

Technical Report on Investment Planning Training November 2013 / Istanbul / Turkey



**Project: Integrated hotspots management and saving
the living Black Sea ecosystem
HOT BLACK SEA
2.2.1.72761.225 MIS-ETC 2303**



Document Control Sheet

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¹ The Programme is managed by the Romanian Ministry of Regional Development and Tourism.

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ABBREVIATIONS

FC	Foundation Caucasus Environment
HS	Hot Spot
ICPE-CA	National Institute for R&D in Electrical Engineering
JOP	Joint Operational Programme
LBS	Land Based Sources (of pollution)
OSENU	Odessa State Environmental University
SuRDEP	NGO for Sustainable Regional Development and Environment Protection
TUBITAK	The Scientific and Technological Research Council of Turkey, www.tubitak.gov.tr/
MRC	Marmara Research Centre
WW	Waste water
WWTP	Waste water treatment plant

INTRODUCTION

This Report has been prepared under the GA4 Increasing sector expertise of the Hot Black Sea Project “**Integrated hotspots management and saving the living Black Sea ecosystem**” ([www. http://www.bs-hotspots.eu/](http://www.bs-hotspots.eu/)), Grant Agreement No 2.2.1.72761.225 MIS-ETC 2303. The Project is financed by EC as an activity under the Joint Operational Programme “Black Sea Basin 2007-2013”. HotBlackSea is an integral part of the overall ongoing process of harmonization of policies in the Black Sea region in the field of environment protection, taking into consideration relevant European acquis.

This project promotes innovation and exchange of good practices in the field of Black Sea environmental protection at the scientific and management levels, contributing also to capacity building through relevant trainings, wider involvement of stakeholders and public awareness further development.

One of the specific objectives of the project is to optimize and/or increase resources to regulatory and enforcement bodies responsible for pollution control and improve capacity through targeted training programmes.

GENERAL INFORMATION

Within the scope of the Hot Black Sea Project, “**Investment Planning on Hot Spots Training Course**” was held in Lares Park Hotel, **Istanbul / TURKEY**, on **28-29 November 2013** and organized by TUBITAK MRC. About 20 experts, representatives of project partners (ICPE-CA Romain, SURDEP Bulgaria, FCE Georgia, Bourgas Municipality Bulgaria, TUBITAK MRC -Turkey) public institutions/organizations and universities of Turkey. Because of change in Ukrainian Project Partner, OSENU could not participate in training.

The overall objective of the training was to support sustainability of the BS environment management by providing knowledge on the development of an optimum investment planning approach basing on a profound understanding of the root of environmental problems. More specifically, the course aimed at assisting the participants in learning how to proceed from the identification of a problem towards developing a proposal that addresses and tries to solve this problem.

The lecturers of the training course were as follows:

Prof.Dr. Ülkü YETİŞ, Academician, METU Environmental Engineering Department



Interest: Water/wastewater treatment and management, hazardous waste management, applications of membranes processes for drinking water treatment and industrial wastewater treatment/reclamation; integrated pollution prevention and control, and understanding of disinfection by-product formation in water treatment.

Experience: 25 years of working experience in METU Environmental Engineering Department as scientist and lecturer in University. Coordination of many national/international projects on interest subjects above.

Dr. Ahmet BABAN, Chief Senior Researcher- TUBITAK MRC Environment and Cleaner Production Institute



Interest: Water/wastewater management and reuse, decentralized sanitation, advanced treatment technologies, cleaner production and industrial pollution prevention control applications and energy production from wastes, project management.

Experience: 8 years of experience in private sector on water and wastewater management and 22 years of working experience in MRC as senior research scientist. Coordination of national/international projects on water and wastewater management.

Assoc. Prof. Dr. Kemal GUNES, Chief Senior Researcher- TUBITAK MRC, Environment and Cleaner Production Institute



Interest: Soil and plant sciences, water and wastewater management and reuse in agriculture, decentralized sanitation, constructed wetland application projects, water resource and basin management, project management, landfill methane emission mitigation, phytoremediation

Experience: 24 years of working experience in MRC as research scientist.

Gülşen AVAZ, Chief Senior Researcher- TÜBİTAK MRC Environment and Cleaner Production Institute



Interest: Urban wastewater management on coastal areas, designation of sensitive areas/ hot spots, land based sources pollution, micro-pollutants management on coastal areas, cleaner production and ISO 17025

Experience: 1 year of experience in Bursa Metropolitan Municipality – Protection of Environment Department as an environmental engineer and 16 years of working experience in MRC as a senior researcher with national/international project coordination

The poster of the project was displayed at the meeting hall and relative documents, booklets, CD-ROM's, laptop bags, and notebooks were handed out to the participants.

Turkish stakeholders were from universities, municipalities and local environmental authorities in Istanbul and Kocaeli.

The content of the training was formed while taking into consideration policy makers, investment implementers, operators and their academic assistants, and other related stakeholders.

The references and sources used for this training were the GPA publications (UNEP/GPA - UNESCO-IHE Train - Sea-Coast GPA), and the experiences from the previous projects and their researchers, who were the lectures of the training. More information on the GPA references can be found at <http://www.gpa.unep.org/>. Projects related to the training course are as follows:

- National Action Plan for LBS Pollution Prioritization of land based point sources, identification of priority investments to tackle those point sources are carried out, coordinated by TUBITAK MRC, supported by: Ministry of Environment, 2005.
- Urban Wastewater Management Along Coastal Areas of Turkey: Reidentification of Hot Spots & Sensitive Areas, Determination Of Assimilation Capacities by Monitoring and Modelling and Development of Sustainable Urban Wastewater Investment Plans, coordinated by TUBITAK MRC, supported by: Ministry of Environment & Forestry, 2011.
- Zero-M Project, EU Project, 2012. (5032419)
- PREPARED, EU Project, cont. (5108602)

The GPA Programme's objective is to train participants how to proceed from the identification of a wastewater management problem towards developing a proposal that addresses and tries to solve this problem.

Outputs of the second project in the above list, which are relevant to the training subjects, are the performing of the needs of Barcelona and Bucharest Conventions related with hot spots determination and the planning of UWWT investments ecologically for coastal residential areas of Turkey.

The training provided participants with analytical tools such as substantive information, skills on how to select, plan, and finance appropriate and environmentally sound municipal wastewater management systems. The course focused on two elements; objective oriented planning and conventional and innovative approaches on municipal, industrial, and agricultural sources of pollution.

The program structure of the training course included an introduction, analytical tools, and substantive information. Analytical tools (first section of the programme), which consisted of the Objective Oriented Planning (OOP) was presented by Prof. Dr. Ülkü Yetiş.

Substantive information (the remaining three sections of the programme), which consisted of Investment Planning on Municipal Wastewater Management: Conventional and Innovative Approaches, Investment Planning Approaches on Industrial Pollution and Discussion Investment Planning on Agricultural Activities presented by Dr. Ahmet Baban, Prof. Dr. Ülkü Yetiş and Assoc. Prof. Dr. Kemal Güneş respectively.

The program of the training is presented in the Table below.

Day 1 Morning	Day 1 Afternoon	Day 2 Morning	Day 2 Afternoon
Opening	Problem & Objective Analysis	Investment Planning on Municipal Wastewater Management	Discussion Investment Planning on Agricultural Activities
Introduction	Stakeholder & Option Analysis		
	Financial Approaches	Investment Planning on Industrial Wastewater Management	

At the end of the training course, the participants received their certificates, and had a small touristic trip in the City of Istanbul.

Feed-Back Forms were distributed to the participants in the meeting. For Agenda, Feed-back Form, list of participants, presentations see:

<http://www.bs-hotspots.eu/EventsGallery/>

DAY 1 – NOVEMBER 28, 2013

Venue: *Lares Park Hotel Topçu Caddesi, No.23 Taksim, İstanbul, Turkey*

Gulsen Avaz (TUBITAK MRC Team Leader) was the moderator of the meeting.

The opening speech of the training programme was made by Dr. Selma Ayaz, Deputy Manager of TUBITAK MAM Environment and Cleaner Production Institute. Following this, Dr. Vesselina Mihneva, from SURDEP, did a presentation on the Hot Black Sea Project, and conducted information on the necessity of the Project. Gülşen Avaz made an introduction presentation on environment, environmental pollution, hot spots and training program structure/concept. After these presentations, the training programme was started.

The training programme was composed of 4 modules. These modules are given below:

- Module 1 – Objective Oriented Planning
- Module 2 – Investment Planning Approaches to Municipal Wastewater Management
- Module 3 – Investment Planning Approaches to Industrial Pollution

- Module 4 – Investment Planning Approaches to Agricultural Pollution

Module 1 and Module 3 lectures were given by Prof. Dr. Ülkü Yetiş. Training was started with the presentation on Module 1. Module 1 had four subsections:

- I. Problem analysis,
- II. Objective analysis,
- III. Stakeholder analysis and-interviews, and
- IV. Options analysis topics

DAY 2 – NOVEMBER 28, 2013

Venue: *Lares Park Hotel Topçu Caddesi, No.23 Taksim, İstanbul, Turkey*

Module 2 course presentation related with Investment Planning Approaches to Municipal Wastewater Management was made by Dr. Ahmet Baban. Module 2 was also comprised of four subtitles.

- I. Conventional approaches and alternative technologies
- II. Water management in the city of tomorrow
- III. The way forward: the 3-Step Strategic Approach
- IV. Financial approaches to municipal wastewater management
- V. Urban Wastewater Management Planning in Turkey: SINHA Project Experience

Module 3 and Module 4 lectures were given by Prof. Dr. Ülkü Yetiş and Assoc. Prof. Dr. Kemal Güneş respectively. Module 3 was related with the “Industrial Pollution and Pollution Prevention Techniques for Industrial Activities”.

In Module 4 training on “Investment Planning Approaches on Diffused Pollution” was comprised of two subtitles.

- I. Agricultural Pollution & Sustainable Agriculture Presentation
- II. Pollution Prevention for Agricultural Activities

At the end of the training, questions of project partners and the stakeholders were discussed and replied by the trainers.

ANALYSIS OF THE FEED-BACK FORM

Analysis of the Feed-Back Form allows making the following conclusions:

According to the Feed-Back Form, purpose and the content of training was satisfactory for the participants. The rate of evaluation was 96 %.

Training materials (printed documents and visual materials) were evaluated as useful and sufficient and this part of training was rated at 98 %.

98 % of the participants indicated their satisfaction about the trainers.

Overall sufficiency of the training was calculated at 97.3 %. This score indicated that the aim and expectations of training were achieved.

RECOMMENDATIONS

Following recommendations were indicated in the Feed-Back Form:

- Difference between laws and regulations in all participating countries need to be improved.
- A site visit to the functional WWTP in the Gebze Settlement of TUBITAK was desired in the period of training.
- Participants gave their ideas what other beneficial subjects can be covered in such trainings. Almost all trainees noted the training was highly beneficial for them.

PHOTOS



