





Sustainable Water Integrated Management (SWIM) - Support Mechanism

INFORMATION NOTE (Including Provisional Agenda)

SUB-REGIONAL WORKSHOP ON

"INNOVATIVE AND ADAPTABLE TECHNOLOGIES FOR TREATED WASTEWATER RE-USE,

INCLUDING THE RE-CHARGE OF AQUIFERS AND DESALINATION".

109-13-12 JULY 2012ISRAEL

Sustainable Water Integrated Management - Support Mechanism (SWIM-SM)

H2020 Capacity Building/Mediterranean Environment Programme (H2020 CB/MEP)

1.1 Background

The EU-ENPI-funded projects Sustainable Water Integrated Management (SWIM-SM) and the Capacity Building Component of the Horizon 2020 initiative (CB/MEP) are partnering for the organization of a sub-regional workshop on "Innovative and adaptable technologies for treated wastewater re-use, including the re-charge of aquifers and desalination" to include Jordan, occupied Palestinian territory andIsrael. -

1.2 **Objectives & expected results**

1.2.1 Workshop Objectives

The aim of this workshop is:

- To introduce participants to the state-of-the-art of wastewater reuse schemes, including innovative and adaptable treatment technologies. Risk management and effluent standards for various reuse purposes will be discussed to support scheme design and technology selection.
- To introduce participants to technologies for artificial recharge with treated wastewater, and their role in wastewater reuse schemes.







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• To understand the state of the art in desalination processes and their economic, energy and environmental impacts.

1.2.2 Expected Outcome

- An improved knowledge of innovative technologies for wastewater treatment and reuse, re-charge of aquifers and desalination in urban and rural areas.
- An improved knowledge of EU <u>wastewater reuse</u> legislation.

1.3 <u>Target Audience</u>

The targeted audience for the workshop are <u>around between 20-3024</u> (5 participants sponsored by SWIM-SM and 5 sponsored by H20208 participants from each country) mid-level officials and stakeholders dealing with wastewater treatment, groundwater recharge and/or desalination such as:

- Representatives from <u>relevant</u> national authorities <u>and municipalities</u>.
- NGOs

1.4 Proposed location and Date

The workshop is to be held in_XXXXXIsrael for 4 days from the $10^{\text{th}}-9^{\text{th}}$ to the $13^{\text{th}}-12^{\text{th}}$ of July 2012. Arrivals to XXXXXXX_Israel will be on the $12^{\text{th}}-98^{\text{th}}$ and departure on the $14^{\text{th}}-13^{\text{th}}$ of <u>AprilJuly 2012</u>.

1.5 <u>Provisional Agenda</u>

Course schedule/ curriculum								
<u>0109</u> .04 <u>07</u> .20 12	Торіс	Description	Length	Method/Speaker or Trainer				
Session 1	Official opening	Welcome addresses and opening words Introduction to Horizon 2020-SWIM-SM and the course program	45 min (09:00 - 09:45)	SWIM-SM H2020CB/MEP H2020 CB/MEP				
Session 2	Introduction: (global) status wastewater reuse	Description of the state-of-the-art of wastewater treatment and reuse	30 min (09:45 - 10:15)	<u>DHV – Yoav Yinon DHV</u>				
Session 3	EU water projects	Overview of EU legislation and EU funded projects on wastewater treatment and reuse	30 min (10:15 - 10:45)	DHV - Jos Peter DHV				

Date: 10-13 July 2012









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			Coffee (15 min)	
Session 4	Reclaimed water	Reclaimed water quality requirements, based	30 min	DHV – Eldad Elron DHV
	quality	on environmental risk assessment and	(11:00 - 11:30)	
	requirements	management		
Session 5	Presentations by	Introduction of participants: expertise,	1 hour	DHV – Yoav Yinon
	participants	experience, background, local conditions	(11:30-12:30)	(Facilitator)
	parcioiparito		Lunch (1 h)	<u>1. aomtator</u> , 2
Session 6	Water treatment	Treatment options: treatment matrix, standard	1.5 h	DHV – Yoav Yinon DHV
56351011 0	options	treatment schemes	(13:30-15:00)	
	options			
			Coffee (15 min)	
Session 7	SWIM Assessment	Assessment of Best Available Technologies	1 hour	<u>DHV – Efrat Ling</u> DHV
		(BAT) for Wastewater Reuse in Rural/Local	(15:15-16.15)	
		Areas		
Session 8	Water treatment	Treatment options: innovative and adaptable	30 minutes	DHV – Yoav Yinon DHV
	options	technologies	(16:15-16:45)	
1 <u>10</u> . 04<u>07</u>.20	Topic	Description	Length	Method/Speaker or Trainer
Session 1	Agricultural reuse	Agricultural use of treated wastewater and	30 minutes	DHV – Gilad Safier DHV
	of wastewater	WHO guidelines	(09.00-9:30)	
Session 2	Soil Aquifer	Introduction to Artificial Recharge with Treated	1 hour 15 min	DHV - Jos Peter DHV
Jession Z	Treatment	Wastewater	(9:30-10:45)	<u>BIN JOST CLCI</u> BIN
	incatinent		Coffee (15 min)	
Cassian 2	Coil Anuifan	CAT for Mostowater Treatment and David (1)		
Session 3	Soil Aquifer	SAT for Wastewater Treatment and Reuse (1)	45 minutes	DHV - Jos Peter DHV
	Treatment		(11.00 - 11.45)	
Session 4	Soil Aquifer	SAT for Wastewater Treatment and Reuse (2) -	45 minutes	DHV - Jos Peter DHV
	Treatment	Examples/Case studies	(11:45-12:30)	
			Lunch (1 h)	
Session 5	Soil Aquifer	Design and Operational Aspects of SAT (1)	45 min	DHV - Jos Peter DHV
	Treatment		(13:30-14.15)	
Session 46	Soil Aquifer	Design and Operational Aspects of SAT (2)	45 min	DHV - Jos Peter DHV
	Treatment		(14:15 - 15:00)	
			Coffee (15 min)	
Session 7	Soil Aquifer	Design and Operational Aspects of SAT (3) -	45 min	DHV - Jos Peter DHV
	Treatment	Calculations	(15:15-16:00)	
Session 8	Exercise		1 h	DHV - Jos Peter DHV
56351011 0	Excitoise		(16:00-17:00)	<u>Bin jost eter</u> bin
2<u>11</u>.04<u>07</u>.20	Торіс	Description	Length	Method/Speaker or Trainer
Session 1	Desalination	Water hierarchy and state of the art of	30 minutes	DHV – Avraham Zavdi DHV
JE331011 I	Desamation	desalination	(09:00-9:30)	
Section 2	Desalination		· · · · ·	DUV Auraham Zaudi DUV
Session 2		Energy, environment and cost as related to	1 hour 15 min	<u>DHV – Avraham Zavdi DHV</u>
	Externalities	desalination and IWRM	(9:30-10:45)	
<u> </u>	Custain 11	Development of the later	Coffee (15 min)	
Session 3	Sustainable	Desalination as a sustainable source	45 minutes	<u>DHV – Avraham Zavdi DHV</u>
	Desalination	• • • • • •	(11.00 - 11.45)	
Session 4	SWIM Assessment	Assessment of Best Available Technologies	45 minutes	<u>DHV – Avraham Zavdi DHV</u>
		(BAT) for Desalination in Rural/Local Areas	(11:45-12:30)	
			Lunch (1 h)	
	Desalination	Interactive discussion with participants on	45 min	<u>DHV – Avraham Zavdi</u> DHV
Session 5			(13:30-14.15)	
Session 5	Options	desalination as an option	1 (13.30 14.13)	
			· · · · · ·	
Session 5 Session 4 <u>6</u>		desalination as an option Presentations by participants	45 min	
			· · · · · ·	







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			(15:15-16:00)		
Session 8		Certificates and closure	1 h	SWIM-SM H2020_SWIM-SM	
			(16:00-17:00)	H2020	
13<u>12</u>.04<u>07</u>.20	Site Visit				
11					
		ShafDan Watewater treatment plant			