



Best Practice: Integrating Sustainability into City Planning Framework

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CITY: COPENHAGEN

POLICY AREAS: CLIMATE CHANGE; ENVIRONMENT

BEST PRACTICE

The City of Copenhagen has developed a strategy to integrate climate change planning into the existing City planning framework. The City's master plan is renewed every four years. Initially focused on physical planning, it has grown to incorporate strategic goals and sustainable urban development concepts. Through its master planning process, the City assigns climate change related tasks and initiatives to key institutions within the city administration.

ISSUE

Over the past two decades, Copenhagen has become an environmental world leader through reducing its carbon emissions by 25%. Then, in 2009, the City Council unanimously agreed on the Copenhagen Climate Plan setting the ambitious goal to become the world's first carbon neutral capital by 2025, starting with a 20% reduction of carbon emissions by 2015. These climate initiatives are part of the overall vision for Copenhagen to be an Eco Metropolis.

Some major focus areas of the plan include converting the energy production from coal to biomass, setting up more than 100 wind turbines both on land and offshore, energy retrofitting the existing building mass, and promoting green mobility. In preparation, the City is integrating climate change planning into its master planning process in order to incorporate sustainable urban design as a regular business practice.

GOALS AND OBJECTIVES

The overall sustainability vision for the City of Copenhagen is to be an Eco Metropolis. This reaches beyond just carbon neutrality and includes addressing broader sustainability issues, creating inviting green spaces and further developing safe bike paths. The goal of the Climate Plan is to develop Copenhagen into an even more livable city; a city that will continue to draw attention and recognition nationally and internationally in 2015 and 2025.

More specifically, the following measurable goals will be addressed:

GOALS FOR 2015	2007 STATISTICS
A reduction in Copenhagen's CO ₂ emissions of at least 20% compared to today.	Copenhagen emits a combined total of 2.4m tons (2005 figures) = 4.9 tons per inhabitant
At least 50% of those who go to work or their educational institution in Copenhagen to go by bike.	36%
The number of seriously injured cyclists in Copenhagen to be halved compared to today.	118 cyclists
At least 80% of cyclists in Copenhagen to feel safe and secure in traffic.	58%
90% of Copenhageners should be able to walk to a park, a beach, a natural area or sea swimming-pool in under 15 minutes.	About 60%
Copenhageners will be visiting the city's parks, natural areas, sea swimming-pools and beaches twice as often as today.	Today, Copenhageners visit the city's parks, natural areas, sea swimming-pools and beaches every other day, staying there one hour on average.

Best Practice: Integrating Sustainability into City Planning Framework

The air should be so clean that Copenhageners health will not be damaged.	Like the vast majority of major European cities, Copenhagen also finds it difficult to live up to the air quality specifications for nitrous dioxide (NO ₂) and large particles (PM10)
There should be at least 20% organic food in the city's food consumption.	About 7% nationwide
The municipality to lead the way with at least 90% ecology in its institutions.	45%
Copenhagen should be Europe's cleanest capital and one of the cleanest capitals in the world. Rubbish should be cleared from public streets within eight hours.	Copenhagen is reckoned to be amongst the top third of the cleanest capitals in Europe. Today, in the inner city, 36 hours elapse in some places before the streets are cleaned.

IMPLEMENTATION

To be most effective, the City is continuously incorporating the goals outlined for the Climate Change Plan into its regular master planning process and integrating climate change into the daily mechanisms of city functions. The City believes that setting up parallel structures and policies specifically for climate change is superfluous and might cause competition amongst institutions.

The master planning process includes public hearing mechanisms that are essential when introducing the public to new climate change ideas and incorporating their feedback into the planning process. The master planning process also involves a range of "round-table" discussion with key stakeholders, including the Lord Mayor, City agencies and urban development professionals from the private sector. The process is overseen by the Department of Finance, which also includes the business development, communications and publicly owned utilities functions.

The climate change initiatives that are being incorporated into the Master Plan as part of the effort to become an Eco Metropolis are as follows:

Transportation

- Continually develop cycle routes, remove barriers such as curbs and cobblestones, and highlight dangerous intersections. Cycle parking facilities will be improved
- Maintain the recently launched campaign to boost the use of carpooling to work
- Test the intelligent traffic control pilot program
- Analyze the possibility of introducing congestion charges together with neighboring municipalities
- Convert municipal vehicle fleet into hydrogen-powered and electric
- Develop an infrastructure to support electric and hydrogen-powered cars

Climate + Companies

- Companies voluntarily commit to CO₂ reduction/limitation targets and report progress to the city
- Companies that commit to reduction targets receive:
 - A climate guide developed by World Wildlife Foundation
 - Energy counseling
 - Communications platform efforts presented on climate website
 - Yearly award event for companies

Energy Retrofit

- Retrofit municipally-owned buildings to meet their potential for energy-savings. An effort will be made to use sustainable energy sources, such as solar cells, geothermal energy and wind power whenever possible.

Best Practice: Integrating Sustainability into City Planning Framework

- Set up 100 additional wind turbines within the city and outside by 2025



Wind turbines in the harbor

Carbon neutral districts

- Over the next 10-12 years, up to 36,000 new homes will be built in Copenhagen, potentially resulting in emissions of 100,000 tons of CO₂. These new neighborhoods must be developed as carbon neutral and follow the building regulations energy class of 2015.

COST

In recent years the city has invested heavily in multiple sustainability and climate initiatives. In the Budget Deals for 2010 and 2011, approximately 40 million Euros were allocated for climate initiatives during the next four years, with an additional 14 million Euros for improving the bicycle structure in the city. The initiatives in the Climate Plan will be financed year by year, and will be integrated in the annual budget. Certain areas, such as building renovation schemes, will have their own budget headings.

RESULTS AND EVALUATION

The City has established measurable goals that will be reported each year to the public in the annual green accounts. The accounts can be found at: www.kk.dk/greenaccounts

TIMELINE

- August 2009** By a unanimous vote, the City Council adopted the Copenhagen Climate Plan - The plan consists of 50 concrete initiatives which will lead the city towards a 20% carbon reduction by 2015 compared to 2005 levels. 44 of the 50 initiatives are underway.
- Summer 2011** The Copenhagen Adaptation Plan will be presented to the City Council. The plan describes the impact of climate change to Copenhagen. The Plan consists of a strategy, risk assessment and solutions for climate adaptation in Copenhagen. The Plan can be found at: www.kk.dk/English



Best Practice: Integrating Sustainability into City Planning Framework

- Winter 2011** The Green Mobility Plan will be presented to the City Council. The Plan will work to make mobility in Copenhagen more efficient and green in order to stimulate growth, contribute to a CO₂ neutral city and for the betterment of life for all Copenhageners.
- 2012** Copenhagen 2025 Climate Action Plan, which will lead the city towards carbon neutrality, will be presented to the City Council.
- Annually** The Copenhagen Green Accounts is published.

LESSONS LEARNED

A focus area for the municipality is external financing. Financing for the initiatives is incorporated into the City's budget, but at the same time the City will apply for external funding. A lesson learned is that there should be a stronger focus on co-funding of future projects, and that the application of funds should be upgraded in the future.

Another lesson learned is that there must be buy-in from all affected parties. The Climate Plan was adopted unanimously by the City Council as a result of strong involvement of the different administrations in the City.

Incorporating sustainability measures into every aspect of the city planning process enables Copenhagen to bring all relevant parts of the City administration together on a common objective. Moreover, using the City's long term planning instruments to drive sustainability has great potential in the long term. Cleaning the inner harbor to allow for swimming and fishing, creating a bicycle network, which is used by half the population, and creating a district heating network, which covers 98% of households are all results of long term planning processes.

TRANSFERABILITY

The Copenhagen Climate Plan has been developed with a strong political focus. The findings in the plan can be used internationally, nationally as well as locally. The concrete initiatives are transferable to other cities and regions.

CONTACTS

Charlotte Korsgaard, Head of Office
City of Copenhagen,
The Technical and Environmental Administration,
Environmental Department
chkors@tmf.kk.dk

More information can be found on:

www.kk.dk/greenaccounts

www.kk.dk/climate

www.kk.dk/english

Facts and figures in this report were provided by the highlighted city agency to New York City Global Partners.