Best Practice: Integrating Sustainability into City Planning Framework

REPORT UPDATED: JUNE 2008

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, and was initially focused on physical planning, but 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 been a world environmental leader in utilizing wind power by replacing a significant amount of energy derived from coal and oil with natural gas. The City of Copenhagen has been successful in developing a district heating network that reuses superfluous heat, reusing 90% of all building waste and creating a cycle-friendly city. These efforts have resulted in a 25% reduction in CO2 emissions from 1990 – 2005.

The City will now host the 2009 UN Conference on Climate, presenting a unique opportunity to position Copenhagen as a world leader in climate policy and showcase the City's efforts. The City administration has set an ambitious goal to reduce their CO2 emissions further by 20% by 2015. 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. The City will adopt the master plan in advance of the 2009 UN Conference.

GOALS AND OBJECTIVES

The climate change initiatives within the master plan have a short-term and a long-term purpose. In the short-term, the plan will detail how the City will achieve a 20% reduction in carbon emissions by 2015, and in the long-term, the plan will focus on how the City can assume carbon neutrality in a generation's time. To achieve these broad goals, there are 3 key factors the City will focus on: 1) energy production, including increased energy efficiency in buildings and how to weigh cost versus benefit in developing green buildings; 2) transportation alternatives – both to increase mobility, decrease congestion, and improve the air quality; and 3) public acceptance of environmental conservation as a way of life.

More specifically, the following measurable goals will be addressed:

GOALS FOR 2015	2007 STATISTICS
A reduction in Copenhagen's CO2 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	Today, Copenhageners visit the city's parks, natural areas, sea swimming-pools and beaches every other day,

Best Practice: Integrating Sustainability into City Planning Framework

as today.	staying there one hour on average.
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 (NO2) and large particles (PM10)
There should be at least 20% ecological 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

The City is incorporating the goals outlined for the climate change action plan into its regular master planning process. The City's master plan is renewed every four years, and was initially focused on physical planning, but has grown to incorporate strategic goals and sustainable urban development concepts. The City administration believes it is important to tie in climate change into the daily mechanisms of how the city functions in order to be most effective. The City believes that setting up parallel structures and parallel policies specifically for climate change is superfluous and might cause competition amongst institutions.

The master planning process already includes public hearing mechanisms that will be 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 stakeholder, 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 are as follows:

Transportation

- Cycle routes will be continually developed; barriers such as curbs and cobblestones will be removed and dangerous intersections will be highlighted. Cycle parking facilities will be improved
- City recently launched a campaign to boost the use of carpooling to work;
- Intelligent traffic control is being tested as a pilot program and
- The City is analyzing the possibility of introducing congestion charges together with neighboring municipalities.

Energy Retrofit

- Municipally-owned buildings will be retrofitted 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.

Climate + Companies

- Companies must 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 platforms (results presented in 2009; efforts presented on climate website)
    - Merchandize for employees

Best Practice: Integrating Sustainability into City Planning Framework

CO2 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. To reduce this impact, the City will establish two sustainable CO2-neutral urban districts with energy-saving buildings and the use of renewable resources in the energy supply and transport system.

Citizen Campaign

- Ongoing opinion polls and efforts to change citizen's attitudes towards climate change policies will be conducted, particularly focusing on children and young people. Examples of efforts may include a youth conference, incorporating climate change into the education system, a global virtual citizens meeting, and creating zero energy institutions for children.

Copenhagen's Mayor's Summit

- Held in parallel with the UN conference in December 2009 in close cooperation with ICLEI and other international organizations
- Goals of the Summit are to:
    - Demonstrate and expand the leadership role of cities in reducing emissions worldwide
    - Unite cities in a strong and clear message that national governments cannot ignore
    - Strengthen the future role of cities in connection with future UN climate change conferences

COST

The initial investment for the City's climate change initiatives is as follows:

- Approximately 20 million Euros have been allocated to climate change initiatives between 2008-2010
- Approximately 25 million Euros have been allocated to improve conditions for cyclists

RESULTS AND EVALUATION

The City has established measurable goals that will be reported each year to the public in annual green accounts.
In order to reduce global emissions of CO_2 as quickly and effectively as needed, a new global climate treaty must accelerate innovation in low carbon technologies significantly and boost global investment in research, development and deployment of clean energy solutions. In doing so, the Copenhagen Protocol that will be decided upon at the UN Summit in Copenhagen in 2009 could become a historic event securing sustainability for future generations.

TIMELINE

2007 Copenhagen Climate Council, established by a group of business leaders and scientists with the aim of helping make the case for a new global climate treaty that will come into force when the first commitment period of the Kyoto Protocol comes to an end in 2012.

The Master Plan is renewed every four years – the goal is to adopt the Master Plan and its climate change initiatives by 2009 in advance of the UN conference.

The City's goal is to achieve 20% CO2 reduction by 2015.

Best Practice: Integrating Sustainability into City Planning Framework

TRANSFERABILITY

http://www.copenhagenclimatesolutions.com

CONTACTS

Henrik Dissing
Chief Advisor for Climate Change
Office of the Lord Mayor
City of Copenhagen
hed@okf.kk.dk

This report was written based on a presentation by Henrik Dissing at the NYC Global Partners summit Public Health and Climate Change on June 26, 2008.

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