



HAMBURG

winner 2011



EUROPEAN
GREEN CAPITAL



An initiative of the
European Commission

Green cities - fit for life



HAMBURG IS EUROPEAN GREEN CAPITAL 2011



The Free and Hanseatic City of Hamburg gained the prestigious European Green Capital title on the recommendation of a panel of environmental experts. They gave it top marks, ranking it above the 34 other European cities in the competition – no mean achievement!

The European Green Capital Award is an initiative of the European Commission and is awarded by a panel of international experts in different environmental fields and a jury. They base their judgement on a series of indicators including air quality, waste management, sustainable land use, combating climate change, and local governance.



www.mediaserver.hamburg.de/ / C.Spahr/bier



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GROWING AND GREEN: IT MUST BE HAMBURG



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Hamburg is home to 4.3 million inhabitants in the metropolitan region, 1.8 million of them in the city centre. In addition, more than 300,000 people commute to work daily. Hamburg hosts over 500 industrial firms, not to mention Europe's third largest port - able to handle large, ocean-going vessels and vital to Hamburg's economic prosperity. This makes Hamburg a transport crossroads, tourist destination, high-tech hub and media centre, as well as a city with an ever-growing population.

As an industrial centre with a growing population, Hamburg has to confront a range of environmental challenges. But wise use of natural resources, coupled with an innovative policy for 'Responsible Growth', has helped to make the city an example of environmental best practice.

Hamburg is impressively green in comparison to most cities of similar size, with over 16.7% of the urban area given over to forests, recreation and green spaces. Water covers a

further 8%, contributing significantly to the city's recreational opportunities. Waterfront terraces and walkways offer pleasant open-air environments for residents, while the River Elbe ferry lines serve the needs of both commuters and visitors.

Hamburg has 3,000 hectares of state-owned parkland (1 460 national parks in total). Farming, fruit growing and horticulture occupy a further 25% of the municipal area. Hamburg's 31 nature protection areas account for 8.4% of land, placing the city ahead of other German states, while additional protected spaces make up a further 19% (14,360ha) of Hamburg's total area.

Hamburg's manufacturing companies employ some 83,000 people, primarily in air and spacecraft and engineering, and in Europe's largest copper smelting plant. Industrial companies invest some €45.8 million a year in measures to care for the environment. Of this, €24.1 million goes towards water protection.

GREEN CAPITAL: A SOURCE OF INSPIRATION



One of the most important roles for Europe's Green Capital each year is to act as an inspiration and source of ideas for its own citizens, and for other cities. Hamburg has a "meticulous, well structured communication strategy and a very attractive programme of events for well chosen target groups, involving all the city's stakeholders".

Train of Ideas

Hamburg's ambitious Train of Ideas is one of the most innovative features of the year, embarking on a Europe-wide tour to carry green thinking to 18 cities, including Warsaw, Malmö, Copenhagen, Brussels, Vienna, Barcelona and Marseilles. Seven containers with an exciting interactive exhibition lead visitors on an educational journey from their personal experience of their environment to their broader surroundings in the city and nature, and then lastly to a global perspective.

The themes covered include urban development and living, mobility, energy and climate protection, nature and city greenery, resource protection, economy and consumption. The concept was developed by the Kunstraum agency for the Hamburg Ministry of Urban Development and Environment.



BSU/W. Huppertz

Train of Ideas tour plan

15 - 21	April:	Hamburg
26 - 29	April:	Copenhagen
01 - 04	May:	Malmö
06 - 10	May:	Gothenburg
12 - 15	May:	Oslo
20 - 22	May:	Zurich
24 - 27	May:	Munich
31 May - 04	June:	Warsaw
07 - 10	June:	Riga
12 - 14	June:	Tallinn
20 - 22	June:	Vienna
25 - 29	June:	Barcelona
02 - 04	July:	Marseilles
07 - 10	July:	Nantes
01 - 04	Sept:	Paris
07 - 13	Sept:	Brussels
15 - 19	Sept:	Amsterdam
21 - 25	Sept:	Antwerp
29 Sept - 22	Oct:	Hamburg

For full programme details see:
<http://hamburggreencapital.eu/>

WHY IS HAMBURG SPECIAL?



As a major industrial centre, Hamburg confronts all the environmental challenges that face other European cities. It is not an eco-paradise – yet! But its leaders are actively finding ways to combine industrial activity and the employment it generates with a good standard of living for inhabitants. This is what makes Hamburg a role model.

Combating climate change

Hamburg has made real efforts to cut back on CO₂, with a Municipal Climate Protection Act, adaptation and research programmes. The climate protection programme, approved by the local government in summer 2007, identifies 10 areas of action covering over 450 individual measures. The city invests up to €22.5 million a year in these measures.

A significant partnership programme, called 'Enterprise for Resource Protection', has already completed about 1,000 projects. The aim is to encourage voluntary investment in increasing energy and resource efficiency in enterprises. For each €1 invested by local government, participating companies contribute €10. This has generated total private investment of €146 million matched by municipal support of €15 million. In total, the enterprises currently save 134,000 tonnes of CO₂ emissions each year.

The Hamburg ECO-Partnership, a joint venture between local government and the commercial sector, encourages companies to go beyond statutory requirements to take additional eco-friendly measures. Serving as a platform for information and networking, the partnership also offers free on-site consultations for Hamburg-based firms, supporting clients in implementing projects in the fields of environmental management and climate protection.

The city has set itself ambitious targets for future development: for example, cutting CO₂ emissions by 40% by 2020 and 80% by 2050, compared with the more modest EU target of 20% by 2020.





A green network for the city

Hamburg is built on a radial or 'axial' model, extending out from the central Rathausmarkt, which facilitates residents' access to rural areas outside the city. At the same time, a 'Green Network' (*Grünes Netz*) structure creates a series of 'green rings' connecting the landscape axes, at various distances from the city centre. The green network covers the whole of Hamburg, forming a link between urban parks and playing fields, narrower green areas and larger spaces, from the outskirts to the city centre. Two inner loops and several landscaped axes together form an almost seamless grid, constituting a unique green urban leisure area.

The objective of the city's landscape planning policy is to link parks, leisure and sports areas, playgrounds and even cemeteries, to make it possible for people to travel from the city centre to the outskirts, on foot or by bicycle, without coming into contact with traffic. The green network is also key to the 'connectivity' of wildlife habitats – enabling animals and other species to move freely from one place to another.

The Elbe – key to Hamburg's prosperity

From its source to its estuary, the Elbe is the lifeblood of the entire region. The interplay of tides and the influence of the North Sea have created a uniquely dynamic natural environment, which for centuries has offered a good living to the inhabitants of the area.

The Lower and Outer Elbe, also called the Elbe estuary, is the habitat for many plants and animals, some found nowhere else. The Elbe estuary is therefore designated as a site of exceptional importance within the European nature conservation network Natura 2000. At the same time, people use the Elbe estuary for shipping and industry, fishing and agriculture, as well as for recreation and water sports.



HfHM / M. Lindner

The integrated management plan for the Elbe estuary aims to protect this unique natural environment while, at the same time, finding solutions that take account of the interests of the human population. Together with local people, the partners – Hamburg, Schleswig-Holstein, Lower Saxony and the federal water and shipping administration – are developing schemes to meet all these needs.

Cranes and cranes

The port of Hamburg handles over 100 million tonnes of goods every year, and occupies 10% (74km²) of the city's total area. It is the heart of its economy, providing more than 150,000 jobs. The huge gantry cranes that load and unload millions of containers are a familiar sight on the skyline. But the city also makes room for cranes of the feathered variety: in total, more than 200km² of land is set aside for conservation across the region, including the Boberg Lowlands, the moorlands of Duvenstedter Brook, and the Elbe island marshes.

Alongside bringing economic prosperity, the port implements long-range ecological programmes. The 'Durable Business Operations in the Harbour' project brings together a great many individual measures. They range from the energy-efficient refurbishment of buildings and the use of solar energy to expanding infrastructure for more eco-friendly means of transport such as barges, harbour trams and gas-fuelled vehicles.



www.mediasever.hamburg.de/T/Hampel

Hamburg's green port

Around 11,000 ships sail into the port every year, owned by over 100 shipping companies. The port's management understands that economy and ecology go hand in hand, and the infrastructure surrounding the port reflects this philosophy. For example, saving energy not only conserves the environment, it also cuts running costs. This makes Hamburg an attractive destination, reflected in the way the port and its logistics have developed over the past few years.

In February 2010, international container shipping companies voted Hamburg the best out of eight north European ports (Hamburg, Rotterdam, Antwerp, Bremerhaven, Zeebrugge, Amsterdam, Felixstowe and Wilhelmshaven). This helps to explain why, despite the global economic crisis, in 2010 the port achieved further growth of 9.8%, handling a total of 121 million tonnes of cargo.

Hamburg was instrumental in getting the EU to apply a 'polluter pays' principle for ports, discouraging container ships from discharging 'old oil' and other ship waste. If a toxic spill of any

sort takes place in the port, an emergency team is on 24-hour standby, together with dedicated water police and fire crews.

Green facts and figures

- 4,700 hectares of woodland – more today than 100 years ago.
- Public parks, recreation areas and woodlands make up 16.8% of the municipal region. Every week, 1 million people use them for leisure and recreation. 89% of the population lives within 300m of a park.
- 11,657km of bus routes, with 10,426 stops.
- 656 million passengers used public transport in 2009.
- 99% of residents have access to public transport within 300m of their homes.
- CO₂ emissions cut by 15% (1990-2006).
- 200,000 low-energy lamps in 400 public buildings save €3.4 million per year



Water matters

Guaranteeing a clean, safe and adequate water supply for residents is a major preoccupation for Europe's cities. Hamburg draws on high-quality, natural, local groundwater for 100% of its supplies. This assures high-quality drinking water, while investments in a comprehensive infrastructure maintenance programme have led to an exceptionally low leakage rate from fresh water pipes of just 4% (compared to 7% on the national average).

Innovation also has its place, for example with pilot schemes that allow for heat from waste water to warm houses, by means of heat exchangers situated at the bottom of large sewers. The Hamburg Water Cycle® enables sewage disposal which is energy self-sustaining and neutral for the climate with nutrient reclaim. Among others, these innovations help to reduce the amount of carbon dioxide emitted and are therefore an essential part of Hamburg's climate adaptation strategy.

Waste Management

Hamburg's integrated waste management system works very well, reducing landfill waste through a recycling and incineration processes. The local authorities have carried out public awareness campaigns to encourage households and businesses to sort paper, glass, plastics, metals and bio-waste. There are plans to boost recycling and energy recovery in the future.

Transport

Hamburg attracts over 300,000 commuters every working day. Almost all residents have access to public transportation within 300m of their home - a higher proportion than in other European cities.

Hamburg is home to the world's largest fleet of hydrogen-fuelled buses - and it is still expanding. Each of the nine existing vehicles contains 1,920 individual fuel cells converting hydrogen into electric power, and they will soon be able to pull into Europe's biggest hydrogen filling station, in the port, producing hydrogen from solar or wind power generation. The almost noiseless, 200-kilowatt engines emit steam, rather than harmful emissions that contribute to climate change, improving Hamburg's air quality.

Since July 2009, the StadtrAD bicycle scheme has developed a network of 71 stations around the city, with 1,000 bikes and 53,000 registered users. Hamburg already has 1,800km of cycle paths. The aim is to increase bicycle traffic from 12% of total road use in 2008 to 18%, through additional bike lanes and cycle-hire schemes.

Winds of change

Saving energy and prioritising renewables are key to Hamburg's strategy for sustainability. The metropolitan region has been a pioneer in wind energy since the early 1990s, and wind is still the core of its renewable energy business: 60% of global wind-energy know-how can be found within 2.5 hours of the city. Hamburg has nearly tripled its use of renewable sources in the last 12 years, and since 2009 has its own 100% city-owned energy supplier: Hamburg Energie. The subsidiary of the water distributor Hamburg Wasser sells electricity from climate-friendly sources and organic gas. The company operates in the heating business and in electric mobility.

The port is already home to the largest onshore wind turbines in the world, and rotors for giant offshore wind parks turn at testing grounds in Cuxhaven and Brunsbüttel.

Sparking new ideas

Whether wind or solar power, bioenergy, geothermal or water power, over 300 Hamburg companies are actively engaged in renewable energy production. Thus far this accounts for 17% of nationwide power generation. In 10 years, the percentage is expected to increase by at least 50%.

Hamburg intends to lead the way to a greener future, which is why the city launched its renewable energy cluster in 2009, placing the city on a par with global competitors.

Hamburg's transport facts

- 656 million passengers used public transport in 2009.
- A new metro line is under construction, and trams will be reintroduced in 2014.
- A network of rapid transit and regional rail services converge at the city centre: three U-Bahn underground lines, six S-Bahn suburban lines and nine regional rail services ensure rapid and direct connections.
- At the weekend and on public holidays, selected buses and train services operate all night.
- November 2011 will see an increase in the fleet of small taxis (Smart cars), with lower rates and fewer CO₂ emissions.
- There are six ferry lines serving the harbour and the River Elbe.



HAMBURG'S VISION FOR THE FUTURE

Hamburg's pioneering efforts to create an eco-friendly and sustainable metropolis will continue long after the end of its year as Green Capital. As a world-class centre for creativity, research and innovation, it aims to be at the forefront of progress towards meeting the environmental challenges of this century and beyond.

Sustainable urban growth

Over the last 30 years, Hamburg has switched its expansion policy away from greenfield development, which creates urban sprawl, more roads and traffic, and destroys landscapes and natural habitats. Instead, the city is regenerating brownfield urban areas:

HafenCity, one of the prime urban development projects in Europe, will expand the existing city centre by 40% - in the spirit of combining a high degree of urbanity with the highest standards in sustainability. The former port and industrial area is transformed into a new type of downtown, with a mixed use spatial structure for 12,000 residents, more than 45,000 jobs and thousands of daily visitors. What provides the basis of high quality urbanism after 10 years of development also offers an example of best practice for sustainable city development.

The physical structure of the new city stands on a new, raised flood-proof level created by underground parking and establishing an interesting landscape of private and public spaces. The urban structure incorporates a finely tuned mix of different uses - including housing, work, commerce, gastronomy, culture and leisure space - and high efficiency, low-carbon spatial interaction. Mobility is possible via a new underground line to be opened in 2012, fuel cell operated buses and a new fuel



cell station. The heating of buildings is linked to a CO₂ benchmark-based local system using, for the eastern part of HafenCity, almost only renewable energy sources. And HafenCity is already featuring some of the best international buildings planned and certified to specific and demanding criteria for green buildings.

The 'Leap across the Elbe' means opening up an arc of urban development in the centre of Hamburg, comprising Europe's largest river island, including HafenCity, the islands of Wilhelmsburg and Veddel, and the Harburg Upriver Port to the south. To support this long-term strategy and foster its development, an International Building Exhibition (IBA) 2013 is taking place in the area.

HANDING OVER THE TITLE



The European Commission has already announced the next winners of the European Green Capital Award. Vitoria-Gasteiz in Spain will inherit the title in 2012. It is the capital of the Basque Country and its second largest town, with a population of 240, 000. In 2013, the crown will be passed to Nantes in France, on the River Loire, with some 280, 000 inhabitants.



Flickr: Widemos

Vitoria-Gasteiz



Flickr: Oletum

Nantes

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GREEN CAPITAL***An initiative of the
European Commission*www.europeangreencapital.eu**Green Capital Secretariat**

The application process and the work of the evaluation panel and the jury are facilitated by the 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.

