

STOCKHOLM

European Green Capital 2010



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A vision for urban development

At a time when many of the world's great cities are facing chronic environmental problems, we need inspirational examples showing what cities can do to deal with them. Most of the environmental challenges facing our society happen in urban areas: and it is these areas that have the potential and the resources to bring together the commitment, and generate the innovation needed to solve them.



We have to think beyond traditional problems. Caring for the urban environment doesn't just mean cutting CO₂ emissions. It also means thinking about the air we breathe, the water we drink and the noise that affects us. It means integrated long-term plans for the cities of tomorrow and the people who will live and work there.

If cities are to flourish, city dwellers must enjoy a clean and healthy urban environment – it is up to city authorities to provide this. The European Green Capital Award promotes ideas such as sustainable mobility, modern waste management, sustainable land use, eco-innovation and other green technologies which local authorities can champion. It is our duty to make citizens aware of the need for sustainable urban living, and to show them how they too can become a part of the drive towards sustainable development and a more resource-efficient life.

Sustainable urban development is a vision and it needs everyone to participate if it is to become a reality. I am delighted to see Stockholm meeting the challenge. It is a worthy winner of this inaugural award.

A handwritten signature in green ink that reads "Janez Potočnik". The signature is stylized and fluid.

Janez Potočnik
European Commissioner for the Environment

Message from the Mayor of Stockholm

Being selected as the first European Green Capital is a great honour, and the award is a boost to all of the city's environmental activities. It's clear that many people have noted that Stockholm has received the award, and the citizens of our city are very proud of it.

Something I believe is quite unique to Stockholm is our long-term approach to an integrated, sustainable development of our city. We started already early in the 20th century when we realised that something had to be done to the heavily polluted water. Since then we have faced a number of challenges, challenges that we probably share with most European cities.

The Stockholm model builds upon the principle that environmental aspects have to be integrated everywhere and at all times. Improving our environment, minimising our environmental impact and reducing our carbon emission levels are issues that need to be handled on a broad scale. We have set some very ambitious targets, and we all need to be involved to be able to achieve them.

Now we realise that we cannot rest on our laurels. We have to continue our work in order to improve our urban environment even further. Of course, we also want Stockholm, the very first European Green Capital, to be one of the world's most beautiful and climate-smart cities in the years to come.



A handwritten signature in green ink, which appears to read 'Sten Nordin'. The signature is fluid and cursive, written on a white background.

Sten Nordin
Mayor of Stockholm



The European Green Capital Award – a pioneering initiative

Every year, beginning in 2010, Europe will honour a new European Green Capital. Stockholm, Sweden, is the first European city to show the way by gaining this prestigious title.

A capital idea...

The European Green Capital Award grew out of an initiative launched by 15 European cities and the Association of Estonian Cities on 15 May 2006 in Tallinn, Estonia. The idea was the brainchild of Jüri Ratas, former mayor of Tallinn and current vice-president of the Estonian Parliament. Their green vision was translated into a joint Memorandum to the European Commission establishing an award to reward cities that are leading the way with environmentally friendly urban living.

... catches on quickly

More than 40 major European cities, including 21 EU capitals, formally support the Memorandum. All of them have a chance of winning the race for environmental recognition and becoming a European Green Capital in the future.

Sustainable urban living

The establishment of the award is timely since Europe has evolved into a primarily urban society, with four out of five people living in towns and cities. While many of today's environmental challenges seem particularly acute in urban areas, cities are also dynamic centres that attract innovative talent, committed and able to find solutions to the problems.

*Fatbursparken
in Södermalm:
one of the many
parks in the
inner-city area.*



In the midst of the global economic downturn, cities that are self-sufficient and safeguard their resources have proved to be resilient and robust. Cities will only prosper if they safeguard the natural resources that underpin their economy and the quality of life of their citizens. The Green Capital Award seeks to recognise, promote and reward these admirable efforts.

Objectives

Beginning in 2010, the European Green Capital Award will go to a city that:

- consistently achieves high environmental standards;
- is committed to ongoing, ambitious goals for further environmental improvement and sustainable development; and
- can serve as a role model for its peers.

Healthy competition

The award aims to recognise and reward efforts at local level to improve the environment and the economy, as well as the quality of life of growing urban populations. Progress is its own reward, but the satisfaction and pride of being named European Green Capital should encourage cities to make further improvements. The objective is also to motivate urban centres to inspire one another and share best practices, within the context of a friendly competition. Every year the award will be presented to a city, not necessarily a capital, at the forefront of eco-friendly urban living.

The 'greenest' city

The award recognises Europe's 'greenest' city based on its performance in relation to ten indicators. These include air quality, sustainable land use, waste management and water consumption.

“Four out of five Europeans live in urban areas”

Urban networking

The award is intended to help European cities become more attractive and healthy places to live. Therefore, the recipient is expected to develop and implement an ambitious communications strategy and programme of actions and events to inspire other cities and share best practices and experiences across Europe.



Riddarholmen island (the Knights' Islet) with its 16th-century Riddarholmskyrkan church. It is one of the oldest buildings in Stockholm, where a number of Swedish monarchs lie buried.

The panel

In the first evaluation round, the judging panel was made up of internationally recognised experts in each field covered by the indicators. They represented the following organisations:

- | *European Climate Foundation and IPCC Working Group on Climate Change Mitigation*
- | *Technical University of Denmark, Transport Department*
- | *European Environment Agency*
- | *Danish National Environmental Research Institute*
- | *Instituto Superior Técnico, Lisbon*
- | *Irish consultancy RPS*
- | *Italian consultancy Ambiente Italia*
- | *European Commission, DG Environment*

Selecting a winner

The multi-step selection process begins with an assessment by a panel of ten internationally acknowledged experts, and a representative of the European Commission's Environment Directorate-General. In the first year of the competition, 35 cities with more than 200 000 inhabitants from 17 European countries put their names forward.

The eight cities with the highest first-round scores provided additional details on their achievements and future commitments – in the form of action plans, regulations, budgets, emissions measurements, statistics, and so on.

To ensure credibility, a peer review accompanied both evaluation rounds. All panel members assessed their respective indicators, which were also reviewed by a second panel member. In the event of any serious inconsistencies between the two evaluations, the main evaluator was required to conduct a second assessment.

The sales pitch

In the second evaluation round, representatives of each of the eight shortlisted cities appeared before the expert panel. Each team had 20 minutes to argue why its city could and should be a European Green Capital. This allowed the judges to ask questions or obtain necessary clarification concerning the city's performance in relation to the indicators and its communication programme.



Stockholm's imposing Royal Castle faces one of the major streets, Skeppsbron, and looks out over the Baltic Sea.

And the winner is... Stockholm!

Based on the written applications, the additional information provided and the meetings with the eight shortlisted candidates, the panel assigned scores to each city. The jury then met to make the final selection – choosing Stockholm as the European Green Capital for 2010.

Added benefits

Besides prestige, the European Green Capital title should bring numerous other benefits, including:

- a better reputation
- increased tourism
- more investment

Looking to the future

With Hamburg in Germany already selected as European Green Capital for 2011, the race is on for the next generation of award-winning cities in 2012 and 2013. When applications closed in February 2010, 17 cities in 12 European countries had put their names forward for the honour. The winners will be announced in Stockholm in October 2010.



Stockholm at a glance

Sweden's capital and largest city is renowned for its beauty, architecture and abundant water and green spaces.

Strategic location

Stockholm sits on Sweden's south-central coast, where Lake Mälaren drains into the Baltic Sea. The City of Stockholm, spread across 14 islands, is located at the heart of Scandinavia, putting all of the region's major cities within reach. Most tourist attractions in Stockholm can be reached on foot, and it is possible for visitors to experience culture, natural scenery and big-city excitement all within a single day.

Transport hub

The Stockholm region has a highly developed transport network with ferry connections to several countries, high-speed trains to Sweden's other major cities, and excellent regional and local public transport. In the coming years, the region's road, rail and port capacity will be expanded.

Stockholm has an extensive and well-developed public transport system. Over 670 million individual journeys are made each year on a network with more than 1 900 buses and 1 000 train and metro carriages.

General facts & figures about Stockholm

- | Capital of Sweden
- | 820 000 residents
- | Area: 209 km² (including 21 km² of water)
- | The construction of 15 000 new housing units is planned for the coming years.
- | Around 40% of the city's land consists of parks or recreational areas and there are seven nature reserves within city limits.

“Most tourist attractions can be explored on foot”

The commuter city

Stockholm is a commuter hub, due in large part to a highly developed and accessible transportation network. On an average day, 20 000 ferry and 30 000 train passengers travel to and from Stockholm. Every day, around 237 000 people commute into Stockholm, contributing to a daytime workforce of 525 000 people employed in 36 000 city locations.

Green Facts & Figures

- 1 000 parks
- Seven nature reserves within city boundaries (and more than 200 in the surrounding area), 1 cultural reserve and 1 city national park
- 95 kg of recycled refuse annually per citizen
- 12 000 trees in the city centre
- 24 official beaches
- World's largest district cooling network
- Set to become fossil-fuel free by 2050
- The city hosts 2 700 clean-tech companies



Stockholm from Skinnarviksberget: a park area on Södermalm, one of the inner city areas, that is famous for its spectacular view of the city.

Close to nature

Stockholm is in all aspects a green city. It is surrounded by more than 200 nature reserves across the region, the nearest one just a 10-minute metro ride from the city centre.

There are few cities in the world that match Stockholm's wealth of green areas. The many parks are part of the high quality of life that defines the Stockholm brand, and every resident has a favourite spot to get away from it all – whether for a picnic, sporting activity or simply to relax.

“The water is so clean you can fish in the city centre”

In total, Stockholm boasts about 1 000 parks, which make up approximately 30% of the city's area. When nature reserves are taken into account, this proportion rises to 40%. The water is so clean that locals can eat the fish they catch in the city centre.

Mother Nature's best

- | *Ekoparken: six miles long, the world's first national city park is a haven for deer, hares, rare birds, butterflies and even grazing cows.*
- | *Djurgården: an island close to central Stockholm featuring Skansen open-air museum and zoo.*
- | *Bergius botanic garden and park: home to an extensive herb garden, Japanese pond and the world's largest water lily.*
- | *Långholmen: an idyllic island popular for picnics, recreation and swimming.*



| *Lake Trekanten in the Liljeholmen-Gröndal area south of the city centre: used by Stockholmers for skating in the winter, and swimming and fishing in the summer.*



Riddarholmen island (the Knights' Islet) is one of the 14 islands that make up Stockholm. It houses a number of private palaces dating from the 17th century.





What makes Stockholm special?

Green and blue spaces form an integral part of a holistic approach to urban living. The city also leads the way in sustainable waste management.

The Green City

Many years of successful environmental work have turned Stockholm into one of the world's cleanest and most beautiful cities. Nearly every resident (more than 90% of the population) lives within 300 metres of a green area. There are extensive plans for developing new green spaces in the future or improving existing ones, and creating more beaches for swimming.

“*Stockholm is part water, part green belt, part city*”

Branching out

The more developed, urban areas are spread out like fingers, interspersed with protected green oases. To conserve biodiversity and ensure accessibility

for everyone, the authorities have extended legal protection to eight areas of natural and cultural reserves under the Environmental Code.

Added value

Besides their sheer beauty, Stockholm's green retreats enhance citizens' physical and mental health and well-being, help reduce noise, filter the air, and purify the water flowing through its wetland areas. They are also a big attraction for tourists.

The green areas – part of a coherent ecological infrastructure – create important habitats for flora and fauna. A good example is the large number of old oaks, estimated to provide a home to more than 1 500 different wildlife species.

Stockholm Park Programme

The Stockholm Park Programme is an action plan for the development of Stockholm's parks and green areas. It provides guidance for their planning and management, and explicitly gives all residents the right "to live close to park areas", for "green retreats, playing, walking and resting in the sun".

As the owner of a large proportion of the land and waterways within city boundaries, the City of Stockholm presides over the management of natural resources. It works on a broad scale to preserve biological diversity and natural values for its citizens.

*Stockholm's
green retreats
enhance its
citizens' physical
and mental
health and
well-being.*



The Blue City

Water makes up over 10% of Stockholm's surface area, and is part of the uniqueness of the Stockholm brand. The major waters are Lake Mälaren and Saltsjön Bay, but there are also 12 small lakes. All of them offer residents and visitors opportunities for swimming, picnics, boating and other recreational activities.

Day at the beach

Stockholm has 24 official bathing beaches, all of them maintained to the highest environmental standards. Of these beaches, 15 are at Mälaren, eight in the smaller lakes and one at Saltsjön, which extends from the Stockholm archipelago to the city centre.

In accordance with EU legislation, Stockholm has implemented an action plan for bathing waters. In 2008, the authorities passed a law introducing environmental quality norms and mandating bathing-water profiles.

Clean drinking water

Drinking water in Stockholm is of a high and consistent quality. Lake Mälaren supplies drinking water for about 1 million people living in the region, and water is treated in two waterworks west of the city. Water quality is tightly controlled by the Food Administration Authority, which must approve all chemical and microbiological analyses.



The Karlbergskanalen with the City Hall in the background. The canal leads into Lake Mälaren.

“Water forms over 10% of Stockholm’s surface”

As a water reservoir, Lake Mälaren is by any standards a pure lake and well-suited for the supply of drinking water. Drinking water is therefore provided through simple and robust processes.

Sustainable waste-water treatment

The waste water from Stockholm and some neighbouring areas is treated in two plants that serve a combined population of 1 million. The water is treated with advanced technology for removing nitrogen and phosphorous, exceeding the ambitions of the EU Urban Waste Water Directive. Biogas is produced in the waste-water treatment plant and then upgraded for use in public buses as well as private cars and taxis. The excess heat in the sewage water is recovered for domestic heating. No water is reused.

*Map of
Stockholm.*





Everybody who lives in Hammarby Sjöstad is a part of the eco-cycle. This is called the Hammarby Model, and it deals with energy, waste, sewage and water for both housing and offices.

The Clean City

Just south of the city centre, the Hammarby Sjöstad residential area is a perfect example of a good, sustainable city environment. Hammarby Sjöstad is an exciting new district in Stockholm where the city imposed tough environmental requirements on buildings, technical installations and the traffic environment from day one. The area is still developing and is to be completed in 2015. The neighbourhood has its own eco-friendly system for handling energy, waste and water.

Everybody who lives in Hammarby Model is part of an eco-cycle that handles energy, waste, sewage and water for homes and offices. One example is the incineration of combustible waste to produce both electricity and district heating; another is the use of waste heat from treated waste water to heat water in the district heating system. The neighbourhood now serves as an example of environmentally sustainable city development worldwide. It was, for example, inspiration for the Sino-Singapore Tianjin Eco City in China.

Municipal and household waste generation

25% material recycling

1.5% biological treatment

73.5% incineration with energy recovery

“100% of household waste is converted into heating and electricity”

One of the many narrow alleys in the Old Town (Gamla Stan) – popular with locals and tourists alike.

Car traffic is limited in the inner parts of the Old Town.



Waste production and management

Stockholm has a well-functioning integrated waste-handling and disposal system. Innovations in transporting waste assist towards widespread recycling, especially of bio-waste, including underground vacuum-controlled systems.

Swedish legislation prohibits any organic waste from being sent to landfill. In Stockholm, all separately collected food waste is recycled as biogas and fertiliser/compost.

Waste-to-energy

Stockholm has turned waste into a valuable resource. It has a century-old tradition of waste incineration and converting household waste to energy. In 1909, the first incinerator plant started operating in the city to reduce the household rubbish going to landfill.

The principle of using household waste for producing heat and electricity, reducing the amount of waste sent to landfill and replacing fossil fuels with combustible waste has continued and developed. The result? No household municipal waste ends up in landfill.

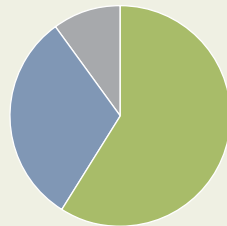
Today, more than 70% of householders have access to district heating, produced partly by energy extracted from waste.

Waste prevention and reduction

Reducing the amount of waste generated is one of the most important challenges for the years ahead. Since the 1990s, Stockholm's Waste Management Administration has been working hard to raise awareness among citizens about the environmental impact of waste and the importance of recycling.

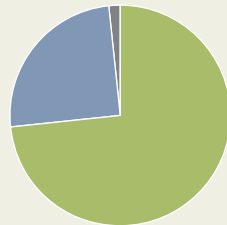
The Strategic Waste Management Plan for 2008-2012 contains strategic objectives and assigned measures and targets. Among other things, it calls for increasing the amount of food waste collected and treated. It has set a target to treat at least 35% of the food waste from restaurants and grocery stores – and 10% of food waste from households – biologically. To achieve this, it promotes a separate collection of high-quality food waste from restaurants. In 2007, 9.5% of the food waste from restaurants and groceries and 2% of the food waste from households was treated biologically.

Municipal waste generation per capita



- Incineration - energy recovery **59%**
- Material recycling **31%**
- Landfill **10%**
- Biological treatment **0%**
- MBT **0%**

Household waste generation per capita



- Incineration - energy recovery **73.5%**
- Material recycling **25%**
- Landfill **0%**
- Biological treatment **1.5%**
- MBT **0%**

Source: City of Stockholm



A city at the forefront of environmental thinking

Connected and climate-smart, Stockholm is a model of sustainable urban living.

The Connected City

During the national fiscal crisis in the early 1990s, Stockholm decided to pursue an unusual, cost-efficient telecommunications model. In 1994, city-owned company Stokab began installing a fibre-optic network, offering capacity to telecommunications carriers for less than the cost of installing it themselves.

Today, Stockholm's 1.2 million-km network would stretch 30 times round the globe! It has more than 90 operators and 450 enterprises as primary customers. The city has 100% fixed and mobile broadband coverage, and by 2012, the fibre-optic network will extend to all businesses and apartment blocks (400 000 households).

Besides allowing anyone to connect to the information and communication technology (ICT) infrastructure, the use of fibre optics has a direct impact on the environment – for example, by reducing the amount of road digging.

Switching to a better option

The Stockholm authorities removed all 1 800 old switches from the school IT network and replaced them with 1 350 newer models. This change alone cut energy consumption by 40% (enough to supply 300 flats for a year).

“The use of fibre optics reduces the need for road digging”

Green IT

Information technology can reduce environmental impact in a number of ways:

- | *Modern IT equipment uses up less energy and resources.*
- | *Video- and teleconferencing reduce travel.*
- | *Transport can be better planned (through Intelligent Transport Systems – ITS).*
- | *Energy use and emissions from buildings, vehicles, etc. can be more accurately controlled.*

Intelligent road use

The website www.trafiken.nu warns drivers about traffic jams and congestion, enabling them to reroute their journeys to save both time and vehicle emissions. Public authorities and companies can also use it to plan school bus routes, services for elderly people, or staff travel, for example. The route planner is also suitable for bike routes.

Efficient IT use also feeds into energy management. The Östra Real upper secondary school is built on top of a 300 m² shelter, housing one of Stokab's broadband cross-connection hubs. Some 60 broadband operators use the hub, generating heat which is channelled into the school above via a heat exchanger. The underground room itself is cooled by geothermal ground-source cooling. When the system is fully operational by the end of 2010, the school will benefit from 100 kw of extra heat, supplying 10% of its needs during the cold winter months, and all of its heating in the summer. District heating will meet the additional requirements.

It is estimated that urban areas could save more than €700 million a year by using modern IT options. But to do this, they need to be able to rely on a well-developed infrastructure – both fixed and mobile. Stockholm's Strategy for Green IT, approved by the City Council in 2009, recognises that "a citywide, standardised and modern IT infrastructure is fundamental for green IT".

The Climate-Smart City

Despite its northern location and an increasing population, Stockholm has very low greenhouse gas emissions, down to about 3.4 tonnes per person in 2009 (compared to 5.4 tonnes per person in 1990). This is made possible by the high proportion of renewable energy for heating houses and other premises, reducing traffic congestion, more clean vehicles and green electricity. Stockholm is now working with citizens and other stakeholders to reduce CO₂ emissions to 3 tonnes per resident by 2015, and calculations indicate that output will actually fall to 2.8 tonnes by that time.

Stockholmers are travelling together

Some 90% of Stockholm residents live within 300 metres of public transport with an hourly or more frequent service. Travel by public transport to the city centre during morning peak hours is constantly increasing, while the number of car trips is declining. Interestingly, 68% of all trips within the city centre are made on foot or by bicycle. During peak hours, 78% of all trips to the inner city are made by public transport.

“40% of cars sold in Stockholm are clean vehicles”

Since August 2007, Stockholm has levied a congestion tax on all Swedish-registered vehicles driving in and out of the city centre on weekdays between 6.30 am and 6.29 pm. Toll stations are 100% automatic. Traffic is monitored on-camera and bills are sent out to car owners electronically, where possible. The charges have cut traffic and emissions by 10-15%.

On the right track

Clean energy fuels much of Stockholm's public transport system. All rail services are operated with certified renewable electricity, and all city buses run on renewables.



Houses in the Old Town (Gamla Stan), which is also home to the Royal Castle, a number of churches, residential buildings and small squares and parks.

An air balloon floats above Södermalm, one of the inner-city areas of Stockholm which look on to the Baltic Sea. The church is the Katarina Kyrka.



In the coming years, Stockholm foresees increasing the number of buses fuelled by biogas from 129 in 2009 to 500. Stockholm Transport also uses some 400 ethanol buses and a handful of ethanol-hybrid buses, comprising the world's largest ethanol fleet. In 2008, one-quarter of buses in the region ran on renewable energy, a figure expected to reach 50% by 2011.

By 2025, all public transport will be fossil-fuel free.

Power to the pedal

Over the last decade, the number of bicycle trips by Stockholm residents has jumped 75%, owing in large part to the expansion of cycling paths and lanes, together with Stockholmers' growing interest in health and physical exercise. In addition to these separate lanes, more and more cyclists travel on local streets, made safer by 30 km per hour speed limits. Those

without their own bikes can always rent one cheaply from several stations throughout the city. There are also nine official bicycle-pump points where cyclists can inflate their tyres. The City of Stockholm is connected by over 760 km of bike lanes. There is also an internet-based travel planner for bikers, covering both the inner city and neighbouring municipalities: <http://cykla.stockholm.se/>

Clean vehicles

Since 1994, Stockholm has actively campaigned for clean vehicles to be introduced on the market as well as providing adequate infrastructure for fuelling them. The effort is paying off: clean vehicles make up an impressive 40% of sales. Of the total fleet in early 2009, 14% were ethanol or biogas-fuelled, hybrid-electric or ultra-low emission vehicles, and the trend is positive. All inner-city buses operate on biogas or ethanol; 50% of refuse trucks and 40% of taxis either consume biofuels or are

hybrids. The City of Stockholm's own fleet of vehicles should be 100% clean by the end of 2010, and many private companies are moving in the same direction.

District heating and cooling

District heating has been used in Stockholm for more than half a century. Today, more than 70% of Stockholm's households have access to district heating, which is mainly powered by renewable energy. The conversion from oil heating to district heating has reduced greenhouse gas emissions by 593 000 tonnes since 1990. The use of district heating with advanced pollution control and optimised processes has reduced the number of small, old oil boilers. This has not only cut CO₂ emissions, but has also helped reduce emissions of sulphur dioxide and other hazardous substances, thereby radically improving air quality.

Larger plants produce both electricity and heat, a process known as co-generation. One such installation is the Högdalen plant, where the city's waste is used to produce energy. Heat in waste water is also used to generate district heating. Cold water from lakes and the sea provides for district cooling, on the other hand, as does the cooling effect from heat pumps that extract energy from seawater or waste water. The use of district cooling reduces CO₂ emissions by about 50 000 tonnes annually.

Eco-labelled electricity

The City of Stockholm uses eco-labelled electricity. Its aim is for 100% of all the electricity the city purchases to be environmentally certified.

Future development

Never content to rest on its laurels, Stockholm keeps raising the bar on environmental standards. The city is growing and must achieve a balance between retaining and developing its unique character, while at the same time being a sustainable and attractive place for people to live and work.

An example of this effort is the Stockholm Royal Seaport, one of Europe's largest urban development projects, which seeks to become a global showcase for sustainable urban development. The city area, which will accommodate more than 10 000 apartments and 30 000 work spaces, plans to be fossil-fuel free by 2030, to reduce carbon emissions below 1.5 tonnes per person by 2020, and to cement Stockholm's reputation as a truly climate-adapted city.

■ *The Ericsson Globe Arena: the world's largest spherical building is an environmentally friendly venue for sports and cultural events. Inaugurated in 1989, it is one of the newer features on Stockholm's skyline.*







The judges decide

Expert panel commends Stockholm's "strong green programmes".

The expert panel was impressed with Stockholm's "holistic vision", combining growth with sustainable urban development.

By all measures, Stockholm's future is green. The city, which continues to invest in clean energy and transport, has adopted a target of becoming fossil-fuel free by 2050.

“All trains and city buses run on renewable fuels”

Sustainable urban planning

Environmental aspects are an integral part of the city's Integrated Management System. Consequently, they are included in the city's budgets, operational planning, reporting and monitoring. The results in the final report show that Stockholm has met, or achieved positive progress, in nearly 80% of its objectives.

The experts' evaluation report finds that: "Overall, Stockholm can be depicted as a city with strong green programmes and measures across the board in all relevant areas, supported by solid budgets." In its sixth consecutive Environmental Programme (2008-2011), Stockholm lays a solid foundation for future progress.

Local contribution to climate change

The amount of greenhouse gas emissions released by each inhabitant of Stockholm is half the national average. Since 1990, emissions per capita have been reduced by 25% in the Swedish capital. Transport emissions are relatively low, and all trains and city buses run on renewable fuels, while not strictly classified as 'low-emissions' vehicles.

The city centre and central station in the foreground. A new complex of 'green' buildings, including a convention centre, offices and a hotel, is currently being built over the railway.

A section of Stockholm's 760 km of bike lanes runs alongside Lake Mälaren.



Green mobility

Over the past decade, the local public transport system has taken several steps towards sustainability. A congestion tax has already led to a documented increase in the use of public transport and cycling, as well as reduced emissions from motor vehicles. In addition, more than 75% of fuel stations in Stockholm now offer ethanol or biogas and all petrol sold in the region contains 5% ethanol.

Blue and green areas

Over 10% of Stockholm's surface area is covered by water. The city is beautifully situated, spreading across 14 islands where Lake Mälaren meets the Baltic Sea, pointed out the experts. The many lakes and bays are ideal for swimming, boating, fishing and other forms of recreation.

The fact that more than 90% of Stockholm residents are found to live only 300 metres away from green areas, adds to the high quality of life. Besides offering places to walk, run and relax, the numerous parks contribute to better air quality, help reduce noise and enhance biodiversity.

Future plans cover an extensive list of new green spaces, further improvement of existing ones and the creation of more bathing areas. Clear and effective noise management and subsequent achievements are also well described, documented and supported financially.

Integrated waste system

Stockholm has a well-functioning, integrated waste system. It is characterised by several innovations in transporting waste, such as the use of an underground vacuum-controlled system. This has prompted extensive recycling, especially of bio-waste. Stockholm's Waste Management Administration has set out to raise awareness about waste reduction, source separation and recycling. It constantly assesses the benefits and effectiveness of various campaigns.

Talking the talk

Through a well-conceived communications strategy, Stockholm has demonstrated its commitment and eagerness to share its experiences with other cities – thereby acting as an inspiration, the judges said.

The strategy is a multi-step process, beginning with an overarching objective and several specific communication goals, followed by the identification of target groups and key messages as well as the tools to get the messages out.

Learning from one another

Strong networking and involvement of local and international stakeholders will ensure that Stockholm and other cities invest in further efforts to become healthy, desirable, green places to live. Ultimately, awareness about sustainable urban living will increase throughout Europe.



A biogas production plant in Henriksdalsverket: one of Stockholm Water Company's waste-water-treatment plants.



Stockholm as an international role model

As the first European Green Capital, Stockholm is committed to being a role model, to inspire other cities and spread best practice across Europe and the rest of the world.

The aim is to demonstrate concrete examples at local level, showing how things are done in real life. Stockholm will invite representatives from other cities to come and share their own best practices, and gain inspiration.

European Green Capital Conference

The main forum for this exchange during the year is the first European Green Capital Conference, with European city planners and administrators invited to Stockholm to get first-hand experience of local solutions, and concrete examples of how common environmental challenges can be met. Stockholm's integrated approach to sustainable urban development is the framework for the conference and the discussions.

Professional study visits

The European Green Capital Award has inevitably boosted interest in Stockholm internationally. So the city, together with other partners such as clean-technology companies, NGOs and academics, has launched a new programme of professional study visits throughout 2010.

The scheme enables visitors with knowledge to find out more about the way Stockholm has dealt with a range of environmental challenges. Visiting delegations have the opportunity to question

experts in all the departments and districts of the city. They get practical insight into the planning of new urban projects, developing public transport networks, and the advantages of a well-connected society from both a democratic and an environmental point of view. The aim is to strengthen networking between cities and increase opportunities for sharing experience and learning from one another, so as to reinforce sustainable urban development across the EU. Stockholm hopes

that these representatives will also bring valuable ideas and inspiration of their own, to foster further development.

“*The award belongs to all Stockholmers*”

The visits focus on topics such as water and waste management, urban development and renewal, combating climate change, information and communication technology, and ensuring an effective and sustainable transport system. The programme also covers education, social inclusion, sustainable energy production and how cultural and creative activities can promote sustainable development.

Seminars and workshops

In addition to the conference and programme of professional study visits, Stockholm is organising a series of workshops and seminars for experts. These will create a platform for discussion of a number of important aspects of sustainable city development, such as urban biodiversity, water protection and green buildings.

Local involvement

The award goes not only to the city administration – it belongs to all Stockholmers, and to the companies who operate in the city. Thanks to them, Stockholm continues to develop as a green city, fit for life. One of the main challenges for the first European Green Capital is to raise general awareness of the scheme and what it stands for. In Stockholm, the Green Capital Award is featuring in all activities throughout 2010, from international conferences and art exhibitions to the official opening of the new tramway. The main theme for the annual cultural festival in Stockholm 2010 will be climate change.

Sharing ideas and experience

All the cities that took part in the competition for the first European Green Capital came out as winners in one respect. They all came away with a valuable document: their application. The application procedure served as an assessment of the environmental performance of each city, and taking part in this self-evaluation process enabled authorities to draw up a clearer and more comprehensive picture of their activities. Another benefit of these documents is that they allow for comparison between applicant cities.

The applications reveal interesting facts about the state of play at local level. It is obvious that many cities face the same challenges of rapid urbanisation and economic development, while at the same time being keen to take environmental concerns into consideration.

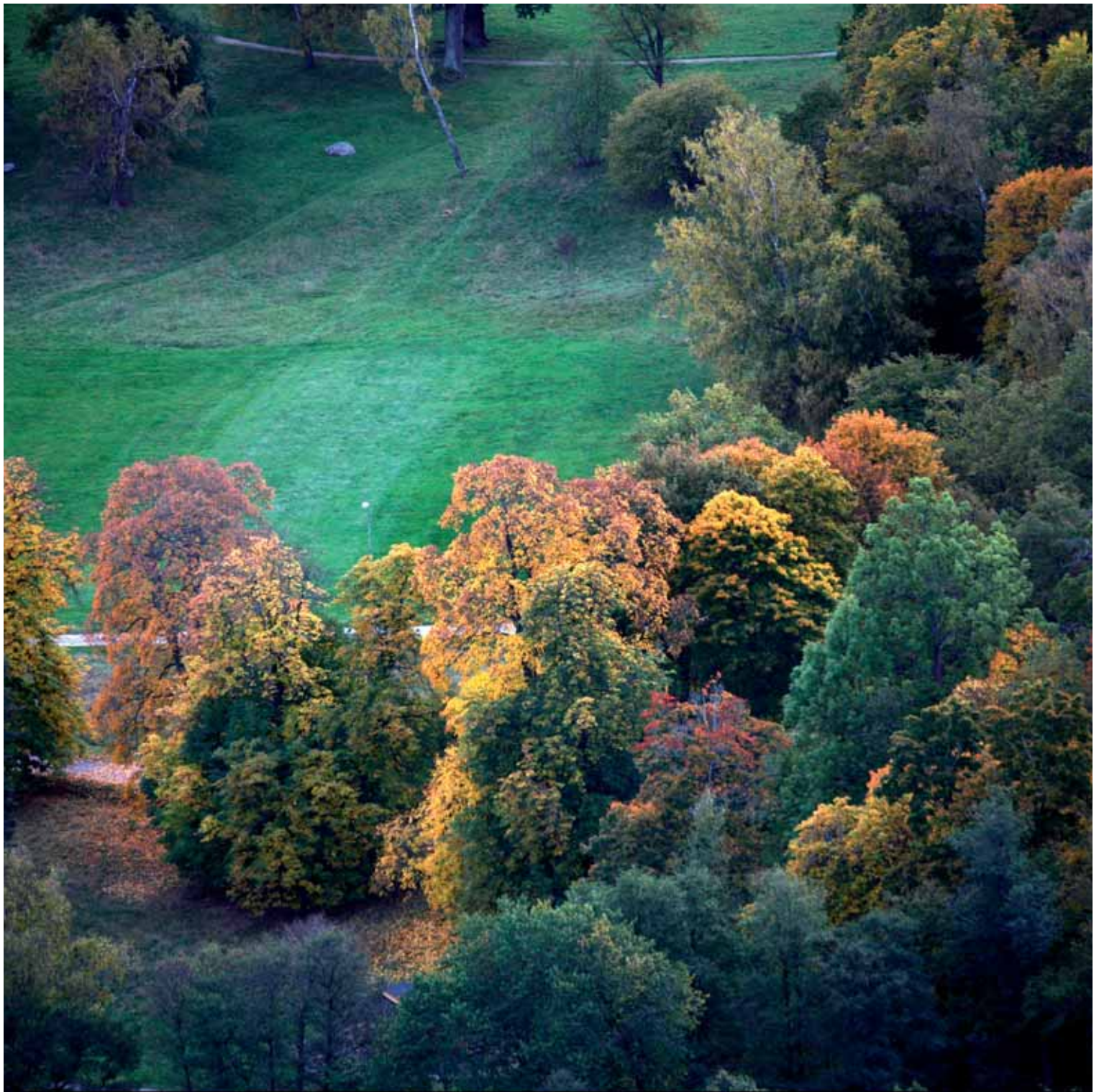
Green capitals join forces

Stockholm and Hamburg (European Green Capital 2011) have signed a joint declaration, pledging to work together and support each other.

Stockholm and Hamburg are working together to explore the different aspects of what a European Green Capital should do in order to fulfill the aspirations of the award.



From the quayside of Nybroviken, in central Stockholm, ferries and small boats take visitors to the islands of the archipelago just outside the city.



Stockholm's vision for the future

Stockholm's efforts to create a model sustainable urban environment will not end when it surrenders its title as European Green Capital in January 2011. The city has developed a challenging vision of its development from now until 2030.

Vision 2030 involves all the city's administrative departments, together with businesses, educational establishments and other partners. Bringing this sustainable, green city of the future into being is a strategic commitment involving all policy-makers and stakeholders. Everyone in Stockholm will have a role to play in making it a reality.

“*Tomorrow's Stockholm is being shaped today*”

Stockholm is growing. By 2030, the population is expected to increase by 200 000 to 1 million residents. It will need more housing, more jobs, more schools and childcare, more health care and public services, and more infrastructure and transport facilities. So planners need to start

work today to ensure that, among other things, these developments do not damage the natural environment that is so important to the quality of life in Sweden's capital city.

Vision 2030 focuses on three main themes, and highlights what will be important for people living in, working in and visiting Stockholm in 20 years' time.

New experiences and opportunities

Stockholm will be a world-class metropolis, offering a wide choice of entertainment and cultural activities. Versatile and full of experiences, its creative pulse should attract visitors from all over the

world. The city derives its vitality from the diversity of different centres and neighbourhoods, each with its own character. High-rise development is taking place alongside Stockholm's trademark parks, lakes, waterways and beaches.

Preserving the city's special blue-green identity will be crucial. Work is already under way to improve previously rundown areas and make them attractive and sustainable residential environments. Public-private partnership is behind new cultural and sports venues.

A centre of innovation

By 2030, the city will be the hub of the growing Stockholm-Mälars region. It should foster innovation and growth – developing as one of Europe's leading regions, with a dynamic and innovative environment where high-tech companies work side by side with small enterprises and research and academic institutions. Planners are aiming for a world-class, knowledge-based and green economy with a highly-skilled labour force.

By 2030, Stockholm will have up to 1 million residents. Vision 2030 is planning for a city that focuses on the needs of citizens, prioritising social integration and well-being.



A citizens' dimension

At the same time, Stockholm must be a city that prioritises integration and social well-being – accessible and safe. It will need high-class education, medical and care services, offering individuals freedom of choice. **Vision 2030** foresees the city maintaining its identity as the citizens' Stockholm.

Stockholm's selection as the first European Green Capital, in 2010, sent a strong message that it is taking steps in the right direction to achieve its vision, becoming a world-class city. Stockholm's ambition is to be a green capital forever.



Soaking up the sun in Stortorget, in Stockholm, ringed with picturesque 18th century buildings.



www.stockholm.se/international
www.europeangreencapital.eu

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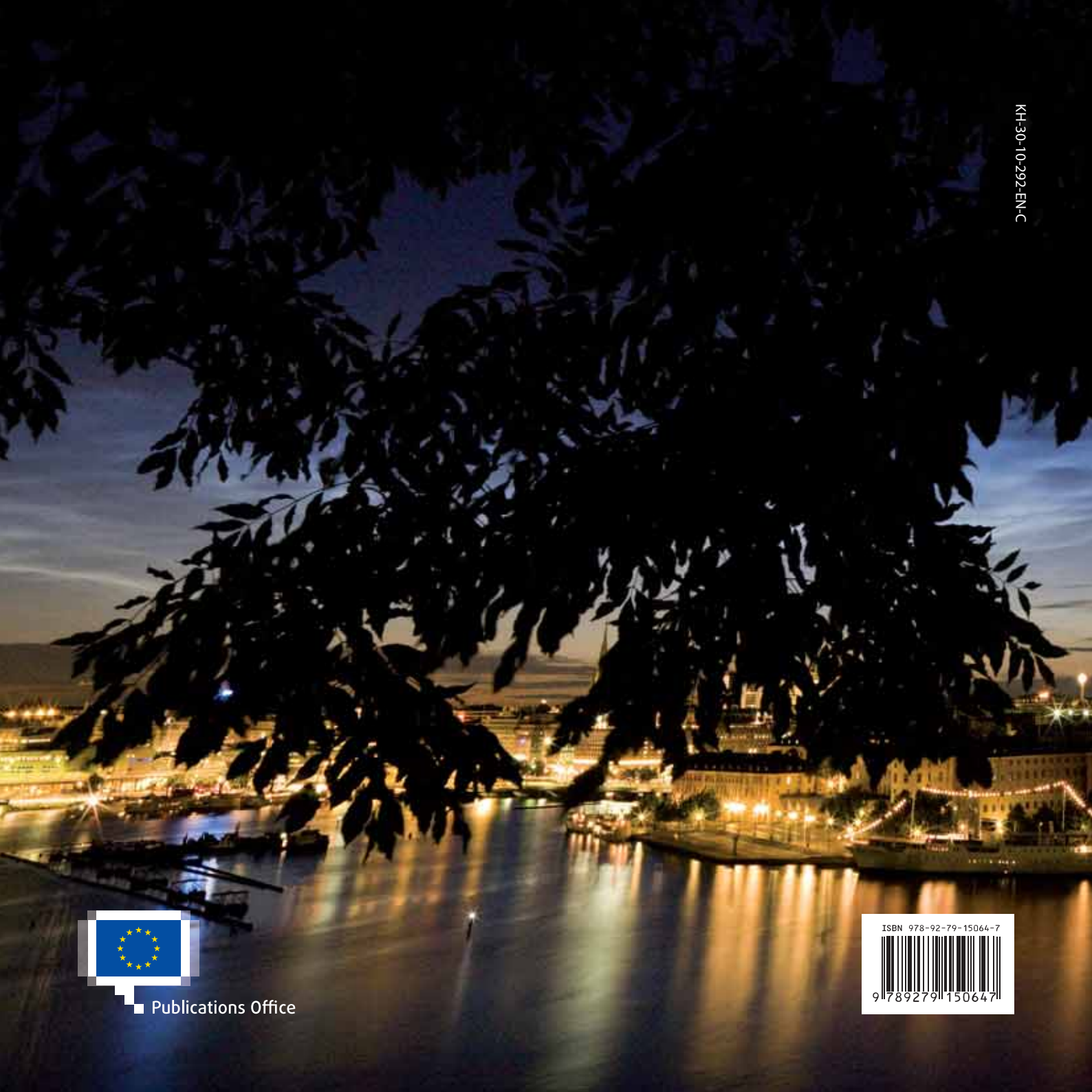
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