



An EU funded project

Workplan for the development of the Integrated hazardous waste management plan IHWMP

1st Workshop IHWMP

22th of October 2015

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Background of the integrated hazardous waste management plan IHWMP

- **Law on Waste Management: Specific waste stream management**
- **Article 11: Provisions for waste management plans**
- **Previous Twinning:**
 - Waste oil
 - Asbestos waste
 - Batteries
 - WEEE
- **Present Twinning**
 - Hazardous C&D waste
 - POPs waste
 - End-of life vehicles

Scope of the integrated hazardous waste management plan IHWMP

- **Geographical coverage: National Plan**
- **Time horizon: 5 years**
- **Waste streams to be covered:**
 - All hazardous waste streams (municipal and industrial)
 - Including: WEEE, Waste Batteries, Waste oil, Asbestos Waste, end- of life vehicles, POPs waste and hazardous C&D waste

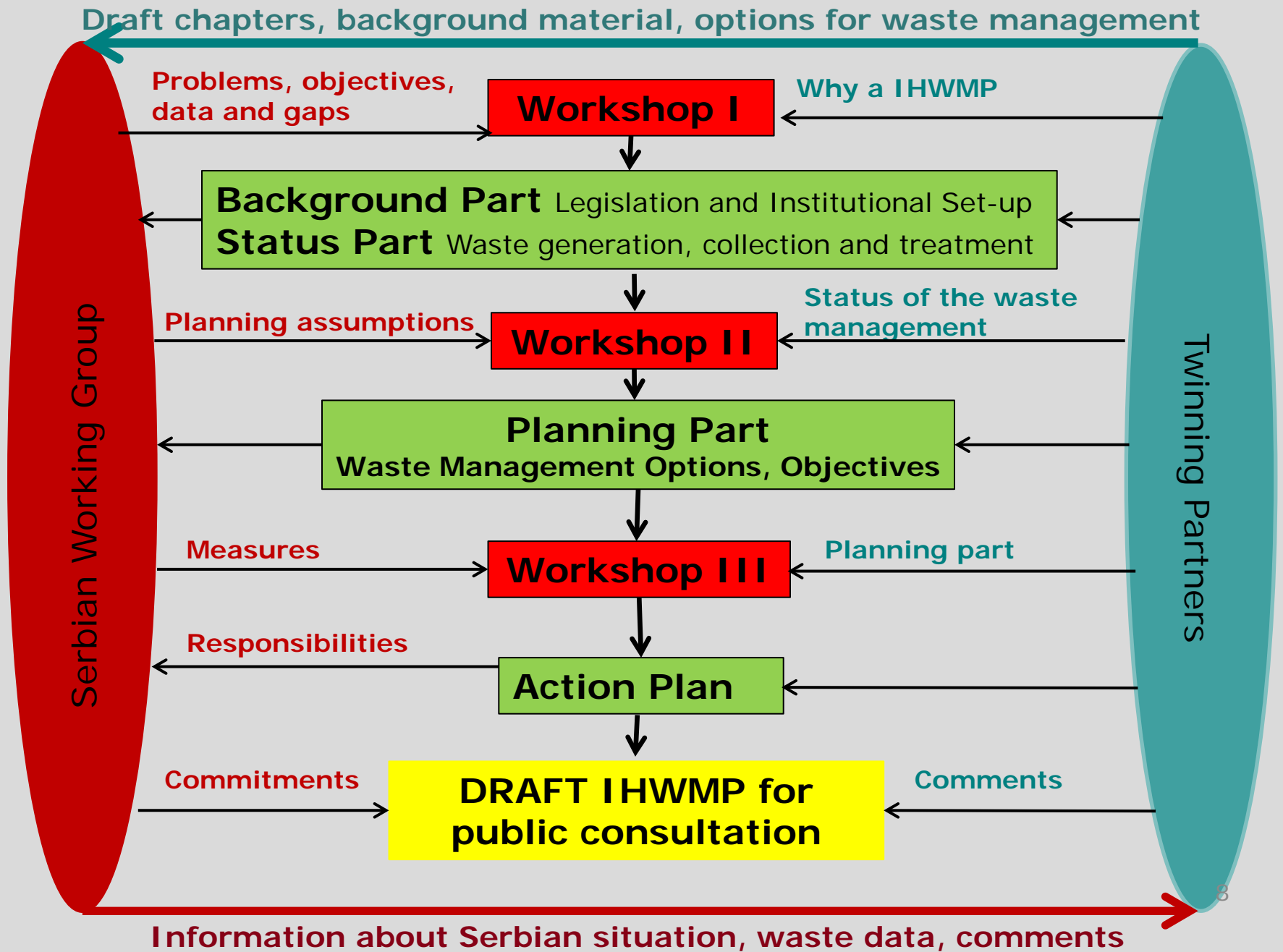
Development of the IHWMP – Establishment of the working group

- Invitation by the Ministry of Agriculture and Environment Protection (MAEP) of state institutions, universities and associations.
- 23 official nominations

Institution	Person
Ministry of Agriculture and Environmental Protection, Department for Waste Management	Jelena Tesla
	Marina Milojević
Ministry of Agriculture and Environmental Protection, Sector of Inspection for Environmental Protection, republic inspector	Vesna Nanuševski
Ministry of Agriculture and Environmental Protection, Department Environmental Impact Assessment	Sabina Ivanović
Ministry of Agriculture and Environmental Protection, Department for Waste Management, Group for Strategic Environmental Impact Assessment	Nenad Radojević
Chamber of Commerce Serbia	Dušan Stokić
Chamber of Commerce Belgrade	Jelena Plavanski
Labour Inspectorate, Ministry of Labour, Veterans and Social Issues	Maja Ilić
	Vesna Jovanović
Ministry of Health, Group for Public Health	Snežana Aksentijević Pantić
	Jugoslav Kelečević
Ministry of Finance, Custom Administration of Serbia, Department for TARIS	Jasminka Gajić
Ministry of Finance, Tax Office, Sector for Material Resources, Regional Department Belgrade	Spomenka Simonić
	Danijela Paunović
Agency for Environmental Protection RS	Nebojša Redzić
	Ljiljana Djordjević
Province Secretariat for Urban Planning, Construction and Environmental Protection	Svetlana Marušić
Faculty of Technology and Metallurgy Belgrade	Mirjana Ristić

Development of the IHWMP – Approach and consultation process

- **Three workshops:**
 - General considerations for the planning process and on the current status
 - Planning assumptions and objectives for improvement of the waste management of the waste stream
 - Proposed measures to achieve the objectives
- **Drafting of the IHWMP**



Elements of the IHWMP

Aspects considered in the determination of the elements/structure :

- Principals laid down in the **European Waste Framework Directive**
- the methodological **guidance note for preparing a waste management plan** [European Commission, DG ENV, 2012],
- the specific waste management plans prepared under the **previous Twinning project** "Strengthening Institutional Capacity in Hazardous Waste Management"

Main sections of the IHWMP

- Background
- Status Part
- Planning Part

Background Part

■ 1 INTRODUCTION

- 1.1 Overall waste problematic
- 1.2 Role of the plan in waste management planning
- 1.3 Consultation process

■ 2 LEGAL FRAMEWORK FOR THE MANAGEMENT OF HAZARDOUS WASTE IN SERBIA

■ 2.1 Serbian policy and legislation for hazardous waste stream

- 2.1.1 Law on Waste Management
- 2.1.2...Specific by-laws.....
- 2.1.x National Waste Management Strategy

■ 2.2 EU policy and legislation for hazardous waste

- 2.2.1 Waste Framework Directive
- 2.2.2 EU Waste stream Directives
- 2.2.3 EU Directives on Waste Treatments
- 2.2.4 Waste related aspects of the EU Industrial Emissions Directive
- 2.2.5 Waste shipment Regulation
- 2.2.5 ADR (if applicable)

■ 3 INSTITUTIONAL SET-UP

- 3.1 Republic of Serbia / Ministry of Agriculture and Environmental Protection
- 3.2 Autonomous Province
- 3.3 Environment Protection Agency - SEPA
- 3.5 Environmental Inspection

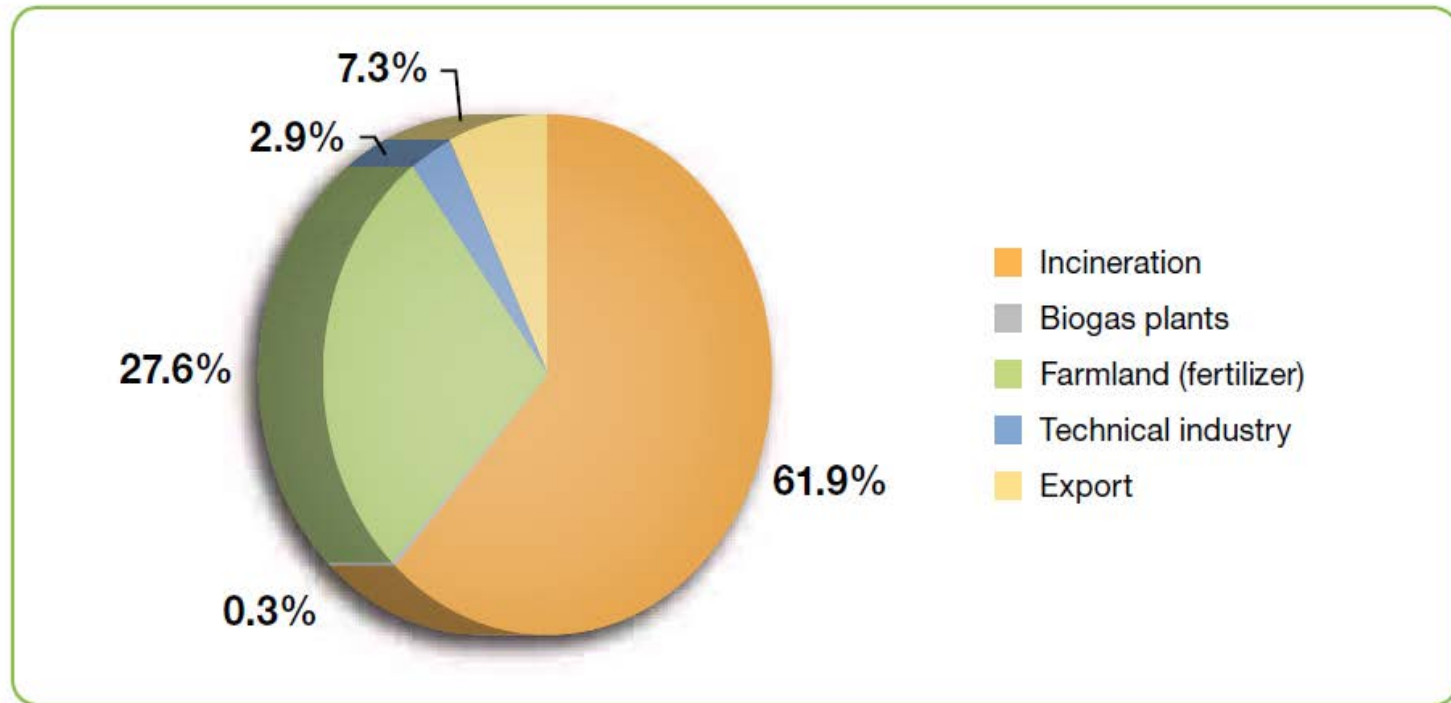
Status Part

- **4 Current Status of the waste management regarding hazardous waste in Serbia**
 - **4.1 Qualitative Characterization of hazardous waste in Serbia**
 - 4.1.1 Waste sources of hazardous wastes (municipal, industrial)
 - 4.1.2 Types of hazardous waste
 - 4.1.3 Composition of hazardous waste
 - 4.1.5 Overview on waste codes for hazardous waste
 - 4.1.6 Other classifications for hazardous wastes (if applicable)
 - **4.2 Quantitative Characterization of hazardous waste in Serbia**
 - 4.2.1 Market input of products which become hazardous waste (where applicable)
 - 4.2.2 Quantities of hazardous waste generated
 - 4.2.3 Quantities of hazardous waste treated (landfilled, incinerated, other treatment)
 - 4.2.4 Quantities of hazardous waste imported/exported to/from Serbia
 - **4.3 Present collection system for hazardous waste in Serbia**
 - **4.4 Existing treatment facilities for hazardous waste in Serbia**
- **5 Economy and Financing of hazardous waste in Serbia**
 - **5.1 Estimated present waste management costs**

Examples how it could look like

■ Hazardous waste treatment

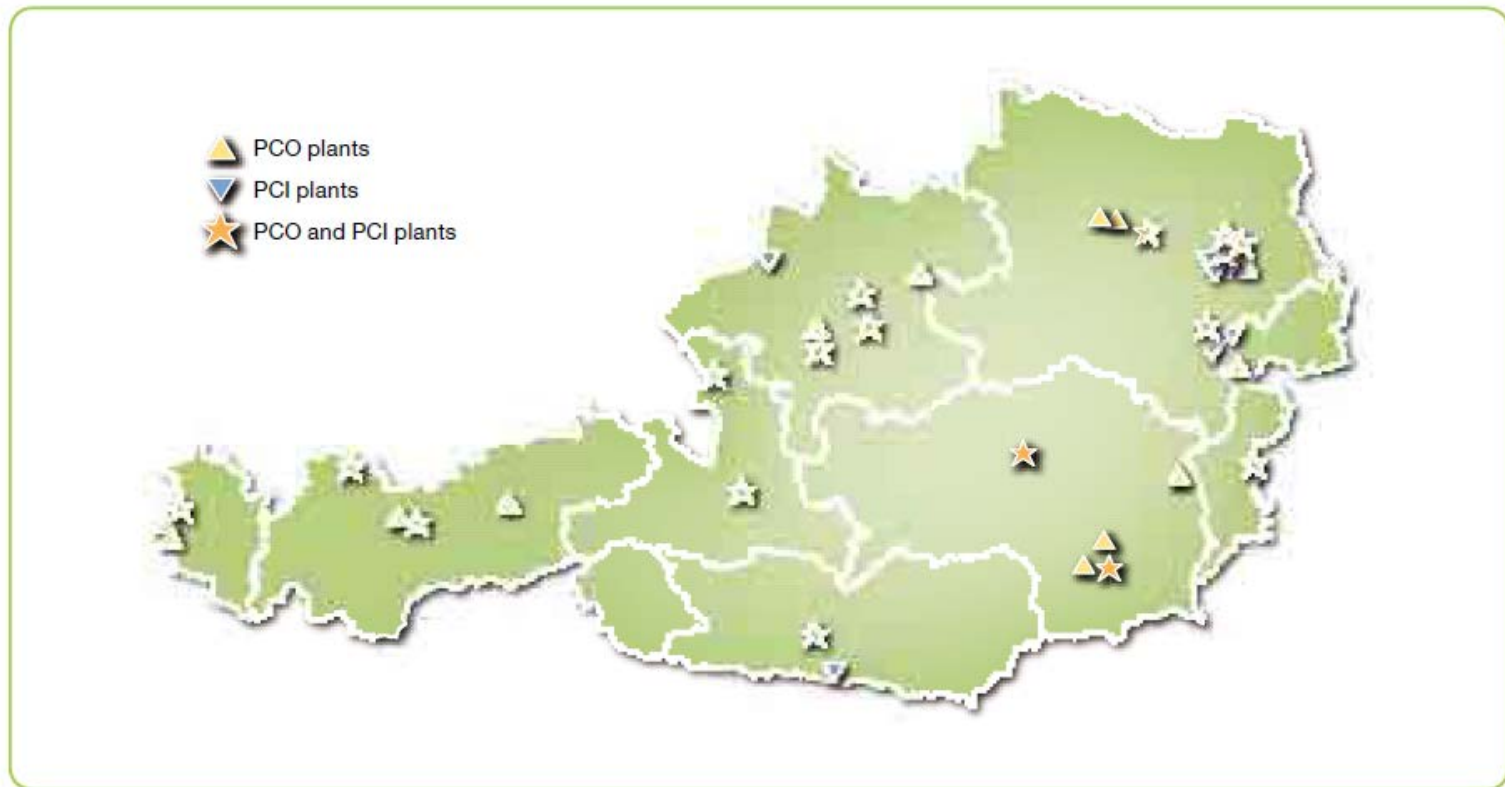
Figure: Percentage of animal fat and meal processed



Examples how it could look like

■ Existing treatment facilities

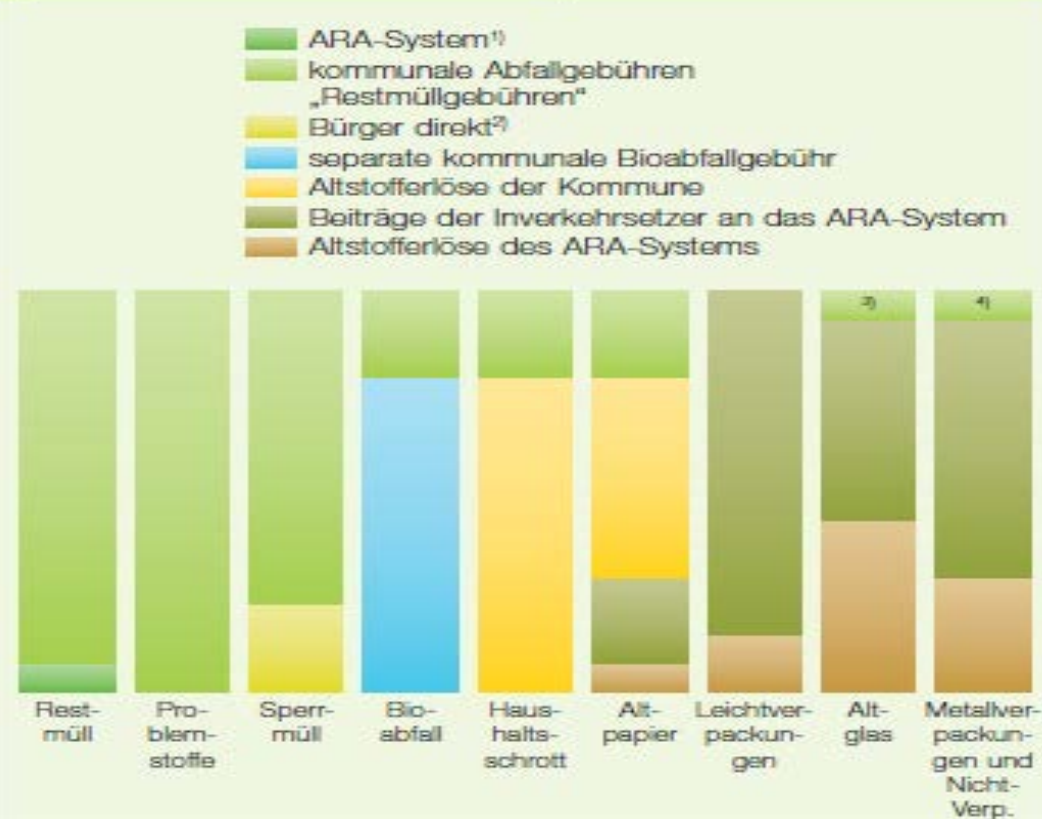
Figure: Physico-chemical treatment plants (April 2006)



Examples how it could look like

Economy and Financing of hazardous waste

Finanzierungsquellen zur Abdeckung der Kosten für die Entsorgung typischer Abfälle von Haushalten und ähnlichen Einrichtungen (ohne EAG und Altbatterien)



Examples how it could look like

Economy and Financing of hazardous waste

Subsidised Waste Management Projects in 2001-2005

Total

Year	Qty	Environmentally relevant investment costs	Total subsidies	CO ₂ reduction
2001	6	64,972,822	12,700,561	307,377
2002	13	36,291,373	8,570,548	198,315
2003	11	11,700,528	3,087,137	11,383
2004	5	2,051,314	570,832	15,197
2005	5	45,880,453	6,018,292	160,377
Total	40	160,896,490	30,947,370	692,649

Planning Part I

- 6 Planning assumptions
 - 6.1 Forecast on waste quantities and required collection and treatment capacities
- 7 Overview of appropriate waste management options for hazardous waste
 - 7.1 Options for the collection of hazardous waste
 - 7.2 Options for the treatment, recovery and disposal of hazardous waste
 - 7.3 Estimated investment and operational costs for appropriate waste management options
 - 7.4 Options for the financing of the management of hazardous wastes
- **8 Determination of objectives**
 - 8.1 Objectives regarding prevention of hazardous waste
 - 8.2 Objectives regarding the collection of hazardous waste
 - 8.3 Objectives regarding the reuse, treatment, recycling and recovery and disposal of hazardous waste, including capacities of waste management facilities

Planning Part II

- **9 Action plan for achieving the objectives**
- **9.1 Measures**
 - 9.1.1 Regulatory instruments (if applicable)
 - 9.1.2 Operative instruments (if applicable)
 - 9.1.3 Market based instruments (if applicable)
 - 9.1.4 Information based instruments (if applicable)
 - 9.1.5 Voluntary instruments and voluntary agreements (if applicable)
- **9.2 Assignment of responsibilities for implementation of measures**
- **9.3 Monitoring**
 - 9.3.1 Indicators for measuring progress
- **10 location criteria for site identification for future disposal and recovery installations**



Next steps

■ Working group (including MAEP)

- Provide information on waste generation and treatment
- Provide information on collection and treatment facilities
- Provide information on costs for waste management in Serbia
- Provide information on useful studies/projects etc.

→ RTA Simona Ghita, (Simona.Ghita@eko.minpolj.gov.rs)

■ Twinning partners

- Draft background part
- Draft status part

→ By April 2016

Contact

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Thank you

Ideas for objectives

- Establish an integrated system of hazardous waste management
- Implementation of separate collection and treatment of hazardous waste from households and industry
- Increase the number of citizens included in the system for waste collection
- establish central regional warehouses for hazardous waste
- Establish a plant for physical chemical treatment of hazardous waste
- Encourage the use of waste as an alternative fuel in cement plants, steelworks plant and thermal plants, in accordance with the principle of waste hierarchy

Ideas for objectives

- Objectives regarding waste data
 - Identify all hazardous wastes generated in Serbia and their sources and their treatment
 - Identify possible needs of hazardous waste tracking
- Objectives regarding **collection**
 - Collection targets for particular waste
 - Define the number of required collection points for particular hazardous wastes / for hazardous wastes from households

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Ideas for objectives

- Objectives regarding the **treatment infrastructure**
 - Define the required capacities for hazardous waste incineration
 - Define the needed capacities for CP treatment
 - Establishment of special plants for pre-treatment of hazardous wastes (WEEE, batteries, contaminated metal wastes etc., mercury wastes etc.,)
 - Clarify for which types of wastes mobile treatment is appropriate and for which not
 - Identify rules for site identification for new hazardous waste treatment facilities
 - Discuss possible funding for new waste treatment facilities

Ideas for objectives

- Objectives to enhance the **professional and institutional capacities** of hazardous waste Management
 - Define training measures for authorities
 - Define the need of specific requirements for operators of haz. waste treatment plants
 - Procedures how to integrate the informal waste management activities
- Objectives regarding **enforcement**
 - Identify possible changes in legislation necessary to support inspections