



# Reliability of data in environmental auditing

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# Contents of the presentation

- **Problems of reliability of environmental data**
- **Reliability of data from national registers (2 case studies)**
- **Reliability of data from official monitoring (1 case study)**



# Problem of reliability of environmental data


At our environmental audits we faced various problems regarding reliability of data:

- unreliability of data **from national registers** (e.g.: types of waste, waste streams and methods of waste treatments);
- unreliability of data resulting from **monitoring**, required by different kinds of environmental permits.

# Reliability of data from national registers (1)

## CASE STUDY 1:

### Data on packaging waste and treatments of packaging waste

- **Recognized risk:** data on packaging waste collected from a study on packaging waste (2007) were completely different from data in national registers.
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- **Audit on effectiveness of separate waste collection** (2009)- one of the objectives of the audit was to establish whether there are accurate, reliable and timely information on packaging waste generated, collected and treated.



## Reliability of data from national registers (2)

**Methods** used to establish correct amounts of packaging waste:

- Comparisons of data on packaging waste from different sources: public companies which collect municipal waste, companies to manage packaging waste and national registers;
- Questionnaires and spot checks (in cooperation of environmental inspectorate) to installations which recycle packaging waste;



- **data collection methods are not defined accurately;**
- **some companies used estimations of some waste streams;**
- **there were no evidence on amounts of packaging waste recycled in some companies.**





# Reliability of data from national registers (3)

## Audit conclusions:

- actual data on packaging waste differed so much from data in national register that actual inefficiencies in managing packaging waste were not appropriately identified;
- policy on managing packaging waste didn't establish appropriate measures;
- there was no proper control over the data reported;
- there were no crossways checks between data from different records;
- data reported to the European Commission were incorrect.



# Reliability of data from national register (5)

## Corrective measures required:

- introduction of clear definitions of methods to record amounts of packaging waste collected;
- strengthening of environmental inspections and implying more regular checks of installations for recycling of packaging waste;
- strengthening controls and crossway checks on data from different records;
- follow-up audit in 2012 → still problems on accurate data on packaging waste collected and recycled



# Reliability of data from national registers (6)

## CASE STUDY 2:

### Data on municipal waste recycled

- **Risks recognized** : data reported to the European Commission seem to be too high compared to the available capacities for recycling; upon reported data on recycling, Slovenia was placed on the second place in Europe regarding recycling of waste according to Commission's study on waste management in Europe.
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- **Audit on waste shipments and audit on effectiveness of management of municipal audit (on-going audit)** - one of the objectives of the audit is to establish whether there are accurate, reliable and timely information on recycling of municipal waste.





# Reliability of data from national registers (7)

**Methods** used to establish correct amounts of waste recycled:

- Comparisons of data on waste recycled from different sources: public companies which collect municipal waste, companies that recycle waste, records on export/import of waste, records of Customs and national register;
- Questionnaires to the companies which recycle waste;
- Joint inspections - actions in cooperation with Environmental Inspectorate on records of waste recycled and waste streams;



- **there are no accurate records on amounts of waste recycled in some companies;**
- **evidence discovered that waste was disposed and not recycled.**



# Reliability of data from national registers (8)

## Audit conclusions:

- there was no proper control over the data about recycling of waste reported to the national register;
- there were no crossways checks between data on recycling from different records;
- data on waste recycling reported to the European Commission were incorrect → what about conclusions in the study??;
- national policy on waste managing is not based on correct data → measures are not appropriate.



# Reliability of data from official monitoring (1)

## CASE STUDY 3:

### Data from monitoring required by environmental permits

- **Risk recognized:** data acquired by official monitoring differ significantly from data acquired by independent measurement (case of exceeding allowed emissions from the La Farge cement factory and other large emitters).
- **Planned audit on control over reliability of environmental monitoring and measurements (2013).**



## Reliability of data from official monitoring (2)

### Planned methods of audit on control over reliability of environmental monitoring and measurements:

- Very unclear system of monitoring over emissions required by environmental permits and companies accredited to perform monitoring → **an overview of the system in place;**
- No control over companies accredited to perform different types of monitoring → **an overview of controls in place;**
- **Use of external experts** → to perform independent selected measures and monitoring and interpretation of gathered data, system of monitoring in place and controls in place;
- Cooperation with **civil initiatives.**



# Reliability of data from official monitoring (3)

## Planned results of audit on control over reliability of environmental monitoring and measurements:

- **Establish clear system of monitoring** of emissions required by environmental permits and **companies accredited** to perform monitoring;
- **Establish clear system of controls** over companies accredited to perform different types of monitoring;
- **Lower risk of unreliable data** gathered by required monitoring of different emissions.





**Thank you for your  
attention!**

**Any questions?**