



Statistics Sweden

Statistiska centralbyrån

Environment statistics and the System of Environmental and Economic Accounts (SEEA)

Viveka Palm, Adjunct Professor KTH
Deputy Director Regions and Environment Statistics Sweden

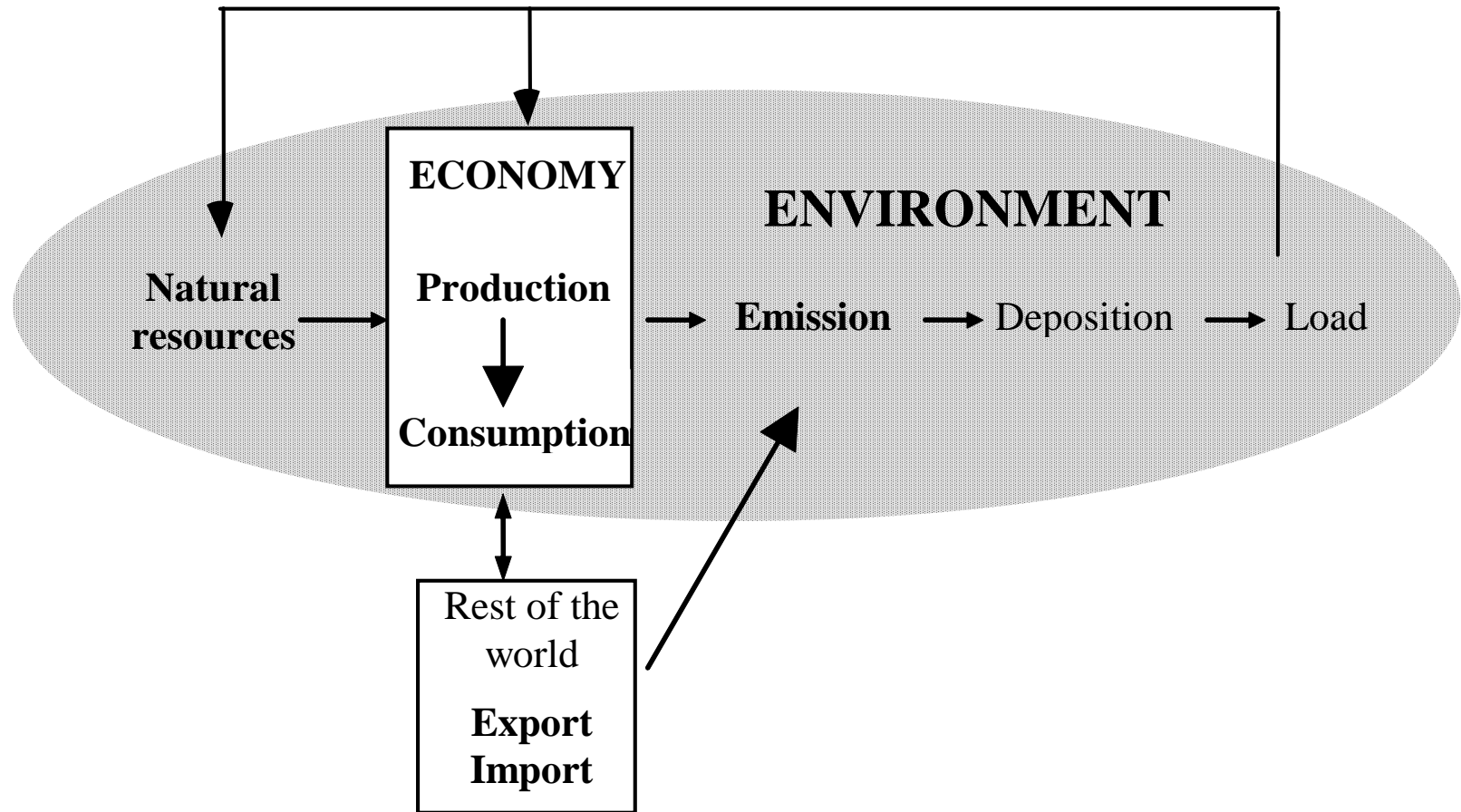
CREEA

Compiling and Refining Environmental and Economic Accounts



System of Environmental and Economic Accounts, SEEA

Damage to environment, health, infrastructure



The System of Environmental and Economic Accounts (SEEA)



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NATIONAL- RÄKENSKAPER		Varor och tjänster	Produktionsaktiviteter (branscher)	Privat kons.	Kapitalbildning	Utländsk	Total
			1. Jordbruk 2. Skogsbruk 3. Fiske 4. Gruvor, min 5. Livsmedel, l 6. Massa, pap 7. Hantver 8. Övriga 9. Offentliga				
Varor och tjänster							
Produktionsaktiviteter (branscher)							
Produktionssektorer							
Privat kons.							
Kapitalbildning							
Utländsk							
Total							

National Accounts

MILJÖSTATISTIK		Varor och tjänster	Produktionsaktiviteter (branscher)	Privat kons.	Kapitalbildning	Utländsk	Total
CO2							
SO2							
Nox							
VOC							
Metaller							
Övriga							

Environm. statistics

MILJÖ- RÄKENSKAPER		Varor och tjänster	Produktionsaktiviteter (branscher)	Privat kons.	Kapitalbildning	Utländsk	Total	CO2	SO2	Nox	VOC
Varor och tjänster											
Produktionsaktiviteter (branscher)											
Produktionssektorer											
Privat kons.											
Kapitalbildning											
Utländsk											
Total											
CO2											
SO2											
Nox											
VOC											
Metaller											
Övriga											

Environmental Accounts



UN standard of SEEA contains

- Flows of materials per industry; energy, material, emissions, waste – Creaa WP on physical extensions for EU and the world
- Economic variables; labour, taxes, subsidies, costs, products and services - Creaa WP on Climate and on Input-Output analyses
- Natural resources; stocks, quality, value – Creaa WP on Water and Forest

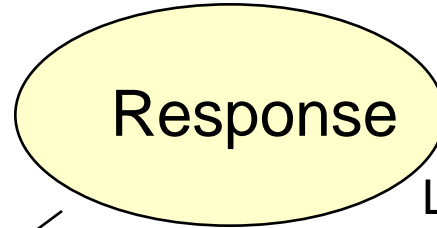
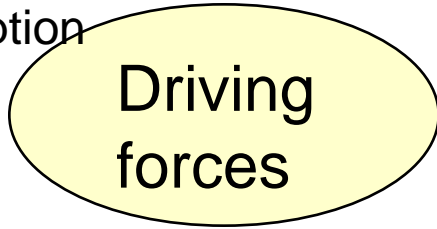




DPSIR-model

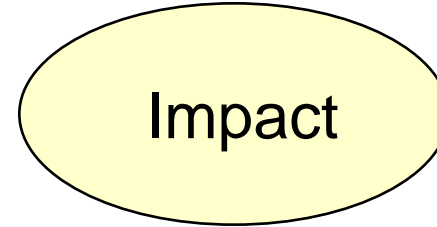
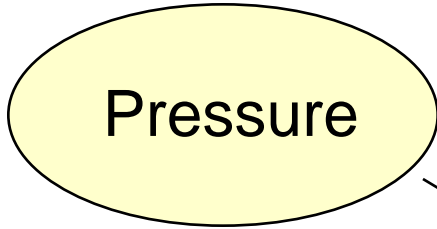
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Population
Energy use
Industry
Transport
Consumption



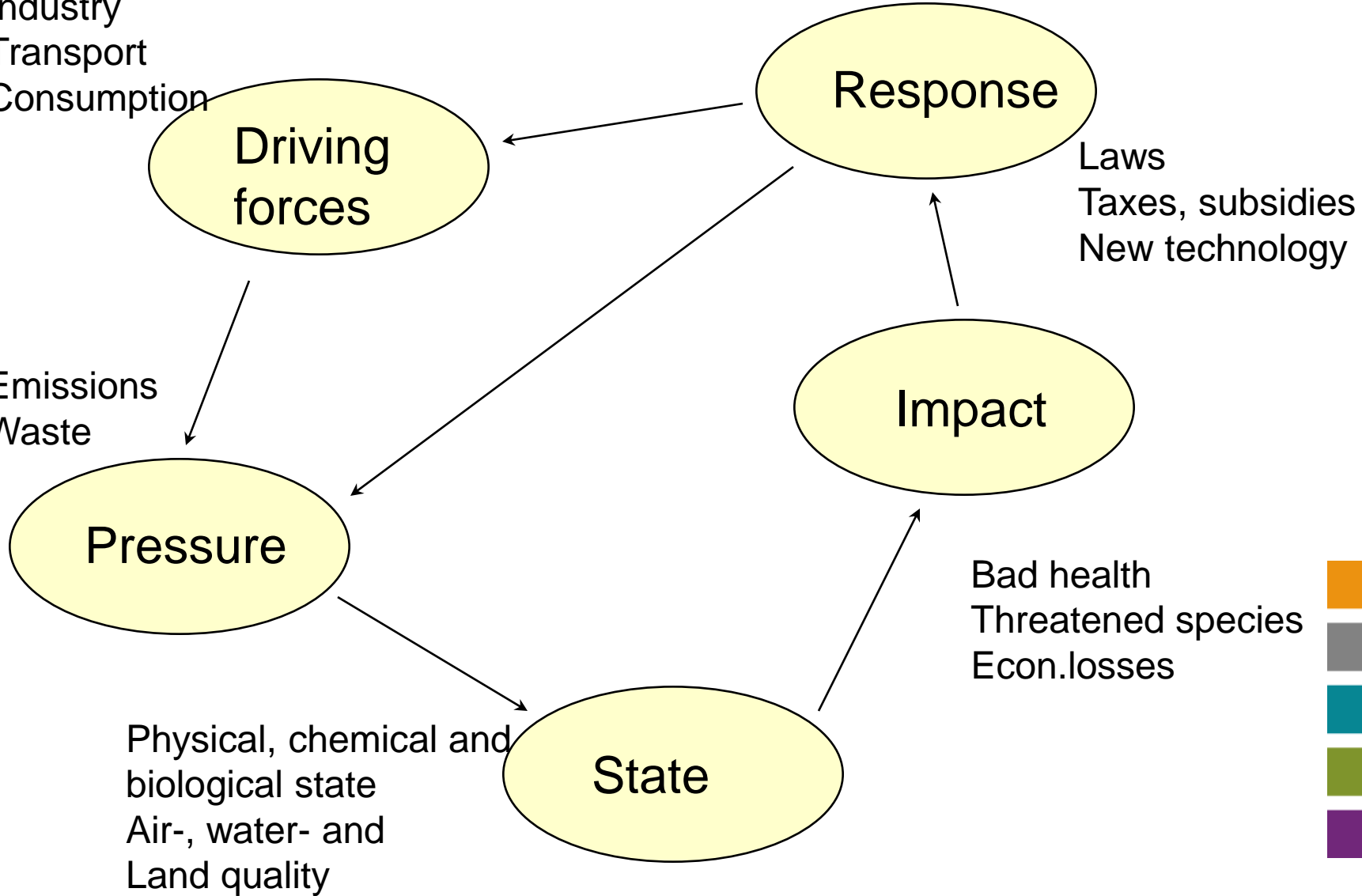
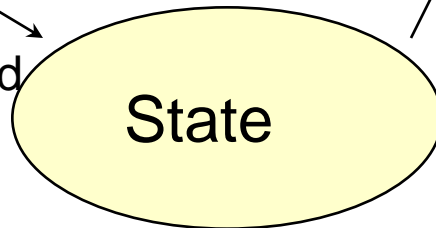
Laws
Taxes, subsidies
New technology

Emissions
Waste



Bad health
Threatened species
Econ.losses

Physical, chemical and
biological state
Air-, water- and
Land quality





Regular publishing SEEA

- Emissions to air per industry
- Environmental taxes and subsidies
- Environmental protection expenditure
- Material flow analysis
- Energy use per industry
- Environmental goods and services



Eurostat portal - introducing texts, data, reports and legislation concerning SEEA



http://epp.eurostat.ec.europa.eu/portal/page/portal/environmental_accounts/introduction



National SEEA pilots

- Water-, Land- , Forest accounts
- Household accounts, emissions by household category
- Decomposition analysis of emissions driving forces such as fuel mix, consumption volume, type of products consumed
- Indicators for sustainable development



And in Creea, developing

- The environmental pressure from consumption, by input-output and gathering of global environmental data; For different environmental areas such as emissions to air, material flows, energy use, land use and waste management.
- Climate change: emissions, land use and land use change as input to EXIOBASE and emission rights data inventory.
- Water: Valuation and new LCA-factors.
- Forests: case studies for Sweden and Catalonia.





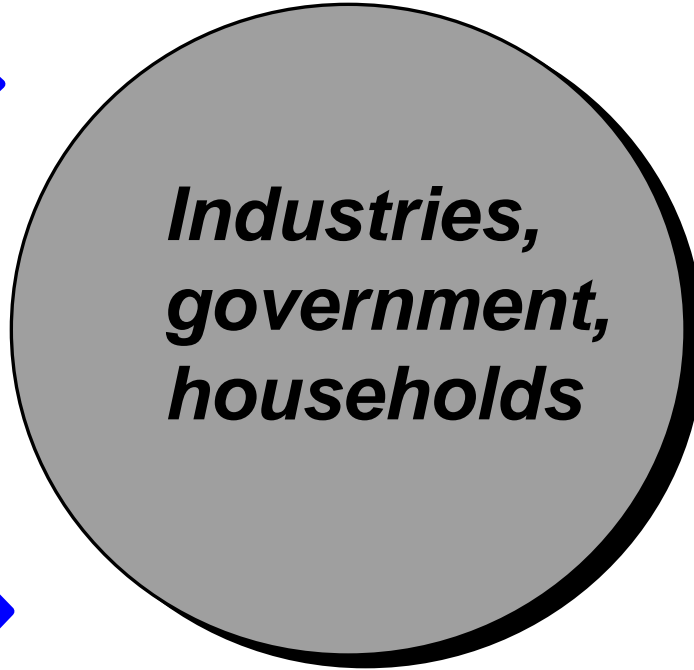
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capital →

work force →

material →

energy →



→ goods

→ services

→ waste

→ emissions



Conclusions

1. The experience is that SEEA is multipurpose, can reuse existing data for new analysis for national and international use.
2. Analysing the greening of the economy is well supported by the system.
3. More countries need to join in order to make good global analysis.
4. The indicators beyond GDP will be well served by this system, if it is complemented with social data.

