



# **Evaluating 3Es in waste and water management audits**

Jerneja Vrabič

The Court of Audit of  
the Republic of Slovenia



# Determination of audit objectives

We usually conduct environmental audits **as performance audits**. We determine audit objectives in the process of detailed audit plannings as:

- **economy**: all the resources that are used by organizations should be at disposal in appropriate time, in right quantity and quality and at the most convenient prices;
- **efficiency**: the best ratio between applied inputs and achieved outputs;
- **effectiveness**: achieving set goals and expected results.



## Audit objectives in environmental audits – published reports

Subject of the audit	Year of publishing the report	Economy	Efficiency	Effectiveness
1 Choosing location for disposal of municipal waste in local community of "Smartno pri Litiji"	2006	✓		
2 Charging waste disposal tax	2007		✓	
3 Administering Water Act	2008		✓	
4 Managing municipal waste	2009		✓	✓
5 Managing illegal disposal of waste	2009		✓	
6 Managing end-of-life vehicles	2010		✓	
7 Managing industrial & construction waste	2010		✓	✓
8 Acquiring funds for decomposition of nuclear power plant and permanent repository of low and intermediate low radioactive waste	2011		✓	✓

Source: The Court of Audit of the Republic of Slovenia

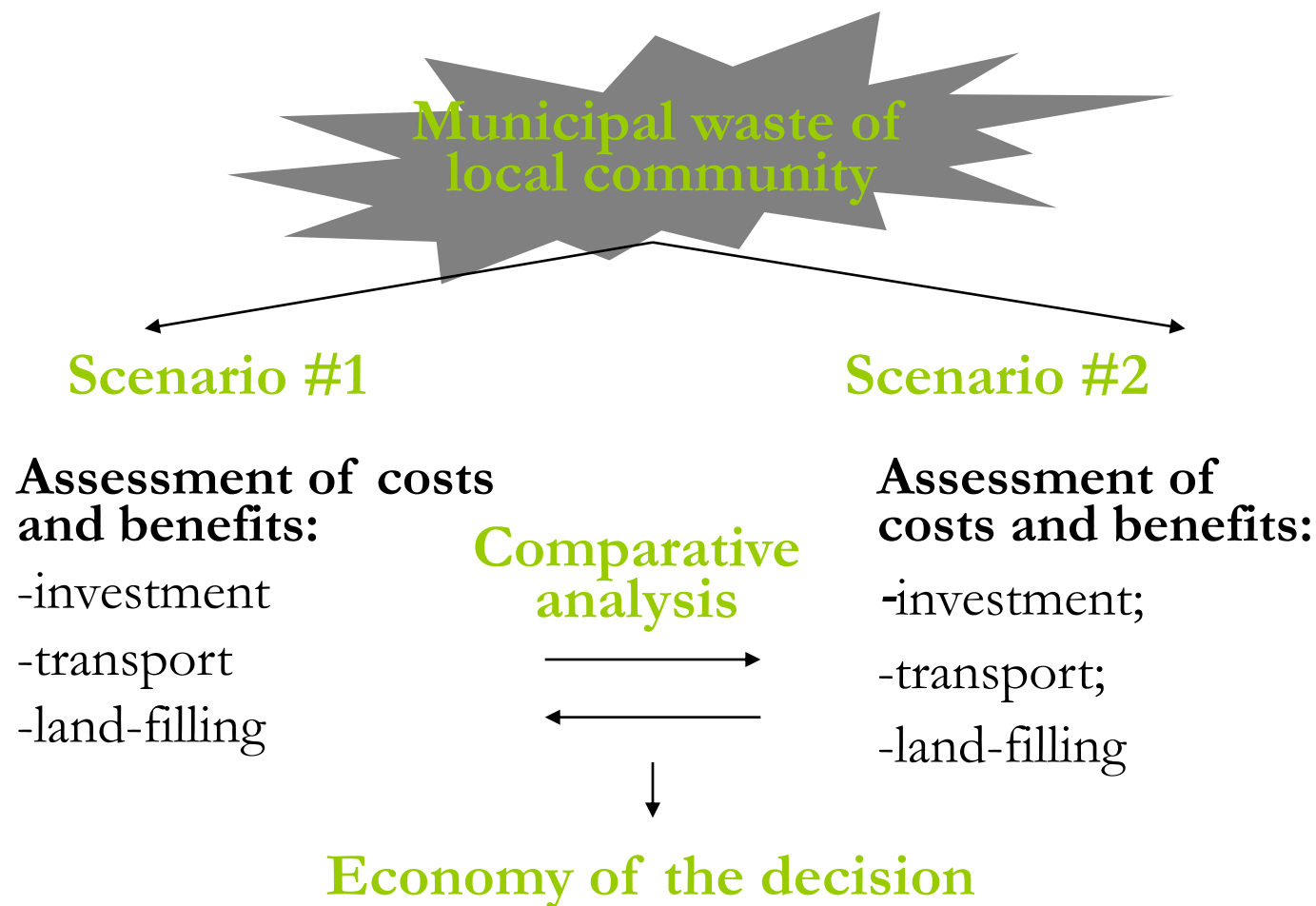


# Assessing 3Es in environmental audits

- **Assessing economy** → in costs/benefits assessments we try to estimate also all environmental cost as well as benefits for the environment of compared scenarios;
- **Assessing efficiency** → we look specifically whether polluters pays principle is applied;
- **Assessing effectiveness** → we look specifically at achievement of environmental objectives



# Cost/benefit analysis





# “Polluter-pays-principle” definition in strategic and legislative frame

- **“Polluter-pays-principle”** is incorporated in the Environmental Protection Act as one of 13 basic principles and as the basic principle in national environmental strategy;
- The person responsible for burden shall **cover all the costs for prescribed measures for the prevention and reduction of environmental risk, of the use of the environment and of the elimination of the consequences of the environmental burden;**
- An obligation to give a **financial guarantee** may be imposed on the person responsible for burden for the payment of costs of environmental burdens caused during pursuit of the activity and after its cessation.



# Principle of subsidiary action

- The State shall provide for the elimination of consequences of excessive environmental burdens and shall cover the costs of such elimination **if payment of costs can not be imposed on particular or identifiable persons causing the burden;**
- the costs of subsidiary action of the state shall not cover the costs of claims of injured parties for the damage caused by excessive environmental burden.



# Applying PPP: packaging waste collection

## Current situation:

- Tax on packaging is applied, but very low and direct income of companies in the scheme;
- Collection of packaging waste is financed through the price of waste collection;
- There is no reliable evidence about actual results of applied packaging waste treatments



**PPP is not applied because price is the same regardless how much packaging waste is collected and therefore no stimulation to households for separate collection; system is not transparent and the objectives are not met**

## What should it be:

- Tax on packaging should be applied estimation of cost of collection and packaging recycling;
- Collection of packaging waste should be financed through the tax on packaging waste;
- There should be control upon actual recycling of packaging waste



**PPP would promote more efficient and transparent system in which the objectives could be met**





## Applying PPP: tax on land-filling

### Current situation:

- *Tax on land-filling is exposed over all collected municipal waste;*
- *Collected funds can be spent also on constructing new land-fills;*
- *There is no efficient control how collected funds are spent*



***PPP is not applied because tax is not exposed over waste being land-filled but on all collected waste regardless its further treatment procedures***

### What should it be:

- *Tax on land-filling should be exposed over municipal waste being land-filled;*
- *Collected funds should be spent only on treatment options higher on hierarchy ;*
- *There should be control how collected funds are spent*



***PPP would enable more transparent system where objectives could be easily met***



## Applying PPP: deciding upon use of water

### Current situation:

- *there is no economic analysis on water usage*
- *there is no payment for issuing water permits required;*
- *there are no measures upon which concession duties are determined;*
- *the funds for financing projects to enable sustainable usage of water are not adequate*



**PPP is not applied; there are no set priorities regarding water usage and sustainable future water sources management**

### What should it be:

- *economic analysis should set priorities about water usage and price for using water;*
- *Measures for setting price for water usage should be set ;*
- *The funds for financing water management projects would be sufficient*



**PPP would enable sustainable water policy and water management**



**Thank you for your  
attention!**

**Any questions?**