

# Mapping environmental data in Sweden

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Statistics Sweden

Statistiska centralbyrån

## Why

Keeping track:

- Who is producing the data
- What is the content
- Who is using it today

Future needs:

- Are there gaps in the information chain
- Is new statistics needed
- How to assure co-ordination



- Two publications on the web (in Swedish)
- Steering committee:  
Inger Eklund, Leif Norman and Martin Lagerström, SCB
- Investigator: Nancy Steinbach, SCB



## Project 1:

Mapping of official environmental statistics according to directive 2001:100

## Project 2:

Mapping of other related environmental statistics and information, including natural resources

# DPSIR-model



Population  
Energy consumption  
Industry  
Transport

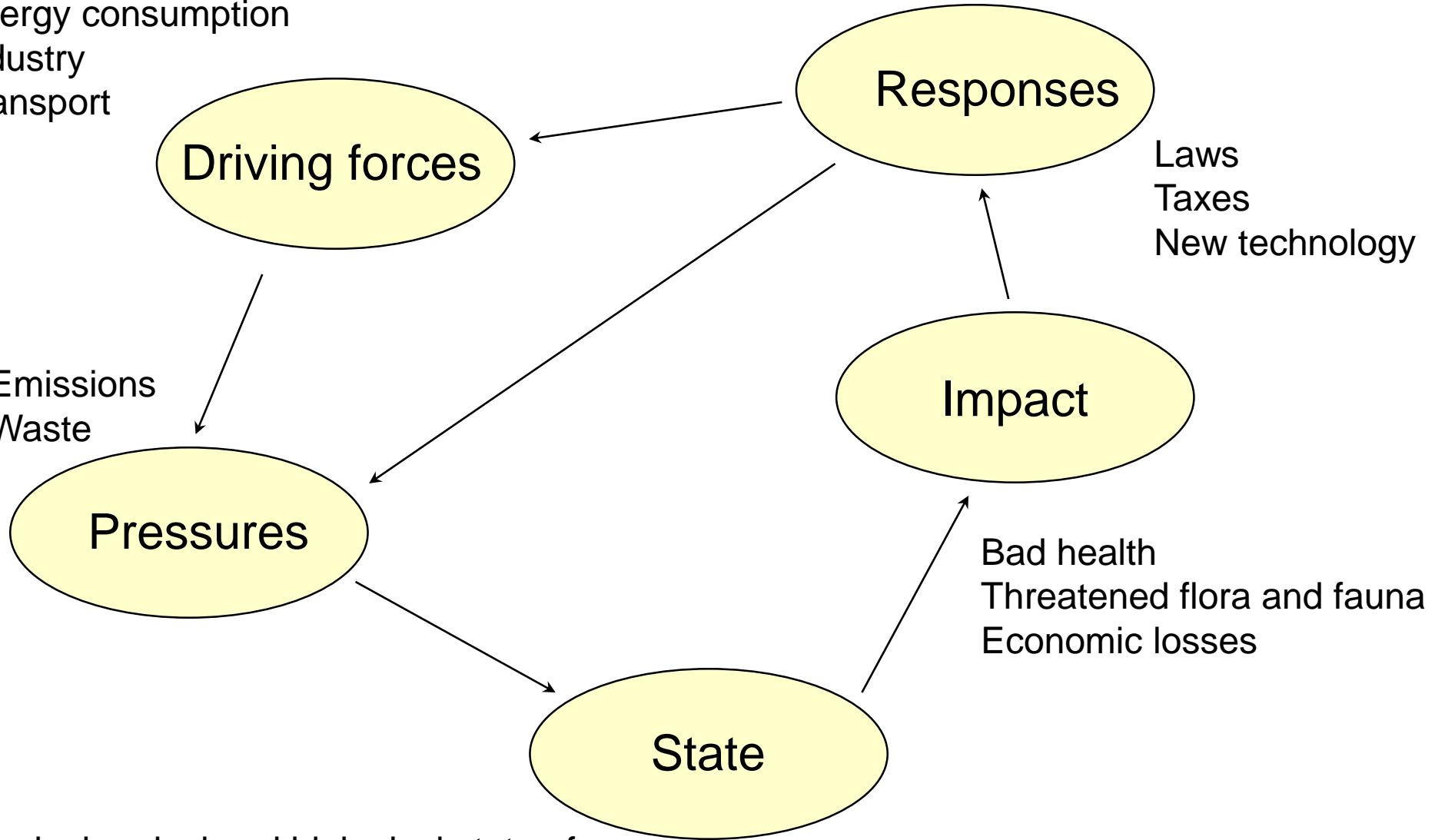
Statistics Sweden  
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Emissions  
Waste

Laws  
Taxes  
New technology

Bad health  
Threatened flora and fauna  
Economic losses

Physical, chemical and biological state of  
air-, water- and ground quality

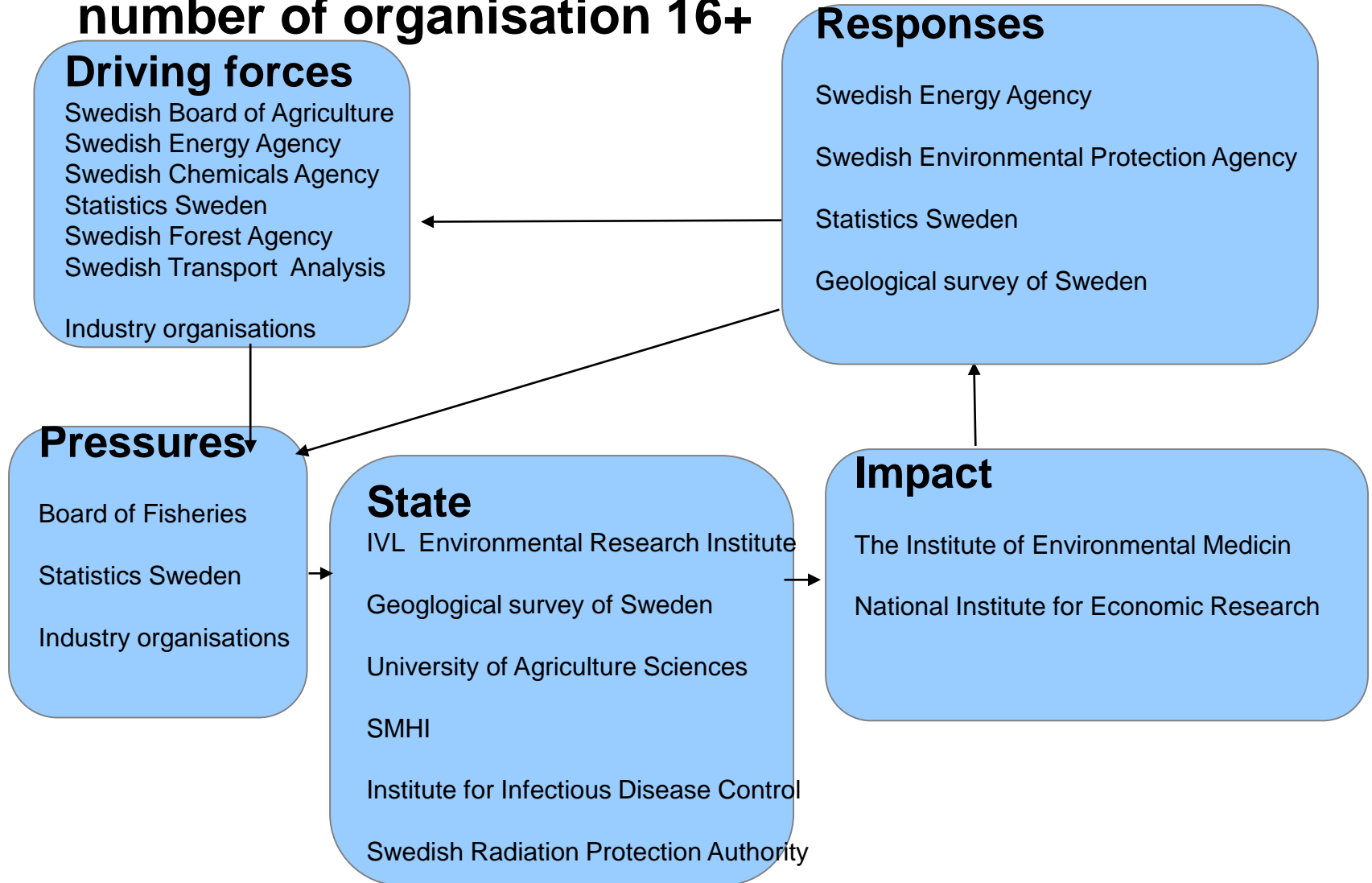




Statistics Sweden

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# DPSIR-model – environmental data producers, number of organisation 16+



# Three authorities for environment statistics

## EPA

### State of the environment

- Number of oil spills in Swedish sea areas
- Metals in fish
- Share of sea eagles with successful hatching
  
- Sulphur dioxide in air
- Nitrogen dioxides in air

### Emissions

- Load of phosphorous to the coast
- Load of nitrogen to the coast
- Discharges to water and sewage sludge production
  
- Emissions of climate changing gases (CO2 equivalents)
- Emissions of sulphur dioxides
- Emissions of nitrogen oxides
- Emissions of ammonia
- Emissions of NMVOC

### Waste

- Official statistics on waste

### Monitoring of Environmental law

- Environmental sanction charges

## Swedish Chemical Agency

### Chemicals, sales and use

- Flow analyses of chemical substances
- Overview of chemicals (not official statistics)
- Sold quantities of pesticides
- Hazardous chemicals
- Pesticides in agriculture. Number of doses

## SCB

### Fertilizers and lime

- Use of fertilizers and animal manure and cultivation measures in agriculture
- Nitrogen and phosphorus balances in arable land and agricultural sector
- Sales of lime for agricultural and horticultural purposes, for lakes and woodlands
- Sales of fertilizers for agricultural and horticultural purposes

### Land use

- Concentrations of workplaces outside localities
- Smaller localities
- Localities; areas, population
  
- Living in weekend and holiday homes
- Development in protected coastal zones
- Concentrations of weekend and holiday homes
  
- Green areas within and in the vicinity of urban settlements
- Land use in localities and changes of land use
- Land use in Sweden
- Land cover by municipality
  
- Protected nature
- Coast, shores and islands in Sweden
- Peat; production, use, environmental impact
- Land and water areas

### Environmental accounts and sustainable development

- Environmental accounts
- Environmental protection expenditure
- Indicators for sustainable development

### Water use

- Water withdrawal and water use
- Industrial water use

# Swedish Environmental Protection Agency

## COAST GUARDS

### State of the environment by coast and sea

- Number of oil spills in Swedish sea areas

## Museum of Natural History

### State of the environment by coast and sea

- \* Metals in fish
- \* Share of white tailed sea eagles with successful hatching

## SMED

### Waste (SCB,IVL)

### Emissions to air (SCB, IVL, SMHI, SLU)

### Discharges to water (SCB)

## IVL

### State of the environment in air

- \* Sulphur dioxides in air
- \* Nitrogen dioxides in air

## SLU, SMHI

### Emissions to water

- Load of phosphorous to the coast
- \*Load of nitrogen to the coast

## Chemical Agency

### Chemicals, sales and use

- \* Flow analyses of chemicals
- \* Overview of chemicals
- \* Sold quantities of pesticides

## SCB

### Fertilizers and lime

### Land use

### Environmental accounts and sustainable development

### Water use

### On commission

- \* Environmental sanction charges
- \* Hazardous chemicals
- \* Pesticides in Swedish agriculture. Number of doses



# Project 2: Mapping of **other related** environmental statistics and information including natural resources

## Where do you start looking

- Environmental monitoring program
- SCB's other statistical production
- Web-sites
- International reporting obligations
- Indicators for Environmental goals



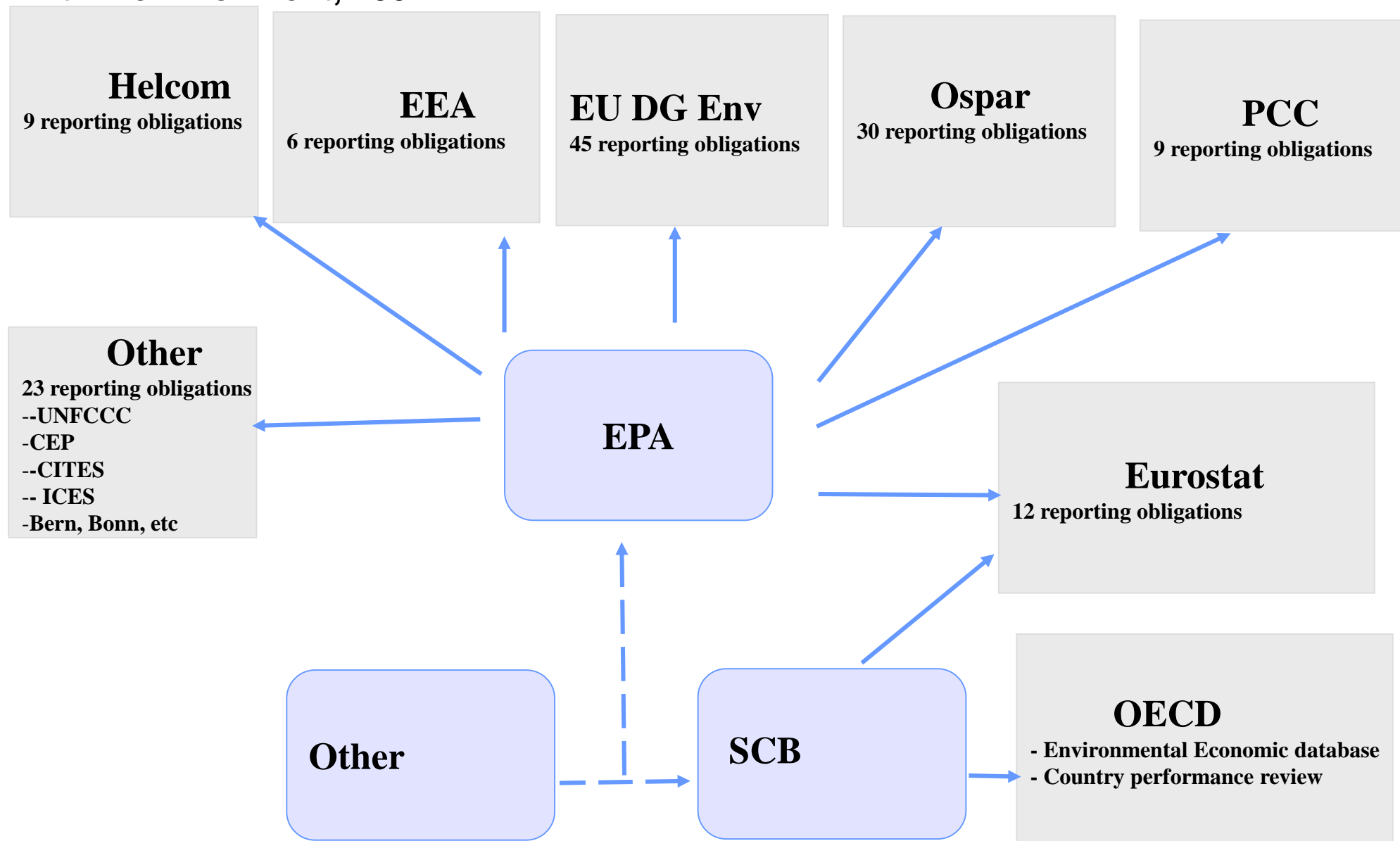
# Larger statistical data producers

	Climate/air/waste	Water	Biodiversity	Natural resources Fish/forest/geology	Environmental health	Other
<b>Actors</b>						
SCB	X	X	X	X	X	
SGU		X		X		
SMHI	X	X				
SLU	X	X	X	X	X	
EPA	X	X				X
Swedish Chemical Agency					X	
IVL	X				X	
Swedish Energy Agency	X					
Swedish Board of Fisheries			X	X		
Swedish Board of Agriculture			X		X	
Swedish Forest Agency			X	X		
Transport Analysis	X					X
Museum of Natural History			X	X	X	
Wild animal injury center (Viltskadecenter)			X			
The Swedish Institute for Infectious Disease Control		X				
Swedish Radiation Protection Authority					X	
Institute of Environment Medicin					X	
Institute of Economic Reserach					X	
The National Board of Housing, Building and Planning	X					
Swedish National Council for Crime Prevention						X

# Industry and Voluntary organisations

	Climate/air/waste	Water	Biodiversity	Natural resources Fish/forest/geology	Env health	Other
<b>Industry organisations</b>						
Swedish waste management	X					
Packaging and newspaper collection	X					
KRAV			X			
Swedish Plastic and Chemicals Federation	X					
Swedish Forest Industries Federation	X					
Swedish Tyre Recycling AB	X					
Swedish District Heating Association	X					
The Swedish Water & Wastewater Association		X				
<b>Voluntary Organisations</b>						
The Swedish Bird Survey			X			
Swedish Association for Hunting and Wildlife Management			X			
Swedish Association for Ornithology			X			

# Statistical and monitoring information for international reporting within environment, 2007





# Lessons learned

Need for an overview

To make data more available

To make harmonisation possible