



Statistics Sweden

Statistiska centralbyrån



# Examples of governmental use and of research uses of SEEA in/by Sweden

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# The environmental accounts



NATIONAL- RÄKENSKAPER		Varor och tjänster	Produktionsaktiviteter (branscher)	Privat kons. & kapital	Utländsk	Total			
Varor och tjänster	1. Jordbruk	82	541	806	871	709	51978		
	2. Skogsbruk	95	541	1026	-991	374	24203		
	3. Fiske	47	575	-4	448	2337	960		
	4. Gruvor, mineralbrott	43	329	-302	5152	32962	19178		
	5. Livsmedel, textil m m	10	319	3291	41598	352565	23004		
	6. Maskin, papper	58	278	-289	50162	136699	960		
	7. Hushåll	147				20086	19178		
	8. Offentliga tjänster	21	5			9151	960		
	9. Övriga	45	319		41	176779	116047		
	10. Livsmedel, textil m m	23	18		417	6535	352565		
	11. Maskin, papper	53	218		546	116047	960		
	12. Offentliga tjänster	895	53	251	-327		23004		
	13. Övriga	15	15			352565	23004		
	14. Gruvor, mineralbrott	253	152	152	25	3132	2947	89	
	15. Livsmedel, textil m m	147	152	147	152	68	1199	1142	34
	16. Maskin, papper	25	874	26	874	241	3776	9375	300
	17. Offentliga tjänster	3776	9375	300	-119	8888	233403		
	18. Övriga	55	60	-3	3541	24	736370		
	19. Övriga	3010	49	127	815		177001		
20. Övriga	8670	1453	395	8888	8888	8603	1371	163	
21. Övriga	8670	1453	395	8888	8888	5894	547		
22. Övriga	8670	1453	395	8888	8888	276	6975		
23. Övriga	8670	1453	395	8888	8888	1536	251		
24. Övriga	8670	1453	395	8888	8888	796370	205715	-13742	
25. Övriga	8670	1453	395	8888	8888	472532			

National Accounts

MILJÖSTATISTIK		CO2	SO2	Nox	VOC
1. Jordbruk	15	171	2	1	1
2. Skogsbruk	37	32	12	17	17
3. Fiske	25	11	188	612	682
4. Gruvor, mineralbrott	230	224	889	2887	182
5. Livsmedel, textil m m	115	62	100	320	368
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Environm. statistics

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Environmental Accounts





# Regular publishing

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





# Non-regular publishing

- Household accounts
- Decomposition analysis
- Regional environmental accounts
- Water-, Land- , Forest accounts



# Typical users

- Ministry of the Environment and Energy; e.g. “Land accounts for biodiversity – a methodological study within ecosystem services”.
- Ministry of Enterprise and Innovation with environmental technology; e.g. “Creating statistics about environmental technology (clean tech)”
- Finance Ministry: economic instruments, modelling
- The Swedish Environmental Protection Agency: env pressure from consumption, economic instruments
- National Institute of Economic Research: model data
- Eurostat: pilots and data gathering
- Researchers: various



# Examples of questions posed

- How does environmental policy affect employment?
- What is the size and the potential of environmental goods and services?
- What was the effect of environmental tax reforms in nations?



# ... more questions

- What factors support adoption of end-of-pipe solutions and clean technology?
- How much state money is spent on environmentally intensive activities?
- What is the environmental pressure from national consumption?
- How are the driving forces of environmental pressure developing?



# New development for regular publishing in the pipeline

1. Quarterly statistics for air emissions by industry (based on quarterly energy calculations)
2. Regional data on air emissions by industry
3. Environmentally related subsidies (potentially environmentally hazardous subsidies and environmentally motivated subsidies by industry)
4. Energy accounts (Eurostats method)







# Pilots on project basis

- Environmental pressure from consumption
- Ownership of land and biodiversity
- Marine and water related environmental economy
- How to include social data to obtain an accounting system for sustainable development



# Recent assignments

- About a third of the time for additional analyses. Ca 18 assignments per year by the environmental accounts group; clients are national as well as international organizations.
- For example: The Swedish National board of Housing, Building And Planning together with KTH has assigned the environmental accounts to develop environmentally relevant indicators for buildings and factory premises. See publication list in supplemented report to the meeting.



# Research

- Statistics Sweden are leading a research project called Policy Relevant Indicators for Consumption and Environment (PRINCE). PRINCE is a three year project and is done in cooperation with the Royal Institute of Technology (KTH), the Stockholm Environment Institute, Chalmers University of Technology, the Norwegian University of Science and Technology. TNO and CML in the Netherlands.
- CREEA- project. Finalized EU FP7 research financed. Included e.g. studies of forest accounts and of environmental-economic instruments.



# EU studies on methodology

- Eurostat research support grants. These studies are used to help to further develop the statistics and provide examples for analyses.
- Private consultants that the environmental accounts have worked together with are: Sogeti (Luxembourg), ICEDD (Belgium), IEEP (UK) and SERI (Austria), Wuppertal Institute and University of Twente (Netherlands).  
The work has mostly focused on assignments to Eurostat, DG Environment, DG Clima and the EEA. E.g. on water, air, energy and material flow accounts, a pilot on classification and data searching for climate adaptation costs as well as web-tools for data presentations.





# Nordic Council of Ministers, ad hoc group complementing welfare measures

- SCB and the Ministry of the Environment and Energy, in cooperation with Denmark, Finland and Norway, to develop indicators for supplementing welfare measures, beginning with the environment.
- Results will be made public October 2015 in Reykjavík at the Nordic Council of Ministers meeting.
- Suggestion for regular Nordic Environmental accounts.



# 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.
5. We have not had many users on the asset accounts, even if we have made pilots there.





# Thanks!    [viveka.palm@scb.se](mailto:viveka.palm@scb.se)

