Urban Management Tools for Climate Change

Duration	**3 weeks**
Dates	**15 June – 2 July 2015**
Tuition Fee	**€ 2,750**
Language	**English**
Partner	**UN Habitat**
Abbreviation code	**UMTCC6**
Course Coordinator	**Stelios Grafakos**

Introduction

Cities are increasingly expected to undertake concrete actions to adapt to sea level rise, floods, droughts and other natural disasters exacerbated by climate change and climate variability. The impact of climate change differs for rural and urban areas, coastal cities, mountain cities and low-latitude cities. What concrete activities should coastal cities undertake?ℭ This course offers management tools for urban policy makers, planners and environmentalists.

Objectives

By the end of the course, participants will be able to prepare local climate change plans, which address the global challenges yet focus on concrete local actions. The course will offer specific practices to manage urban design and environmental infrastructure, in particular energy, transport, housing and water.

Content

Module 1: Introduction to Climate Change and Vulnerability.
Cities are considered the most vulnerable areas to sea level rise, storm surges, floods and droughts. Mapping the most at risk areas of a city with relevant climate impact-agents is a fundamental step in understanding how to reduce a city's vulnerability. Participants will get acquainted with a range of vulnerability assessment tools and will acquire knowledge and skills on how to perform a vulnerability assessment and vulnerability mapping at a city based on a case study. In addition, participants will get an introduction to decision support tools for climate change.

Module 2: Climate change adaptation: Land, water and disaster management.
Cities should adapt to both long-term trends associated with climate change (e.g. sea level rise) and to extreme events such as flooding. After centuries of land reclamation, the Netherlands transforms land into lakes, builds floating houses and roads, and experiments with rooftop gardens. Based on theory and best practices, participants will acquire knowledge of different adaptation strategies from concrete cases. Different types of approaches, such as community based and ecosystem based adaptation will be addressed within this module.

Module 3: Climate change mitigation: Energy, transport and carbon markets.
Cities can play an essential role in mitigating climate change. They can reduce energy consumption, promote renewable sources of energy or they can trade carbon credits under the Flexible Mechanisms of the Kyoto protocol. The latter is becoming a lucrative business for 'green' and 'clean' cities. GHG emissions inventories and abatement potential assessment are becoming vital tools for city's climate mitigation planning. Participants will have the chance to perform a GHG inventory at a city level and prioritize relevant climate mitigation actions.

Module 4: Local climate change action plans
Local Climate Change (CC) Action Plans translate - often vague - strategies for adaption and mitigation into concrete actions. Local CC action plans are based on vulnerability assessment, mitigation and adaptation assessment and consider the (financial) constraints of the particular city. Participants will analyze and evaluate detailed assessment reports of various case studies and will develop a local climate change action plan for a specific city.

Methodology

The course will be a blend of lectures, case studies, participants' presentations, group exercises, simulation exercises and excursions/field visits. Participants will be engaged mainly in group work by using different tools for vulnerability mapping, GHG emissions inventory, climate change prioritization and an online data base of climate technologies and actions. From the onset of the course, participants will apply theory and best practices to actual group work. Local Climate Change Action Plans will be prepared by participants, including a vulnerability assessment, adaptation and mitigation actions assessment along with concrete plans and financial arrangements. Rotterdam is one of the 40 cities of the Clinton initiative, therefore the course will look at the Rotterdam Climate Initiative and Rotterdam Climate Proof Programs and a range of innovative plans and actions – such as 'floating communities' - that aim to transform a polluting harbor city, below sea level, into a 'CO2 neutral' and climate proof city.

CLIMACT Prio tool & Climate techwiki

The Climate Actions Prioritization (CLIMACT Prio) tool, developed by IHS, is a climate decision support and capacity building tool for the prioritization and assessment of climate mitigation and/or adaptation actions at a local level. Climate Tech-Wiki offers detailed information on a broad set of mitigation and adaptation technologies and actions within the wider context of low emission and low vulnerability development. Participants will have the chance to use the CLIMACT Prio tool and Climate Tech-wiki database in combination with different material and case studies from the Cities in Climate Change Initiative programme of UN – Habitat.

IHS is proud to announce that this course is jointly developed with UN-HABITAT.

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