



Horizon 2020 Capacity Building/Mediterranean Environment Programme

“New technologies in generating electricity from waste and management of Construction & Demolition Waste (C&DW) and Waste from Electronic and Electrical Equipment (WEEE)”

The Netherlands & Belgium, 24-26 September 2012

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.

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) – has been elaborated. The other two projects currently being carried out under the investment and RMR H2020 components are respectively the MeHSIP PPIF and the ENPI Shared Environmental Information System (ENPI 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-ECSD), 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, Syria.

Course Description – “New technologies in generating electricity from waste and management of Construction & Demolition Waste (C&DW) and Waste from Electronic and Electrical Equipment (WEEE)”

Introduction to the training course

The study visit is organized within the framework of the Horizon 2020 CB/MEP project and in response to the capacity building needs identified earlier in the project. The course is organized by the Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+). Its duration is 3.5 days; the language of the course is English. **Twelve Egyptian officials** are expected to participate.

Target group

The capacity building activity is targeted to: Country officials (Ministries, Agencies, Regional & Local authorities), and others that are involved, or will be in the future, in finding solutions for integrated waste management issues (including WtE, anaerobic digestion, C&DW, WEEE) in Egypt. The background level of the trainees is expected to be of an intermediate/ high level.

Learning objectives

The main objective of the course is to increase the trainees’ understanding the complex and multidimensional problems of integrated waste management related to WtE, anaerobic digestion, C&DW, WEEE and develop their skills to allow them for appropriate decision making.

Methodology and Structure

The study visit is intended to be participatory and interactive, making use of professional learning tools such as

- Pre- and post course assignment
- Lectures
- Group- and plenary discussions
- Site visit(s)
- Video display
- Case study (exercises)

Learning outcomes of the training course

After the study visit the trainees will be able to:

- Understand the current status of the C&DW, WEEE problems in the Mediterranean/ Balkan and European context
- Understand the complex and multi-dimensional problem of WtE, anaerobic digestion, C&DW, WEEE management
- Appraise the key issues (technical, environmental, economic, safety, health, cultural and social) related to WtE, anaerobic digestion, C&DW, WEEE management
- Appraise the environmental, social and economic benefits of improved WtE, anaerobic digestion, C&DW, WEEE management
- Explain the reasoning behind the choices made for a specific WtE, anaerobic digestion, C&DW, WEEE management system based on ISWM
- Create a set of criteria to consider when designing a waste management programme based on ISWM
- Develop a preliminary draft waste management plan per (group of) trainee(s) to share with his/her unit/ administration, ...





A preliminary overview of the course is given below

| Detailed study visit program | | | | | | |
|---|----------------------------------|--|------------|---|-----------------------------|--|
| Arrival of the trainees at Amsterdam (Schiphol) on Sunday 23 September 2012. | | | | | | |
| | Topic | Description | Length | Trainer/facilitator | Location | Method |
| Day 1: Monday 24 September 2012 | | | | | | |
| 8h00 – 09h00 | Travelling | From Amsterdam to Alkmaar: HVC Group | 1 hour | | | |
| Session 0 9h00-9h30 | Introduction | <ul style="list-style-type: none"> Introduction H2020 Waste management in Egypt | ½ hour | Emad Adly (Deputy Team Leader Hor2020 CB programme) + Egyptian official | Conference room HVC Alkmaar | Interactive presentations |
| Session 1 9h30 -11h30 including a break of 15 minutes | Introduction | <ul style="list-style-type: none"> Introduction to waste management aspects in Europe including legislative, institutional, technical, environmental, economic and social aspects of waste management Characteristics of the integrated waste management system in the Netherlands Introduction to Waste to Energy in Europe and NL | 1/ ½ hours | Jan Manders | Conference room HVC Alkmaar | Interactive presentations |
| Session 2 11h30-12h30 | Introduction about HVC | <ul style="list-style-type: none"> Introduction about the HVC business/ municipality model Introduction about HVC operations on the Alkmaar site | 1 hour | Mr Wil Sierhuis | Conference room HVC Alkmaar | presentation |
| 12h30-13h30 | Lunch Break | | 1 hour | | Offered by HVC | |
| Session 3 13h30-15h30 | Site visit | <ul style="list-style-type: none"> Visit of the HVC facilities on site : the 650 kt/ annum Waste Incineration plant, the Biomass Energy Plant, Energy Recovery facilities | 2 hours | Mr Wil Sierhuis + Jan Manders | HVC | Interactive study visit followed by plenary discussion and recap |
| Session 4 15h30- 16h30 | Visit to dry waste sorting plant | <ul style="list-style-type: none"> Visit to sorting plant for bulky domestic waste | 1 hour | HVC representative | Sortiva site, Alkmaar | Site visit |
| 16h30 – 17h00 | | <ul style="list-style-type: none"> Recap site visit in the conference room of the facility + planning for next day | As needed | Jan Manders | To be decided | Interactive session |
| | | Trip back to Amsterdam | 1 hour | | | |



UNEP/MAP
and its
RACs



ANGed/
SWEEPNet

umweltbundesamt

AEA



LMoE
W



HMECC

UNESCO-IHE
Institute for Water Education

UNESCO-IHE



MIO-ECSD



RAED



WWF
MedPO



ACR+



ACWUA



| Day 2: Tuesday 25 September 2012 | | | | | | |
|----------------------------------|-----------------------------|---|-------------|------------------------------------|--|------------------------------------|
| 8h30 – 9h00 | Travelling | From Amsterdam hotel to AEB company | ½ hour | | | |
| Session 5 9h00 – 10h00 | Introduction | <ul style="list-style-type: none"> Introduction to AEB Amsterdam Waste to Energy operations | 1 hour | AEB representative | Conference room AEB | Interactive presentation |
| Session 6 10h00-11h00 | Site visit | <ul style="list-style-type: none"> Visit to one of the two AEB WtE facilities (in total 1400kton/y) | 1 hour tour | Plant representative + Jan Manders | AEB | Interactive study visit |
| 11h00-11h30 | Travel | | | | | |
| 11h30- 13h15 | Site visit and simple lunch | Visit to Afvalzorg at Nauerna site Explanation on modern landfilling and gas recovery as well as LFG energy generation | 1,5 hours | Reps from Afvalzorg | | Site visit and interactive session |
| 13h15 – 1400h | travel | | | | | |
| Session 7 14:00-16:00 | Introduction and Site visit | <ul style="list-style-type: none"> Visit to “de Meerlanden” at Rijsenhout. Explanation on anaerobic digestion and composting of source separated green waste. Plant tour | 2 hour | Representatives from de Meerlanden | De Meerlanden Conference room and site | Interactive session |
| 16h00 – 18h30 | Travelling | From Rijsenhout to Brussels | 2 ½ hours | | Stay at Brussels | |

| Day 3 Wednesday 26 September 2012 | | | | | | |
|-----------------------------------|-----------------------------|---|---------|--|----------------------|---------------------------|
| 9h30-9h45 | Introduction | <ul style="list-style-type: none"> Welcome at OVAM (Flemish Public Waste Agency) | ¼ hour | M. Danny Wille General Director OVAM | Conference room OVAM | |
| 9h45-10h15 | Introduction | <ul style="list-style-type: none"> Presentation of the Egyptian delegation + global overview of waste management in Egypt | ½ hour | Egyptian delegate | Conference room OVAM | Interactive presentation |
| Session 8 9h45-10h15 | Flanders waste mngt | <ul style="list-style-type: none"> How Flanders became a recycling society | ½ hour | M. Anne Vandeputte, project manager | Conference room OVAM | Interactive presentation |
| 10h15-10h30 | Coffea break | | | | | |
| 10h30-11h00 | | <ul style="list-style-type: none"> Waste management in Flanders (Question & answer session) | ½ hour | Ms. Anne Vandeputte, project manager | Conference room OVAM | Question & answer session |
| Session 9 11h00-12h00 | WEEE policies EU & Flanders | <ul style="list-style-type: none"> OVAM (WEEE legislation, export, reuse) Recupel (WEEE collection and treatment in Belgium) | 1 hour | Dimitri Strybos (WEEE expert) Ms. Katrien Verfaillie | Conference room OVAM | Interactive presentation |
| 12h00–14h00 | Lunch break + conclusions | <ul style="list-style-type: none"> Evaluation the learning outcomes of the study visit and the way forward | 1 hour | Facilitator of the Egyptian delegation | Conference room OVAM | Interactive discussion |
| Session 10 14h00- 17h00 | Site visits | <ul style="list-style-type: none"> Site visits WEEE <ul style="list-style-type: none"> APPAREC (Willebroek) TELEVIL (Vilvoorde) | 3 hours | Sophie Heyns Luc Daelemans | Flanders | Site visit |
| | | | | | Stay at Brussels | |

Departure of the trainees from Brussels National Airport (Zaventem) on **Thursday 27 September 2012.**