

Environment and Climate Regional Accession Network (ECRAN)

Report on National Roundtable on Cost Recovery and Cost Benefit Analysis in the Waste Sector

12-13 April 2016, Pristina



ENVIRONMENT AND CLIMATE REGIONAL NETWORK FOR ACCESSION - ECRAN

WORKSHOP REPORT

Activity 2.2

NATIONAL ROUNDTABLE ON COST RECOVERY AND COST BENEFIC ANALYSIS IN WASTE SECTOR

12-13 April 2016, Pristina, Kosovo¹

¹ This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.







Table of Contents

I.	Background/Rationale	1
II.	I. Objectives of the training	3
	General Objective	3
	Specific Objectives	3
	Results/outputs	3
III.	II. EU policy and legislation covered by the training	4
IV	V. Highlights from the training workshop	€
٧.	/. Evaluation	10
A۱	NNEX I – Agenda	14
A۱	NNEX II – Participants	18
A۱	ANNEX III – Presentations (under separate cover)	21





LIST OF ABREVIATIONS					
B/C	Benefit / Cost ratio				
СВА	Cost Benefit Analysis				
ENPV	Economic Net Present Value				
ERR	Economic Rate of Return				
EU	European Union				
IRR	Internal Rate of Return				
MBT	Mechanical-biological Treatment				
MWM	Municipal Waste Management				
NPV	Net Present Value				
RWC	Regional Waste Companies				
USAID	United States Agency for International Development				





I. Background/Rationale

Waste Framework Directive requires that, in in accordance with the polluter-pays principle, the costs of disposing of waste must be borne by the holder of waste, by previous holders or by the producers of the product from which the waste came. Also the cost shall be allocated in such a way as to reflect the real costs to the environment of the generation and management of waste.

Landfill directive requires that Member States shall take measures to ensure that all of the costs involved in the setting up and operation of a landfill site, including as far as possible the cost of the financial security and the estimated costs of the closure and after-care of the site for a period of at least 30 years shall be covered by the price to be charged by the operator for the disposal of any type of waste in that site.

Such requirements call for sound cost recovery mechanisms and use of economic instruments to reflect real environmental costs.

Supporting efforts for establishment of cost recovery mechanisms **ECRAN Regional workshop on Cost recovery in waste sector** took place 18 - 19 March 2015 in Tirana, Albania. Few selected conclusions included:

- There is no single model for cost recovery and how it shall be established. Very much depends on national situation, traditions, waste management goals, market maturity, etc.;
- Polluter pays principle implementation step by step starting with O&M costs and later adding investment costs (affordability and political acceptability);
- Financial support does not solve the long-term and continuous operation of the system. The main source of financing waste management tariffs;
- There are differences among countries how environmental costs (landfill tax or other instruments) are applied and impact cost recovery;
- Getting prices right can encourage development of infrastructure using private funds;
- It is important to have various services as economic units landfill, incinerator, MBT, collection with full costs accountancy and recovery;
- Regional solidarity principle:
 - a. municipal waste management tariff should not depend on the distance to the regional waste management facilities
 - b. price should be the same for all municipal waste holders of the region if they have the same scope and quality of the services
- It is important, that municipalities continue being involved into collecting tariffs:
 - a. They are better informed about the situation
 - b. Municipalities get more influence on waste management services
 - c. Better acceptance for people.
- Regional authorities my support municipalities in implementation of their functions:
 - a. to present the calculation of tariffs for MWM to municipality and collect them after approval of the council of municipality;
- Some countries have methodologies for setting tariffs for municipal waste collection from waste holders and waste management;







- Attention shall be paid to costs of waste collection. Collection of waste may make up to 60% of total costs, while landfilling only about 10%;
- Flat fee rates are more easy to control, but they do not provide economic interest for minimisation of landfilling;
- Economic incentive to shift from landfilling to other methods of treatment is not possible without landfill tax.

Countries in the region still lack well established methodologies for cost recovery. This problem is growing with each new investment into waste management operations. Economic instruments, except of packaging charges, are almost not used. Landfill taxes or similar instruments, which would support recycling and divert waste from landfilling are still to be developed.

Considering such a situation national roundtables are organised in beneficiary country in order to better reflect national situation and needs in developing cost recovery systems in waste sector.





II. Objectives of the training

General Objective

To provide practical knowledge on experience of the EU Member States and support establishment of cost-recovery mechanism in the country.

Specific Objectives

- To establish common understanding on main terms, definitions and principles for cost recovery in waste sector;
- To present experience of the Member States having different models of cost recovery;
- To present and discuss legal basis and institutional mechanisms for tariff setting;
- To analyse impacts of cost recovery for investment projects planning;
- To familiarise with cost benefit analysis and application of it in waste management sector;
- To provide information on economic incentives for better waste management supporting achievement of waste recycling, biodegradable waste diversion and other targets as required by the EU waste management law;
- To identify steps for establishment of national cost recovery system in waste sector;
- To present CBA requirements and analyse relation of CBA to cost recovery in waste sector.

Results/outputs

The expected results are:

- Delivery of presentations as foreseen in the agenda;
- Established/improved knowledge base regarding cost recovery mechanisms;
- Established/ improved knowledge base regarding economic instruments in waste management sector;
- Increased experience in cost benefit analysis;
- Practical knowledge and experience in financial analysis.







III. EU policy and legislation covered by the training

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste:
- Council Directive 99/31/EC of 26 April 1999 on the landfill of waste;
- Directive 94/62/EC of the European Parliament and of the Council on 20 December 1994 on packaging and packaging waste

Waste Framework Directive

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. This Directive repealed Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste (the codified version of Directive 75/442/EEC as amended), hazardous waste Directive 91/689/EEC, and the Waste Oils Directive 75/439/EEC. It provides for a general framework of waste management requirements and sets the basic waste management definitions for the EU sets the basic concepts and definitions related to waste management, such as definitions of waste, recycling, recovery. It explains when waste ceases to be waste and becomes a secondary raw material, the so called end-of-waste criteria, and how to distinguish between waste and by-products. The Directive lays down some basic waste management principles: it requires that waste be managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odours, and without adversely affecting the countryside or places of special interest. Waste legislation and policy of the EU Member States shall apply as a priority order the following waste management hierarchy:

- Prevention;
- Preparing for re-use;
- Recycling;
- Recovery;
- Disposal.

The Directive introduces the "polluter pays principle" and the "extended producer responsibility". It incorporates provisions on hazardous waste and waste oils, and includes two new recycling and recovery targets to be achieved by 2020: 50% preparing for re-use and recycling of certain waste materials from households and other origins similar to households, and 70% preparing for re-use, recycling and other recovery of construction and demolition waste. The Directive requires that Member States adopt waste management plans and waste prevention programmes.

Landfill Directive

Council Directive 99/31/EC of 26 April 1999 on the landfill of waste - The Landfill Directive defines the different categories of waste (municipal waste, hazardous waste, non-hazardous waste and inert waste) and applies to all landfills, defined as waste disposal sites for the deposit of waste onto or into land. Landfills are divided into three classes:

- landfills for hazardous waste:
- landfills for non-hazardous waste;
- landfills for inert waste.







The Directive does not apply to:

- the spreading on the soil of sludge (including sewage sludge and sludge resulting from dredging operations);
- the use in landfills of inert waste for redevelopment or restoration work;
- the deposit of unpolluted soil or of non-hazardous inert waste resulting from prospecting and extraction, treatment and storage of mineral resources as well as from the operation of quarries;
- the deposit of non-hazardous dredging sludge alongside small waterways from which they
 have been dredged and of non-hazardous sludge in surface water, including the bed and its
 subsoil.

A standard procedure for the acceptance of waste in a landfill is laid down so as to avoid any risks, including:

- waste must be treated before being landfilled;
- hazardous waste within the meaning of the Directive must be assigned to a hazardous waste landfill;
- landfills for non-hazardous waste must be used for municipal waste and for other non-hazardous waste;
- landfill sites for inert waste must be used only for inert waste;
- Criteria for the acceptance of waste at each landfill class must be adopted by the Commission in accordance with the general principles of Annex II.

Packaging Directive

The Directive obligates member states to meet targets for the recovery and recycling of packaging waste. The Directive covers all packaging placed on the Community market. In 2010, an estimated 98.6 billion plastic carrier bags were placed on the EU market, which amounts to every EU citizen using 198 plastic carrier bags per year. Out of these almost 100 billion bags, the vast majority are lightweight bags, which are less frequently re-used than thicker ones.

In 2004, the Directive was amended to provide criteria clarifying the definition of the term 'packaging' and increase the targets for recovery and recycling of packaging waste. In 2005, the Directive was revised again to grant new Member States transitional periods for attaining the recovery and recycling targets. In 2013 Annex I of the Directive containing the list of illustrative examples of items that are or are not to be considered as packaging was revised in order to provide more clarity by adding a number of examples to the list.

The Directive is to be amended in 2015.







IV. Highlights from the training workshop

National Roundtable on Cost Recovery and Cost Benefit Analysis in the Waste Sector took place April 12 - 13, 2016 in Pristina, Kosovo* (Hotel AFA, Ali Kelmendi 15, Pristina, 10000). Agenda of the roundtable is presented in annex 1. EU legislation covered during the workshop includes Waste framework Directive, Landfills Directive, Packaging and packaging waste Directive and the relevant implementing national legislation.

First day of the roundtable was dedicated to the discussion on the cost recovery issues in waste sector. Following presentations were delivered:

- 1. Welcome and opening Muhamet Malsiu, Director of the Department of Environmental Protection;
- 2. Introduction to the agenda Mr. Arunas Kundrotas. ECRAN SPIWG Coordinator.
- 1. Developing municipal solid waste management sector Mr. Enver Tahiri, Head of Waste and Chemical Division;
- Cost recovery system as proposed in waste management investment project "Eco Higjiena", Public- Private Companies for Collection of Municipal Waste;
- 3. Cost recovery and tariffs setting. MS experience. Estonia Peeter Eek, Ministry of Environment, Head of Waste Management Department, Estonia;
- 4. Cost recovery and tariffs setting. MS experience. Italy Francesco Loro, Waste management expert at Environmental Protection Agency of Veneto, Italy;
- 5. Cost recovery and tariffs setting. MS experience. Lithuania Rasa Uselyte, European Union Funds Management Division, Ministry of Environment, Lithuania;
- 6. National roundtable regarding establishing cost recovery system.

Some issues discussed regarding host country include:

- Description of legal and institutional basis,
- Planning documents:
 - The strategy is designed for ten-year period 2013-2022,
 - o 12 actions are planned at cost of EUR 133.85 million, for two periods I-II 32.56% and 67.44%),
 - Suggested sources of funding are: national 25.92%, local 17.20%, donors 42%.
 - o 33 projects are planned for a five year period (2013-2017).
- Situation with municipal waste management:
 - o Regional systems are being established,
 - The total amount of waste generated in 2013 from an estimated population of 1763 million is about 400,000 tons,
 - Municipal waste generation is estimated to be 0.6 kg / d /person,
 - Organic component is about 55% of total, followed by recyclables approximately
 - The amount collected is placed into landfills. Around our 257,000 or 67% of the waste produced,
 - o 54.06% (2014) of households have access to waste collection services;
 - o About 61.88% (2014) of the settlements are included in this service,
 - About 90% of the quantity comes from urban areas,





Human Dynamics Consortium



- 64 public and private companies are licenced, 27 of which are licensed only for the collection of municipal waste including 7 regional public companies for communal waste,
- Regional Waste Companies (RWC) have the status of regional or municipal public companies and their main activity is the performance of services for the collection of municipal waste and delivery of them to the landfill.
- Informal sector:
 - Collect the majority of the waste which can currently be used for recycling (about 75% according to USAID),
 - Garbage collectors are poor category of the population in Kosovo*, although increased trading of secondary raw materials is profitable,
 - o For collecting 200 kg of paper have to move on foot approximately 20 km,
- Price for waste management:
 - o The price for MSW collection 3,0- € 5.0/ ton,
 - o For storage € 6.5 / ton,
 - The average cost of waste management sector is 36-37 Euro / ton collected and stored.
 - Affordability is at the level of 1,26% for average households, and 6.98% for low income (pensioners),
 - o Payments are collected from about 53.78% (2014).
- Municipalities have responsibility for setting tariffs and the manner of collection of funds for municipal services.

Experience of EU Member States discussed include:

- Tariff methodologies applied in each country;
- Examples of tariff calculations;
- Gate fee calculations;
- Methods of cost recovery systems:
 - o Municipal tax system,
 - Tariff system,
 - o Public tender for lowest price for acceptable standard.
- Methods of setting tariffs:
 - o Per m2;
 - Per households;
 - o Per ton.
- PAYT application, incentive role and problems faced with the introduction;
- Economic instruments applied;
- Tariff/ local tax collection arrangements;
- Fine systems for failing to comply with requirements;
- Relation of cost recovery with achievement of targets.

Second day was dedicated to the cost – benefit analysis of investment projects in waste sector. Participants were introduced to the main CBA issues as seen from the evaluator side, evaluation methodology and main CBA development aspects including:

- Option identification;
- Feasibility analysis;







- Option selection;
- Financial analysis;
- Steps of the financial analysis;
- Investment costs;
- Reinvestment costs;
- Calculation of residual value;
- Depreciation;
- Reference period (not more than 30 years);
- Determination of operating costs and revenues;
- Specific cost recovery issues;
- Calculation of the financial indicators:
 - Return on investment
 - Net present value (NPV (C))
 - Internal rate of return (IRR (C))
 - o Return on invested capital
 - Net present value (NPV (K))
 - Internal rate of return (IRR (K)
- Sources of financing and sustainability;
- Economic analysis;
- Fiscal corrections;
- Approach to inflation;
- From market to shadow prices;
- Examples of market distortions;
- Assessment of external effects;
- Economic indicators;
- Calculation of the economic performance indicators:
 - Social discount rate
 - Economic Net Present Value (ENPV) (ENPV should be more than 0)
 - Economic Rate of Return (ERR) (ERR should be more than 5 %);
 - Benefit/Cost ratio (B/C) (B/C ratio should be more than 1);
- Sensitivity analysis;
- Risk analysis;
- Assessing of financing gap;
- Cost-benefit analysis of major projects.

Practical aspects of CBA application were demonstrated using simplified calculation examples. Session was delivered by ECRAN Short Term Expert assoc. professor, Dr. Sarunas Bruzge.

Roundtable discussion conclusions

- 1. National Strategy for Waste Management is in place. Needs enforcement;
- 2. Tariffs remain the same from 2012 when the national regulator has been abolished and responsibility for setting tariffs transferred to municipalities. Only one municipality approved tariffs after 2012. In general municipalities would not want to consider rising tariffs because the issue is sensitive to low income groups;
- 3. Development of the national Tariff Methodology would facilitate cost recovery situation. This could be guidance document for municipalities. Elaboration of draft waste tariff methodology (or other alternative methods like municipal tax) is needed to facilitate discussion with regions/ municipalities. Currently such activity is not planned but would be appreciated;







- 4. Municipalities would benefit from such discussion regarding cost recovery issues and methods. Could be delivered several workshops for municipalities;
- 5. Currently affordability rate is not established at national level. Average affordability is about 1.26 %. Much higher for low income groups. Would be important to set the affordability rate at national level. This would facilitate development of investment projects;
- 6. Waste management systems are financed according proportions among different sources mainly in line with the National waste management strategy;
- 7. More effort shall be concentrated on the separation and reduction of waste stream to landfilling. Integration and cooperation with informal sector is needed;
- 8. Good examples are available in the country with private operators delivering waste management services. Experience shall be disseminated among municipalities.

Most important next step

 Organising process for the development of the national waste management tariff methodology and discussion with municipalities regarding need of cost recovery system and how such systems could be implemented.





V. Evaluation

Workshop - participant Evaluation

	N°. Responses	Yes	No	Partially	Do not know
•	26	25 (96)%	0 (0)%	1 (3)%	N/A
e agenda	20	23 (30)70	0 (0)/0	1 (3)/0	14/71
gramme well	26	25 (96)%	0 (0)%	1 (3)%	N/A
		20 (00)/10	0 (0)/0	_ (0)//	, , .
	26	26 (100)%	0 (0)%	0 (0)%	N/A
		, ,	. ,	. ,	,
•	26	26 (100)%	0 (0)%	0 (0)%	N/A
	26	24 (92)%	1 (3)%	1 (3)%	N/A
discussions?					
0 1 /5	N.O. D.	- u		1 0 11 1	
	· ·				
5	128	57 (44)9	% 66 (51	.)% 5 (3)% 0 (0)%
	NIO Decisiones	Vas	N1-	Dank!all.	Da sat Israel
	N°. Responses	Yes	No	Partially	Do not know
ct any follow-up	N°. Responses	Yes	No	Partially	Do not know
esults of the	N°. Responses	Yes 25 (96)%	No 1 (3)%	Partially N/A	Do not know
esults of the legislation, new					
esults of the legislation, new approach, etc.)?					
esults of the legislation, new approach, etc.)?					
esults of the registration, new approach, etc.)? that further TAIEX reded (workshop,	26	25 (96)%	1 (3)%	N/A	N/A
esults of the legislation, new approach, etc.)? that further TAIEX eded (workshop, study visit,					
esults of the registration, new approach, etc.)? that further TAIEX reded (workshop,	26	25 (96)%	1 (3)%	N/A	N/A
esults of the registration, new approach, etc.)? that further TAIEX reded (workshop, study visit, esion) on the topic	26	25 (96)%	1 (3)%	N/A	N/A
esults of the registration, new approach, etc.)? that further TAIEX reded (workshop, study visit, esion) on the topic	26	25 (96)%	1 (3)%	N/A	N/A
esults of the registration, new approach, etc.)? that further TAIEX reded (workshop, study visit, ssion) on the topic p?	26 25	25 (96)% 25 (100)%	1 (3)% 0 (0)%	N/A N/A	N/A N/A
esults of the regislation, new approach, etc.)? that further TAIEX eded (workshop, study visit, esion) on the topic p?	26 25 26	25 (96)% 25 (100)% 24 (92)%	1 (3)% 0 (0)%	N/A N/A	N/A N/A 0 (0)%
	kshop carried out e agenda gramme well y issues related to essed? shop enable you to nowledge? time allowed for discussions? Speaker/Expert 5	kshop carried out e agenda gramme well 26 y issues related to essed? shop enable you to nowledge? time allowed for discussions? Speaker/Expert N°. Responses	kshop carried out e agenda gramme well 26 25 (96)% 26 25 (96)% 27 issues related to essed? 28 26 (100)% 29 26 (100)% 29 26 (100)% 20 26 (100)% 20 24 (92)% 20 24 (92)% 21 Speaker/Expert 22 N°. Responses Exceller	kshop carried out e agenda 26 25 (96)% 0 (0)% gramme well 26 25 (96)% 0 (0)% y issues related to essed? 26 26 (100)% 0 (0)% shop enable you to nowledge? 26 26 (100)% 0 (0)% time allowed for discussions? 26 24 (92)% 1 (3)% Speaker/Expert N°. Responses Excellent Goo	kshop carried out e agenda 26 25 (96)% 0 (0)% 1 (3)% gramme well 26 25 (96)% 0 (0)% 1 (3)% y issues related to essed? 26 26 (100)% 0 (0)% 0 (0)% shop enable you to nowledge? 26 26 (100)% 0 (0)% 0 (0)% time allowed for discussions? 26 24 (92)% 1 (3)% 1 (3)% Speaker/Expert N°. Responses Excellent Good Satisf

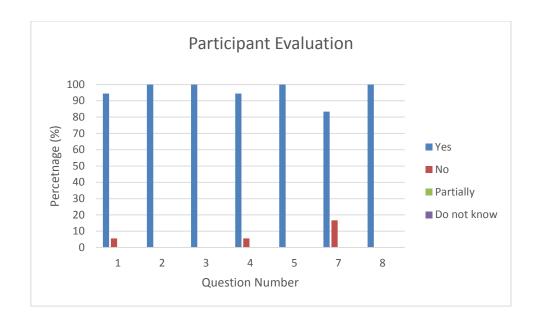
Comments:

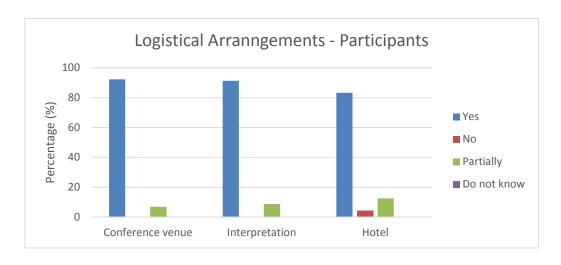
- Thank you TAIEX ECRAN Workshop on Cost Recovery and Cost Benefit Analysis in the Waste Sector Event good experience for municipalities;
- No
- Recommendation: would recommend you allow us, we municipalities to exchange
 experiences with other countries is regulated how the issue of waste management, in order
 to apply best practices. Note: We Municipalities very little, not to say never, did not have a
 practice with other European countries, in order to see how it works in practice waste
 management system.

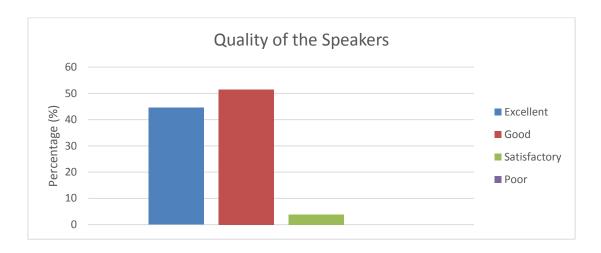














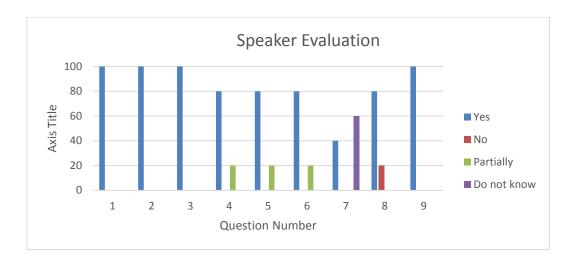


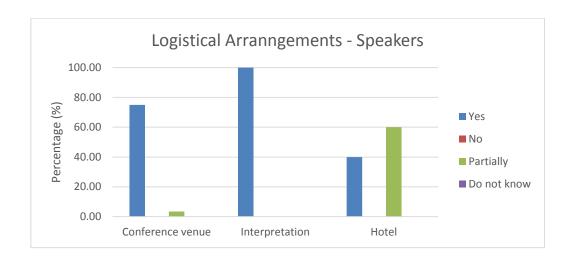
Workshop - speaker Evaluation

Question	N°. Responses	Yes	No	Partially	Do not know
1. Did you receive all the					
information necessary for the	5	5 (100)%	0 (0)%	0 (0)%	N/A
preparation of your contribution	1?				
2. Has the overall aim of the	5	5 (100)%	0 (0)%	0 (0)%	N/A
workshop been achieved?		- (/-	- (-7-	- (-)-	,
3. Was the agenda well	5	5 (100)%	0 (0)%	0 (0)%	N/A
structured?		, ,	. ,	. ,	ŕ
4. Were the participants present		4 (00)0(0 (0)0(4 (00)0(21/2
throughout the scheduled	5	4 (80)%	0 (0)%	1 (20)%	N/A
workshop?					
Was the beneficiary represented by the appropriate	5	4 (80)%	0 (0)%	1 (20)%	N/A
participants?	3	4 (80)/6	0 (0)/6	1 (20)/6	N/A
6. Did the participants actively					
take part in the discussions?	5	4 (80)%	0 (0)%	1 (20)%	N/A
7. Do you expect that the					
beneficiary will undertake follov					
up based on the results of the	5	2 (40)%	0 (0)%	N/A	3 (60)%
workshop (new legislation, new					
administrative approach etc.)					
8. Do you think that the					
beneficiary needs further TAIEX					
assistance (workshop, expert	5	4 (80)%	1 (20)%	N/A	N/A
mission, study visit, assessment					
mission) on the topic of this					
workshop?					
9. Would you be ready to participate in future TAIEX	4	4 (100)%	0 (0)%	N/A	N/A
workshops?	4	4 (100)/0	0 (0)/0	IN/ A	IN/A
10.lf					
11. 1.1					
Conterence	4	3 (75)%	0 (0)%	1 (25)%	0 (0)%
satisfied with Interpretation	5	5 (100)%	0 (0)%	0 (0)%	0 (0)%
the logistical		, ,			
arrangements? Hotel	5	2 (40)%	0 (0)%	3 (60)%	0 (0)%











Day 1: Tuesday 12 April 2016

Topic: ECRAN Task 2.2.3 Cost recovery and tariff setting (or economic/financial analysis). Subtask 2.

National roundtables on cost recovery

Chair: Arunas Kundrotas, ECRAN

Start	Finish	Topic	Speaker	Sub topic/Content
08:30	09:00	Registration		
09:00	09:10	Welcome and opening	Mr. Muhamet Malsiu Director of the department of environmental protection	
09:10	09:20	Introduction of the agenda	Mr. Arunas Kundrotas ECRAN SPIWG Coordinator	 Presentation and adoption of the agenda Introduction to the purpose of the workshop and its expected outcomes Short description of the sector
09:20	09:40	Developing municipal solid waste management sector	Mr. Enver Tahiri Head of Waste and Chemical Division	 Current cost recovery system (tariffs methodology and setting procedures, levels) Developing waste management system, infrastructure components Challenges Method: PPP and Q&A
09:40	10:00	Cost recovery system as proposed in waste management investment project	"Eco Higjiena" Public- Private Companies for Collection of Municipal Waste	 Short description of the investment project Proposed cost recovery mechanism Method: PPP and Q&A



10:00	10:30	Discussion	All participants	Challenges in developing cost recovery mechanisms Method : moderated discussion
10:30	11:00	Coffee Break		
11:00	11:45	Cost recovery and tariffs setting. MS experience. Estonia	Peeter Eek, Ministry of Environment, Head of Waste Management Department, Estonia	Cost recovery system – what shall be recovered? Tariffs setting procedures and methodology Institutional system for cost recovery Method: PPP and Q&A
11:45	12:30	Cost recovery and tariffs setting. MS experience. Italy	Francesco Loro, Waste management expert at Environmental Protection Agency of Veneto, Italy	 Cost recovery system – what shall be recovered? Tariffs setting procedures and methodology Institutional system for cost recovery Method: PPP and Q&A
12:30	13:00	Discussion	All participants	What is applicable to the national situation?Method: moderated discussion
13:00	14:00	Lunch Break		Wethou : moderated discussion
14:00	14:45	Cost recovery and tariffs setting. MS experience.	Rasa Uselyte, European Union Funds Management Division, Ministry of Environment, Lithuania	Cost recovery system – what shall be recovered? Tariffs setting procedures and methodology Institutional system for cost recovery Method: PPP and Q&A
14:45	15:00	Discussion		What is applicable to national situation?Method: moderated discussion
15:00	15:30	Coffee Break		
15:30	16:15	National roundtable regarding establishing cost recovery system		Method : moderated discussion





16:15	16:30	Wrap up	Mr.	Arunas	Kundrotas,	Key	points	of	discussions	and	next
			ECRA	N SPIWG	Coordinator	step	S				

Day 2: Wednesday 13 April 2016

Topic: ECRAN Task 2.2.3 Cost recovery and tariff setting (or economic/financial analysis). Subtask 2. National roundtables on cost recovery. Introduction to cost benefit analysis requirements

Chair Arunas Kundrotas

Start	Finish	Topic	Speaker	Sub topic/Content
08:30	09:00	Registration		
09:00	09:10	Welcome	Mr. Muhamet Malsiu Director of the department of environmental protection	
09:10	09:20	Introduction	Mr. Arunas Kundrotas ECRAN SPIWG Coordinator	
09:20	10:30	Introduction to CBA Theoretical and practical background.	Assoc. Professor, Dr. Sarunas Bruzge ECRAN Short Term Expert	 New and old CBA guidelines. Main differences Feasibility and option analysis
10:30	11:00	Coffee Break		





11:00	12:30	Financial analysis. Theoretical and practical background	Assoc. Professor, Dr. Sarunas Bruzge	 Reference period Reinvestment/residual value Determination of project costs/revenues Discounting, calculation of financial indicators Determination of EU grant rate Financial sustainability Calculation of financial indicators 	
12:30	13:30	3:30 Lunch Break			
13:30	15:00	Economic analysis. Theoretical and practical background	Assoc. Professor, Dr. Sarunas Bruzge	 Fiscal corrections; Conversion of market to accounting (shadow) prices; Evaluation of non-market impacts and corrections for externalities; Calculation of economic indicators. 	
15:00	15:30	Coffee Break			
15:30	16:15	Sensitivity and risk analysis. Theoretical and practical background	Assoc. Professor, Dr. Sarunas Bruzge		
16:15	16:30	Wrap up	Mr. Arunas Kundrotas ECRAN SPIWG Coordinator	Key points of discussions and next	





ANNEX II – Participants

First Name	Family Name	Institution Name	Country	Email
Alban	Sokoli	Municipality Mamushe	Kosovo*	albansokoli@gmail.com
Arbnor	Hoxha	Ministry of Economic Development	Kosovo*	arbnor.hoxha@rks-gov.net
Avdullah	Berisha	Ministry of Environment and Spatial Planning	Kosovo*	Avdullah.berisha@rks-gov.net
Bajram	Kadriu	Ministry of Environment and Spatial Planning	Kosovo*	Bajram.Kadriu@rks-gov.net
Bjondina	Ramaj	Municipality Rahovec	Kosovo*	bjondina.ramaj@rks-gov.net
Bujar	Dullovi	Municipality Vitis	Kosovo*	bujar.dollovi@rks-gov.net
Dardan	Bashota	Municipality Kline	Kosovo*	dardan.basota@rks-gov.net
Durim	Dernjani	Municipality of Hani I Elezit	Kosovo*	durim.dernjani@rks-gov.net
Enver	Tahiri	Ministry of Environment and Spatial Planning	Kosovo*	Enver.tahiri@rks-gov.net
Esra	Osi	Municipality Mamushe	Kosovo*	esraosi15@gmail.com
Fazli	Pervetica	Municipality Obiliq	Kosovo*	fazli.pervetica@rks-gov.net
Fitim	Veliqi	Municipality Drenas	Kosovo*	fitimveliqi.ing@gmail.com
Goran	Kostic	Municipality Novo Brdo	Kosovo*	opstinanovobrdo@gmail,com
Haki	Bekolli	Municipality Obiliq	Kosovo*	hakibekolli11@hotmail.com
Hasim	Morina	Municipality Mamushe	Kosovo*	hysen.imeri@gmail.com
Hikmete	Morina	Ministry of Environment and Spatial Planning	Kosovo*	Hikmete.morina@rks-gov.net
Hysen	Imeri	Municipally of Junik	Kosovo*	hysen.imeri@gmail.com
Ibrahim	Balaj	Ministry of Environment and Spatial Planning	Kosovo*	Ibrahim.balaj@rks-gov.net
Ilirjana	Azami	Municipality Vushtrri	Kosovo*	ilirjana.azemi@rks-gov.net
Irfan	Peci	Municipality Mitrovica	Kosovo*	irfan.peci@rks-gov.net
Ismet	Dervari	Ministry of Environment and Spatial Planning	Kosovo*	ismet.dervari@rks-gov.net
Jehona	Mavraj- Kamberaj	Municipality Pristina	Kosovo*	jehona.mavraj@rks-gov.net
Jeta	Demaj	Municipality Mitrovica	Kosovo*	jeta.demaj@rks-gov.net
Lulzim	Mjekiqi	Municipality Obiliq	Kosovo*	lulzim.mjekiqi@rks-gov.net
Milorad	Kovacevic	Municipality Novo Brdo	Kosovo*	opstinanovobrdo@gmail,com





First Name	Family Name	Institution Name	Country	Email
Mimoza	Hyseni	Ministry of Environment and Spatial Planning	Kosovo*	mimoza.hyseni@rks-gov.net
Minir	Haxhimusa	Municipality Ferizaj	Kosovo*	minir.haxhimusa@.rks-gov.net
Miqail	Vila	Municipality of Hani I Elezit	Kosovo*	miqail.vila @rks-gov.net
Mirlinda	Bllata Dibrani	Ministry of Environment and Spatial Planning	Kosovo*	mirlinda.bllata@rks-gov.net
Muhamet	Malsiu	Ministry of Environment and Spatial Planning	Kosovo*	muhamet.malsiu@rks-gov.net
Naim	Alidemaj	Ministry of Environment and Spatial Planning	Kosovo*	Naim.Alidemaj@rks-gov.net
Nazmi	Maxhera	Ministry of Environment and Spatial Planning	Kosovo*	Nazmi.Maxhera@rks-gov.net
Qefsere	Maloku	Ministry of Environment and Spatial Planning	Kosovo*	qefsere.maloku@rks-gov.net
Sami	Sinani	Ministry of Environment and Spatial Planning	Kosovo*	Sami.Sinani@rks-gov.net
Selver	Beqiri	Municipality Vitis	Kosovo*	selverdevajaidn@hotmail.com
Sherif	Sherifi	Municipality of Shtime	Kosovo*	sherif.sherifi@rks-gov.net
Tafe	Veselaj	Ministry of Environment and Spatial Planning	Kosovo*	tafe.veselaj@rks-gov.net
Teuta	Selimi Haxhiu	Ministry of Environment and Spatial Planning	Kosovo*	Teuta.haxhiu@rks-gov.net
Valbona	Salihu	Municipality Gilan	Kosovo*	valbona.salihu@hotmail.com
Valdete	Morina	Municipality Kaçaniku	Kosovo*	valdete.morinaa@gmail.com
Violeta	Lajqi Makolli	Ministry of Environment and Spatial Planning	Kosovo*	<u>Violeta.Lajqi.Makoll@rks-gov.net</u>
Visare	Hoxha	Ministry of Environment and Spatial Planning	Kosovo*	visare.hoxha@rks-gov.net
Xhelal	Shabani	Municipality Mitrovica	Kosovo*	xhelal.shabani@rks-gov.net





First Name	Family Name	Institution Name	Country	Email
Peeter	Eek	Ministry of the Environment	Estonia	Peeter.Eek@envir.ee
Francesko	Loro	ARPAV	Italy	lorofrancesko@outlook.com
Rasa	Uselyte	Ministry of Environment	Lithuania	Rasa.uselyte@am.lt
Sarunas	Bruzge	ECRAN	Lithuania	sarunas@finovus.lt
Arunas	Kundrotas	ECRAN	Lithuania	arunas@axante.lt





ANNEX III – Presentations (under separate cover)

Presentations can be downloaded from:

http://www.ecranetwork.org/Files/Workshop Presentations CBA Pristina April 2016.zip

