

## Environmental accounts

One aim of our projects has been to explore how tools like Environmental Accounting and related Input-Output Analysis can produce information useful for the development of policies on sustainable consumption and production and on the sustainable use of natural resources.

NAMEA stands for National Accounting Matrix including Environmental Accounts. It is a framework for documenting economic and environmental flows in a consistent way following the UN System of National Accounts established in 1953. At its core lie conventional economic input-output matrices — national inventories of monetary flows between economic sectors (for example between the food processing branch and the retail branch) and between them and final consumers. These inventories are then extended by adding information on material resource inputs to each sector and the pollutants they release back into the environment.

The project has compiled and analysed Environmental Accounts for eight European countries for which comprehensive data was available (Denmark, Germany, Hungary, Italy, the Netherlands, Spain, Sweden and the United Kingdom). The accounts are disaggregated to 31 distinct economic sectors. Supplementary data collected by Eurostat for a number of additional EU Member States have also been analysed.

The environmental pressures analysed in the project are: global warming potentials, acidification potentials, tropospheric ozone forming potentials and resource use.



European Environment Agency  
Kongens Nytorv 6  
1050 Copenhagen K  
Denmark

Tel.: +45 33 36 71 00  
Fax: +45 33 36 71 99

Web: [eea.europa.eu](http://eea.europa.eu)  
Enquiries: [eea.europa.eu/enquiries](http://eea.europa.eu/enquiries)

## Environmental pressures from European consumption and production

### Insights from environmental accounts



## Consumption and production in Europe

---

Unsustainable patterns of consumption and production, particularly in industrialised countries, are a major cause of global environmental degradation.

This statement made by the UN in 1992 in the ground breaking Agenda 21 was the seed of what 15 years on has become a major area of international and European policy. Sustainable Consumption and Production (SCP) — an economy-wide search for more environmentally sustainable production processes and consumption behaviour — is a key priority area in the renewed EU Sustainable Development Strategy and is the theme of a future EU Action Plan.

Beginning in 2003, the European Environment Agency (EEA) and its European Topic Centre on Resource and Waste Management (ETC/RWM) have undertaken a series of projects examining environmental pressures including the use of resources from consumption and production in selected European countries.

This brochure presents a first glimpse into these projects. The full results of the studies will be presented in a comprehensive EEA report in the beginning of 2008.

## Questions and key messages

---

*Production perspective: Which are the economic sectors in the EU contributing most to environmental pressures?*

Agriculture, electricity generation, transport services and mining are the economic sectors contributing most to environmental pressures. Moreover, while these industries emit over half an economy's total environmentally harmful emissions, they typically contribute little over 10 % to GDP.

*Consumption perspective: Which goods and services consumed in the EU cause the main direct and indirect environmental pressures?*

The demand for products meeting 'basic needs' (eating & drinking, housing & infrastructures, transport) causes the majority of direct and indirect environmental pressures along the production-consumption chain.

*Are some countries better than others at providing goods and services efficiently?*

Eco-efficiencies along the production-chain of similar product groups vary significantly from country to country, indicating room for improvement across the EU as a whole.

*Is international trade leading to a shift of environmental pressures from the EU to the rest of the world?*

The import of resource-intensive goods leads to significant material extraction in regions outside the EU, to feed European consumption. The quantity of these materials, meanwhile, is much



greater than material extracted in the EU to produce goods and services for export.

*Have recent developments in production and consumption helped to decouple environmental pressures from economic growth?*

Eco-efficiency improvements in key production sectors are typically more than offset by growth in consumption. Meanwhile consumers show little sign of shifting spending to less pressure intensive types of goods/services.

### Further information:

<http://waste.eionet.europa.eu/publications/WP2-2007>

Pawel Kazmierczyk,  
pawel.kazmierczyk@eea.europa.eu  
(European Environment Agency)

Stephan Moll, smoll@t-online.de and  
David Watson, dawat@etc.mim.dk (European  
Topic Centre on Resource and Waste  
Management)