

COPENHAGEN

winner 2014



EUROPEAN  
GREEN CAPITAL

An initiative of the  
European Commission



*Green cities - fit for life*



# MESSAGE FROM COPENHAGEN

*More than two thirds of Europeans live in towns and cities. This places major cities at the heart of the many environmental challenges facing us today, such as polluted air and water, and climate change.*

For years now, Copenhagen has worked intensively to meet environmental challenges, focusing on innovative and sustainable solutions. A green city is the precondition for a high quality of life. It is consequently with both pride and humility that we accept the prestigious European Green Capital Award for 2014. Pride because it is an appreciation of what Copenhagen has already achieved environmentally and humility because we must live up to these great expectations in 2014.

Copenhagen has an ambition to become the first carbon-neutral capital by 2025. We want to show that it is possible to combine growth and an increasing quality of life while reducing carbon emissions and meeting environmental challenges. Due to this committed effort it is possible to swim in the harbour in one of our many harbour baths; we have prioritised creating green recreational areas in the city's adaptation to climate change; and we have created a bicycle infrastructure like no other, used by 55% of Copenhageners every day. Results like this cannot be accomplished by the city alone. It requires partnerships across businesses

and public institutions, and a great deal of involvement from citizens, in order to succeed.

In Copenhagen we will use our year as Green Capital to emphasise the importance of working towards creating collective solutions to the many environmental challenges facing us. Within the framework of 'Sharing Copenhagen 2014', Copenhagen invites Europe and the rest of the world to share solutions, best practices and knowledge. The European Green Capital Award brings people, cities and Europe closer together. It's all about facing the environmental challenges – and facing them together – so that we can pave the way towards a sustainable future. And we look forward to carrying on the tradition of this prestigious award in 2014.

Let 2014 be about combining strengths across borders, businesses and organisations coming up with sustainable solutions for a greener Europe and higher liveability for the citizens of Europe.

*Morten Kabell  
Mayor of Technical  
and Environmental  
Administration*

*Frank Jensen  
Lord Mayor of  
Copenhagen*



A glance down Frederiksholms Canal

# COPENHAGEN AT A GLANCE

*Strategically placed at the entrance to the Baltic Sea, the City of Copenhagen has been an important regional centre for centuries.*

Copenhagen is surrounded by water, with many parks and green spaces. An integrated public transport network and the bicycle paths that line most streets make it as easy as possible for residents to choose environmentally friendly ways to get around.

Copenhagen started life in the 10th century as a Viking fishing village. Within 100 years it had expanded into a busy market town. Because of its harbour, the city developed as a trading centre of growing importance, until it took on the role of Denmark's capital in the 15th century.

## Copenhagen: Facts

- Population: 541,989, rising by 1,000 a month up to 637,000 by 2025
- 40% more young people in the last 20 years
- Total area: 74.4km<sup>2</sup>
- Situated on the Øresund Strait on the eastern coast of Zealand, where the North and Baltic Seas meet
- Joined to Sweden by the Øresund Bridge

Copenhagen is already renowned as an environmentally friendly and green city, thanks to far-sighted municipal planning, support from national legislation and involving local people in decision-making. It has some 8km of sandy beaches within 30 minutes cycling from the city centre, as well as popular harbour baths along the city waterfront. Despite its northerly location, the city benefits from the effects of the Gulf Stream, bringing warmer water from the Atlantic Ocean. Summer temperatures can reach up to 32°C.



Students relaxing in Ørstedsparken

©Ursula Bach

The City of Copenhagen received the European Environmental Management Award in 2006, in recognition of a decade of long-term, holistic environmental planning, which halved the amount of sewage discharged into the harbour. The water has been safe for bathing in since 2002 and today it is possible to take a swim in one of the numerous harbour baths just 500 metres from City Hall.

## Copenhagen: Green Facts

- Twice voted the world's most liveable city by Monocle magazine (2008 and 2013)
- 36% of commuters and 55% of Copenhageners cycle to work or school/college
- District heating serves 98% of households
- 90% of building waste is reused
- 24% cut in carbon emissions between 2005 and 2012
- 96% of residents live within 15 minutes' walk of a recreational area
- In 2008, transport experts named the city's urban train system as 'The Best Metro in the World'

# 2014 PROGRAMME HIGHLIGHTS

*Copenhageners, the city's businesses, universities and organisations will contribute to an exciting year of events, including conferences, site visits and master classes. Activities will focus on five main themes:*

- The City of the Future (January-April)
- Resource Efficiency (May-July)
- The Blue and Green City (July-September)
- Green Mobility (September)
- Climate (October-December)

The programme will be tailored to attract six specific target groups: cities, businesses, citizens, knowledge institutions, youth and children.

In 2014, Copenhagen will establish and host a new city network with membership limited to cities that have been shortlisted for the European Green Capital Award. The idea is to enable the most progressive green cities in Europe to share knowledge and shoulder the environmental agenda together. The first meeting took place in January and the second meeting will take place in association with the award ceremony in June 2014.



Sun in the city: a summer's day at Svanemøllen beach



Shopping for flowers on Istedgade in the Vesterbro district

## Share Copenhagen in 2014

As European Green Capital 2014, Copenhagen is inviting the rest of Europe to join the celebrations, to share solutions and experiences on the environment, climate and quality of life and to define a common agenda for green policies looking to the future and paving the way for a greener continent.

Throughout the year, the city will work with the broadest possible range of partners, including its next-door neighbour Malmö, to organise an ambitious programme of activities. Copenhagen has always considered the knowledge and experience of other cities in finding solutions to its own environmental challenges, and in return, others can be inspired by its example. The city has pledged to share debate on policies and strategies across generations and collaborate fully with businesses, research institutions and urban administrations.

# WHAT MAKES COPENHAGEN SPECIAL

©Christian Lindgreen



Botanisk Have (Botanical Gardens)

*Copenhagen is working to become a “green, smart and carbon-neutral city” by 2025 – a unique ambition that makes Denmark’s capital a role model for European cities.*

In its sustainable development efforts, Copenhagen benefits from the backing of Denmark’s national government and its environmental policies. Denmark established a Ministry of Environment back in 1971 and two years later became the first country in the world to implement environmental legislation. Copenhagen’s success is based on sound municipal planning with public involvement at every stage.

## Green Targets for 2025

- **Energy consumption:** 20% cut in heat consumption; 20% cut in power consumption in businesses; 10% reduction in power consumption in households compared to 2010; solar cells to generate 1% of electricity.
- **Energy production:** carbon-neutral district heating; wind and biomass electricity production to exceed consumption; separation of plastic waste to reduce incineration emissions; biogasification of organic waste.
- **Water consumption:** reduce daily water consumption to 100 litres per person per day, by 2017.
- **Green mobility:** 75% of journeys on foot, bike or public transport; 50% of journeys to work or study by bicycle; 20% more passengers on public transport (compared to 2009); carbon neutral public transport; 20 - 30% of passenger cars and 30 - 40% of heavy vehicles using renewable fuels.
- **City administration:** 40% cut in energy consumption in buildings (compared with 2010); all new buildings to meet updated classifications; city vehicles to use alternative fuels; 50% cut in energy consumption for street lighting; 60,000m<sup>2</sup> of solar panels installed on municipal buildings.

# Planning for green growth

## Green tech shows the way

The City of Copenhagen is supporting massive investment in green growth and eco-innovation, both direct and indirect. This will help to boost employment within the green sector and provide opportunities for many innovation projects. The overall investment by the city administration and the many cooperating partners and businesses between now and 2025 is expected to amount to up to €3.64 billion, generating new jobs equivalent to 36,000 man years.

The green sector is already substantial, employing some 25,000 people across the Greater Copenhagen area and involving 6,000 companies, with an export intensity of 36%. Furthermore, labour productivity in the sector is 40% higher than in industry overall, showing that the green economy is driving growth in Denmark. Even during the financial crisis, the sector maintained growth of 8% per year, compared with just 1.1% in the economy as a whole.

## Ground breaking international cooperation

The opening of the Øresund Bridge paved the way for the evolution of something much bigger: the cross-border Øresund Region. By 2025, Copenhagen and its neighbouring city Malmö in Sweden should form an integrated metropolis in which growth and quality of life go hand in hand. It will become Scandinavia's commercial hub, where international companies and innovative entrepreneurs choose to set up for business.

Activities will focus on growth sectors like clean-tech, life science, logistics, creative industries and information and communication technologies. Copenhagen is the centre of Europe's largest university region and should be known for its good study environments, high-quality research and positive collaboration with business.



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A boat on Øresund with the Øresund Bridge, connecting Denmark and Sweden, in the background

Copenhagen is part of a socially well-balanced and inclusive region, with room for diversity. By 2025, the Øresund Region will have 4.1 million inhabitants and aims to offer them healthy, meaningful and long lives.

A platform for progress, Sustainia, is an innovation platform where companies, NGOs, foundations and innovators come together to create practical projects for sustainability. Its mission is to develop markets and sectors for sustainable products and services. It helps to equip decision-makers, company managers and citizens with the solutions, arguments, visions, facts and networks needed to accelerate sustainable transformation.

## Green growth targets 2015

- By 2015, Copenhagen will be a knowledge city attracting and retaining foreign students, researchers, skilled employees and enterprises
- Average annual growth will be 5%
- 20,000 new private-sector jobs
- 95% of young people will complete secondary education

## A city on the move

Copenhagen aims to be the world's best city for cyclists. Every day, residents travel 1.3 million km by bike: the equivalent of 30 times around the world! The city has 359km of cycle tracks and many kilometres of cycle lanes. In 1995, the city launched one of the world's first free bike-share programmes. Today, cycling is an integral part of everyday life, with 52% of residents claiming the bicycle to be their main means of transport. The ratio of bicycle-to-car ownership is 5:1. Cycling has a self-evident green impact, limiting carbon emissions, air and noise pollution.

Copenhagen's new two-line metro was opened between 2002 and 2007. In 2011, it carried 54.3 million passengers. The driverless trains run 24 hours a day, at an average speed of 40 km/h. The city's aim is to develop an integrated transport system enabling travellers to move about effortlessly by different means of public transport.

The Action Plan for Green Mobility includes a proposal for congestion charging, already introduced in Stockholm, which would have a great impact on traffic hold-ups as well as climate, environment and emissions.

The city is carrying out lab tests on hydrogen, electricity and biofuels for cars. 85% of municipal passenger cars should be running on electricity or hydrogen, by 2015.



Morning rush hour on H.C. Andersens Boulevard, a main artery in the centre of the city



© Ursula Bach

A lot of people combine their bike ride to work with public transportation, such as the S-train, offering special compartments for bikes

### What impressed the Jury

The EGCA Jury was especially impressed with Copenhagen's pioneering efforts to expand its green economy. It pointed out that the city has placed public-private partnerships at the core of its approach to eco-innovation and sustainable employment, working with companies, universities and other organisations to create forums dedicated to developing and implementing green growth.

Copenhagen drew attention to the Nordhavn project as an example of future sustainable urban areas. Offering accommodation for up to 40,000 residents and the same number of jobs, the developers' aim is to produce enough sustainable energy to export the excess to the rest of Copenhagen.

The Jury commended Copenhagen as a model of good urban planning and design. It highlighted the city's ambitious transport and climate change targets, aiming to get 50% of commuters cycling to their place of work or education by 2015 and becoming carbon neutral by 2025.

© Ursula Bach



Aerial view of the five lakes in Copenhagen

## A green, smart and carbon-neutral city

Copenhagen has set itself uniquely demanding climate objectives. By 2025, it will be a carbon-neutral city, which means reducing carbon emissions to a minimum and compensating for the remainder through other initiatives. It is the first capital city in the world to make such a commitment.

Today, Copenhagen emits approximately 1.8 million tonnes of carbon per year. Thanks to measures such as switching from coal to biomass in the capital's combined heat and power plants, more renewable energy in the Danish power grid, retrofitting of buildings and stricter EU regulations, this will fall to 1.2 million tonnes by 2025. Today, 98% of all heat is supplied in the form of efficient district heating produced at large cogeneration plants.

The Climate Plan has been developed in close cooperation with businesses, the citizens of Copenhagen, NGOs and knowledge institutions. Copenhageners are keen to support it, through cycling, sorting household waste, installing solar panels and adopting energy-efficient lifestyles. In return, they can look forward to a better quality of life and savings on their electricity and heating bills each year.

## Green and blue spaces for greener lifestyles

Strategically placed at the entrance to the Baltic Sea, the City of Copenhagen is surrounded by water, with many parks and green spaces.

Today, 96% of Copenhageners live within 15 minutes' walk of a larger green or blue area, and work is under way to improve access to recreational areas. Among its many parks, the Fælledparken is the most popular, attracting more than 11 million visitors each year.

## City biodiversity

Volunteers play a vital role in caring for the city's green areas. In 2011, Copenhagen launched 22 local green partnerships projects, plus two city garden initiatives and a school garden project. The city also planted more than 3,600 trees – 217 of them 'adopted' by local people, companies or institutions.

## Air quality

More than half of Copenhageners worry about noise and poor air quality, so a lot of work is going into dealing with these challenges. The city is tackling air pollution by cutting traffic emissions and setting up clean air zones.

## Managing noise

A Noise Action Plan should help all Copenhageners to sleep peacefully at night. Since 2007, noise-reducing asphalt has been routinely used for repairing roads carrying more than 2,000 cars every 24 hours and by 2011 had been laid on 56 of the 290km of roads with heavy traffic. The city has agreed the renovation and soundproofing of 14-16 schools to achieve low levels of traffic noise.

## An organic city

Copenhagen buys a larger share of organic food than any other capital: one in every ten purchases. In municipal institutions, 75% of all food served is organic, but the target is considerably higher. By 2015, according to 'Eco-metropolis - our vision for Copenhagen 2015', 90% of all food served in municipal institutions should be organic. At the same time, the aim is to increase the proportion of organic food eaten throughout the capital from 17%, to a world-beating 20%.



Copenhageners enjoying one of the many recreational areas

©Kasper Thyé



©Ulrichs Bach

Source separation and recycling is child's play at the Trafiklegepladsen playground in Fælledparken, Østerbro

## Waste

Copenhagen sends less than 2% of its waste to landfill - down from 44% in 1988. Almost 58% of all waste is recycled and 40% is used to fuel the city's district heating network. Public perceptions have changed through information campaigns and making sorting and recycling easier. Now people regard waste as a resource, with 97% agreeing that their bulky items can be put to other uses.



Taking a leap into the harbour bath at Islands Brygge

## Water

Water quality has improved steadily, and by 2015, the port of Copenhagen should meet all bathing-water quality standards. The beaches at Amager, to the south, and Svanemøllebugten to the north – opened for bathing in 2010 – are also extremely popular.

The rising demand for fresh water is a challenge for city authorities, since drinking water is piped in over long distances. It is employing new technologies to monitor and prevent leaks, cutting losses to 6% by 2025 and using water metering to cut waste.

## Energy

Denmark generates 31% of its electricity needs from wind energy – the highest proportion in the world – with the aim of reaching 50% by 2020.

In 2001, a large offshore wind farm was built just off the coast of Copenhagen at Middelgrunden, producing about 4% of the city's power. Planners took on the challenge of potential public resistance by giving the local community an interest in the project. The wind farm is run by a cooperative, half owned by the city, and half by almost 9,000 small investors, and it was built using state-of-the-art technology for maximum efficiency. A public awareness campaign offered residents demonstration tours and surveys now show a high level of public support for wind power.

# COMMUNITY INVOLVEMENT



Communicating with citizens – informing them on the issues and engaging and empowering them to get involved in making decisions – is key to successful environmental policy-making. Experience shows that people want to get involved in enhancing their environment and authorities can often help by providing the information to nudge them into changing their behaviour, on a permanent basis, rather than imposing rules or penalties.

Educating residents, of all ages, boosts understanding and enables people to take responsibility for – and pride in – their local area. Consultation helps to engage people even further: the city invited more than 100 Copenhagengers to take part in drawing up its Local Agenda 21 plan ‘Green Daily Life in Copenhagen’.

Sometimes, it pays to be inventive and surprise people. The Good Bicycle Karma campaign,

launched in 2011, and repeated in 2012, encouraged responsible road use. ‘Karma spotters’ were out on the streets to reward considerate cyclists with a cheerful greeting and a gift of chocolate or stickers.

Research shows that 85% of residents are already aware of Copenhagen’s aspiration to be the best city for cyclists, and 56% know about the 20% reduction in carbon emissions by 2015.

In drawing up its plan for ‘A Greener and Better Everyday Life 2012-2015’, the city carried out home visits and held workshops and meetings for local families and schoolchildren. At its core were a series of environmental activities grouped under five headings: home, resources, urban spaces, transport, and innovation and education. The events generated literally hundreds of new ideas, to be integrated into the plan.

## BRISTOL: EUROPEAN GREEN CAPITAL 2015

Bristol (UK) will be European Green Capital in 2015. The ECGA jury considered Bristol to be an innovator in terms of the green economy, with a powerful communications strategy and the commitment and enthusiasm required to develop its role as a model for Europe. Eight European cities put their names forward, and Brussels (Belgium), Glasgow (UK) and Ljubljana (Slovenia) were all shortlisted. The decision was announced in June 2013.

As well as being an efficient city with a growing green economy, Bristol is the UK’s greenest city, easily accessible with very good air quality.



©Chris Bahn

The Avon Gorge in Bristol

# EUROPEAN GREEN CAPITALS TO DATE



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### European Green Capital Secretariat

The application process and the work of the evaluation panel and the jury are facilitated by the European Green Capital Secretariat, currently run by RPS Group, an environmental & communications consultancy based in Ireland. The secretariat also assists with PR activities related to the award scheme through the European Green Capital Award website, Facebook and Twitter pages and through various communication channels such as brochures and press releases.



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