that 50% of people are to cycle to their workplace or educational institution is to be achieved.

To further encourage cycle commuters, the first cycle super path connecting municipalities surrounding Copenhagen with the city was opened in April 2012, and the second cycle super path was opened in April 2013. So far, a grid of cycle super paths covering a total of 300km has been planned.

EVEN MORE SAFE AND SECURE TO CYCLE

Compared with 2011 the number of cyclists killed or seriously injured in traffic increased by just under 28% in 2012. Seen over a longer period this is still a positive trend, however reinforced efforts are needed if we are to achieve the goal.



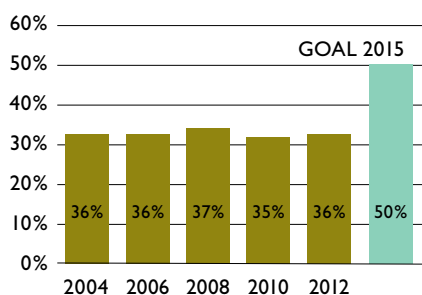
GOALS FOR CYCLING IN 2015

- At least 50% of people will cycle to their workplace or educational institution.
- The number of seriously injured cyclists in Copenhagen to be more than halved compared with 2005.
- At least 80% of cyclists in Copenhagen to feel safe and secure in traffic.

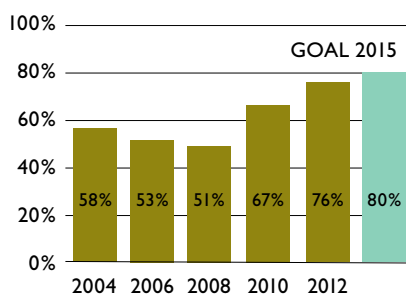
We have succeeded in reversing the trend with regard to how safe and secure Copenhagen cyclists feel in traffic. In 2012 76% of cyclists in Copenhagen felt safe and secure in traffic, which is a significant increase compared to the previous years. This increase reflects the City's considerable efforts to improve cyclists' feeling of being safe and secure in traffic. For example, many intersections have been redesigned so that the solid white stop line for cars has been moved back and existing cycle paths have been widened on stretches of road with exceptionally many cyclists.

Even though we are moving in the right direction, continued targeted efforts and campaigns are needed if the goals for cyclists to feel more safe and secure in traffic are to be achieved in 2015.

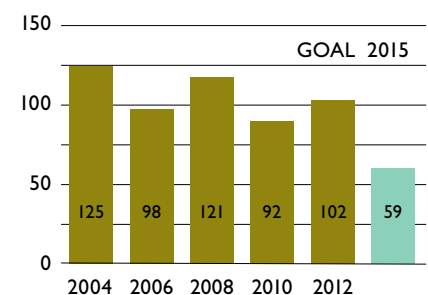
PERCENTAGE OF PEOPLE CYCLING TO WORK OR EDUCATIONAL INSTITUTION IN COPENHAGEN



PERCENTAGE OF CYCLISTS FEELING SAFE IN TRAFFIC



NUMBER OF CYCLISTS SERIOUSLY INJURED ON THE ROADS – INCLUDING FATALITIES



CLIMATE CAPITAL

COPENHAGEN STILL ON TRACK

In 2011, Copenhagen had already achieved its goal to reduce carbon emissions from the city by 20% compared with 2005. And this positive trend is continuing, e.g. carbon emissions compared with 2011 were reduced by more than 6% in 2012. This reduction can almost completely be ascribed to the increased use of wind power.

Total reduction for the period 2005 to 2012 has been calculated at just over 24%. This reduction has been achieved despite Copenhagen's population having grown by 10% in the period 2005-12.

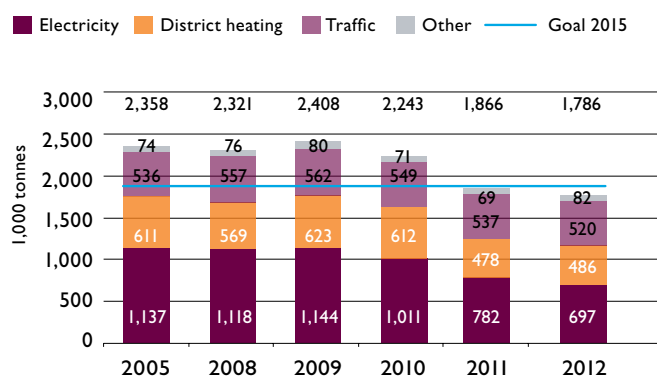
The the government's 2012 energy agreement and the Copenhagen 2025 Climate Plan, provide a good basis for maintaining the carbon reductions achieved so far and for building on these reductions in the years to come.

The carbon emissions avoided because electricity is produced from renewable energy sources in Copenhagen have been credited, i.e. deducted, from the carbon emissions from electricity consumption in Copenhagen. This crediting of electricity means that carbon emissions from electricity consumption in 2011 were reduced from 0.870 mill. tonnes to 0.697 mill. tonnes. Without this credit, total carbon emissions in 2012 fell by almost 23% compared with the 2005 base year.

GREENER ELECTRICITY AND DISTRICT HEATING

For Denmark as a whole, one kilowatt-hour of electricity emitted an average of almost 16% less CO₂ in 2012 than in 2011, and almost 34% less than in 2005. Whereas the reduction from 2011 to 2012 can primarily be ascribed to increased production from wind turbines, the total reduction from 2005 to 2012 is primarily due to the increased use of biomass in the City's combined heat and power production.

CARBON EMISSIONS BY SECTOR
INCLUDING CREDITED RENEWABLE ELECTRICITY PRODUCTION



GOALS FOR CO₂

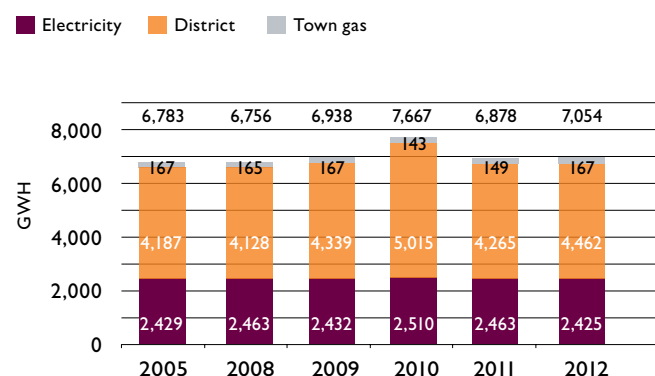
- Copenhagen's CO₂ emissions are to be reduced by at least 20% in 2015 compared to 2005.
- Copenhagen is to be CO₂ neutral in 2025.

There has been a fall in electricity consumption in Copenhagen of about 2% compared with 2011, primarily in municipal and other public institutions. There has also been a slight fall in electricity consumption by private households, even though the population of the municipality grew over the same period by about 2%.

2012 was somewhat cooler than 2011, and this explains the 5% increase in the consumption of district heating. The relatively stable level of carbon emissions is due to the increased use of biomass in combined heat and power production. Compared with 2011, one kilowatt-hour of district heating emitted 4% less CO₂ in 2012, and compared with 2005 the fall is as much as 26%.

Carbon emissions from traffic have also dropped slightly compared with 2011. This is partly because the trend in recent years of less vehicle mileage in the city has continued.

ENERGY CONSUMPTION BY SECTOR
EXCLUDING TRANSPORTATION



COPENHAGEN CLIMATE PLAN – STATUS

The Copenhagen City Council agreed on the Copenhagen 2025 Climate Plan in August 2012, and the 2013 Budget has allocated DKK 500 mill. on implementing the plan. The plan describes initiatives needed if Copenhagen is to be carbon neutral in 2025. 65 specific initiatives are described for 2013-2016 that need to be initiated if the 2025 goals of the climate plan are to be achieved. Of these 65 initiatives, a total of 50 will be launched in 2013.

REDUCING ENERGY CONSUMPTION IS A NECESSITY

In 2010 the heating and electricity consumption of Copenhagen buildings corresponded to 64% of the city's total carbon emissions. Due to the expectations that the population of Copenhagen will increase by more than 100,000 before 2025, the Copenhagen 2025 Climate Plan introduces significant reductions from new construction of dwellings and commercial buildings. Efforts in this area are required if the CPH 2025 Climate Plan is to have a positive effect on the macro and micro economy. Therefore there is emphasis on new buildings meeting the energy-efficient requirements of 'low energy rating 2015' or 'low energy rating 2020' that entail very low energy consumption per square metre. Renovation of the City's own buildings will also contribute significantly to the planned energy reduction.

ENERGY SUPPLY LEADS TO THE GREATEST CARBON REDUCTIONS

In 2025, Copenhageners' electricity and heating will be based on wind energy, biomass, geothermal energy, waste and solar energy. The goal is for district heating to be carbon neutral in 2025, and for Copenhagen's energy consumption to secure electricity production from renewable energy sources at a level that is greater than the city's actual total electricity consumption. Energy supply is expected to contribute with 74% of the total carbon emission reduction in 2025.

Changing the fuel at Block 1 at the Amagerværket power station from coal to biomass in 2010 and the expected change to biomass at Block 3 at Amagerværket and Block 1 at Avedøreværket are a great step in the right direction with regard to achieving the goal on carbon-neutral district heating in 2025.

Expanding wind energy is a central element in the CPH 2025 Climate Plan, and wind energy production within the City limits is on the way. Three wind turbines located at Prøvestenen are expected to be taken into use by the end of 2013. Moreover a further eight wind turbines will be taken into use in the municipalities of Lolland and Billund. The Copenhagen energy supply company HOFOR is targeting its efforts to expand near-shore wind turbines.



GREEN AND EFFICIENT MOBILITY

The City of Copenhagen is intent on making cycling, walking or public transport the preferred modes of transportation in the city. If people choose to move around by car, the goal is for as many as possible to choose electric or hybrid cars, while heavier vehicles are to run on new fuels such as biogas.

With regard to cycling, the second cycle super path between Farum and Copenhagen was opened in April 2013. The City continues to invest in new and improved cycle paths to make it even more attractive to cycle in Copenhagen. In 2013 the City will introduce two electric buses for a trial period to test whether this technology is compatible with public transport needs.

THE CITY'S OWN EFFORTS

- Energy and climate renovation of the City's own buildings is well under way. A total of DKK 1.7 bn. has been allocated to schools, and since 2006 a total of 25 schools have been fully renovated. Approximately DKK 350 million of this overall amount has earmarked for renovation projects in 2013.
- A total of DKK 266 million has been earmarked to new and more energy-efficient street lights that are expected to halve energy consumption.
- The City is switching its fleet of vehicles to 85% electric and hybrid cars in 2015. At the end of 2012, 20% (82) of the City's cars and vans were electric.

The Climate Plan's initiatives are to be implemented in close cooperation with the business community and research institutes, both to ensure innovation, green transition and a smarter and carbon-neutral city in 2025.

A GREEN AND BLUE CAPITAL CITY

GREEN AREAS FOR EVERYONE

Outdoor recreational opportunities are crucial for the quality of life of Copenhageners and they have a positive effect on people's health. The City of Copenhagen conducted a survey in 2011 that shows that approximately 96% of Copenhageners are able to walk to a large green or blue area in less than 15 minutes. This means that one of the Eco-metropolis goals has been achieved. Despite this the City is still striving to improve accessibility to green areas. In 2012, two new pocket parks were opened and another two are expected to be opened in the districts of Husum and Valby in 2013. A pocket park is a small green oasis in a densely built up area.

MORE GREEN EXPERIENCES

As part of the project 'Plads til Leg' (Room for play), in 2012 the City renovated nine playgrounds so that now almost all of the city's 130 playgrounds have been renovated since 2008. After a four-year renovation period, the City of Copenhagen could inaugurate its most popular park, Fælledparken, in 2012. Renovation of this popular park includes an interactive playground with mini-versions of many of the city's hallmark towers, a 3.5-km-long lighted running path, the largest skateboard park in Northern Europe, a 'dance square', new benches, an artificial grass football pitch and more than 1000 new trees. All of the projects have induced Copenhageners to spend more time in the city's parks.

COPENHAGEN IS AMBITIOUS

In 2012 the City of Copenhagen made great efforts to involve its residents in developing the city's green areas. Also in 2012 the City established a number of voluntary projects in the city's parks and natural areas, for example the garden project 'Byhaven 2200' in the urban residential area Hørsholmparken. In 2013, the City will continue to involve its residents and local businesses in the development of the city's green areas. For example the City will encourage volunteers to get involved in nature management of the Utterslev



GOALS FOR GREEN AND BLUE AREAS IN 2015

- 90% of Copenhageners to be able to walk to a park, a beach, a natural area or sea swimming pool in less than 15 minutes.
- Copenhageners to visit the city's parks, natural areas, sea swimming pools and beaches twice as often as today (2007) (on average 1 hour every other day in 2007).

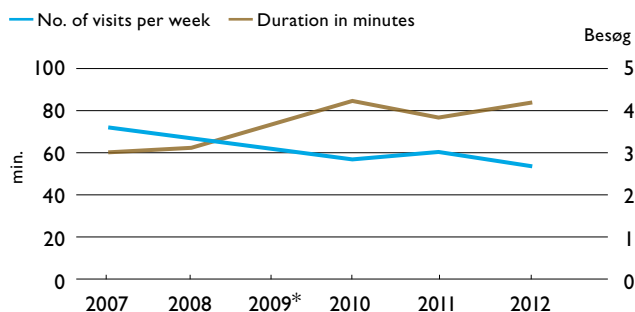
Mose marsh, start a new urban garden in the district of Christianshavn and collaborate with volunteers in an effort to improve the water quality at Kastrup Fort. The aim of these projects is to create new experiences in nature for Copenhageners and thereby ensure reaching the Eco-metropolis goal.

COPENHAGEN IS TAKING ROOT

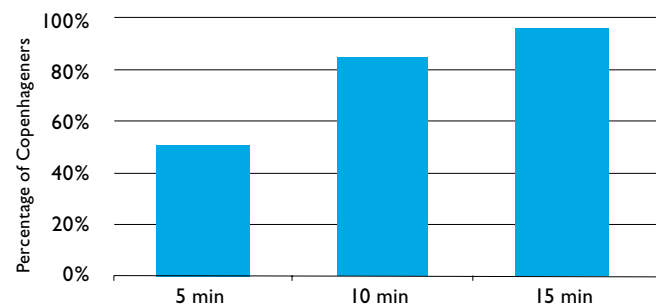
In 2012 the City planted more than 4600 trees and felled 230. The trees were primarily planted in connection with large road projects and when renovating and establishing new squares and parks.

VISITS TO RECREATIONAL AREAS

* DATA IS ESTIMATED FOR 2009, WHERE NO MEASUREMENT WERE MADE



WALKING DISTANCE TO RECREATIONAL AREAS



CLIMATE CHANGE ADAPTATION - ADAPTING TO THE WEATHER CONDITIONS OF THE FUTURE

We can expect a 30% increase in annual rainfall (precipitation) over the next 100 years as a consequence of climate change. We will see periods of heavy rainfall with extreme amounts of rain lasting just a short time, so-called cloudbursts. This kind of weather has major consequences for the city and its inhabitants.

In autumn 2011 the Copenhagen Climate Change Adaptation Plan was adopted and in autumn 2012 the City of Copenhagen's cloudburst plan was approved by the Copenhagen City Council. These two plans describe how we should deal with the increasing rainfall and cloudbursts in Copenhagen.

UNCOUPLING RAINWATER FROM SEWERS

Due to the limited capacity of the Copenhagen sewer system and treatment plants, rainwater must be uncoupled from the sewer system so as to avoid overflow of polluted sewage to harbour areas etc.

This can be done by exploiting and expanding the green and blue areas in Copenhagen by adding more green corridors and other areas to which rainwater can be directed. The collected rainwater can either be used for irrigation purposes or recreational purposes before it evaporates or is absorbed by the soil. This delays the water for a period before it re-enters the natural water cycle. Open green areas with trees and bushes constitute an added bonus for the city environment when they are designed to function as a recreational area that benefits the city's residents.

By exploiting precipitation in this way, 30% of water from precipitation will be uncoupled from the sewer system within the next 100 years. This uncoupling will also lead to savings at city treatment plants, as the amount of water to be treated will remain the same as today.

CLOUDBURSTS

In the event of cloudbursts, the green corridors can be used to conduct the massive amounts of rainwater to the harbour without it becoming mixed with sewage. This will avoid flooding in Copenhagen. Thus the green corridors can be used to collect normal rainfall and water from cloudbursts. To achieve the goal of keeping water levels in streets below 10 cm, green corridors will be combined with pipes, canals and water storage areas in central



GOALS FOR ADAPTING TO INCREASING AND MORE INTENSE PRECIPITATION

- In Copenhagen 30% of regular rain is to be uncoupled from the sewer system before 2110 by way of green (plants) and blue (water) solutions at surface level.
- In Copenhagen cloudburst solutions will help ensure that water levels on roads do not exceed 10 cm during a 100-year cloudburst.

locations. When street-water levels are kept below 10 cm, we can avoid problems due to heavy rainfall and the substantial financial consequences of such rainfall for both the city and its residents.

To meet this target the City of Copenhagen has launched a number of initiatives. At present cloudburst solutions have been established at several critical locations in the inner city and in the eastern part of the city. These cloudburst solutions include a wide range of different projects, and it is estimated that it will take at least 20 years before all aspects of the Cloudburst Plan have been implemented. The Cloudburst Plan will be implemented in close collaboration with the supply companies and the City of Frederiksberg.

A number of climate change adaptation solutions will be implemented in Copenhagen's new climate district, the Sankt Kjeld district in the eastern part of the city, over the next years. These solutions include both open and closed cloudburst solutions and run-off of regular rainwater by reusing it and diverting it through recreational green areas. Together with the supply companies, the City of Copenhagen regularly monitors the percentage of rainwater that is uncoupled.

A CLEAN AND HEALTHY BIG CITY



VISION FOR GREEN MOBILITY

- Mobility in Copenhagen to be more efficient and more green in order to stimulate growth and to contribute to a carbon-neutral city and a good life for Copenhageners.
- At least one-third of all journeys in the city to be by bike, at least one-third to be by public transport and no more than one-third to be by car.

MANY PEOPLE EXPOSED TO NOISE FROM TRAFFIC

Noise from traffic may affect people's health and lead to a number of illnesses and premature death, especially if they do not get a proper night's sleep.

The City of Copenhagen is working to reduce noise from traffic by redirecting car traffic to regional bypass roads, and by laying noise-reducing asphalt on stretches of road with heavy traffic. At the end of 2012, noise-reducing asphalt had been laid on 56 km of the 300 km road in Copenhagen with heavy traffic. Moreover, the City has continued to reduce speed limits and this has had a positive effect on noise levels in residential areas.

GREEN MOBILITY IS PART OF THE ANSWER

In 2012 the City of Copenhagen adopted the Action Plan for Green Mobility. This plan points to the fact that Copenhagen can only achieve its visions about high quality of life, mobility and growth through extensive efforts directed at all aspects of city life. This means that the City will continue to pursue its efforts to become the world's best city for cycles, while at

the same time expanding public transport options with more metro lines, fast and convenient bus connections and possibly also a light rail transit system.

The increasing number of people moving to Copenhagen will live in new urban development areas that are designed for cycle and public transport options. One of the largest of these new areas is Nordhavn that will be connected to the metro system at an early phase in the area's development. This district will also be connected to the overall road network via the new Nordhavnsvej road (under construction) and the possible extension of this road via a tunnel. At the same time, noise-reducing restrictions aimed at traffic will be introduced in existing urban districts.

The planned measures are both extensive and costly. To ensure optimal connections and increase the use of green modes of transport, the action plan introduces a green mobility package containing 25 specific initiatives that can be implemented over the next five to ten years.



MAPPING NOISE

In 2012 the City carried out the statutory mapping of road noise that is conducted every five years. Over the past 5-year period the number of dwellings exposed to excessively high noise levels (higher than 58 dB) has dropped by 17%. The number of dwellings exposed to very excessive noise levels (higher than 68 dB) has dropped even further; by 30%. This drop is especially due to the City's initiatives to lay noise-reducing asphalt and reduce speed limits.

However a significant number of dwellings are still exposed to excessive noise levels. Noise nuisance from road traffic could be reduced for these dwellings by replacing windows with sound-proof windows.

Overall traffic planning in Copenhagen, noise-reducing asphalt and school road projects have led to noise reductions in areas surrounding schools.

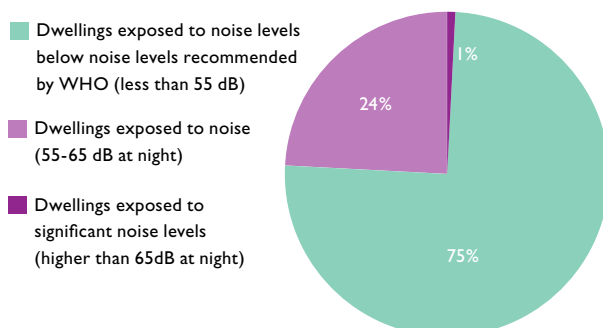
GOALS FOR NOISE

- Copenhageners to be able to sleep peacefully, free from noise harmful to health from street traffic.
- All schools and institutions to be subject to only low traffic-noise levels during the day.

Dealing with noise nuisance has been included in the plans to fully renovate city schools. Two schools have already been equipped to deal with noise nuisance, and a number of other projects are in progress. These projects aim at defining the scope of the noise nuisance and dealing with this nuisance by installing sound-proof windows, double-glazing, sound barriers, etc.

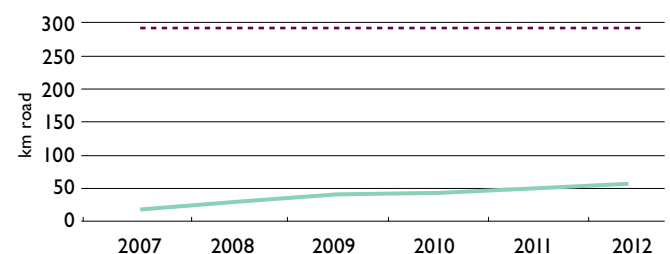
Combating road noise is made challenging by the fact that reducing the noise source (engine and tyre noise from vehicles) almost always requires changing legislation. In 2012, the EU introduced a tyre labelling scheme that also covers noise from tyres, however progress in this area is slow.

NOISE FROM TRAFFIC AT NIGHT AT FACADES



KM ROAD PAVED WITH NOISE-REDUCING ASPHALT

----- All stretches of road exposed to significant noise levels (290 km)



AIR POLLUTION FROM TRAFFIC

Copenhageners identify air pollution as the most important environmental issue for which the City should take action. Traffic is one of the main culprits when it comes to air pollution, and especially diesel vehicles contribute negatively with particles and nitrogen dioxide (NO₂). Air pollution affects the health of Copenhageners and causes premature death. Especially children, the elderly and persons with respiratory problems are affected.

Particle pollution, especially ultra-fine particles smaller than 0.1 µm, are thought to contribute to development of, or exacerbation of, chronic lung and cardiovascular diseases. Moreover, these particles may be a contributory factor to the development of cancer, asthma and premature death. Nitrogen dioxide pollution may impair lung function as well as lung resistance to infection.

LIMIT VALUES FOR PARTICLES BEING MET

Particle pollution stems from a number of different sources, both local and remote, e.g. industry, ships, woodstoves and road transport. Particles from traffic stem in part from exhaust fumes and in part from wear and tear of roads, tyres and brakes. Preliminary measurements for 2012 show that the air's content of particles smaller than 10 and 2.5 µm (PM₁₀ and PM_{2.5}) continues to be within the EU limits set for annual mean values. The limit values for the annual mean value and daily mean value for PM₁₀ particles have been set at 40 µg/m³ and 50 µg/m³, respectively. The daily mean value may not be exceeded more than 35 times per year. According to the preliminary measurements for 2012, the limit value was exceeded 33 times on the busy H.C. Andersens Boulevard.

There are no limit values for ultra-fine particles (PM_{0.1}). However the most recent measurement shows that pollution due to ultra-fine particles fell by more than 50% in the period 2002 to 2012.

EXCESSIVELY HIGH LEVELS OF NITROGEN DIOXIDE

The air's content of nitrogen dioxide still exceeds the limit value of 40 µg/m³ by more than 25%. This limit value has been valid since 2010. The annual mean value for 2012 is at present 55 µg/m³. And calculations show that in 2012 the limit value was exceeded on 17 of the 99 most congested stretches of road in Copenhagen.



GOAL FOR AIR IN 2015

- The air to be so clean that Copenhageners' health will not be damaged

The measuring station on H.C. Andersens Boulevard is close to the City Hall Square (Rådhuspladsen). The extensive construction work and traffic diversions at this site are thought to have contributed to increasing the NO₂ concentrations.

THE LOW EMISSION ZONE

The City of Copenhagen is involved in discussions with the Ministry of the Environment and the Danish Environmental Protection Agency about a law on effective clean air zones. The City assesses that expanding the existing low emission zones and introducing new restrictions will probably reduce NO_x and particle pollution even more and thus lead to improved quality of air.

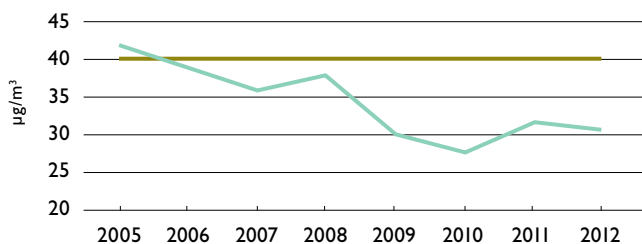
The Low Emission Zone was introduced in 2008. Today the zone only applies to heavy duty vehicles weighing more than 3.5 tonnes that need to be fitted with a particulate filter, unless they comply with Euro IV standard or are even better.

An assessment of the Low Emission Zone shows that in 2010 particle emissions from lorries and buses on H.C. Andersens Boulevard were reduced by 60% due to low emission zone requirements and the new environmental requirements for public contracts for bus operations in Copenhagen. This corresponds to 16% of total particle emissions from all vehicles. At the same time, nitrogen oxide emissions from heavy duty traffic were reduced by 25%, corresponding to 8% of total emissions from all vehicles.



AIR CONTENT OF PARTICLES (PM 10) ANNUAL MEAN H.C. ANDERSENS BOULEVARD (AT SURROUNDING TEMP. AND PRESSURE)

— 2005 EU limit



OTHER EFFORTS FOR CLEANER AIR

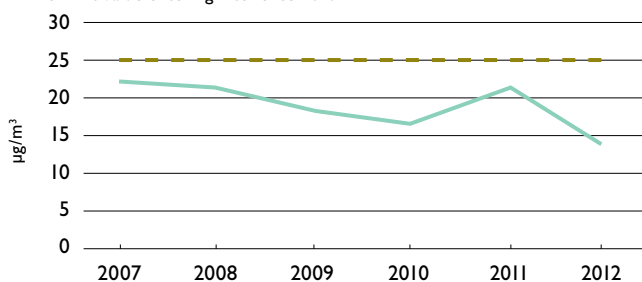
The City is continuing its efforts to manage traffic and promote cycling, and thereby limit pollution from cars. Moreover the City is introducing stricter environmental requirements when calling for tenders for public transport solutions and has introduced a limit on how long motorised vehicles may stand still with the engine idling.

Finally, the ongoing modernisation of vehicles in general, including an increasing number of electric cars, will entail that, in time, vehicles will emit fewer particles and nitrogen oxides.

In 2013, the City will present an overall clean-air plan containing a number of specific efforts to reduce air pollution in Copenhagen.

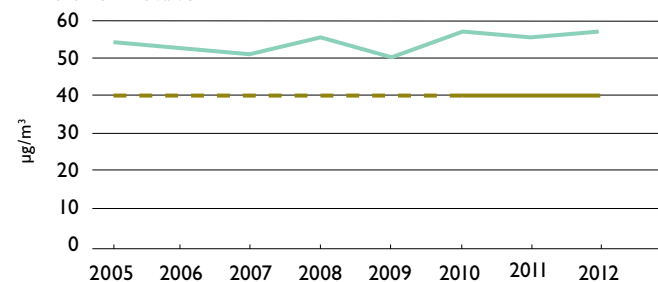
AIR CONTENT OF PARTICLE (PM 2.5) ANNUAL MEAN H.C. ANDERSENS BOULEVARD (AT SURROUNDING TEMP. AND PRESSURE)

— EU limit value entering into force 2015



AIR CONTENT OF NITROGEN DIOXIDE (NO₂) ANNUAL MEAN H.C. ANDERSENS BOULEVARD

— 2010 EU limit value



AIMING FOR 90% ORGANIC FOOD IN 2015

In 2012, the figures for organic food in the City's kitchens once again increased, and now 76% of the all the food served by the City is organic.

Three of the major focus areas in 2012 have been the city's large central kitchen facility 'Københavns Madservice' (Copenhagen's Food service), nursing homes that receive food from one of the City's large central kitchens and social care institutions. All three areas have seen good progress; the central kitchen facility 'Københavns Madservice' has increased its use of organic food from 0% to 18% and organic food use in social care institutions has now reached 80%.

However the positive trend seen in 2012 was smaller than it has been. This is because more kitchen facilities have started using the government's organic food label and this entails that calculation of organic food use is based on actual purchases rather than being an estimate. The City assesses that this has entailed a drop corresponding to 5-10 percentage points, especially in nursing homes that have their own kitchen facility.

CHILDREN STILL A KEY FACTOR

The food served in daycare facilities is still a key factor in the overall consumption of organic food. In total, the Children and Youth Administration is responsible for 55% of food consumption in municipal kitchen facilities. Even though this group is well on its way with regard to organic food – 86% in 2012 – they still have a little way to go to reach the 90% goal.

Over the next few years, the City will focus its efforts on ensuring that at least 75% of food use is organic in the remaining 50 daycare facilities.



GOALS FOR ORGANIC FOOD IN 2015

- There should be at least 20% organic food in the city's food consumption.
- The City to lead the way with at least 90% organic food in its institutions.

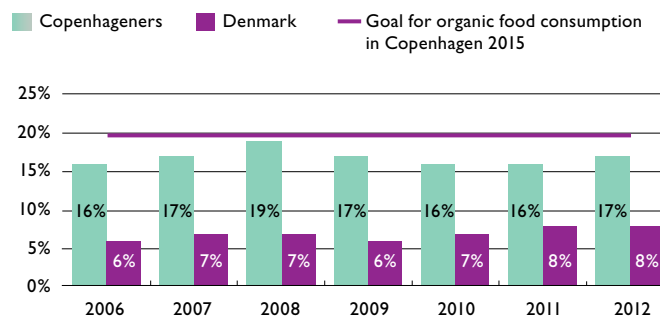
THE ELDERLY MUST ALSO GO ORGANIC

Up until 2015, food for the elderly will remain a focal point, as it constitutes one-third of the City's total food production. At present 58% of food for this group is organic. In addition to the targeted efforts in the municipal central kitchen facility, a new project is to be launched involving six 'first-mover' nursing homes. These nursing homes are to target their efforts to reach the 90% organic food goal, and share their positive experiences with colleagues working in other kitchen facilities.

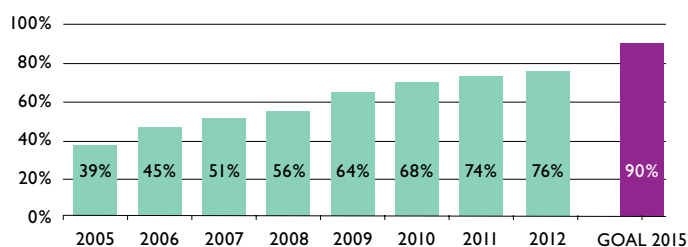
COPENHAGENERS ARE STILL BUYING MORE ORGANIC FOOD

In private households, Copenhageners buy more than twice as much organic food as the average Dane. Measured in DKK, in 2012 a total of 17% of the food consumed by Copenhageners was organic. This is an increase of one percentage point compared with 2011.

PERCENTAGE OF ORGANIC FOOD CONSUMED BY COPENHAGENERS



PERCENTAGE OF ORGANIC FOOD IN ALL MUNICIPAL INSTITUTIONS AND KITCHENS





ON THE WAY TO BECOMING THE CLEANEST CAPITAL IN EUROPE

Clean streets and squares contribute to the feeling of safety and well-being of Copenhageners and visitors to the city.

BUSY CITY, CLEAN STREETS

Copenhagen is experiencing a positive development with an increasing population, more outdoor life and large construction projects under way such as the expansion of the Metro transit system. Even though these activities lead to more litter being thrown in the streets, the City has still been able to maintain a steady standard of street cleaning. The level of citizens' satisfaction with street cleaning reflects this.

In an international survey of the standard of street cleaning in the city centre of six European capitals conducted in September 2010, Copenhagen ranked lowest with a score of 4.1 on a scale from one to five, whereas Madrid ranked highest with a score of 4.5. Despite its low ranking, we still believe that the difference of just 0.4 points means that Copenhagen has a good chance of achieving its goal to be the cleanest capital in Europe in 2015. This optimism is based on the fact that the current resources allocated to street cleaning have become a fixed item in the City's budget, and will in future ensure even more efficient operations and more flexible street cleaning procedures. A new international survey will be conducted in September 2013.

COPENHAGEN, CLEAN AT HEART

One of the major challenges to becoming the cleanest capital in Europe is the relaxed attitude of Copenhageners to throwing litter in the street and the lack of designated cycle parking facilities that makes it difficult to clean the streets efficiently.

To help alleviate this problem, the campaign Copenhagen – clean at heart aims at involving Copenhagen residents and businesses in achieving the goal. The campaign was launched in 2012 and will

GOALS FOR STREET CLEANING IN 2015

- Copenhagen to be Europe's cleanest capital and one of the cleanest capitals in the world.
- Litter to be cleared from public streets within eight hours.

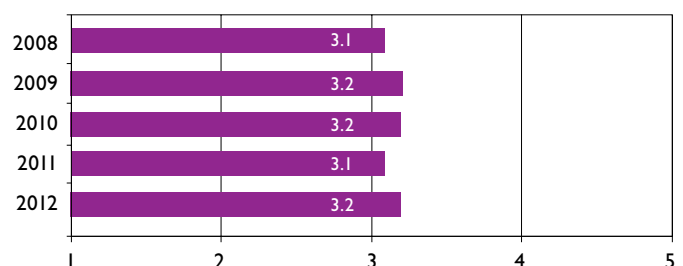
continue in 2013. More area-specific street-cleaning days have been introduced, and street-cleaning campaigns were carried out during specific city events such as the 1 May celebrations and the street party event Distortion. A number of enterprises have been invited to enter into binding partnerships on keeping Copenhagen clean. For example, the socio-economic enterprise Incita helps keep Copenhagen streets clean by removing abandoned bicycles.

NO MORE THAN EIGHT HOURS

The goal to clear litter from public streets within eight hours was already achieved in 2011. Litter is cleared within eight hours, seven days a week in the city centre and in particularly dirty areas. In the event of more serious litter incidents in public areas, following alerts from citizens, litter is removed within eight hours in all parts of the city. Citizens can report such litter incidents via an app or the City's website at www.kk.dk/givetpraj. Overall compliance with the eight-hour rule is ensured through a city street-cleaning response service operating for 19 hours a day, seven days a week.

COPENHAGENER'S LEVEL OF SATISFACTION WITH STREET-CLEANING EFFORTS IN THEIR DISTRICT

1 is very poor, 5 is very good



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The City of Copenhagen

This booklet on Copenhagen's Green Accounts 2012 includes the most important key figures and information about how far the City has come with regard to achieving the 13 goals that support the vision for Copenhagen to become the Eco-metropolis of the world in 2015.

You can find the complete and significantly more detailed Green Accounts for Copenhagen (in Danish) on the City of Copenhagen's website: www.kk.dk/miljoeregnskab

See more about how far the City has come with regard to its efforts for the environment and urban life in:
The Cycle Accounts at www.kk.dk/cyklernesby and
The Urban Life Accounts at www.kk.dk/metropolformennesker