Horizon 2020 Capacity Building/Mediterranean Environment Programme

"Measuring our Carbon and Water Footprint"

June 20-21, Athens, 2011

Introduction - The Horizon 2020 Initiative

The "**Horizon 2020 Initiative"** aims to de-pollute the Mediterranean by the year 2020 by tackling the sources of pollution that account for around 80% of the overall pollution of the Mediterranean Sea: municipal waste, urban wastewater and industrial pollution. Climate change is also dealt with as a cross-cutting issue to be addressed.

Horizon 2020 was endorsed during the Environment Ministerial Conference held in Cairo in November 2006 and is one of the key initiatives run under the Union for the Mediterranean (UfM). The H2020 2007-2013 Road-Map focuses on the following four pillars:

- Identification of projects to reduce the most significant sources of pollution.
- Identification of capacity-building measures to help neighbouring countries create national environmental administrations that are able to develop and police environmental laws.
- Use of the EC's research budget to develop greater knowledge of environmental issues relevant to the Mediterranean and ensure this is shared.
- Develop indicators to monitor the success of Horizon 2020.

H2020 is made up of the following components: monitoring, reporting and research (RMR); investment; and capacity building. Under each component, a project is currently being run. H2020 Capacity Building/Mediterranean Environment Programme (H2020 CB/MEP) is the project aiming at enhancing the capacities to address pollution problems at institutional and society level. In addition, through the H2020 MEP, a Hot Spot Investment Programme (HSIP) for the West Balkans and Turkey - as complementary to the Mediterranean HSIP (MeHSIP) – is being elaborated. The other two projects currently being carried out under the investment and RMR H2020 components are respectively the MeHSIP and the Mediterranean Shared Environmental Information System (Med SEIS).

The framework - Horizon 2020 Capacity Building/Mediterranean Environment Programme

Obviously pollution is expected to be substantially reduced through the installation and proper functioning of major infrastructures (e.g. sewage treatment plants), installing pollution reduction technologies in industries, etc. However, this won't work if institutional and individual capacities are not in place. This is what the H2020 CB/MEP aims to enhance by operating within the existing and developing policy instruments, and supporting the implementation of the commitments undertaken in the framework of the ENP as well as other regional agreements e.g. of the Barcelona Convention, while cooperating, coordinating and synergising with all relevant (EU and other) programmes.

Aims and objectives

The main objective of this project is to support the implementation of Horizon 2020 with a special focus on environmental mainstreaming. It aims to address the following problems:

- low political priority given to the environment;
- insufficient integration of environment in the different sector policies (agriculture, tourism, transport or energy) and lack of inclusion of the different actors from local to international level;
- Insufficient capacities and resources at institutional and civil society level.

More specifically, the purpose is to support the implementation of the Horizon 2020 Initiative Road Map and Work Plan through capacity building and awareness raising activities, and to promote integration of environment issues in other sectors policies.

Partners

This project is funded by the European Union and implemented by the National and Kapodistrian University of Athens (NKUA) in consortium with: Mediterranean Action Plan of the United Nations Environment Programme and its Regional Activity Centres and Programmes (UNEP/MAP and its RACs), National Waste Management Agency (ANGed)/ Regional Solid Waste Exchange of Information and Expertise Network in Mashreq and Maghreb Countries (SWEEPNet), Umweltbundesamt GmbH – Austrian Environment Agency (AEA), Lebanese Ministry of Energy and Water - the General Directorate of Hydraulic and Electrical Resources (LMoEW), Hellenic Ministry for Environment, Energy and Climate Change, UNESCO-IHE Institute for Water Education (UNESCO-IHE), Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), Arab Network for Environment and Development (RAED), WWF Mediterranean Programme Office (WWF MedPO), Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+), Arab Countries Water Utilities Association (ACWUA).

Partner Countries

The Partner countries are: Albania, Algeria, Bosnia- Herzegovina, Croatia, Egypt, Israel, Jordan, Lebanon, Montenegro, Morocco, Occupied Palestinian Territory, Tunisia, Turkey and Syria.

Course Description – Carbon and Water Footprint

Introduction to the training course

The training course is organized within the framework of the Horizon 2020 CB/MEP project and in response to the capacity building needs identified by the partner countries and stakeholders in the region. It introduces carbon and water footprint concepts, measurements and indicators so that Partner countries are better able to report on progress made in terms of Climate Change mitigation and adaptation measures . The seminar is organized by the Regional Activity Centre for Cleaner Production CP/RAC, hosted by the National and Kapodistrian University of Athens (NKUA) and supported by the Greek Government - Ministry for Environment and Climate Change. Its duration is 2 days; the language of the course is English and French.

Participants in this seminar (around 40) are from all H2020 Partner countries. This activity aims to build capacity at regional level for the implementation of Horizon 2020 objectives and provide the opportunity to share relevant valuable experiences.

Target group

The capacity building activity is targeted to:
Representatives from authorities who are interested in learning about carbon and water footprint concepts, tools, etc. so as to better address reporting requirements. The background level of the trainees is expected to be of intermediate level.

Learning objectives

The main objective of the course is to provide to the trainees a solid understanding of carbon and water footprints as well as an overview of:

- Current and forthcoming challenges in addressing Climate Change and regional water scarcity risks.

- Global, EU, Mediterranean and other frameworks and strategies in place to which partner countries are obliged to report on (a) how water scarcity is addressed (climate change adaptation) and (b) how our carbon footprint is minimized (climate change mitigation).
- Strengths and limitations of information tools for carbon footprinting.
- Understanding of key principles and features of responsible water accounting and reporting.
- Capacity to assess the implications of the water footprint for your organization
- A basis for developing carbon reduction management strategies
- Identification and recommendation of future activities for national capacity building

Methodology and Structure

The workshop will be comprised of a balanced mix of presentations, small group exercises and moderated discussion to foster an engaging learning experience. It is also intended to be participatory and interactive

Learning outcomes of the training course

- Understanding of the links between global/regional/national climate change and water scarcity strategies (UN, EU, MCSD, Med Strategy for Water, etc.) and calculating carbon and water footprints.
- Identifying similarities, differences and complementarities between water and carbon footprint concepts
- Understanding water and carbon footprints of products, businesses and organizations.
- An in-depth understanding of carbon footprinting and greenhouse gas accounting which are based on the Life Cycle Assessment methodology.
- Developing a carbon reduction strategy
- Understanding the outlines of a full water footprint assessment and the corresponding phases.

An overview of the course and course curriculum is given below:

- Overview on global/regional/national strategies and projects in terms of Climate Change and water scarcity.
- Introduction to Life Cycle Analysis (LCA)
- Carbon and water footprint concepts; similarities, differences and complementarities *vs* Life Cycle assessment
- carbon reduction strategy, carbon offsetting, etc.
- Impacts of footprint standards
- Carbon footprint certification, verification
- Water footprint sustainability assessment
- National perspectives: Presentations and an open forum

Course schedule				
1st day - 20.06.2011				
	Topic	***Description***	***Length***	***Method/speaker***
Session 1	Official opening	Welcome addresses and opening words Introduction of course programme Introduction of speakers and participants	9:00-9:30	Prof. Scoullos Magali Outters Mohammed Ezzine
		Capacity Building Program of H2020	9:30-10:00	Prof. Scoullos H2020 team leader
Session 2	Mediterranean initiative of the Global Footprint Network	Ecological footprint trends	10:00-10:30	Dr. Alessandro Galli Global Footprint Network
		Coffee (30 min.)		
	Footprints methods	Differentiation between ecological, water and carbon footprints	10:30-11:00	Dr. Alessandro Galli Global Footprint Network
Session 3	Water scarcity and pollution	Water scarcity -water pollution in the Mediterranean area. Recent regional activities	11:30-12:00	Prof. Scoullos H2020 Team Leader /MIO-ECSDE
Session 4	Fundamentals Water footprint	Water footprint(products, accounting, business, ..): definitions, calculation methodologies; and indicators Case studies from industry	12:00-12:45	Dr. Ertug Ercin Twente Water centre University of Twente
		Lunch (1 hour)		
Session 5	Interactive learning	Role Play on globalisation of Water Management; Water Footprint and virtual water trade reduction strategy.	13:45-16:00	Dr. Ertug Ercin Twente Water centre University of Twente
	Fundamentals Water footprint	Water footprint(products, accounting, business, ..): definitions, calculation methodologies; and indicators Case studies from industry	16:00-16:30	Dr. Ertug Ercin Twente Water centre University of Twente
		Coffee (20 min.)		
Session 6	Water footprint sustainability assessment	Water footprint sustainability assessment	16:50-17:45	Dr. Ertug Ercin Twente Water centre University of Twente

2nd day - 21.06.2011				
Session 1	Water footprint state-of-the-art	Applications of the concept, relation between WF and LCA, carbon and ecological footprint, overview of the different water initiatives: ISO, CEO Water Mandate, AWS	9:00-10:30	Dr. Ertug Ercin Twente Water centre University of Twente
		Coffee (30 min.)		
Session 2	What is the carbon footprint? Calculating the carbon footprint	Basic concept , National and international standards, personal, corporate, product, national footprints, establishing boundary, different methodologies: input output versus, strengthens, weakness, calculation specifics, conversion factors, greenhouse gaz covered, ...	11:00-12:00	Benjamin Gill Post Bank Green Institute
	Exercise Summary of the session	Calculating a company carbon footprint A worked example Case studies-business and municipalities, Questions	12:00-13:00	Benjamin Gill Post Bank Green Institute
		Lunch (1hour)		
Session 3	Discussion	Have any participants calculated the carbon footprint, how do participants expect to be using this?	14:00-14:30	Benjamin Gill Post Bank Green Institute
	Carbon neutral products and services	Life cycle assessment Certification Offsetting	14:30-15:00	Benjamin Gill Post Bank Green Institute
	Benefits and uses of carbon footprint	Communication tools, products and individuals Analysis for identifying where the biggest impacts lie Analysis for identifying coast saving	15:00-15:30	Benjamin Gill Post Bank Green Institute
Session 4	Carbon reduction strategy	Carbon offsetting & Water footprint: GAEA 1st Carbon Neutral Olive Oils in the World, 1st Carbon Neutral consumer products in Greece and the 1st Olive Oil Water Footprint worldwide.	15:30-16:00	Dafni Colla GAEA Products S.A.
		Coffee (15 min.)		
	Closing	Lessons learned and participants questions Participants will receive a certificate documenting their completion of the seminary Departure	16:00-17:00	