

# Economy and Use of Environmental Resources

Tables on Environmental-Economic Accounting  
Part 1: Macroeconomic overview tables, Economic indices



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## Table of contents

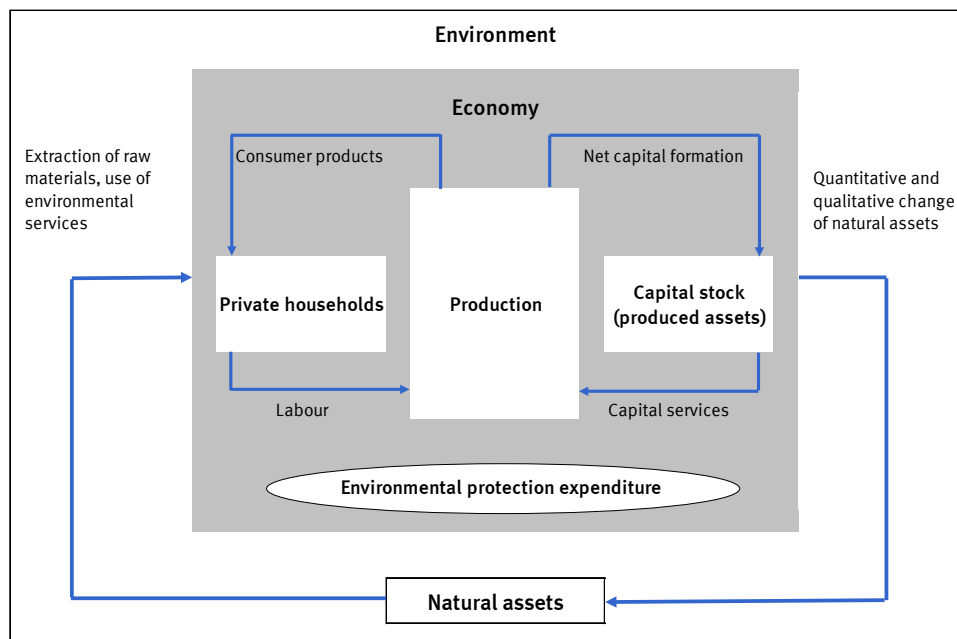
<b>Part 1</b>	<b>Chapter 1</b>	<b>Macroeconomic overview tables</b>
		Introduction
		General notes
		Glossary
	1.1	Population and economy
	1.2	Use of environmental resources for economic purposes
	1.3	Population, consumption expenditure and direct use of environmental resources by private households
	1.4	Detailed classification of material inputs (mn tonnes)
	1.5	Detailed classification of material outputs (mn tonnes)
	1.6	Environmental and economic indicators of the German Strategy for Sustainable Development
	<b>Chapter 2</b>	<b>Economic indices</b>
	2.1	Gross value added 2000 bis 2010 (at current prices, EUR mn)
	2.2	Gross value added 2000 bis 2010 (at current prices, %)
<i>Part 2</i>	<i>Chapter 3</i>	<i>Energy</i>
<i>Part 3</i>	<i>Chapter 4</i>	<i>Air emissions</i>
<i>Part 4</i>	<i>Chapter 5</i>	<i>Raw materials</i>
	<i>Chapter 6</i>	<i>Use of water</i>
	<i>Chapter 7</i>	<i>Waste water</i>
	<i>Chapter 8</i>	<i>Waste</i>
<i>Part 5</i>	<i>Chapter 9</i>	<i>Land use</i>
	<i>Chapter 10</i>	<i>Environmental protection measures</i>
<i>Part 6</i>	<i>Chapter 11</i>	<i>Transport and the environment</i>
	<i>Chapter 12</i>	<i>Agriculture and the environment</i>
	<i>Chapter 13</i>	<i>Forest accounting</i>

# 1 Environmental-Economic Accounting of the Federal Statistical Office

Environmental-Economic Accounting (EEA) describes the **interrelationship between the economy and the environment**. For its economic activities, production and consumption an economy not only uses labour and produced assets but also natural assets. Natural assets include raw materials such as sources of energy, ores, other minerals and water as well as land that serves as a location for production, consumption and various leisure activities. These parts of natural assets are used directly. Other components of natural assets are ecosystems and other natural systems such as the atmosphere. They support economic activities by absorbing and eliminating residues and pollutants arising from production and consumption, such as atmospheric emissions, waste and effluent.

Figure 1 shows the interrelationship between economy<sup>1</sup> and environment. On the one hand natural assets are used as input for the economic process. On the other hand the economy discharges residues and pollutants.

Figure 1: Interrelationship economy environment



The use of natural assets – similar to the produced capital stock – generally involves depletion, which means that the burden or **impact on the environment** causes changes in its state and/or natural assets. On the one hand, these changes are of a quantitative nature (e.g. a decreasing amount of non-renewable raw materials); on the other, they have many qualitative aspects (deteriorating air quality due to emissions of pollutants, diminished biodiversity etc.). Attempts are being made to prevent these negative changes with targeted, appropriate environmental protection measures, such as by avoiding environmental burden (e.g. desulphurising flue gas) or remedying damage that has already been done (e.g. cleaning up polluted sites). The interdependencies between the economy and the environment therefore are not restricted to showing the burdens on the environment; in fact the pattern also includes changes to the state of

<sup>1</sup> Both are shown in simplified form in the diagram.

## Introduction

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the environment brought about by pollution and the steps taken to avoid it or repair the damage.

The EEA aims to describe all three forms of interdependence between economy and environment – environmental burden, the environmental state and environmental measures. The description of these interdependencies takes as its starting point the fact, mentioned above, that a national economy not only uses labour and capital but also nature. Therefore, the basic idea is to take the commonly accepted definition of a national economy and expand it by a "factor nature". The System of National Accounts (SNA) provides a comprehensive and systematic definition of economic activity. Principally, they show monetary transactions (flows) and assets using standardised classifications. EEA were conceived as a satellite system for the national accounts, the objective of which is to extend the presentation of the economic process by a depiction of the interrelationship between the economic system and the environment. The environmental flows and inventories are almost always presented in physical units. For example, air emissions are expressed in tonnes, energy consumption in Terajoules, area used for transport and settlement purposes (land use) in square metres.

An important feature is the full compatibility of both systems – the national accounts and the EEA. The underlying concepts, definitions, distinctions, and classifications in both systems match as far as this is logically sensible and possible. This also applies and particularly so for the economic classifications used in the EEA and the SNA. Because of these common concepts, definitions, distinctions and classifications the results of the EEA can be linked internally and to the identically categorised SNA data and they can be analysed jointly. Compatibility with the national accounts permits for example to relate the environmental parameters, which are mostly shown in physical units (such as in tonnes), to the economic indices (in euros). Of particular importance here are the data on the efficiency of environmental use, expressed as an arithmetical ratio of the figure of interest (such as raw materials consumption) to the gross value added (GVA) or to the gross domestic product (GDP). With regard to the details of calculating productivities and intensities see the notes on the tables in Part 1.

The concept underlying the EEA is to express the status quo and the change in natural assets in units of money, so as to be able to determine what is known as corrected macro-economic aggregates, such as the ecological domestic product. Particularly insofar as such evaluations do not assess the quantitative decrease of resources, but refer to qualitative changes of other components, they are problematic in many respects with regard to the methods used (valuation/aggregation problems, restricted knowledge about correlation between cause and effect and considerable regional differences). That is why such calculations tend not to be carried out by the Federal Statistical Office but by scientific research institutes. Consequently, when presenting environmental pollution and the state of the environment EEA of the Federal Statistical Office is restricted to physical data.

Environmental economic accounts and national accounts describe two dimensions of sustainable development – economy and environment – and their interrelationship. Therefore they provide an important and useful data base for political discussions concerning sustainability.

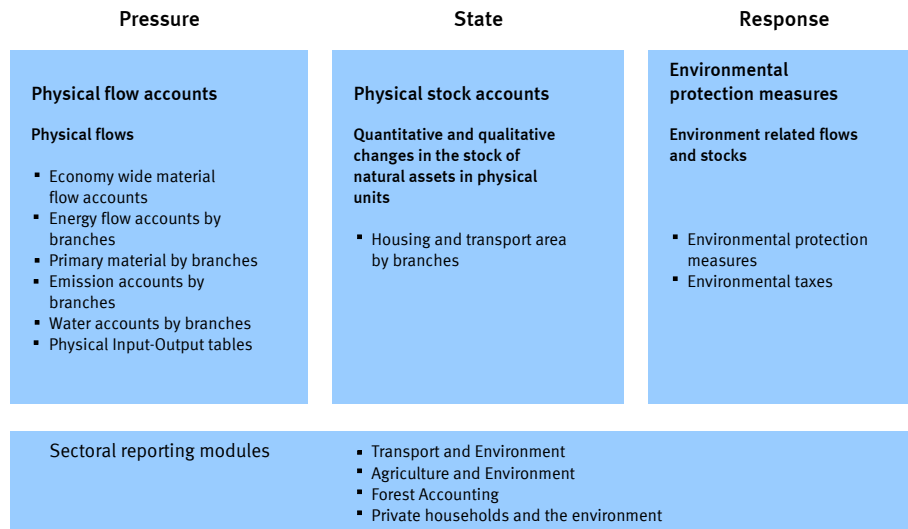
Figure 2 shows the different reporting **modules of the EEA** of the Federal Statistical Office. They reflect the internationally recognized pressure-state-response model, used to statistically show correlations between the environment and the economy. The **environmental pressures** reporting module shows the material flows listed behind it: the amount of raw materials extracted per year, the amount of pollutants emitted per year etc. This reporting module does not include produced goods or services, but raw materials extracted from nature and residual materials and hazardous substances emitted back into nature. The respective flows for each type of material are booked as

## Introduction

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consolidated quantities, in what is known as the material account, which charts the flows of material between a national economy and both the natural environment and the world's other national economies.

**Figure 2: Modules of German Environmental-Economic Accounting**



At present, the **state of the environment** reporting module of the German EEA only expresses the component of the natural capital presented by land area. Especially land use by housing and transport are in the focus of this reporting module. Looking at how much land area is used by which economic stakeholder, however, can not be realised for the time being. Landscapes and ecosystems form yet another essential component of the natural capital, which should principally be included by accounting. In Germany these aspect are dealt with by Agency for Nature Protection, not by environmental economic accounts. Displaying the stocks of mineral resources – a third aspect of the natural assets, which may be of great importance for countries rich in raw materials – has a fairly low priority as far as German EEA is concerned and has so far not been considered. A reporting module has so far only been developed for forest.

In the module **environmental protective measures**, components already included in the monetary transactions of the national accounts are shown separately and, as a rule, broken down further. Here, for example, environmentally relevant taxes, such as vehicle tax or fuel tax, are shown. Another important part of environmental protective measures consist of investment and ongoing expenditure for environmental protection in the government and manufacturing industry sectors, as well as privatised public enterprises. Contrary to the physical electric power accounts of the material and energy flow accounts and the physical asset accounts describing the state of the environment, the EEA shows the environmental protective measures in the form of monetary accounts.

The **sectoral reporting modules**, presently used for the transport, agriculture, forestry, and private households sectors, enable extending the EEA standard programme by single items for politically significant topics. For such sectors, these reporting modules provide a much more detailed picture of the complete range of interdependencies between the environment and the economy, across the EEA components mentioned above.

Typical of EEA is considering the environmental impact (removing raw materials, land use, services of the environment) of economic activities from two angles: the first question is to what extent an environmental factor enters the economic cycle or is adversely affected in production or consumption of private households. Apart from this it is however also important to know what quantities of environmental factors are being employed and for what final purpose. This second assessment not only assigns directly consumed factor components to a specific category of use (such as the consumption activities of private households), but also those quantities needed to manufacture all the goods consumed by the households (at all stages of the production process) and therefore consumed, as it were, "indirectly" by the households. This contrasting of **direct and indirect parameters** is comparable with the presentation of origin and use in the national accounts, and applies to numerous subjects of EEA.

"Upstream" indirect consumption cannot be derived from the accounting system directly. Allocation takes place through a model approach based on input-output tables (IOT). IOTs are central elements of the national accounts; they include details of the upstream interdependencies between the individual production sectors, to name just one example.

The concept of Environmental Economic Accounts was established and further developed at **international level** by the United Nations, in particular, and adopted in February 2012 as an international statistical standard "System of Integrated Environmental and Economic Accounting (SEEA Central Framework 2012)"<sup>2</sup>. In Germany substantial sections of the environmental economic accounts are drawn up based on these conceptual proposals in the SEEA.

<sup>2</sup> European Commission/Food and Agriculture Organisation/International Monetary Fund/Organisation for Economic Co-Operation and Development/ United Nations/World Bank (2012): System of Environmental-Economic Accounting – Central Framework, White cover publication, pre-edited text subject to official editing.

## 2 Overview on classification

### 2.1 Classification of homogeneous branches

No.	Branches	Classification of products by activity (CPA) in the European Community	
		Designation	No.
1	Products of agriculture, forestry and fishing	Products of agriculture, forestry and fishing	A
2	Products of agriculture, hunting and related services	Products of agriculture, hunting and related services	01
3	Products of forestry, logging and related services	Products of forestry, logging and related services	02
4	Fish and other fishing products; aquaculture products	Fish and other fishing products; aquaculture products; support services to fishing	03
5	Mining and quarrying	Mining and quarrying	B
6	Coal and lignite	Coal and lignite	05
7	Crude petroleum and natural gas	Crude petroleum and natural gas	06
8	Metal ores, other mining and quarrying products	Metal ores, other mining and quarrying products; mining support services	07 – 09
9	Manufactured products	Manufactured products	C
10	Food products; beverages; tobacco products	Food products; beverages; tobacco products	10 – 12
11	Textiles; wearing apparel; leather and related products	Textiles; wearing apparel; leather and related products	13 – 15
12	Wood and products of wood and cork, except furniture	Wood and products of wood and cork, except furniture; articles of straw and plaiting materials	16
13	Paper and paper products	Paper and paper products	17
14	Printing and recording services	Printing and recording services	18
15	Coke and refined petroleum products	Coke and refined petroleum products	19
16	Coke oven products	Coke oven products	19.1
17	Refined petroleum products	Refined petroleum products	19.2
18	Chemicals and chemical products	Chemicals and chemical products	20
19	Basic pharmaceutical products and pharmaceutical preparations	Basic pharmaceutical products and pharmaceutical preparations	21

## Introduction

No.	Branches	Classification of products by activity (CPA) in the European Community	
		Designation	No.
20	Rubber and plastic products	Rubber and plastic products	22
21	Other non-metallic mineral products	Other non-metallic mineral products	23
22	Glass and glass products	Glass and glass products	23.1
23	Refractory products, cut, shaped and finished stone	Refractory products; clay building materials; other porcelain and ceramic products; cement, lime and plaster; articles of concrete, cement and plaster; cut, shaped and finished stone; other non-metallic mineral products	23.2 – 23.9
24	Basic metals	Basic metals	24
25	Basic iron and steel and ferro-alloys, other products of steel	Basic iron and steel and ferro-alloys; tubes, pipes, hollow profiles and related fittings of steel; other products of the first processing of steel	24.1 – 24.3
26	Basic precious and other non-ferrous metals	Basic precious and other non-ferrous metals	24.4
27	Casting services of metal	Casting services of metal	24.5
28	Fabricated metal products, except machinery and equipment	Fabricated metal products, except machinery and equipment	25
29	Computer, electronic and optical products	Computer, electronic and optical products	26
30	Electrical equipment	Electrical equipment	27
31	Machinery and equipment n. e. c.	Machinery and equipment n. e. c.	28
32	Motor vehicles, trailers and semi-trailers	Motor vehicles, trailers and semi-trailers	29
33	Other transport equipment	Other transport equipment	30
34	Furniture, other manufacture goods	Furniture, other manufacture goods	31 – 32
35	Repair and installation services of machinery and equipment	Repair and installation services of machinery and equipment	33
36	Electricity, gas, steam and air conditioning	Electricity, gas, steam and air conditioning	D
37	Electricity, transmission and distribution services, steam	Electricity, transmission and distribution services; steam and air conditioning supply services	35.1, 35.3



## Introduction

No.	Branches	Classification of products by activity (CPA) in the European Community	
		Designation	No.
38	Manufactured gas	Manufacture gas; distribution services of gaseous fuels through mains	35.2
39	Water supply; sewerage, waste management and remediation services	Water supply; sewerage, waste management and remediation services	E
40	Natural water; water treatment and supply services	Natural water; water treatment and supply services	36
41	Sewerage services; waste collection and material recovery services	Sewerage services; waste collection and material recovery services	37 – 39
42	Sewerage services, sewerage sludge	Sewerage services, sewerage sludge	37
43	Waste collection, treatment and disposal services	Waste collection, treatment and disposal services; materials recovery services; remediation services and other waste management services	38 – 39
44	Constructions and construction works	Constructions and construction works	F
45	Building and building construction works	Building and building construction works	41 – 42
46	Specialised construction works	Specialised construction works	43
47	Wholesale and retail trade services; repair services of motor vehicles	Wholesale and retail trade services; repair services of motor vehicles and motorcycles	G
48	Wholesale and retail trade and repair services of motor vehicles	Wholesale and retail trade and repair services of motor vehicles and motorcycles	45
49	Wholesale trade services, except of motor vehicles and motorcycles	Wholesale trade services, except of motor vehicles and motorcycles	46
50	Retail trade services, except of motor vehicles and motorcycles	Retail trade services, except of motor vehicles and motorcycles	47
51	Transportation and storage services	Transportation and storage services	H
52	Passenger rail transport services, freight rail transport services	Passenger rail transport services, interurban; freight rail transport services	49.1 – 49.2
53	Other passenger land transport services, transport services via pipeline	Other passenger land transport services; freight transport services by road and removal services; transport services via pipeline	49.3 – 49.5

## Introduction

No.	Branches	Classification of products by activity (CPA) in the European Community	
		Designation	No.
54	Water transport services	Water transport services	50
55	Air transport services	Air transport services	51
56	Warehousing and support services for transportation	Warehousing and support services for transportation	52
57	Postal and courier services	Postal and courier services	53
58	Accommodation and food services	Accommodation and food services	I
59	Information and communication services	Information and communication services	J
60	Financial and insurance services	Financial and insurance services	K
61	Real estate services	Real estate services	L
62	Professional, scientific and technical services	Professional, scientific and technical services	M
63	Administrative and support services	Administrative and support services	N
64	Public administration and defence services	Public administration and defence services	O
65	Education services	Education services	P
66	Human health and social work services	Human health and social work services	Q
67	Other services	Arts, entertainment and recreation services; other services; services of households as employers; undifferentiated goods and services produced by households for own use	R – T
68	<b>All homogeneous branches</b>	<b>All homogeneous branches</b>	

## Introduction

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### 2.2 Classification of industries

No.	Industries	Classification of economic activities, 2008 edition	
		Designation	No.
1	Agriculture, forestry and fishing	Agriculture, forestry and fishing	A
2	Crop and animal production, hunting and related services	Crop and animal production, hunting and related services	01
3	Forestry and logging	Forestry and logging	02
4	Fishing and aquaculture	Fishing and aquaculture	03
5	Mining and quarrying	Mining and quarrying	B
6	Mining of coal and lignite	Mining of coal and lignite	05
7	Extraction of crude petroleum and natural gas	Extraction of crude petroleum and natural gas	06
8	Mining of metal ores, other mining and quarrying	Mining of metal ores; other mining and quarrying; mining support service activities	07 – 09
9	Manufacturing	Manufacturing	C
10	Manufacture of food products, beverages and tobacco products	Manufacture of food products; manufacture of beverages and manufacture tobacco products	10 – 12
11	Manufacture of textiles, wearing apparel, leather	Manufacture of textiles; manufacture of wearing apparel; manufacture of leather and related products	13 – 15
12	Manufacture of wood and products of wood and cork, except furniture	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	16
13	Manufacture of paper and paper products	Manufacture of paper and paper products	17
14	Printing and reproduction of recorded media	Printing and reproduction of recorded media	18
15	Manufacture of coke and refined petroleum products	Manufacture of coke and refined petroleum products	19
16	Manufacture of coke oven products	Manufacture of coke oven products	19.1
17	Manufacture of refined petroleum products	Manufacture of refined petroleum products	19.2
18	Manufacture of chemicals and chemical products	Manufacture of chemicals and chemical products	20

## Introduction

No.	Industries	Classification of economic activities, 2008 edition	
		Designation	No.
19	Manufacture of basic pharmaceutical products	Manufacture of basic pharmaceutical products and pharmaceutical preparations	21
20	Manufacture of rubber and plastic products	Manufacture of rubber and plastic products	22
21	Manufacture of other non-mineral products	Manufacture of other non-mineral products	23
22	Manufacture of glass and glass products	Manufacture of glass and glass products	23.1
23	Manufacture of refractory products, cutting, finishing of stone	Manufacture of refractory products; manufacture of clay building materials; manufacture of other porcelain and ceramic products; manufacture of cement, lime and plaster; manufacture of articles of concrete, cement and plaster; cutting, shaping and finishing of stone; manufacture of abrasive products and non-metallic mineral products n. e. c.	23.2 – 23.9
24	Manufacture of basic metals	Manufacture of basic metals	24
25	Iron and steel	Manufacture of basic iron and steel and ferro-alloys; manufacture of tubes, pipes, hollow profiles and related fittings of steel; manufacture of other products of first processing of steel	24.1 – 24.3
26	Manufacture of basic precious and non-ferrous metals	Manufacture of basic precious and other non-ferrous metals	24.4
27	Casting of metals	Casting of metals	24.5
28	Manufacture of fabricated metal products, except machinery	Manufacture of fabricated metal products, except machinery and equipment	25
29	Manufacture of computer, electronic and optical products	Manufacture of computer, electronic and optical products	26
30	Manufacture of electrical equipment	Manufacture of electrical equipment	27
31	Manufacture of machinery and equipment n. e. c.	Manufacture of machinery and equipment n. e. c.	28
32	Manufacture of motor vehicles, trailers and semi-trailers	Manufacture of motor vehicles, trailers and semi-trailers	29

## Introduction

No.	Industries	Classification of economic activities, 2008 edition	
		Designation	No.
33	Manufacture of other transport equipment	Manufacture of other transport equipment	30
34	Manufacture of furniture; other manufacturing	Manufacture of furniture; other manufacturing	31 – 32
35	Repair and installation of machinery and equipment	Repair and installation of machinery and equipment	33
36	Electricity, gas, steam and air conditioning supply	Electricity, gas, steam and air conditioning	D
37	Electric power generation, transmission and distribution, steam	Electric power generation, transmission and distribution; steam and air conditioning supply	35.1/ 35.3
38	Manufacture of gas; distribution of gaseous fuels through mains	Manufacture of gas; distribution of gaseous fuels through mains	35.2
39	Water supply, sewerage, waste management and remediation activities	Water supply, sewerage, waste management and remediation activities	E
40	Water collection, treatment and supply	Water collection, treatment and supply	36
41	Sewerage, waste collection, treatment and disposal activities	Sewerage, waste collection, treatment and disposal activities; material recovery; remediation activities and other waste management services	37 – 39
42	Sewerage	Sewerage	37
43	Waste collection, treatment and disposal activities	Waste collection, treatment and disposal activities; material recovery; remediation activities and other waste management services	38 – 39
44	Construction	Construction	F
45	Construction of buildings, civil engineering	Construction of buildings, civil engineering	41 – 42
46	Specialised construction activities	Specialised construction activities	43
47	Wholesale and retail trade; repair of motor vehicles and motorcycles	Wholesale and retail trade; repair of motor vehicles and motorcycles	G
48	Wholesale and retail trade and repair of motor vehicles	Wholesale and retail trade and repair of motor vehicles and motorcycles	45
49	Wholesale trade, except of motor vehicles and motorcycles	Wholesale trade, except of motor vehicles and motorcycles	46

## Introduction

No.	Industries	Classification of economic activities, 2008 edition	
		Designation	No.
50	Retail trade, except of motor vehicles and motorcycles	Retail trade, except of motor vehicles and motorcycles	47
51	Transportation and storage	Transportation and storage	H
52	Passenger rail transport, interurban; freight rail transport	Passenger rail transport, interurban; freight rail transport	49.1 – 49.2
53	Other passenger land transport; transport via pipeline	Other passenger land transport; freight transport by road and removal services; transport via pipeline	49.3 – 49.5
54	Water transport	Water transport	50
55	Air transport	Air transport	51
56	Warehousing and support activities for transportation	Warehousing and support activities for transportation	52
57	Postal and courier activities	Postal and courier activities	53
58	Accommodation and food service activities	Accommodation and food service activities	I
59	Information and communication	Information and communication	J
60	Financial and insurance activities	Financial and insurance activities	K
61	Real estate activities	Real estate activities	L
62	Professional, scientific and technical activities	Professional, scientific and technical activities	M
63	Administration and support service activities	Administration and support service activities	N
64	Public administration and defence; compulsory social security	Public administration and defence; compulsory social security	O
65	Education	Education	P
66	Human health and social work activities	Human health and social work activities	Q
67	Other service activities	Arts, entertainment and recreation; other service activities; activities of households and employers; undifferentiated goods and service producing activities of households for own use	R – T
68	<b>All industries</b>	<b>All industries</b>	

### 3 Abbreviations and symbols

#### Abbreviations – general

NH <sub>3</sub>	=	ammonia
CH <sub>4</sub>	=	methane
CO <sub>2</sub>	=	carbon dioxide
NO <sub>2</sub>	=	nitrogen dioxide
NO <sub>x</sub>	=	nitric oxides (= nitrogen dioxide + nitrogen monoxide)
N <sub>2</sub> O	=	nitrous oxide (= laughing gas)
NMVO	=	volatile organic compounds (not including methane)
SO <sub>2</sub>	=	sulphur dioxide
SF <sub>6</sub>	=	sulphur hexafluoride
PFCs	=	perfluorocarbons
HFCs	=	hydrofluorocarbons
H <sub>2</sub> O	=	water
NE	=	Non-ferrous metals
No.	=	number
Incl.	=	including
EB	=	Energy balance
EEA	=	Environmental-Economic Accounting
SNA	=	System of National Accounts

#### Abbreviations – units of measure

Equ.	=	equivalent		
EUR	=	Euro		
J	=	Joule	1 J	= 1 watt seconds (Ws)
kJ	=	kilojoules	1 kJ	= 10 <sup>3</sup> J
MJ	=	megajoules	1 MJ	= 10 <sup>6</sup> J
GJ	=	gigajoules	1 GJ	= 10 <sup>9</sup> J
TJ	=	terajoules	1 TJ	= 10 <sup>12</sup> J

## Introduction

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PJ	=	petajoule	1 PJ	=	$10^{15}$ J
Kg	=	kilogram			
t	=	tonnes			
mn	=	million			
bn	=	billion			
MWh	=	megawatt hour			
h	=	hour			
m <sup>3</sup>	=	cubic metre			
%	=	per cent			
m <sup>2</sup>	=	square metre			
km <sup>2</sup>	=	square kilometre			
ha	=	hectare	1 ha	=	10 000 m <sup>2</sup>
t-km	=	ton-kilometre			
p-km	=	passenger-kilometre			
o. b.	=	without bark			

### Explanation of symbols

0	=	less than half of 1 in the last digit occupied, but more than zero
...	=	data will be available later
X	=	cell blocked for logical reasons
.	=	numerical value unknown or not to be disclosed
-	=	no figures or magnitude zero

Deviations in the totals may occur because of rounding off.

### Note

Since the release of the tables in 2011 homogeneous branches (WZ 2008) are presented in a break down comparable to the statistical classification of economic activities of the European Community. Until 2010, the tables were calculated according the WZ 1993 respectively on the basis of the WZ 2003.

The intensities are shown in the tables 2011 only for the years from 2000 onwards, as data on gross value added by homogeneous branches after the revision of the national accounts are available only as from the reference year 2000.



## General notes

### Chapter 1: Macroeconomic overview tables

The goal of Environmental-Economic Accounting is to describe in particular the interaction between the economy and the environment. The starting point are the national accounts, which are supplemented by the Environmental-Economic Accounting by the environmentally-relevant elements.

In the analysis of the state of the economy, a major role is played by the contribution of the production factors labour and capital to production. Environmental-Economic Accounting additionally includes the production inputs from the environment. This comprises not only material inputs (raw materials) from the environment, but also services from the environment such as the absorption of residuals and pollutants, and the provision of land on which to perform economic activities. A direct measurement of the input of services from the environment at macroeconomic level is currently possible neither in monetary nor in physical units. For this reason, this input is measured indirectly, i. e. approximately using the residuals and the volume of pollutants which are absorbed by the environment and the area used. Since the contribution made by the environment cannot be summarised in one single number, productivity figures for important individual elements of nature are formed. The services from the environment for economic purposes is as a rule a burden on the environment which is closely linked to a quantitative or qualitative worsening of the state of the environment.

For the economic use of the following direct input factors in the production process and in consumption, volume trends and productivity figures are depicted in Environmental-Economic Accounting:

#### The environment as a source of resources

Energy	Energy consumption as consumption of primary energy (petajoules, (PJ))
Raw materials	Consumption of raw materials as withdrawal of abiotic raw materials used from the domestic environment plus imported abiotic goods (million tonnes)
Water withdrawal	Consumption of water as withdrawal of water from the environment (million m <sup>3</sup> )

#### The environment as a sink for residuals and pollutants

Greenhouse gases	Burden on the environment caused by the emission of greenhouse gases, here: Carbon dioxide (CO <sub>2</sub> ), Methane (CH <sub>4</sub> ), Nitrous oxide ("laughing gas", N <sub>2</sub> O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF <sub>6</sub> ) million tonnes CO <sub>2</sub> equivalents according to the global Warming Potential Values (calculation of productivities only for CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O)
Air pollutants	Burden on the environment caused by the emission of Sulphur dioxide (SO <sub>2</sub> ), Nitric oxides (NO <sub>x</sub> ), Ammonia (NH <sub>3</sub> ) and volatile organic compounds not including methane (NMVOC) (1,000 tonnes)
Water discharge	Burden on the environment caused by the discharge of used water into the environment (million m <sup>3</sup> )
Waste	Burden on the environment caused by the deposit of waste (1,000 tonnes)

#### Structural use of the environment

Land	Land use in the form of housing and transport area (km <sup>2</sup> )
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#### Use of economic factors

Labour	Volume of labour measured by hours worked (billion hours)
Capital	Use of capital as depreciation (billion Euro)

In order to analyse the links between the economy and the environment it is necessary both to present the absolute parameters and to assess further indicators through which the various parameters are interrelated. It is common practice in the economy to relate economic performance (gross value added) to the use of labour or capital as production factors. In the same way, in Environmental-Economic Accounting economic capacity is related

to the individual volumes of environmental input factors measured in physical units. In this way, so-called productivities can be used as a measure of the efficiency of the use of various elements of the environment as a production factor.

### **Productivity, Intensity – indicators on the efficiency of the use of factor input**

The productivity of an input factor indicates how much economic capacity is produced with the use of a unit of this factor.

$$\text{productivity} = \frac{\text{gross domestic product}}{\text{input factor}}$$

Productivity expresses how efficiently an economy uses the input of labour, capital and environmental inputs. For example, with an increase in gross domestic product and constant use of an input factor results in a productivity increase. These factors are not directly comparable with one another because of their different characteristics and functions. The analysis for longer periods may however indicate how the ratio of these factors changes to one another.

Furthermore, one should note that by calculating productivities in this way total output from the economic activity is exclusively related to the respective production factor, although the product is the result of the interaction of all production factors. The productivities ascertained can hence only serve as a rough aid to orientation.

At the level of industries gross value added (GVA) is referred to in order to calculate the efficiency of factor utilisation. If the economic performance appears in the fraction as the denominator it is an "intensity figure", if the gross value added is in the numerator the ratio is a "productivity figure". For raw materials and energy the relevant (macroeconomic) productivity is used as an indicator within the context of the sustainable development strategy of the German Federal Government. Intensities are calculated in EEA in order to facilitate comparison between the use of environmental factors of different sectors.

If productivity or intensity is observed for a longer period it is necessary to carry out a price adjustment of the monetary figures at current prices. Since 2005 the method of price adjustment has changed in the calculations of the national accounts. Following the revision of the SNA the previous fixed-price basis was abolished in favour of a previous year price basis. Data given in constant prices (e. g. "in 1995 prices") therefore belong to the past. Price-adjusted details in the national accounts since then have been provided in the form of chained data, in which volume indicators on a previous year price basis are linked to one another for a range of years and chained to a reference year (e.g. 2000). Price adjusted figures of gross value added of industries have been estimated for purposes of the Environmental-Economic Accounting.

Environmental data on private households has been compiled annually in a comprehensive way since 2006 in the sectoral reporting module "Private households and environment". Based on the results of Environmental-Economic Accounting and other official and unofficial data sources details are provided for consumer expenditure, housing area, energy use, carbon dioxide emissions, water and sewage water. Table 1.3 of the EEA table volume provides an overview of all the household related data.

The data presented are a result of various calculations within the material and energy flow accounts: the energy flow accounts, the water accounts, emission calculation, area survey and waste statistics. The level of private consumption expenditure (price-adjusted) is another important parameter for direct use of environmental factors by private households. For the area of "housing" calculations are performed, in which data such as the number of inhabitants, the number of households, the living area and the number of residential buildings are used as well as the energy use of households. In addition, the reporting module contains results for greenhouse gas emissions and the land use of food products.

For tables 1.4 and 1.5 see notes in part 4 "Raw materials".

The national strategy for sustainable development adopted by the German Federal Government measures the effectiveness of policy measures to implement the strategy using a set of sustainability indicators. These indicators concern 21 selected subject areas aimed at describing aspects of intergeneration equity, quality of life, social cohesion and society's international responsibility. Most of the indicators are linked to target values and target years specified by policy. At two-year intervals the trend of the indicators is described and analysed in an Indicator Report published by the Federal Statistical Office (last 2012) and an accompanying data compendium. The data compendium includes calculation rules and additional background data on the indicators. The major portion of the data material the indicators are based on is taken from official statistics (e. g. national accounts, environmental-economic accounts, land survey, education statistics, traffic statistics, agricultural statistics, microcensus, children and young people's support statistics etc.). Information from other external sources like federal ministries and their associated offices, from special working groups and other bodies, are added.

Table 1.6 includes the time series of 17 selected indicators of sustainability strategy relating to aspects of the environment and the economy. For the majority of these indicators the Federal Statistical Office has a fairly comprehensive database from national and environmental economic accounts available, which facilitates more extensive analyses. The indicators for this table are also updated between the years of publication of the Indicator Reports, and updates are made available on the Internet also.

The time series appear in various dimensions, partly as indices with indicators for various starting years (1990, 1994, 1999), partly as proportions in %, partly in physical units and partly on a monetary basis. With the exception of details of the GDP itself, composed indicators (such as energy or raw material productivity) also appear in the Indicator Report as segmented rows (for example energy consumption or resource consumption and GDP), to ensure the highest possible level of transparency.

Additional calculations to table 1.6 on the success of the strategy can be taken from the appendix of the aforementioned Indicator Report. These calculations take into account the trend development of the indices towards the fixed targets. The Indicator Report and the data compendium are available at DESTATIS:

[www.destatis.de/EnvironmentalEconomicAccounting.html](http://www.destatis.de/EnvironmentalEconomicAccounting.html)

## Chapter 2: Economic indices

The calculation of gross value added (GVA) for industries was converted to the WZ 2008 (Classification of Economic Activities, 2008 edition) (previously WZ-93 or 2003). For homogeneous branches results at current prices are available for the years 2000 to 2007. For 2008 to 2010, gross value added was taken from the input-output tables. For the year 2011 an estimate was made based on data for industries.

For the years 2000 to 2011 price-adjusted values for GVA for homogeneous branches were calculated by means of a single deflator for the GVA. The deflator was compiled with reference to total GVA at current prices and total volume of GVA. Volume data for individual homogeneous branches were calculated by dividing the figures on GVA at current prices with the deflator of total GVA.

## Glossary

<b>Air pollution</b>	The following substances or substance classes are considered to be air pollutants for the purpose of this indicator: sulphur dioxide (SO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ), ammonia (NH <sub>3</sub> ), non-methane volatile organic compounds (NMVOC). Unweighted average of the indices of the four air pollutants referred to.
<b>Built-up area and transport infrastructure, expansion</b>	Average daily built-up area and transport infrastructure expansion. Determination by the division of the built-up area and transport infrastructure expansion (in hectares) in a defined period of time (one year or four years) by the number of days (365/366 or 1,461). The moving four-year average is determined in each case by the development of this area in the relevant year and the preceding three years. The data for one year is currently influenced by external effects (the public land survey registers are being reorganised), so that the moving four-year average gives a better picture.
<b>Depreciation</b>	Loss in value of fixed assets due to normal wear and out of economic reasons.
<b>Domestic final consumption expenditure of households</b>	Household final consumption expenditure consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant and including consumption goods and services acquired abroad.
<b>Energy consumption</b>	Energy consumption is the difference between the quantity of energy used in an economic sector and the quantity passed on by that sector to downstream sectors. Generally, the quantity of energy used is entirely consumed in the process of production and consumption activities of the sector (e.g. to run machines, equipment and vehicles or for room heating) and finally discharged into the environment in the form of heat.
<b>Energy productivity</b>	Energy productivity expresses how much gross domestic product (in euros adjusted for price changes) is generated per unit of primary energy used (in petajoules).
<b>Exports</b>	Exports of goods and services consist of sales, barter, or gifts and grants, of goods and services from residents to non-residents.
<b>Government debt</b>	The national debt level as defined in the Maastricht Treaty as a measure of government debt in relation to the nominal GDP.
<b>Greenhouse gas emissions</b>	Emissions of the following greenhouse gases (substances or substance groups) compliant with the Kyoto Protocol (excluding emissions from land use changes and forestry (LULUCF) and excluding emissions from the energy utilisation of biomass): carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), partly hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulphur hexafluoride (SF <sub>6</sub> ). The base year is 1990 for CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O and 1995 for HFC, PFC, and SF <sub>6</sub> . Calculations are based on the database Zentrales System Emissionen (Central System of Emissions - ZSE) of the Federal Environment Agency taking additional statistical energy information into account. Indicators are calculated in accordance with territorial principle (emissions on German territory, in other words including foreign companies located in Germany and excluding emissions from German companies located abroad).
<b>Gross domestic product</b>	The gross domestic product (GDP) is a measure of the economic performance of a national economy over a given period.

<b>Gross fixed capital formation</b>	Gross fixed capital formation (at current prices) in relation to the nominal gross domestic product (GDP) also referred to as investment ratio. This includes investments in buildings (residential buildings, non-residential buildings), equipment (machinery, vehicles, tools) and other assets (intangible assets, such as software and copyrights, property transfer costs, production livestock).
<b>Gross value added</b>	Gross Value Added (GVA) describes the added value of goods produced in the production process (gross output minus intermediate consumption).
<b>Homogeneous branches</b>	Economic sectors in the input-output tables. Homogeneous branches are constructed in the input-output accounts by pure functional criteria. They are defined by the output of a certain commodity group. Homogeneous branches rely solely on the production of a certain commodity group and vice versa all of it is produced only by one homogeneous branch.
<b>Housing and transport area</b>	The housing and transport area includes building and adjacent open area, operating area (except exploitation area), recreation area, cemetery and transport area. Housing and transport area and sealed area cannot be considered identical since housing and transport area may also include areas that are neither housing nor sealed. Estimates reveal a degree of sealing of 43% to 50% for housing and transport areas. Even recreation areas have sealed areas, for example sports grounds.
<b>Imports</b>	Imports of goods and services consist of purchases, barter, or receipts of gifts or grants, of goods and services by residents from non-residents.
<b>Intensity of goods transport</b>	Specification: Domestic goods transport performance (in tonne-kilometres) / gross domestic product (price-adjusted). The term transport covers any conveyance of items and all supplementary domestic services (including air transport and local transport by German lorries up to 50 km).
<b>Intensity of passenger transport</b>	Specification: Passenger transport performance (in passenger kilometres) / gross domestic product (price-adjusted). The term transport covers any conveyance of persons and all supplementary domestic services (including air transport).
<b>National deficit</b>	Annual national deficit (or national financing balance), calculated from national revenue less national expenditure (by the Federal Government, the <i>Länder</i> , municipalities and social security funds), itemised under national accounts as a percentage of the nominal gross domestic product. Proceeds from UMTS auctions in the year 2000 are not included.
<b>Nitrogen surplus</b>	Nitrogen surplus in kilogram per hectare of land used for agriculture, calculated from nitrogen input (from fertilisers, atmospheric deposition, biological nitrogen fixation, seed and plant material, feedstuff from domestic production and from imports) minus nitrogen output (through crop and animal market products leaving the agricultural sector). The overall balance is calculated on the basis of the "farm-gate model". Nitrogen flows in the domestic cycle - with the exception of domestic feed production - are not shown. The moving three-year average is calculated from the total balance of the given year, the previous year and the following year.

<b>Organic farming</b>	Farmland used for organic farming subject to the control procedure of the EU regulations on organic farming (EC Regulation No. 834/2007 and provisions concerning its implementation in EC Regulation No. 889/2008), as a proportion of all the farmland in Germany. It includes both the areas completely devoted to organic farming as well as those still under conversion. The results of official statistics are used. For methodological reasons (among other things data collection thresholds, time of survey) they differ slightly from the data provided annually by the Federal Office for Agriculture and Food.
<b>Primary energy consumption</b>	Domestic primary energy consumption is calculated from the sum of all primary energy sources generated domestically and all imported energy sources less energy exports (and excluding offshore bunkering). In terms of use, this is equivalent to total energy used for energy purposes (final energy consumption and own consumption by energy sectors) and for non-energy purposes (e. g. in the chemical industry), losses incurred through domestic energy conversion, losses from flaring and distribution, as well as statistical differences reported in energy balance sheet.
<b>Rail transport and inland freight water transport</b>	Share of rail transport as well as share of inland freight water transport in the total domestic goods transport performance excluding local haulage by German lorries up to 50 km.
<b>Raw materials</b>	In Environmental-Economic Accounts (EEA) raw materials are those materials that are those materials occurring unprocessed by humans in the natural environment.
<b>Raw material productivity</b>	Raw material productivity expresses how much gross domestic product (in euros, adjusted for price changes) is obtained per tonne of abiotic primary material. The (non-renewable) raw materials withdrawn from the domestic environment – not counting agricultural and forestry products – as well as all imported abiotic materials (raw materials, semi-finished and finished products) are considered to be abiotic primary material.
<b>Renewable energy</b>	Renewables include, among others, hydropower, wind power on land and at sea, solar energy and geothermal energy, but also biomass such as biogenic solid fuels, biogas and biogenic wastes. <i>Share of renewable energy sources in final energy consumption:</i> Final energy is generated subject to energy loss through conversion from primary energy and is directly available to the consumer. <i>Share of electricity from renewable energy sources in electricity consumption:</i> (comprising net electricity supply of the country, exchange balance with other countries, own electricity consumption of power plants and grid losses).
<b>Resident concept</b>	The resident concept is a concept used in the National Accounts and the Environmental Economic Accounting (EEA) for the recording of economic activities. In that concept the residents of a certain territory are determined as recording units. In the EEA this concept for example is used for the recording of energy consumption or air emissions.
<b>Species diversity and landscape quality</b>	With reference to the projected target value of 100 that is to be reached by 2015, the indicator shows the state of development for 51 selected bird species in the form of an index (measured in % of target value, degree of target achievement). The bird species represent the most important landscape and ecosystem types in Germany (10 species each for the sub-indicators agricultural land, settlements, inland waters, coasts and seas, 11 species for forest; temporarily excluding the Alps due to the unreliable data basis). The stock per species is calculated annually from the results of bird monitoring programmes and related to the size of the defined target value. The results of the spatially representative and statistically reliable monitoring of common breeding species started in 2004 is incorporated in the calculation. More than 1,400 sample areas were recorded in 2011. The historical values for 1979 and 1975 in comparison, have been reconstructed. The indicator is also adopted for the National Strategy on Biological Diversity.
<b>Structural deficit</b>	Annual structural deficit as a percentage of GDP. This is the part of annual national deficit which cannot be attributed to economic fluctuations and temporary effects. The principle of the structurally balanced budget (debt brake) is laid down in German Basic Law ( <i>Grundgesetz</i> ) (Articles 109 and 115) and relates to the European Stability and Growth Pact.

<b>Waste</b>	Solid waste covers discarded materials that are no longer required by the owner or user.
<b>Waste water</b>	Waste water is used water, typically discarded into the sewage system. It contains matter and bacteria in solution or suspension.
<b>Waste water discharged into nature</b>	Water discharged into nature includes direct and indirect water discharge of industries and private households as well as water losses, evaporation and rain and infiltration water.
<b>Withdrawal of water from nature</b>	Withdrawal of water from nature is the direct abstraction of ground water, surface water or spring water and bank filtrate.





Table 1.1: Population <sup>1)</sup> and economy

No.	Specification	Unit	1991	1995	2000	2001	2002
1	Inhabitants 2).....	mn	80.0	81.7	82.2	82.3	82.5
2	Active population.....	mn	41.0	41.1	42.9	42.9	43.0
3	Persons in gainful employment (national concept).....	mn	38.9	37.9	39.8	39.7	39.5
4	Unemployed.....	mn	2.2	3.2	3.1	3.2	3.5
5	in % of active population.....	%	5.3	7.9	7.3	7.4	8.2
6	Domestic final consumption expenditure of households at current prices.....	EUR bn	856.7	1,019.8	1,143.4	1,182.8	1,187.0
7	Domestic final consumption expenditure of households .....	Index 2005 = 100	85.4	90.5	98.1	99.9	98.9
8	Hours worked.....	bn hours	60.3	58.0	58.0	57.4	56.7
9	per person in gainful employment (domestic concept).....	hours	1,553.5	1,528.0	1,452.0	1,441.9	1,430.9
10	Consumption of fixed capital at current prices.....	EUR bn	249.2	309.6	355.2	367.0	375.2
11	Consumption of fixed capital in 2005 prices.....	EUR bn	242.8	280.2	323.9	335.0	343.9
12	Gross domestic product total, price-adjusted, chain-linked index.....	Index 2005 = 100	84.1	88.4	97.2	98.8	98.9
13	per person in gainful employment (domestic concept).....	Index 2005 = 100	85.2	91.6	95.8	97.6	98.1
14	per hour worked.....	Index 2005 = 100	77.4	84.6	93.1	95.6	96.8
15	per inhabitants.....	Index 2005 = 100	86.7	89.3	97.5	99.0	98.8
Memorandum item:							
16	Persons in gainful employment (domestic concept).....	mn	38.8	38.0	39.9	39.8	39.6

1) Annual averages are used for the data on population and employment.

2) Data on the population projection are based on previous censuses.

**Table 1.1: Population <sup>1)</sup> and economy**

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	No.
82.5	82.5	82.5	82.4	82.3	82.1	81.9	81.8	81.8	81.9	82.1	1
43.0	43.4	43.8	43.8	43.9	43.9	44.1	43.9	44.0	44.3	44.5	2
39.1	39.2	39.2	39.6	40.3	40.8	40.8	41.0	41.5	42.0	42.2	3
3.9	4.2	4.6	4.2	3.6	3.1	3.2	2.9	2.5	2.3	2.3	4
9.1	9.6	10.4	9.7	8.2	7.1	7.3	6.7	5.7	5.2	5.1	5
1,207.0	1,231.4	1,258.3	1,294.8	1,313.9	1,341.1	1,336.4	1,372.9	1,430.6	1,460.0	1,486.1	6
98.6	99.4	100.0	101.8	101.6	102.0	102.1	103.0	105.4	106.0	106.6	7
55.9	55.9	55.5	56.5	57.4	58.0	56.1	57.0	57.9	57.8	57.6	8
1,424.8	1,422.2	1,411.3	1,424.7	1,424.4	1,418.4	1,372.7	1,389.9	1,393.1	1,374.2	1,362.5	9
379.2	386.6	393.6	403.5	423.4	440.3	450.9	459.0	474.2	490.8	502.1	10
350.4	355.6	360.9	367.3	375.4	384.2	390.0	393.6	399.0	404.9	409.6	11
98.1	99.3	100.0	103.7	107.1	108.2	102.1	106.3	110.1	110.5	110.7	12
98.5	99.3	100.0	102.9	104.4	104.2	98.2	101.9	104.2	103.4	102.9	13
97.5	98.5	100.0	101.9	103.5	103.7	101.0	103.5	105.5	106.2	106.6	14
98.1	99.2	100.0	103.8	107.4	108.7	102.9	107.2	111.0	111.3	111.1	15
39.2	39.3	39.3	39.6	40.3	40.9	40.9	41.0	41.6	42.0	42.3	16

Table 1.2: Use of environmental resources for economic purposes

No.	Specification	Unit	1990	1995	2000	2001	2002	2003
<b>Production factors</b>								
1	Primary energy consumption (EB, domestic concept).....	petajoule	14,905	14,269	14,401	14,679	14,427	14,600
2	Extraction of raw materials and imports 2).....	mn tonnes	.	1,444	1,400	1,330	1,314	1,329
3	Water withdrawal from nature 3).....	mn m <sup>3</sup>	.	48,831	44,929	43,899	-	-
4	Greenhouse gases.....	1,000 t CO <sub>2</sub> equiv.	.	1,166,871	1,101,165	1,130,915	1,113,114	1,122,506
5	including: CO <sub>2</sub> .....	1,000 tonnes	.	979,812	951,994	982,866	969,617	983,368
6	N <sub>2</sub> O.....	1,000 t CO <sub>2</sub> equiv.	.	79,495	61,545	62,677	61,342	60,324
7	CH <sub>4</sub> .....	1,000 t CO <sub>2</sub> equiv.	.	91,985	75,105	72,324	69,264	66,557
8	HFCs.....	1,000 t CO <sub>2</sub> equiv.	.	7,008	7,430	8,359	8,835	8,198
9	PFCs.....	1,000 t CO <sub>2</sub> equiv.	.	1,792	823	756	821	879
10	SF <sub>6</sub> .....	1,000 t CO <sub>2</sub> equiv.	.	6,779	4,269	3,933	3,236	3,181
11	Air pollutants.....							
12	SO <sub>2</sub> .....	1,000 tonnes	.	1,923	757	850	827	782
13	NO <sub>x</sub> .....	1,000 tonnes	.	2,506	2,142	2,260	2,237	2,174
14	NM VOC.....	1,000 tonnes	.	1,791	1,387	1,295	1,235	1,170
15	NH <sub>3</sub> .....	1,000 tonnes	.	600	602	610	596	592
16	Water discharge into nature 4).....	mn m <sup>3</sup>	.	48,642	44,766	43,727	-	-
17	including: waste water.....	mn m <sup>3</sup>	.	40,756	37,356	36,296	-	-
18	Waste 5).....	1,000 tonnes	.	365,421	406,663	395,222	381,262	366,412
19	Housing and transport area 6).....	km <sup>2</sup>	.	-	43,939	44,381	44,780	45,141
20	Hours worked.....	bn hours	.	58	58	57	57	56
21	Consumption of fixed capital at current prices.....	EUR bn	.	310	355	367	375	379
22	Consumption of fixed capital in 2000 prices.....	EUR bn	.	280	324	335	344	350
memorandum item:								
<b>Renewable sources of energy</b>								
23	Share of primary energy consumption.....	%	1.9	2.2	3.9	4.1	4.5	5.0
24	Share of electricity consumption.....	%	3.1	4.5	6.8	6.7	7.8	7.5
25	Gross domestic product at current prices.....	EUR bn	.	1,898	2,114	2,177	2,206	2,217
26	Gross domestic product, price-adjusted.....	Index 2005 = 100	.	88.4	97.2	98.8	98.9	98.1
<b>Index</b>								
27	Primary energy consumption (EB, domestic concept).....	1990 = 100	100	95.7	96.6	98.5	96.8	98.0
28		2005 = 100	102.4	98.0	98.9	100.8	99.1	100.3
29	Extraction of raw materials and imports 2).....	1994 = 100	.	96.3	93.3	88.6	87.6	88.6
30		2005 = 100	.	111.4	107.9	102.5	101.4	102.5
31	Water withdrawal from nature 3).....	2000 = 100	.	108.7	100	97.7	-	-
32	Greenhouse gases.....	1995 = 100	.	100	94.4	96.9	95.4	96.2
34		2005 = 100	.	105.2	99.2	101.9	100.3	101.2
35	including: CO <sub>2</sub> .....	1995 = 100	.	100	97.2	100.3	99.0	100.4
36		2005 = 100	.	100.4	97.5	100.7	99.3	100.7
37	N <sub>2</sub> O.....	1995 = 100	.	100	77.4	78.8	77.2	75.9
38		2005 = 100	.	129.7	100.4	102.3	100.1	98.4
39	CH <sub>4</sub> .....	1995 = 100	.	100	81.6	78.6	75.3	72.4
40		2005 = 100	.	155.0	126.6	121.9	116.7	112.2
41	HFCs.....	1995 = 100	.	100	106.0	119.3	126.1	117.0
42		2005 = 100	.	83.0	88.0	99.0	104.6	97.0
43	PFCs.....	1995 = 100	.	100	45.9	42.2	45.8	49.1
44		2005 = 100	.	246.9	113.3	104.2	113.2	121.2
45	SF <sub>6</sub> .....	1995 = 100	.	100	63.0	58.0	47.7	46.9
46		2005 = 100	.	194.8	122.7	113.0	93.0	91.4
47	Air pollutants.....							
48	SO <sub>2</sub> .....	1995 = 100	.	100	39.4	44.2	43.0	40.7
49		2005 = 100	.	233.7	92.0	103.3	100.5	95.0
50	NO <sub>x</sub> .....	1995 = 100	.	100	85.5	90.2	89.3	86.8
51		2005 = 100	.	114.8	98.1	103.5	102.5	99.6
52	NM VOC.....	1995 = 100	.	100	77.5	72.3	69.0	65.3
53		2005 = 100	.	154.7	119.9	111.9	106.7	101.1
54	NH <sub>3</sub> .....	1995 = 100	.	100	100.5	101.8	99.5	98.8
55		2000 = 100	.	104.0	104.5	105.8	103.4	102.7
56	Water discharge into nature 4).....	2000 = 100	.	108.7	100	97.7	-	-
57	including: waste water.....	2000 = 100	.	109.1	100	97.2	-	-
58	Waste 5).....	1996 = 100	.	.	105.5	102.6	98.9	95.1
59		2005 = 100	.	.	122.5	119.1	114.9	110.4
60	Housing and transport area 6).....	1992 = 100	.	.	109.0	110.1	111.1	112.0
61		2005 = 100	.	.	95.4	96.4	97.2	98.0
62	Hours worked.....	1991 = 100	.	96.2	96.2	95.3	94.1	92.7
63		2005 = 100	.	104.5	104.4	103.4	102.2	100.6
64	Consumption of fixed capital in 2000 prices.....	1991 = 100	.	115.4	133.4	138.0	141.6	144.3
65		2005 = 100	.	77.6	89.7	92.8	95.3	97.1
66	Gross domestic product, price-adjusted (chain-linked index).....	1991 = 100	.	96.2	96.2	95.3	94.1	92.7
67		2005 = 100	.	104.5	104.4	103.4	102.2	100.6

Table 1.2: Use of environmental resources for economic purposes

2004	2005	2006	2007	2008	2009	2010	2011	2012 <sup>1)</sup>	2013 <sup>1)</sup>	No.
<b>Production factors</b>										
14,591	14,558	14,837	14,197	14,380	13,531	14,217	13,599	13,447	13,802	1
1,326	1,297	1,359	1,338	1,320	1,206	1,245	1,326	1,284	1,292	2
40,537	-	-	37,747	-	-	38,104	-	-	...	3
1,128,803	1,109,656	1,129,086	1,122,918	1,135,159	1,064,704	1,111,489	1,088,236	1,109,852	...	4
990,172	976,380	999,390	994,224	1,005,765	937,070	993,869	969,389	991,841	...	5
63,797	61,283	60,497	62,266	63,759	63,699	55,122	57,375	56,381	...	6
62,287	59,340	56,654	53,928	53,242	51,204	50,125	48,761	48,768	...	7
8,299	8,448	8,605	8,656	8,782	9,307	8,877	9,153	9,346	...	8
848	726	579	511	496	358	302	241	209	...	9
3,400	3,480	3,398	3,334	3,115	3,065	3,194	3,316	3,307	...	10
									...	11
948	823	823	962	1,027	873	916	831	911	...	12
2,373	2,183	2,163	2,294	2,302	2,060	2,100	1,960	2,041	...	13
1,189	1,157	1,146	1,088	1,037	946	1,060	1,013	988	...	14
585	577	573	571	572	579	553	564	550	...	15
40,388	-	-	37,626	-	-	37,984	-	-	...	16
33,992	-	-	30,473	-	-	30,741	-	-	...	17
339,368	331,876	372,906	386,946	382,818	359,387	373,011	386,690	380,576	...	18
45,621	46,050	46,436	46,789	47,137	47,422	47,702	47,971	48,225	48,482	19
56	56	56	57	58	56	57	58	58	58	20
387	394	404	423	440	451	459	474	491	502	21
356	361	367	375	384	390	394	399	405	410	22
5.8	6.8	8.0	9.5	9.3	10.2	11.3	12.1	12.6	12.3	23
9.2	10.1	11.6	14.3	15.1	16.4	17.1	20.5	22.9	25.4	24
2,268	2,298	2,390	2,510	2,558	2,457	2,576	2,699	2,750	2,809	25
99.3	100.0	103.7	107.1	108.2	102.1	106.3	110.1	110.5	110.7	26
<b>Index</b>										
97.9	97.7	99.5	95.2	96.5	90.8	95.4	91.2	90.2	92.6	27
100.2	100	101.9	97.5	98.8	92.9	97.7	93.4	92.4	94.8	28
88.4	86.4	90.5	89.2	88.0	80.4	83.0	88.4	85.6	86.1	29
102.2	100	104.8	103.2	101.8	93.0	96.0	102.2	99.0	99.6	30
90.2	-	-	84.0	-	-	84.8	-	-	-	31
96.7	95.1	96.8	96.2	97.3	91.2	95.3	93.3	95.1	...	32
101.7	100	101.8	101.2	102.3	95.9	100.2	98.1	100.0	...	34
101.1	99.6	102.0	101.5	102.6	95.6	101.4	98.9	101.2	...	35
101.4	100	102.4	101.8	103.0	96.0	101.8	99.3	101.6	...	36
80.3	77.1	76.1	78.3	80.2	80.1	69.3	72.2	70.9	...	37
104.1	100	98.7	101.6	104.0	103.9	89.9	93.6	92.0	...	38
67.7	64.5	61.6	58.6	57.9	55.7	54.5	53.0	53.0	...	39
105.0	100	95.5	90.9	89.7	86.3	84.5	82.2	82.2	...	40
118.4	120.5	122.8	123.5	125.3	132.8	126.7	130.6	133.4	...	41
98.2	100	101.9	102.5	104.0	110.2	105.1	108.4	110.6	...	42
47.3	40.5	32.3	28.5	27.7	20.0	16.9	13.5	11.7	...	43
116.8	100	79.8	70.4	68.3	49.3	41.7	33.3	28.8	...	44
50.2	51.3	50.1	49.2	45.9	45.2	47.1	48.9	48.8	...	45
97.7	100	97.6	95.8	89.5	88.1	91.8	95.3	95.0	...	46
									...	47
49.3	42.8	42.8	50.0	53.4	45.4	47.7	43.2	47.4	...	48
115.2	100	100	116.9	124.8	106.1	111.4	101.0	110.7	...	49
94.7	87.1	86.3	91.6	91.9	82.2	83.8	78.2	81.4	...	50
108.7	100	99.1	105.1	105.5	94.4	96.2	89.8	93.5	...	51
66.4	64.6	64.0	60.8	57.9	52.8	59.2	56.6	55.1	...	52
102.7	100	99.1	94.0	89.6	81.8	91.5	87.5	85.3	...	53
97.6	96.2	95.5	95.2	95.4	96.5	92.2	94.1	91.7	...	54
101.5	100	99.3	99.0	99.2	100.4	95.9	97.9	95.3	...	55
90.2	-	-	84.0	-	-	84.9	-	-	-	56
91.0	-	-	81.6	-	-	82.3	-	-	-	57
88.1	86.1	96.8	100.4	99.4	93.3	96.8	100.4	98.8	...	58
102.3	100	112.4	116.6	115.3	108.3	112.4	116.5	114.7	...	59
113.2	114.3	115.2	116.1	117.0	117.7	118.4	119.0	119.6	120.3	60
99.1	100	100.8	101.6	102.4	103.0	103.6	104.2	104.7	105.3	61
92.8	92.1	93.7	95.3	96.2	93.1	94.6	96.1	95.9	95.6	62
100.8	100	101.7	103.5	104.4	101.1	102.7	104.3	104.1	103.8	63
146.5	148.7	151.3	154.6	158.2	160.6	162.1	164.3	166.8	168.7	64
98.5	100	101.8	104.0	106.4	108.0	109.0	110.5	112.2	113.5	65
92.8	92.1	93.7	95.3	96.2	93.1	94.6	96.1	95.9	95.6	66
100.8	100	101.7	103.5	104.4	101.1	102.7	104.3	104.1	103.8	67

Table 1.2: Use of environmental resources for economic purposes

No.	Specification	Unit	1990	1995	2000	2001	2002	2003
<b>Gross domestic product relation to production factors</b>								
68	Primary energy consumption (EB, domestic concept).....	2005 = 100	.	90.2	98.3	98.0	99.7	97.9
69		1990 = 100	100	105.6	115.7	115.6	117.9	116.2
70	Extraction of raw materials and imports 2).....	2005 = 100	.	79.4	90.0	96.4	97.5	95.7
71		1994 = 100	.	105.6	119.8	128.3	129.8	127.4
72	Water withdrawal from nature 3).....	1991 = 100	.	110.4	131.9	137.2	-	-
73		2000 = 100	.	83.7	100.0	104.1	-	-
74	Greenhouse gases.....	1995 = 100	.	100	116.5	115.3	117.2	115.4
75		2005 = 100	.	84.1	97.9	97.0	98.5	97.0
76	including: CO2.....	1995 = 100	.	100	113.1	111.4	113.0	110.6
77		2005 = 100	.	88.1	99.7	98.2	99.5	97.4
78	N2O .....	1995 = 100	.	100	142.0	141.8	144.9	146.2
79		2005 = 100	.	68.2	96.8	96.6	98.8	99.7
80	CH4 .....	1995 = 100	.	100	134.6	142.2	148.4	153.4
81		2005 = 100	.	57.0	76.8	81.1	84.7	87.5
82	HFCs.....	1995 = 100	.	100	103.7	93.7	88.7	94.9
83		2005 = 100	.	106.6	110.5	99.9	94.5	101.1
84	PFCs.....	1995 = 100	.	100	239.5	264.9	243.9	226.2
85		2005 = 100	.	35.8	85.8	94.9	87.4	81.0
86	SF6 .....	1995 = 100	.	100	174.5	192.7	234.2	236.5
87		2005 = 100	.	45.4	79.2	87.5	106.3	107.4
88	Air pollutants.....	1995 = 100	.	100	153.3	152.0	155.7	160.4
89		2005 = 100	.	61.5	94.2	93.4	95.7	98.6
90	SO2 .....	1995 = 100	.	100	279.1	252.9	259.9	273.0
91		2005 = 100	.	37.8	105.6	95.7	98.4	103.3
92	NOx .....	1995 = 100	.	100	128.6	123.9	125.2	127.9
93		2005 = 100	.	77.1	99.1	95.5	96.5	98.5
94	NMVOC.....	1995 = 100	.	100	141.9	154.5	162.1	169.8
95		2005 = 100	.	57.2	81.1	88.3	92.6	97.1
96	NH3 .....	1995 = 100	.	100	109.4	109.8	112.4	112.3
97		2005 = 100	.	85.1	93.1	93.4	95.6	95.5
98	Water discharge into nature 4).....	1991 = 100	.	110.4	131.8	137.2	-	-
99		2000 = 100	.	83.7	100.0	104.1	-	-
100	including: waste water.....	1991 = 100	.	113.5	136.0	142.4	-	-
101		2000 = 100	.	83.4	100.0	104.7	-	-
102	Waste 5).....	1996 = 100	.	.	103.3	108.1	112.1	115.8
103		2005 = 100	.	.	79.3	83.0	86.0	88.9
104	Housing and transport area 6).....	1992 = 100	.	.	95.4	96.2	97.2	98.3
105		2005 = 100	.	.	101.9	102.6	101.7	100.1
106	Hours worked.....	1991 = 100	.	109.3	120.2	123.4	124.9	125.9
107		2005 = 100	.	84.6	93.1	95.6	96.8	97.5
108	Consumption of fixed capital in 2000 prices.....	1991 = 100	.	91.1	86.7	85.2	83.0	80.9
109		2005 = 100	.	113.9	108.3	106.5	103.8	101.1

1) Some values estimated.

2) Used withdrawal of abiotic raw materials and imported abiotic goods.

Partially revised in comparison to the previous editions of this publication.

3) Including infiltration and rain water.

4) Including infiltration and rain water, loss occurring with water distribution and evaporation.

5) The comparison of the results from 1996 onwards with earlier results is only partially possible because of the conversion of the primary statistics.

Until 2005 calculation based on net principle, since 2006 calculation according to the gross principle.

6) The reference data is 31.12. The data for 1997, 1998 and 1999 are based on a project by the Federal Office for Building and Regional Planning.

Table 1.2: Use of environmental resources for economic purposes

2004	2005	2006	2007	2008	2009	2010	2011	2012 <sup>1)</sup>	2013 <sup>1)</sup>	No.
<b>Gross domestic product relation to production factors</b>										
99.1	100	101.8	109.8	109.6	109.9	108.9	117.9	119.7	116.7	68
118.2	119.5	121.7	132.	132.0	132.4	131.6	142.1	143.1	141.5	69
97.1	100	99.0	103.8	106.3	109.8	110.7	107.7	111.6	111.1	70
129.2	133.1	131.7	138.1	141.5	146.1	147.4	143.3	148.6	147.8	71
149.3	-	-	172.9	-	-	170.0	-	-	-	72
113.2	-	-	131.2	-	-	129.0	-	-	-	73
116.1	118.9	121.2	125.8	125.8	126.6	126.2	133.5	131.4	...	74
97.6	100	101.9	105.8	105.8	106.4	106.1	112.3	110.5	...	75
111.1	113.5	115.0	119.4	119.2	120.8	118.5	125.9	123.5	...	76
97.9	100	101.3	105.2	105.1	106.4	104.4	110.9	108.8	...	77
139.9	146.7	154.1	154.6	152.6	144.1	173.4	172.5	176.2	...	78
95.4	100	105.1	105.4	104.0	98.3	118.2	117.6	120.1	...	79
165.8	175.3	190.4	206.6	211.4	207.5	220.6	234.9	235.8	...	80
94.6	100	108.6	117.8	120.6	118.4	125.8	134.0	134.5	...	81
94.8	93.8	95.5	98.0	97.7	86.9	94.9	95.3	93.7	...	82
101.1	100	101.8	104.5	104.1	92.7	101.2	101.6	99.9	...	83
237.4	279.2	362.7	424.9	442.6	578.4	712.6	924.3	1 072.0	...	84
85.0	100	129.9	152.2	158.5	207.1	255.2	331.0	383.9	...	85
223.9	220.3	234.0	246.3	266.4	255.4	255.1	254.6	256.2	...	86
101.6	100	106.2	111.8	120.9	116.0	115.8	115.6	116.3	...	87
150.2	162.7	170.0	168.0	169.0	176.6	177.1	194.4	189.9	...	88
92.4	100	104.5	103.3	103.9	108.6	108.9	119.5	116.7	...	89
227.7	264.2	274.1	242.0	229.1	254.3	252.2	288.2	263.9	...	90
86.2	100	103.7	91.6	86.7	96.2	95.4	109.1	99.9	...	91
118.5	129.8	135.8	132.3	133.2	140.5	143.5	159.2	153.5	...	92
91.3	100	104.7	101.9	102.6	108.2	110.5	122.6	118.2	...	93
169.1	175.0	183.2	199.3	211.3	218.5	203.2	220.1	226.7	...	94
96.6	100	104.7	113.9	120.8	124.9	116.1	125.8	129.5	...	95
115.0	117.6	122.8	127.2	128.3	119.6	130.3	132.3	136.3	...	96
97.8	100	104.4	108.2	109.1	101.8	110.8	112.5	115.9	...	97
149.3	-	-	172.8	-	-	169.9	-	-	-	98
113.2	-	-	131.1	-	-	128.9	-	-	-	99
152.7	-	-	183.8	-	-	180.8	-	-	-	100
112.3	-	-	135.1	-	-	132.9	-	-	-	101
126.5	130.3	120.2	119.7	122.2	122.9	123.2	123.1	125.6	...	102
97.1	100	92.3	91.9	93.8	94.3	94.6	94.5	96.4	...	103
100.2	101.0	100.1	98.7	99.1	99.2	102.3	105.0	105.6	105.0	104
100.2	100	102.8	105.4	105.7	99.2	102.6	105.7	105.6	105.1	105
127.2	129.1	131.6	133.6	133.9	130.4	133.6	136.3	137.2	137.7	106
98.5	100	101.9	103.5	103.7	101.0	103.5	105.5	106.2	106.6	107
80.6	80.0	81.5	82.4	81.4	75.6	78.0	79.7	78.8	78.0	108
100.8	100	101.9	103.0	101.7	94.5	97.5	99.6	98.5	97.5	109

Table 1.3: Population, consumption expenditure and direct use of environmental resources by private households

No.	Specification	Unit	1990	1995	2000	2001	2002
<b>Production factors</b>							
1	Inhabitants 1).....	1,000	.	81,817	82,260	82,440	82,537
2	Number of households (reference data 31.12.).....	1,000	.	37,024	38,207	38,522	38,775
3	Housing area (reference data 31.12.) 2).....	km <sup>2</sup>	.	-	13,457	-	-
4	Residential area used 2).....	km <sup>2</sup>	.	-	9,309	-	-
5	Living space (reference data 31.12.).....	mn m <sup>2</sup>	.	2,891	3,234	3,278	3,314
6	Flats (reference data 31.12.) 3).....	1,000	33,856	35,954	38,384	38,682	38,925
7	Domestic final consumption of households (current prices).....	EUR mn	.	1,019,828	1,143,431	1,182,774	1,186,967
8	Domestic final consumption of households (price-adjusted).....	Index (2005=100)	.	91	98	100	99
including:							
9	Actual rent (current prices).....	EUR mn	.	77,454	92,166	93,806	95,484
10	Imputed rent (Current prices).....	EUR mn	.	86,786	103,517	106,487	109,583
11	Actual rent (price-adjusted).....	Index (2005=100)	.	90	98	99	99
12	Imputed rent (price-adjusted).....	Index (2005=100)	.	85	93	95	96
13	Use of water.....	mn m <sup>3</sup>	.	3,313	3,233	3,224	-
14	including: water withdrawal from nature.....	mn m <sup>3</sup>	.	47	32	26	-
15	including: water received from other industries.....	mn m <sup>3</sup>	.	3,266	3,200	3,198	-
16	Water consumption per inhabitants.....	m <sup>3</sup>	.	40	39	39	-
17	Energy consumption.....	petajoule	.	3,944	4,147	4,124	4,160
18	including: energy consumption for mobility.....	petajoule	1,247	1,392	1,384	1,402	1,453
19	including: energy consumption for housing.....	petajoule	.	2,551	2,763	2,721	2,706
20	memorandum item: energy consumption for housing (EB) 4).....	petajoule	.	2,655	2,584	2,822	2,689
21	Energy consumption per inhabitants.....	terajoule	.	48	50	50	50
22	Energy consumption per households.....	terajoule	.	107	109	107	107
23	Energy consumption relevant to emissions.....	petajoule	.	3,341	3,296	3,536	3,444
24	including: energy consumption relevant to emissions for mobility.....	petajoule	1,247	1,392	1,384	1,402	1,453
25	including: energy consumption relevant to emissions for housing.....	petajoule	.	1,949	1,912	2,134	1,990
26	Emissions of carbon dioxide.....	mn tonnes	.	242	244	260	243
27	including: emissions of carbon dioxide for mobility.....	mn tonnes	.	109	114	114	108
28	including: emissions of carbon dioxide for housing.....	mn tonnes	.	133	130	146	136
29	N2O.....	1,000 tonnes	.	9	7	7	6
30	CH4.....	1,000 tonnes	.	110	95	95	90
31	SO2.....	1,000 tonnes	.	138	79	84	67
32	NOx.....	1,000 tonnes	.	808	668	651	569
33	NM VOC.....	1,000 tonnes	.	754	532	497	443
34	NH3.....	1,000 tonnes	.	20	32	31	30
35	Waste water total.....	mn m <sup>3</sup>	.	3,176	3,284	3,275	3,272
36	including: waste water directly discharged.....	mn m <sup>3</sup>	.	246	205	180	182
37	including: waste water indirectly discharged.....	mn m <sup>3</sup>	.	2,930	3,079	3,095	3,090
<b>Index</b>							
38	Inhabitants 1).....	2005 = 100	.	99.2	99.8	100.0	100.1
39	Number of households (reference data 31.12.).....	2005 = 100	.	94.5	97.5	98.3	99.0
40	Housing area (reference data 31.12.) 2).....	2000 = 100	.	-	100.0	-	-
41	Residential area used 2).....	2000 = 100	.	-	100.0	-	-
42	Living space (reference data 31.12.).....	2005 = 100	.	84.6	94.7	96.0	97.0
43	Flats (reference data 31.12.) 3).....	2005 = 100	85.6	90.9	97.0	97.8	98.4
44	Domestic final consumption of households (current prices).....	2005 = 100	.	81.0	90.9	94.0	94.3
45	Domestic final consumption of households (price-adjusted).....	2005 = 100	.	90.5	98.1	99.9	98.9
including:							
46	Actual rent (current prices).....	2005 = 100	.	77.9	92.7	94.3	96.0
47	Imputed rent (Current prices).....	2005 = 100	.	73.9	88.1	90.6	93.3
48	Actual rent (price-adjusted).....	2005 = 100	.	89.6	98.0	98.7	99.0
49	Imputed rent (price-adjusted).....	2005 = 100	.	85.1	93.1	94.8	96.2
50	Use of water.....	2000 = 100	.	102.5	100.0	99.7	-
51	including: water withdrawal from nature.....	2000 = 100	.	145.2	100.0	79.0	-
52	including: water received from other industries.....	2000 = 100	.	102.1	100.0	99.9	-
53	Water consumption per inhabitants.....	2000 = 100	.	102.6	100.0	99.7	-
54	Energy consumption.....	2005 = 100	.	100.8	106.0	105.4	106.3
55	including: energy consumption for mobility.....	2005 = 100	88.3	98.6	98.0	99.3	102.9
56	including: energy consumption for housing.....	2005 = 100	.	102.0	110.5	108.8	108.2
57	Energy consumption per inhabitants.....	2005 = 100	.	101.5	106.2	105.4	106.2
58	Energy consumption per households.....	2005 = 100	.	106.6	108.7	107.2	107.4
59	Energy consumption relevant to emissions.....	2005 = 100	.	101.9	100.6	107.9	105.1
60	including: energy consumption relevant to emissions for mobility.....	2005 = 100	88.3	98.6	98.0	99.3	102.9
61	including: energy consumption relevant to emissions for housing.....	2005 = 100	.	104.5	102.5	114.4	106.7
62	Emissions of carbon dioxide.....	2005 = 100	.	104.5	105.4	112.2	104.9
63	including: emissions of carbon dioxide for mobility.....	2005 = 100	.	102.8	107.6	107.8	101.7
64	including: emissions of carbon dioxide for housing.....	2005 = 100	.	105.9	103.5	116.0	107.6
65	Waste water total.....	2000 = 100	.	96.7	100.0	99.7	99.6
66	including: waste water directly discharged.....	2000 = 100	.	120.2	100.0	87.7	88.7
67	including: waste water indirectly discharged.....	2000 = 100	.	95.2	100.0	100.5	100.4

Table 1.3: Population, consumption expenditure and direct use of environmental resources by private households

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	No.
<b>Production factors</b>											
82,532	82,501	82,438	82,315	82,218	82,002	81,802	81,752	81,844	80,524	80,768	1
38,989	39,136	39,178	39,767	39,722	40,076	40,189	40,301	40,439	40,657	...	2
-	14,678	-	-	-	15,430	-	-	-	-	-	3
-	10,004	-	-	-	10,201	-	-	-	-	-	4
3,349	3,383	3,416	3,446	3,473	3,494	3,513	3,530	3,551	3,571	3,595	5
39,142	39,362	39,551	39,754	39,918	40,057	40,184	41,223	41,374	41,550	41,550	6
1,206,972	1,231,438	1,258,333	1,294,755	1,313,850	1,341,130	1,336,434	1,372,867	1,430,629	1,459,993	1,486,131	7
99	99	100	102	102	102	102	103	105	106	107	8
96,886	98,146	99,469	100,753	102,007	103,274	104,311	105,368	106,701	108,053	109,578	9
112,284	114,816	117,483	120,160	122,870	125,576	127,977	130,518	133,677	136,798	140,170	10
99	100	100	100	100	100	100	100	100	100	100	11
97	99	100	101	102	103	104	105	106	107	109	12
-	3,209	-	-	3,103	-	-	3,004	-	-	...	13
-	28	-	-	28	-	-	23	-	-	...	14
-	3,182	-	-	3,075	-	-	2,981	-	-	...	15
-	39	-	-	37	-	-	36	-	-	...	16
4,080	4,018	3,914	3,878	3,822	3,817	3,793	3,757	3,784	3,720	...	17
1,435	1,455	1,412	1,370	1,361	1,326	1,329	1,332	1,346	1,329	...	18
2,645	2,563	2,501	2,508	2,462	2,491	2,464	2,425	2,438	2,391	...	19
2,750	2,634	2,591	2,622	2,259	2,558	2,478	2,676	2,333	2,427	...	20
49	49	47	47	46	47	46	46	46	46	...	21
105	103	100	98	96	95	94	93	94	91	...	22
3,455	3,353	3,277	3,276	2,914	3,169	3,092	3,265	2,989	3,044	...	23
1,435	1,455	1,412	1,370	1,361	1,326	1,329	1,332	1,346	1,329	...	24
2,019	1,898	1,865	1,906	1,553	1,843	1,763	1,934	1,643	1,715	...	25
243	236	232	234	207	226	220	234	209	212	...	26
106	108	106	105	104	102	103	103	98	96	...	27
137	128	126	129	103	124	118	131	111	117	...	28
5	5	5	4	4	4	4	4	4	4	...	29
90	86	83	79	75	75	75	83	77	77	...	30
58	49	47	52	37	49	41	49	45	44	...	31
535	521	491	462	418	382	357	349	303	293	...	32
409	386	362	357	337	314	310	354	338	325	...	33
29	28	26	23	21	21	20	18	17	16	...	34
3,269	3,267	-	-	3,182	-	-	3,086	-	-	...	35
184	186	-	-	203	-	-	202	-	-	...	36
3,086	3,081	-	-	2,979	-	-	2,884	-	-	...	37
<b>Index</b>											
100.1	100.1	100	99.9	99.7	99.5	99.2	99.2	99.3	97.7	98.0	38
99.5	99.9	100	101.5	101.4	102.3	102.6	102.9	103.2	103.8	...	39
-	109.1	-	-	-	114.7	-	-	-	-	-	40
-	107.5	-	-	-	109.6	-	-	-	-	-	41
98.0	99.0	100	100.9	101.7	102.3	102.8	103.4	103.9	104.6	105.2	42
99.0	99.5	100	100.5	100.9	101.3	101.6	104.2	104.6	105.1	...	43
95.9	97.9	100	102.9	104.4	106.6	106.2	109.1	113.7	116.0	118.1	44
98.6	99.4	100	101.8	101.6	102.0	102.1	103.0	105.4	106.0	106.6	45
97.4	98.7	100	101.3	102.6	103.8	104.9	105.9	107.3	108.6	110.2	46
95.6	97.7	100	102.3	104.6	106.9	108.9	111.1	113.8	116.4	119.3	47
99.3	99.6	100	100.2	100.2	100.2	100.1	100.1	100.1	100.1	100.2	48
97.4	98.7	100	101.1	102.1	103.2	104.1	105.0	106.3	107.5	108.7	49
-	99.3	-	-	96.0	-	-	92.9	-	-	...	50
-	85.4	-	-	87.1	-	-	71.0	-	-	...	51
-	99.4	-	-	96.1	-	-	93.2	-	-	...	52
-	99.1	-	-	96.1	-	-	93.7	-	-	...	53
104.3	102.7	100	99.1	97.7	97.5	96.9	96.0	96.7	95.0	...	54
101.6	103.0	100	97.0	96.3	93.9	94.1	94.3	95.3	94.1	...	55
105.7	102.5	100	100.3	98.4	99.6	98.5	96.9	97.5	95.6	...	56
104.1	102.6	100	99.2	97.9	98.0	97.7	96.8	97.4	97.3	...	57
104.8	102.8	100	97.6	96.3	95.3	94.5	93.3	93.7	91.6	...	58
105.4	102.3	100	100.0	88.9	96.7	94.3	99.6	91.2	92.9	...	59
101.6	103.0	100	97.0	96.3	93.9	94.1	94.3	95.3	94.1	...	60
108.3	101.8	100	102.2	83.3	98.8	94.5	103.7	88.1	92.0	...	61
104.7	101.9	100	100.9	89.2	97.5	95.0	100.8	90.1	91.6	...	62
99.9	102.0	100	98.8	97.9	96.5	97.1	97.0	92.9	90.5	...	63
108.7	101.7	100	102.6	81.9	98.3	93.3	103.9	87.8	92.6	...	64
99.6	99.5	-	-	96.9	-	-	94.0	-	-	...	65
89.8	90.9	-	-	98.9	-	-	98.4	-	-	...	66
100.2	100.1	-	-	96.8	-	-	93.7	-	-	...	67



Table 1.3: Population, consumption expenditure and direct use of environmental resources by private households

No.	Specification	Unit	1990	1995	2000	2001	2002
<b>Factors in relation to household final consumption expenditure (price-adjusted)</b>							
68	Actual rent (price-adjusted).....	2005 = 100	.	99.0	99.9	98.8	100.1
69	Imputed rent (price-adjusted).....	2005 = 100	.	94.0	94.9	94.9	97.3
70	Use of water.....	2000 = 100	.	111.0	100.0	98.0	-
71	including: water withdrawal from nature.....	2000 = 100	.	157.3	100.0	77.6	-
72	including: water received from other industries.....	2000 = 100	.	110.6	100.0	98.2	-
73	Water consumption per inhabitants.....	2000 = 100	.	111.2	100.0	97.9	-
74	Energy consumption .....	2005 = 100	.	111.3	108.0	105.5	107.4
75	including: energy consumption for mobility.....	2005 = 100	.	108.9	99.9	99.4	104.0
76	including: energy consumption for housing.....	2005 = 100	.	112.7	112.6	108.9	109.4
77	Energy consumption per inhabitants.....	2005 = 100	.	112.2	108.3	105.5	107.3
78	Energy consumption per households.....	2005 = 100	.	117.8	110.8	107.3	108.6
79	Energy consumption relevant to emissions.....	2005 = 100	.	112.6	102.5	108.0	106.2
80	including: energy consumption relevant to emissions for mobility.....	2005 = 100	.	108.9	99.9	99.4	104.0
81	including: energy consumption relevant to emissions for housing.....	2005 = 100	.	115.4	104.5	114.6	107.9
82	Emissions of carbon dioxide.....	2005 = 100	.	115.4	107.4	112.4	106.1
83	including: emissions of carbon dioxide for mobility.....	2005 = 100	.	113.6	109.7	107.9	102.9
84	including: emissions of carbon dioxide for housing.....	2005 = 100	.	117.0	105.6	116.1	108.8
85	Waste water total.....	2000 = 100	.	104.8	100.0	97.9	98.8
86	including: waste water directly discharged.....	2000 = 100	.	130.3	100.0	86.1	88.0
87	including: waste water indirectly discharged.....	2000 = 100	.	103.1	100.0	98.7	99.5
<b>Factors in relation to household final consumption expenditure (current prices)</b>							
88	Use of water.....	2000 = 100	.	114.9	100.0	96.4	-
89	including: water withdrawal from nature.....	2000 = 100	.	162.7	100.0	76.3	-
90	including: water received from other industries.....	2000 = 100	.	114.4	100.0	96.6	-
91	Water consumption per inhabitants.....	2000 = 100	.	115.0	100.0	96.4	-
92	Energy consumption .....	2005 = 100	.	124.3	116.6	112.1	112.7
93	including: energy consumption for mobility.....	2005 = 100	.	121.6	107.8	105.6	109.1
94	including: energy consumption for housing.....	2005 = 100	.	125.9	121.6	115.8	114.7
95	Energy consumption per inhabitants.....	2005 = 100	.	125.3	116.9	112.1	112.5
96	Energy consumption per households.....	2005 = 100	.	131.6	119.6	114.0	113.8
97	Energy consumption relevant to emissions.....	2005 = 100	.	125.8	110.7	114.8	111.4
98	including: energy consumption relevant to emissions for mobility.....	2005 = 100	.	121.6	107.8	105.6	109.1
99	including: energy consumption relevant to emissions for housing.....	2005 = 100	.	128.9	112.9	121.7	113.1
100	Emissions of carbon dioxide.....	2005 = 100	.	128.9	116.0	119.4	111.2
101	including: emissions of carbon dioxide for mobility.....	2005 = 100	.	126.9	118.4	114.6	107.9
102	including: emissions of carbon dioxide for housing.....	2005 = 100	.	130.7	113.9	123.4	114.1
103	Waste water total.....	2000 = 100	.	108.4	100.0	96.4	96.0
104	including: waste water directly discharged.....	2000 = 100	.	134.8	100.0	84.8	85.5
105	including: waste water indirectly discharged.....	2000 = 100	.	106.7	100.0	97.2	96.7

1) Population projections based on the 1987 census (West) and 1990 (East) - Technical Series 1, Series 1.3 - 2011 (reporting date 31.12 of the year);

2012: population projections based on the census of 2011.

2) Due to the present period of transition regarding the official land registers, it is currently not possible to provide reliable data on the building and adjacent open area used for housing.

3) Housing stock in Germany - apartments in residential and non-residential buildings: Fachserie 5, Series 3, 2012; Results for 2010 on basis of the census of building and housing 2011 (Status as of 31.05.2012).

4) EB: Energy balance.

Table 1.3: Population, consumption expenditure and direct use of environmental resources by private households

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	No.
<b>Factors in relation to household final consumption expenditure (price-adjusted)</b>											
100.7	100.3	100	98.4	98.6	98.3	98.0	97.1	95.0	94.4	94.0	68
98.8	99.3	100	99.4	100.6	101.2	101.9	102.0	100.9	101.4	102.0	69
-	98.0	-	-	92.7	-	-	88.5	-	-	...	70
-	84.3	-	-	84.1	-	-	67.7	-	-	...	71
-	98.1	-	-	92.8	-	-	88.7	-	-	...	72
-	97.9	-	-	92.8	-	-	89.3	-	-	...	73
105.7	103.3	100	97.4	96.1	95.6	94.9	93.2	91.8	89.7	...	74
103.0	103.7	100	95.3	94.8	92.1	92.1	91.5	90.4	88.8	...	75
107.2	103.1	100	98.5	96.9	97.6	96.4	94.1	92.5	90.1	...	76
105.6	103.2	100	97.5	96.4	96.1	95.6	94.0	92.4	91.8	...	77
106.2	103.4	100	95.9	94.8	93.5	92.5	90.6	88.9	86.4	...	78
106.9	103.0	100	98.2	87.5	94.8	92.4	96.7	86.6	87.6	...	79
103.0	103.7	100	95.3	94.8	92.1	92.1	91.5	90.4	88.8	...	80
109.8	102.5	100	100.4	82.0	96.9	92.5	100.7	83.6	86.7	...	81
106.1	102.5	100	99.1	87.8	95.6	93.0	97.8	85.5	86.4	...	82
101.3	102.7	100	97.1	96.4	94.6	95.1	94.2	88.2	85.4	...	83
110.2	102.4	100	100.8	80.6	96.4	91.3	100.9	83.3	87.3	...	84
99.0	98.2	-	-	93.6	-	-	89.5	-	-	...	85
89.3	89.7	-	-	95.5	-	-	93.7	-	-	...	86
99.7	98.8	-	-	93.4	-	-	89.2	-	-	...	87
<b>Factors in relation to household final consumption expenditure (current prices)</b>											
-	92.2	-	-	83.5	-	-	77.4	-	-	...	88
-	79.3	-	-	75.8	-	-	59.2	-	-	...	89
-	92.3	-	-	83.6	-	-	77.6	-	-	...	90
-	92.0	-	-	83.7	-	-	78.1	-	-	...	91
108.7	104.9	100	96.3	93.5	91.5	91.2	88.0	85.0	81.9	...	92
105.9	105.3	100	94.3	92.2	88.1	88.6	86.4	83.8	81.1	...	93
110.2	104.7	100	97.5	94.3	93.4	92.8	88.9	85.7	82.4	...	94
108.6	104.8	100	96.4	93.8	92.0	92.0	88.7	85.7	83.9	...	95
109.2	105.0	100	94.9	92.3	89.5	88.9	85.5	82.4	78.9	...	96
109.9	104.6	100	97.1	85.1	90.7	88.8	91.3	80.2	80.1	...	97
105.9	105.3	100	94.3	92.2	88.1	88.6	86.4	83.8	81.1	...	98
112.9	104.0	100	99.3	79.8	92.7	89.0	95.0	77.5	79.3	...	99
109.1	104.1	100	98.0	85.4	91.5	89.5	92.4	79.3	79.0	...	100
104.2	104.3	100	96.1	93.7	90.6	91.4	88.9	81.7	78.0	...	101
113.3	103.9	100	99.7	78.5	92.3	87.9	95.2	77.2	79.8	...	102
94.3	92.4	-	-	84.3	-	-	78.3	-	-	...	103
85.1	84.4	-	-	86.1	-	-	82.0	-	-	...	104
94.9	92.9	-	-	84.2	-	-	78.0	-	-	...	105

**Table 1.4: Detailed classification of material inputs<sup>\*)</sup>**  
mn tonnes

No.	Specification	1994	1995	1996	1997	1998	1999	2000
1	Domestic extraction (used) 1).....	1,319.9	1,414.4	1,249.2	1,231.7	1,191.8	1,233.8	1,205.8
2	Abiotic raw material (used).....	1,107.9	1,193.3	1,013.5	993.9	953.3	997.1	959.7
3	Energy sources.....	278.0	265.5	255.8	243.8	227.0	220.8	220.7
4	Hard coal.....	52.4	53.6	48.2	46.8	41.6	39.5	33.6
5	Brown coal (lignite).....	207.1	192.8	187.2	177.2	166.0	161.3	167.7
6	Crude (mineral) oil.....	2.9	3.0	2.8	2.8	2.9	2.7	3.1
7	Natural gas, pit gas and petroleum gas.....	15.0	15.7	17.0	16.5	15.9	16.8	15.7
8	Other energy sources 2).....	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9	Minerals.....	829.9	927.8	757.7	750.1	726.3	776.3	739.0
10	Ores.....	0.1	0.1	0.1	0.2	0.6	0.6	0.5
11	Industrial and construction minerals.....	829.8	927.7	757.6	749.9	725.7	775.7	738.5
12	Construction minerals.....	765.9	727.0	698.8	689.4	666.0	713.3	679.2
13	Sand and gravel.....	322.5	200.7	188.4	182.6	174.0	180.6	170.7
14	Raw and unbroken natural stones, crude earth 3).....	374.4	451.3	427.8	425.8	411.0	448.9	429.2
15	Other construction minerals 4).....	69.0	75.1	82.7	81.0	81.1	83.9	79.4
16	Industrial minerals.....	63.9	58.5	58.8	60.5	59.6	62.3	59.3
17	Special sand and clays.....	16.8	18.0	17.6	16.9	16.3	16.8	15.4
18	Minerals for chemistry and fertilization.....	11.5	8.4	8.6	8.9	9.1	8.9	8.2
19	Salts.....	14.8	13.0	14.5	15.7	14.8	16.5	14.6
20	Other industrial minerals 5).....	20.8	19.2	18.1	19.1	19.5	20.1	21.1
21	Biomass (used).....	211.9	221.1	235.7	237.9	238.5	236.6	246.1
22	Biomass from agriculture (harvest).....	194.9	204.0	217.3	219.3	219.1	217.8	221.4
23	Cereals and pulses.....	36.6	40.2	42.5	46.0	45.3	45.2	45.7
24	Roots and tubers.....	36.4	38.4	41.3	39.3	39.6	40.4	42.2
25	Oil crops, hops and tobacco.....	3.2	3.3	2.1	3.0	3.5	4.4	3.7
26	Vegetables and fruits.....	7.0	6.2	7.2	6.1	7.5	8.0	9.0
27	Straw.....	16.8	18.7	19.4	20.7	20.5	20.2	20.4
28	Intercrops and turnip leavers.....	9.6	9.9	9.8	9.6	8.8	8.8	8.8
29	Fodder plants and grazing on permanent pastures.....	84.7	86.8	94.3	94.1	93.3	90.3	90.9
30	Other crops.....	0.6	0.6	0.6	0.6	0.6	0.6	0.5
31	Biomass from forestry (coniferous and non-coniferous wood) 6).....	16.8	16.9	18.1	18.3	19.2	18.6	24.5
32	Biomass from animals.....	0.2	0.2	0.3	0.3	0.3	0.3	0.2
33	Biomass from fishing 7).....	0.2	0.2	0.2	0.2	0.2	0.2	0.2
34	Biomass from hunting.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Memorandum items for balancing.....	1,080.1	1,081.8	1,116.1	1,076.9	1,068.5	1,041.5	1,038.3
36	Oxygen for combustion 3).....	992.6	995.2	1,029.4	991.6	982.9	956.4	954.6
37	Oxygen for respiration 8).....	86.1	85.4	85.4	84.2	84.4	84.0	82.7
38	Nitrogen for emissions from combustion.....	1.3	1.2	1.2	1.1	1.1	1.1	1.0
39	Air for other industrial processes.....	-	-	-	-	-	-	-
40	Imports.....	463.1	463.6	475.0	482.4	504.7	489.1	521.2
41	Raw materials.....	277.3	275.0	290.3	287.2	298.2	290.4	305.5
42	Energy sources.....	172.5	169.6	190.1	186.6	194.2	192.1	194.5
43	Minerals.....	82.7	82.7	77.3	78.8	81.1	73.7	86.0
44	Ores.....	47.0	47.3	42.9	45.6	51.2	43.6	51.9
45	Other minerals.....	35.7	35.5	34.4	33.1	30.0	30.1	34.1
46	Biomass.....	22.1	22.7	22.9	21.8	22.9	24.7	25.0
47	Semi-manufactured products.....	105.6	105.6	104.0	109.2	113.4	104.3	112.2
48	from energy sources.....	48.5	48.4	51.7	55.6	56.7	49.1	53.5
49	from minerals.....	37.5	38.0	33.3	33.9	35.8	34.2	36.0
50	from ores.....	9.6	9.7	8.3	10.4	11.6	10.9	13.0
51	from other minerals.....	27.9	28.3	25.0	23.5	24.2	23.3	23.0
52	from biomass.....	19.7	19.2	18.9	19.7	20.8	21.0	22.7
53	Finished products.....	80.3	83.0	80.6	86.0	93.1	94.3	103.2
54	mostly out of energy sources.....	15.5	15.9	15.2	16.6	18.4	18.1	20.3
55	mostly out of minerals.....	35.8	38.7	37.5	40.3	44.0	45.2	49.7
56	mostly out of ores.....	30.6	33.5	31.4	34.1	37.3	38.6	42.1
57	mostly out of other minerals.....	5.2	5.2	6.1	6.2	6.7	6.6	7.5
58	mostly out of biomass.....	28.9	28.4	28.0	29.2	30.7	31.0	33.3
59	Packaging materials imported with products.....	-	-	-	-	-	-	-
60	Waste imported for final treatment and disposal.....	0.0	0.0	0.0	0.0	0.0	0.1	0.2
61	Unused domestic extraction.....	2,360.8	2,216.0	2,150.7	2,048.4	2,021.8	2,083.6	2,055.7
62	Unused extraction from mining and quarrying of fossil fuels.....	1,920.4	1,807.7	1,723.0	1,614.6	1,575.9	1,602.5	1,565.0
63	including: overburden from brown coal.....	1,870.0	1,754.9	1,675.1	1,567.6	1,533.8	1,562.1	1,531.4
64	Unused extraction from mining and quarrying of fossil fuels 3).....	136.1	129.9	124.7	125.7	123.4	131.6	128.1
65	Unused extraction of biomass 9).....	198.6	179.8	176.7	183.2	191.5	188.2	201.2
66	Excavated earth 10), 11).....	105.6	98.6	126.2	124.8	131.0	161.3	161.3
67	Indirect flows associated to imports.....	-	-	-	-	-	-	-

<sup>\*)</sup> Some preliminary results. - From 2001 onwards imports are collected according to SITC.

A comparison of the figures with earlier results is hence only partially possible.

1) Totalling not including oxygen, nitrogen and air.

2) Energetic peat and other products of mineral oil and natural gas extraction.

3) Partially revised in comparison to the previous editions of this publication.

4) These include unbroken natural stones, limestone and dolomit and crude earth.

5) These include other industrial minerals and peat for agricultural use.

6) Methodological differences compared to the results of forest accounting.

7) Catches from the high seas and from coastal fishing, including landings abroad.

8) Including respiration of humans and farm animals.

9) Up to 2005 the unused extraction of timber biomass in minor extent comprises other positions (e.g. woodchips).

10) Since 2002 including dangerous waste.

11) Since 2004 without reused materials from excavation, construction and recultivation activities.

**Table 1.4: Detailed classification of material inputs<sup>\*)</sup>**  
mn tonnes

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	No.
1,140.3	1,113.4	1,083.1	1,109.3	1,075.2	1,095.4	1,103.6	1,084.8	1,041.2	1,015.0	1,108.8	1,077.7	1
902.9	882.8	875.7	854.8	827.6	861.1	841.4	821.5	773.3	765.8	827.0	796.9	2
222.4	227.9	225.5	226.9	220.9	215.7	219.0	209.1	199.1	196.1	202.1	208.7	3
27.4	26.4	25.9	25.9	24.9	20.9	21.5	17.2	13.8	12.9	12.1	10.8	4
175.4	181.8	179.2	181.9	177.9	176.3	180.4	175.3	169.9	169.4	176.6	185.4	5
3.4	3.6	3.8	3.5	3.6	3.5	3.4	3.1	2.8	2.5	2.7	2.6	6
15.8	15.7	16.3	15.3	14.2	14.6	13.4	13.2	12.4	10.9	10.3	9.4	7
0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	8
680.5	654.9	650.1	628.0	606.8	645.4	622.3	612.4	574.2	569.8	624.9	588.2	9
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	10
680.1	654.5	649.7	627.6	606.4	645.0	621.9	612.0	573.8	569.4	624.4	587.7	11
621.8	595.4	590.7	565.7	543.8	580.8	559.8	552.1	516.2	505.2	560.2	528.3	12
155.2	145.8	150.4	142.3	132.6	139.4	132.9	132.8	123.8	120.3	135.7	127.8	13
391.5	378.7	369.9	352.6	343.0	368.9	351.2	348.3	332.7	322.4	357.8	335.0	14
75.1	70.9	70.4	70.9	68.2	72.5	75.7	71.0	59.7	62.5	66.7	65.5	15
58.3	59.1	59.0	61.8	62.6	64.2	62.1	59.9	57.6	64.2	64.2	59.5	16
14.5	14.2	14.4	14.2	13.4	13.8	14.2	13.9	11.8	12.4	13.6	13.0	17
8.8	8.9	8.3	8.8	8.9	9.1	9.3	8.7	5.2	7.8	8.3	8.1	18
14.2	15.5	16.1	18.4	19.0	19.5	15.7	15.3	18.9	19.7	17.4	14.8	19
20.8	20.5	20.2	20.4	21.3	21.8	22.9	21.9	21.7	24.3	24.8	23.5	20
237.4	230.6	207.4	254.5	247.6	234.3	262.3	263.4	267.9	249.2	281.8	280.7	21
218.6	210.5	183.3	228.9	220.7	204.2	226.1	236.5	244.7	223.0	252.5	253.3	22
50.3	43.9	39.9	51.6	46.4	43.8	40.9	50.3	50.0	44.3	42.1	45.6	23
37.2	38.8	34.3	40.9	37.5	31.3	37.4	34.9	38.1	33.9	41.7	38.6	24
4.3	3.9	3.7	5.4	5.2	5.4	5.4	5.3	6.4	5.8	4.0	4.9	25
7.1	7.0	7.1	8.3	7.6	8.0	8.7	8.5	9.0	7.5	8.3	8.5	26
22.7	19.2	17.5	23.2	20.5	19.8	18.1	22.2	22.4	19.5	17.9	17.9	27
7.9	7.8	6.8	6.8	6.4	5.9	6.8	6.7	7.2	6.6	7.7	7.4	28
88.5	89.3	73.3	92.1	96.6	89.4	108.2	108.2	111.1	104.9	130.3	129.9	29
0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	30
18.6	19.8	23.8	25.3	26.6	29.8	35.8	26.5	23.0	26.0	29.0	27.1	31
0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	32
0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	33
0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	34
1,068.3	1,052.6	1,048.2	1,034.8	1,015.7	1,028.0	995.3	1,003.2	943.7	979.0	949.9	965.3	35
984.2	970.1	966.7	955.1	935.8	949.2	916.3	923.8	864.3	900.5	872.1	886.6	36
83.1	81.6	80.6	78.8	79.1	78.0	78.2	78.7	78.7	77.8	77.1	78.0	37
1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	38
-	-	-	-	-	-	-	-	-	-	-	-	39
507.0	513.3	542.3	562.4	563.5	600.9	607.5	606.9	539.2	592.5	615.9	603.8	40
296.9	309.3	319.3	325.1	326.4	337.1	336.1	337.5	304.1	322.8	334.2	335.2	41
199.1	208.2	224.8	224.4	227.7	232.6	224.6	228.1	213.2	214.1	222.3	230.1	42
73.0	76.9	69.3	76.7	72.5	76.2	80.0	78.0	57.3	73.4	76.1	68.8	43
44.5	48.6	43.1	51.2	47.0	49.6	52.3	51.2	33.6	47.8	47.1	44.4	44
28.5	28.3	26.1	25.5	25.5	26.6	27.8	26.9	23.8	25.6	29.0	24.4	45
24.8	24.3	25.2	24.1	26.2	28.3	31.5	31.4	33.5	35.3	35.9	36.2	46
108.3	102.4	109.0	115.6	113.7	122.0	119.4	122.1	111.2	127.1	131.1	123.6	47
53.5	49.1	50.6	53.3	52.3	54.7	48.1	52.8	51.2	57.2	56.8	52.1	48
32.4	29.9	32.7	35.0	34.1	36.9	38.6	37.4	29.8	36.6	39.3	36.5	49
12.8	12.5	14.7	17.4	17.2	19.4	21.1	20.2	13.3	18.0	20.2	18.1	50
19.7	17.5	18.1	17.6	16.8	17.5	17.5	17.2	16.5	18.7	19.2	18.4	51
22.3	23.4	25.7	27.2	27.3	30.3	32.7	31.9	30.2	33.2	35.0	35.0	52
101.5	101.1	113.5	119.7	121.7	140.4	150.0	144.9	121.4	140.0	147.7	142.2	53
20.1	20.6	22.9	24.7	25.2	28.4	30.3	29.1	25.6	29.3	30.5	29.8	54
48.4	46.9	53.2	56.8	57.1	68.7	74.8	73.0	55.4	68.1	73.8	69.5	55
41.5	39.8	45.2	48.2	48.4	59.1	64.4	62.2	45.9	57.2	62.5	59.0	56
6.9	7.1	8.0	8.5	8.7	9.7	10.4	10.9	9.5	10.9	11.3	10.6	57
33.0	33.7	37.4	38.3	39.4	43.3	44.8	42.7	40.4	42.6	43.4	42.8	58
-	-	-	-	-	-	-	-	-	-	-	-	59
0.3	0.5	0.5	2.0	1.7	1.4	2.0	2.5	2.6	2.7	2.9	2.8	60
2,088.8	2,166.8	2,117.2	2,212.8	2,180.7	2,112.0	2,203.9	2,226.2	2,089.0	2,110.9	2,103.5	1,997.7	61
1,624.8	1,708.3	1,697.2	1,789.2	1,758.2	1,690.9	1,763.2	1,812.2	1,697.0	1,723.3	1,703.2	1,597.2	62
1,593.7	1,678.5	1,666.8	1,757.6	1,727.1	1,663.5	1,736.4	1,791.0	1,680.3	1,706.8	1,690.5	1,586.2	63
122.4	119.4	119.9	118.2	114.1	117.4	115.9	112.9	94.7	105.0	112.5	109.1	64
191.9	190.8	164.3	197.3	201.5	193.3	212.1	189.8	189.4	174.3	175.4	178.8	65
149.6	148.3	135.8	108.1	106.8	110.4	112.7	111.2	107.9	108.4	112.4	112.6	66
-	-	-	-	-	-	-	-	-	-	-	-	67

**Table 1.5: Detailed classification of material outputs<sup>\*)</sup>**  
mn tonnes

No.	Specification	1994	1995	1996	1997	1998	1999	2000
1	Domestic processed output.....	1,532.2	1,533.9	1,575.7	1,526.4	1,513.8	1,478.1	1,476.1
2	Air emissions of mass pollutants 1).....	951.9	948.7	968.8	939.3	930.3	902.2	905.0
3	Carbon dioxide (CO <sub>2</sub> ) 2) .....	932.5	930.9	951.9	923.1	915.2	887.9	891.5
4	Carbon monoxide (CO).....	7.0	6.6	6.1	6.0	5.5	5.1	4.8
5	Nitrogen oxide (NO <sub>x</sub> ).....	2.2	2.2	2.1	2.0	2.0	2.0	1.9
6	Sulphur dioxide (SO <sub>2</sub> ) .....	2.4	1.7	1.4	1.2	1.0	0.8	0.6
7	Nitrous oxide (N <sub>2</sub> O) 2) .....	0.3	0.3	0.3	0.3	0.2	0.2	0.2
8	Ammonia (NH <sub>3</sub> ).....	0.6	0.6	0.6	0.6	0.6	0.6	0.6
9	Methane (CH <sub>4</sub> ) 2) .....	4.5	4.4	4.2	4.0	3.8	3.7	3.6
10	Dust.....	0.5	0.4	0.4	0.4	0.4	0.4	0.4
11	Volatile organic compounds, not including methane (NMVOC).....	1.8	1.8	1.7	1.7	1.7	1.5	1.4
12	Emissions to water 3).....	4.5	4.0	3.8	3.7	3.4	3.2	3.2
13	Dissipative use of products.....	33.7	35.3	36.7	35.6	35.7	37.0	35.1
14	Farmyard manure 4).....	26.5	27.2	27.8	27.4	27.3	27.4	27.2
15	Mineral fertilisers.....	4.7	4.7	4.8	5.1	5.2	5.5	4.9
16	Pesticides.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	Seeds.....	1.6	1.7	1.8	1.8	1.8	1.7	1.8
18	Thawing salt.....	0.9	1.6	2.4	1.4	1.4	2.4	1.1
19	Dissipative losses 5) .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20	Memorandum items of balancing.....	542.1	545.8	566.3	547.8	544.4	535.6	532.7
21	Water vapour from combustion 6).....	395.4	400.0	420.5	403.6	399.9	391.6	390.5
22	Respiration of humans and livestock (CO <sub>2</sub> ) 7) .....	118.4	117.4	117.5	115.7	116.1	115.5	113.7
23	Water vapour (H <sub>2</sub> O) 8) .....	28.2	28.3	28.4	28.5	28.4	28.5	28.5
24	Exports.....	223.2	224.7	238.3	249.3	259.9	265.5	289.2
25	Raw materials.....	55.3	55.9	67.1	63.7	67.5	68.7	74.4
26	Energy sources.....	5.0	7.2	16.7	15.6	15.2	12.8	13.4
27	Minerals.....	34.9	32.2	34.5	34.2	36.3	37.7	38.1
28	Ores.....	0.2	0.2	0.2	0.1	0.1	0.2	0.2
29	Other minerals.....	34.7	32.1	34.3	34.0	36.1	37.5	37.9
30	Biomass.....	15.5	16.5	15.9	13.9	16.1	18.2	22.9
31	Semi-manufactured products.....	86.1	83.5	83.8	86.8	89.4	91.9	98.6
32	from energy sources.....	23.8	21.5	21.3	20.5	22.1	23.3	26.9
33	from minerals.....	43.6	41.8	42.1	44.7	44.3	45.2	46.1
34	from ores.....	15.0	13.8	13.8	15.8	13.6	14.3	14.7
35	from other minerals.....	28.6	28.1	28.3	29.0	30.6	31.0	31.4
36	from biomass.....	18.7	20.2	20.4	21.6	23.0	23.4	25.6
37	Finished products.....	81.8	85.2	87.3	98.8	103.0	104.9	116.2
38	mostly out of energy sources.....	20.6	20.9	20.7	22.8	22.9	24.5	26.8
39	mostly out of minerals.....	42.3	44.6	46.6	53.3	55.6	54.8	61.7
40	mostly out of ores.....	36.8	38.9	39.2	45.2	46.9	46.2	52.5
41	mostly out of other minerals.....	5.5	5.7	7.3	8.1	8.7	8.7	9.2
42	mostly out of biomass.....	18.9	19.7	20.0	22.7	24.4	25.5	27.7
43	Packaging materials exported with products.....	-	-	-	-	-	-	-
44	Disposal of unused domestic extraction 9).....	2,360.8	2,216.0	2,150.7	2,048.4	2,021.8	2,083.6	2,055.7
45	Indirect flows associated to exports.....	-	-	-	-	-	-	-
46	Balance input/output 10).....	1,107.6	1,059.1	1,026.3	1,015.3	991.2	1,020.8	1,000.0
47	including: landfilled waste.....	111.0	94.8	78.6	71.6	67.2	66.8	67.1
Memorandum item:								
48	Water withdrawal from nature 11).....	49,199.9	48,830.9	47,765.2	47,382.7	45,806.7	45,370.6	44,929.3
49	Water discharged to nature 12).....	49,007.6	48,642.5	47,589.3	47,210.9	45,635.1	45,194.0	44,765.8
50	Balance export and import of water .....	-8.0	-7.8	-6.7	-6.7	-6.7	-6.9	-7.2
51	Balance water.....	184.4	180.6	169.2	165.1	164.9	169.7	156.3

\*) Some preliminary results. - From 2001 onwards exports are collected according to SITC.  
A comparison of the figures with earlier results is hence only partially possible.

1) Not including CFCs and halons.

2) Source: www.unfccc.int

3) Emissions of nitrogen, phosphorus and other substances and (organic) material behind sewage plant. Up to 2001 estimation.

4) Slurry, manure, etc. (industrial fertilisers) in dry substances.

5) Including only brake and tyre losses.

6) Partially revised in comparison to the previous editions of this publication.

7) Including respiration emissions (CO<sub>2</sub>) of humans and farm animals.

8) Including only water evaporation by humans by respiration and perspiration via the skin.

9) Value corresponds to unused domestic extraction.

10) As of 2002 emissions to water are not included.

11) Including infiltration and rain water.

12) Including infiltration and rain water, loss occurring with water distribution and evaporation.

**Table 1.5: Detailed classification of material outputs<sup>\*)</sup>**  
mn tonnes

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	No.
1,508.6	1,481.2	1,480.5	1,464.3	1,438.2	1,453.4	1,410.0	1,418.4	1,332.3	1,386.4	1,348.2	1,366.4	1
920.5	903.2	905.4	893.0	872.5	883.7	858.6	861.0	794.7	839.1	819.8	831.0	2
907.5	890.9	893.6	881.7	861.7	873.2	848.5	851.1	785.6	829.4	810.4	821.7	3
4.6	4.3	4.1	3.9	3.7	3.6	3.5	3.4	3.0	3.4	3.3	3.3	4
1.8	1.8	1.7	1.6	1.6	1.6	1.5	1.4	1.3	1.3	1.3	1.3	5
0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	6
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7
0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	8
3.4	3.3	3.2	3.0	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.3	9
0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	10
1.3	1.2	1.1	1.2	1.1	1.1	1.0	1.0	0.9	1.0	1.0	1.0	11
3.1	-	-	-	-	-	-	-	-	-	-	-	12
36.0	35.0	34.9	34.3	35.1	34.0	32.5	33.0	34.2	36.2	34.0	33.3	13
27.5	26.7	26.4	25.8	25.6	24.7	25.0	25.4	25.1	24.5	24.4	24.6	14
4.9	4.7	4.7	4.5	4.4	4.5	4.8	4.1	4.2	4.8	4.7	4.9	15
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16
1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.6	17
1.8	1.8	2.0	2.2	3.4	3.1	1.0	1.7	3.1	5.3	3.2	2.2	18
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	19
548.9	543.0	540.2	537.0	530.5	535.5	518.7	524.4	503.3	511.1	494.3	502.0	20
406.2	402.2	400.7	400.0	393.2	399.8	382.7	387.7	366.7	375.8	360.0	366.4	21
114.2	112.1	110.8	108.4	108.7	107.2	107.5	108.2	108.2	106.9	106.0	107.2	22
28.6	28.6	28.6	28.6	28.6	28.6	28.5	28.5	28.4	28.3	28.4	28.4	23
291.7	303.7	318.5	349.5	357.0	379.6	396.2	388.0	338.5	365.3	378.4	377.1	24
73.0	77.3	77.9	80.5	78.1	82.0	83.6	85.4	78.1	80.5	86.8	84.6	25
15.0	16.5	19.8	22.4	15.1	11.4	11.1	11.5	9.9	15.0	21.7	25.6	26
37.5	40.6	39.3	40.8	41.5	48.0	51.0	53.1	46.6	44.5	46.3	40.1	27
0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.3	0.3	28
37.3	40.4	39.2	40.6	41.3	47.9	50.8	53.0	46.4	44.3	46.1	39.8	29
20.4	20.2	18.8	17.3	21.5	22.5	21.5	20.8	21.6	21.0	18.8	18.8	30
100.0	100.4	109.5	123.4	130.1	134.7	141.7	131.7	116.7	120.4	121.8	123.4	31
26.0	27.0	28.4	35.0	37.6	39.9	41.5	38.6	31.8	27.7	27.7	33.5	32
48.2	48.9	55.0	59.5	61.8	61.9	65.8	57.4	49.7	55.8	56.4	53.1	33
15.2	14.0	14.9	16.0	15.2	16.7	18.1	17.8	15.0	18.9	20.0	18.8	34
33.0	34.9	40.1	43.6	46.6	45.2	47.7	39.6	34.7	36.8	36.4	34.3	35
25.9	24.5	26.1	28.9	30.7	32.8	34.4	35.7	35.2	36.9	37.6	36.8	36
118.7	126.1	131.0	145.6	148.8	163.0	170.9	170.9	143.8	164.4	169.8	169.1	37
27.1	28.2	30.4	33.7	34.7	37.0	38.8	33.6	34.7	38.0	38.0	38.2	38
62.9	66.5	68.1	76.4	75.8	85.7	90.1	92.6	68.9	82.5	89.2	87.7	39
53.5	56.6	57.6	65.1	64.1	72.7	76.4	79.0	57.4	68.6	75.0	74.2	40
9.5	9.9	10.4	11.3	11.7	13.0	13.6	13.5	11.5	13.9	14.3	13.5	41
28.7	31.3	32.6	35.5	38.3	40.3	42.0	44.7	40.2	44.0	42.7	43.2	42
-	-	-	-	-	-	-	-	-	-	-	-	43
2,088.8	2,166.8	2,117.2	2,212.8	2,180.7	2,112.0	2,203.9	2,226.2	2,089.0	2,110.9	2,103.5	1,997.7	44
-	-	-	-	-	-	-	-	-	-	-	-	45
915.3	894.3	874.6	892.6	859.2	891.2	900.3	888.6	853.3	834.8	947.8	903.2	46
64.8	66.5	59.5	56.7	45.7	38.7	43.2	41.6	35.4	34.0	36.9	37.0	47
43,899.2	-	-	40,536.9	-	-	37,747.2	-	-	38,103.8	-	-	48
43,727.2	-	-	40,387.5	-	-	37,625.6	-	-	37,984.0	-	-	49
-7.5	-	-	-9.2	-	-	-1.0	-	-	-1.0	-	-	50
164.6	-	-	140.2	-	-	120.5	-	-	118.7	-	-	51

**Table 1.6: Indicators on environment and economy of the national Strategy for Sustainable Development<sup>\*)</sup>**

No.	Indicator	Unit	1990	1994	1995	1996	1999
1	Energy productivity (1a).....	1990 = 100	100	111.3	112.5	109.7	119.6
2	Primary energy consumption (1b).....	1990 = 100	100	95.2	95.7	98.9	96.1
3	Raw material productivity (1c).....	1994 = 100	–	100	105.6	108.4	115.5
4	Greenhouse gas emissions (2).....	bv <sup>a)</sup> = 100	99.7	89.6	89.3	90.8	83.2
5	Share of renewable energy sources in final energy consumption (3a).....	%	1.9	0.0	2.2	2.1	3.4
6	Share of renewable energy sources in electricity consumption (3b).....	%	3.4	4.3	4.7	4.8	5.2
7	Increase in land use for housing and transport (4).....	ha per day <sup>b)</sup>	–	–	–	119.6	126.3
8	Species diversity and landscape quality (5).....	2015 = 100	76.5	76.6	73.1	76.0	74.8
9	General government deficit (6a).....	%	–	2.4	2.9	3.4	1.5
10	Structural deficit (6b).....	%	–	–	–	–	–
11	Government debt (6c).....	%	–	47.3	54.6	57.4	59.9
12	Gross fixed capital formation in relation to GDP (7).....	%	–	23.9	23.3	22.8	22.9
13	Gross domestic product per capita (price-adjusted) (10).....	EUR 1,000	–	25.9	26.2	26.4	27.9
14	Intensity for goods transport (11a).....	1999 = 100	–	–	–	–	100
15	Intensity for passenger transport (11b).....	1999 = 100	–	–	–	–	100
16	Share of rail transport in goods transport performance (11c).....	%	–	–	–	–	16.5
17	Share of inland water transport in goods transport performance (11c).....	%	–	–	–	–	13.5
18	Nitrogen surplus (12a).....	kg/ha <sup>c)</sup>	–	114.7	114.0	112.6	114.6
19	Organic farming (12b).....	%	–	–	–	–	2.9
20	Air pollution (13).....	1990 = 100	100	66.7	62.8	60.6	54.8

<sup>\*)</sup> Numbers in brackets according to the numbers in the German Strategy for Sustainable Development.

a) Basis value: 1990 is the basis for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and 1995 for HCFs, PFCs and SF<sub>6</sub> (according Kyoto protocol).

b) Moving four-year average, reference to the relevant year and the preceding three years.

c) Moving three-year average, reference to the second year.

**Table 1.6: Indicators on environment and economy of the national Strategy for Sustainable Development<sup>\*)</sup>**

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	No.
122.5	122.2	124.4	122.0	123.5	124.7	126.9	136.9	136.6	137.0	135.7	147.0	149.2	145.5	1
96.6	98.5	96.8	98.0	97.9	97.7	99.5	95.2	96.5	90.8	95.4	91.2	90.2	92.6	2
119.8	128.3	129.8	127.4	129.2	133.1	131.7	138.1	141.5	146.1	147.4	143.3	148.6	147.8	3
83.1	84.3	82.6	82.5	81.5	79.5	80.1	78.0	78.3	72.9	75.6	74.2	75.0	...	4
3.7	4.0	4.4	5.0	5.7	6.6	7.7	9.3	8.6	9.7	10.2	11.3	12.1	12.0	5
6.2	6.6	7.7	7.6	9.3	10.2	11.6	14.2	15.1	16.3	17.0	20.4	23.6	25.3	6
129.1	128.3	123.1	115.1	115.1	114.3	113.3	112.8	103.8	93.9	86.6	80.9	74.4	...	7
71.9	71.1	69.7	69.8	72.4	71.8	70.2	70.5	70.5	67.5	67.6	63.4	...	...	8
1.4	3.1	3.9	4.1	3.7	3.3	1.5	-0.3	0.0	3.0	4.1	0.9	-0.1	-0.1	9
-	-	-	-	-	2.0	1.5	0.7	0.7	0.4	2.1	1.3	0.0	-0.6	10
58.7	57.5	59.2	62.9	64.6	66.8	66.3	63.5	64.9	72.4	80.3	77.6	79.0	76.9	11
23.0	21.7	20.1	19.6	19.2	19.1	19.7	20.1	20.3	19.1	19.3	20.1	20.0	19.7	12
28.7	29.1	29.0	28.8	29.2	29.4	30.5	31.6	31.9	30.2	31.5	32.6	32.7	32.7	13
99.9	99.0	99.1	104.8	109.2	110.2	114.2	115.4	114.8	108.6	112.2	110.9	108.8	...	14
96.0	96.4	96.5	97.0	98.2	97.2	94.7	92.0	91.7	97.8	93.9	91.7	91.7	...	15
17.2	16.6	16.6	16.5	16.9	17.2	17.9	18.4	18.5	17.2	17.8	18.5	18.2	...	16
13.8	13.3	13.1	11.3	11.7	11.6	10.7	10.4	10.2	10.0	10.4	9.0	9.7	...	17
112.5	111.2	108.1	105.9	104.2	103.4	104.2	103.9	95.5	93.2	95.8	101.1	...	...	18
-	3.6	-	4.3	-	4.6	-	5.1	-	-	5.6	-	5.8	...	19
52.4	51.0	49.0	47.7	46.7	45.4	45.2	43.8	42.8	41.3	41.6	41.3	40.4	...	20



**Table 2.1: Gross value added<sup>\*)</sup> 2000 to 2010 (at current prices)**

EUR mn

No.	CPA <sup>1)</sup>	Homogeneous branches	2008	2009	2010
1	A	Products of agriculture, forestry and fishing.....	20,094	15,036	16,842
2	01	Products of agriculture, hunting and related services.....	17,702	12,937	14,356
3	02	Products of forestry, logging and related services.....	2,152	1,859	2,236
4	03	Fish and other fishing products; aquaculture products.....	240	240	250
5	B	Mining and quarrying.....	7,569	7,313	8,006
6	05	Coal and lignite.....	1,615	1,510	1,731
7	06	Crude petroleum and natural gas.....	2,291	1,726	1,614
8	07-09	Metal ores, other mining and quarrying products.....	3,663	4,077	4,661
9	C	Manufactured products.....	444,077	370,104	442,976
10	10-12	Food products, beverages, tobacco products.....	33,906	33,748	35,669
11	13-15	Textiles, wearing apparel, leather and related products.....	6,947	5,652	6,311
12	16	Wood and products of wood and cork, except furniture.....	5,979	5,024	6,056
13	17	Paper and paper products.....	9,771	8,949	8,744
14	18	Printing and recording services.....	9,092	7,969	8,428
15	19	Coke and refined petroleum products.....	2,895	3,019	4,654
16	19.1	Coke oven products.....	-	-	-
17	19.2	Refined petroleum products.....	-	-	-
18	20	Chemicals and chemical products.....	28,846	24,738	30,189
19	21	Basic pharmaceutical products and pharmaceutical preparations.....	14,900	13,631	13,723
20	22	Rubber and plastic products.....	21,488	19,387	21,975
21	23	Other non-metallic mineral products.....	13,741	12,129	13,207
22	23.1	Glass and glass products.....	3,644	3,009	3,237
23	23.2-9	Refractory products, cut, shaped and finished stone.....	10,097	9,120	9,970
24	24	Basic metals.....	23,440	16,414	16,319
25	24.1-3	Basic iron and steel and ferro-alloys, other products of steel.....	13,290	8,370	7,972
26	24.4	Basic precious and other non-ferrous metals.....	4,261	3,853	3,432
27	24.5	Casting services of metal.....	5,889	4,191	4,915
28	25	Fabricated metal products, except machinery and equipment.....	47,484	37,466	45,093
29	26	Computer, electronic and optical products.....	23,798	17,824	23,223
30	27	Electrical equipment.....	31,161	28,288	34,386
31	28	Machinery and equipment n.e.c.....	77,671	59,533	70,107
32	29	Motor vehicles, trailers and semi-trailers.....	50,099	36,065	59,430
33	30	Other transport equipment.....	9,068	8,767	10,171
34	31-32	Furniture, other manufacture goods.....	18,023	16,409	19,165
35	33	Repair and installation services of machinery and equipment.....	15,768	15,092	16,126
36	D (35)	Electricity, gas, steam and air conditioning.....	42,153	43,865	43,954
37	35.1/.3	Electricity, transmission and distribution services, steam.....	33,812	30,967	34,566
38	35.2	Manufactured gas.....	8,341	12,898	9,388
39	E	Water supply; sewerage, waste management and remediation services.....	24,418	23,265	23,883
40	36	Natural water; water treatment and supply services.....	5,270	4,534	4,773
41	37-39	Sewerage services; waste collection and materials recovery services.....	19,148	18,731	19,110
42	37	Sewerage services, sewerage sludge.....	-	-	-
43	38-39	Waste collection, treatment and disposal services.....	-	-	-
44	F	Constructions and construction works.....	96,923	99,013	107,848
45	41-42	Building and building construction works.....	28,098	28,828	31,157
46	43	Specialised construction works.....	68,825	70,185	76,691
47	G	Wholesale and retail trade services; repair services of motor vehicles.....	245,402	231,460	223,306
48	45	Wholesale and retail trade and repair services of motor vehicles.....	39,716	35,988	33,271
49	46	Wholesale trade services, except of motor vehicles and motorcycles.....	122,547	109,612	104,542
50	47	Retail trade services, except of motor vehicles and motorcycles.....	83,139	85,860	85,493
51	H	Transportation and storage services.....	95,186	85,070	94,209
52	49.1-2	Passenger rail transport services, freight rail transport services.....	-	-	-
53	49.3-5	Other passenger land transport services, transport service via pipeline.....	-	-	-
54	50	Water transport services.....	7,892	7,500	6,989
55	51	Air transport services.....	4,853	4,169	4,623
56	52	Warehousing and support services for transportation.....	34,314	30,095	30,780
57	53	Postal and courier services.....	11,555	10,665	9,992
58	I	Accommodation and food services.....	36,753	39,588	37,052
59	J	Information and communication services.....	92,403	98,272	96,110
60	K	Financial and insurance services.....	80,323	90,196	98,557
61	L	Real estate services.....	282,004	276,325	283,879
62	M	Professional, scientific and technical services.....	151,777	134,359	140,049
63	N	Administrative and support services.....	118,609	106,815	113,718
64	O	Public administration and defence services.....	131,515	136,815	139,419
65	P	Education services.....	96,970	99,546	102,808
66	Q	Human health and social work services.....	149,764	158,521	166,843
67	R-T	Other services.....	101,060	101,787	104,384
68	93	Sports activities and amusement and recreation activities.....	11,718	11,386	11,681
69		<b>All homogeneous branches.....</b>	<b>2,217,000</b>	<b>2,117,350</b>	<b>2,243,843</b>

\*) Results from input-output accounts: Publications of the National Accounts, Fachserie 18, Series 2. For the reference years 2000 to 2007 no data will be published in the revised statistical classification of products by activity (CPA 2008).

1) Statistical Classification of Products by Activity (CPA) of the European Union (2008 edition).

**Table 2.2: Gross value added<sup>\*)</sup> 2000 to 2010 (at current prices)**  
in percent

No.	CPA <sup>1)</sup>	Homogeneous branches	2008	2009	2010
1	A	Products of agriculture, forestry and fishing.....	0.9	0.7	0.8
2	01	Products of agriculture, hunting and related services.....	0.8	0.6	0.6
3	02	Products of forestry, logging and related services.....	0.1	0.1	0.1
4	03	Fish and other fishing products; aquaculture products.....	0.0	0.0	0.0
5	B	Mining and quarrying.....	0.3	0.3	0.4
6	05	Coal and lignite.....	0.1	0.1	0.1
7	06	Crude petroleum and natural gas.....	0.1	0.1	0.1
8	07-09	Metal ores, other mining and quarrying products.....	0.2	0.2	0.2
9	C	Manufactured products.....	20.0	17.5	19.7
10	10-12	Food products, beverages, tobacco products.....	1.5	1.6	1.6
11	13-15	Textiles, wearing apparel, leather and related products.....	0.3	0.3	0.3
12	16	Wood and products of wood and cork, except furniture.....	0.3	0.2	0.3
13	17	Paper and paper products.....	0.4	0.4	0.4
14	18	Printing and recording services.....	0.4	0.4	0.4
15	19	Coke and refined petroleum products.....	0.1	0.1	0.2
16	19.1	Coke oven products.....	-	-	-
17	19.2	Refined petroleum products.....	-	-	-
18	20	Chemicals and chemical products.....	1.3	1.2	1.3
19	21	Basic pharmaceutical products and pharmaceutical preparations.....	0.7	0.6	0.6
20	22	Rubber and plastic products.....	1.0	0.9	1.0
21	23	Other non-metallic mineral products.....	0.6	0.6	0.6
22	23.1	Glass and glass products.....	0.2	0.1	0.1
23	23.2-9	Refractory products, cut, shaped and finished stone.....	0.5	0.4	0.4
24	24	Basic metals.....	1.1	0.8	0.7
25	24.1-3	Basic iron and steel and ferro-alloys, other products of steel.....	0.6	0.4	0.4
26	24.4	Basic precious and other non-ferrous metals.....	0.2	0.2	0.2
27	24.5	Casting services of metal.....	0.3	0.2	0.2
28	25	Fabricated metal products, except machinery and equipment.....	2.1	1.8	2.0
29	26	Computer, electronic and optical products.....	1.1	0.8	1.0
30	27	Electrical equipment.....	1.4	1.3	1.5
31	28	Machinery and equipment n.e.c.....	3.5	2.8	3.1
32	29	Motor vehicles, trailers and semi-trailers.....	2.3	1.7	2.6
33	30	Other transport equipment.....	0.4	0.4	0.5
34	31-32	Furniture, other manufacture goods.....	0.8	0.8	0.9
35	33	Repair and installation services of machinery and equipment.....	0.7	0.7	0.7
36	D (35)	Electricity, gas, steam and air conditioning.....	1.9	2.1	2.0
37	35.1-/3	Electricity, transmission and distribution services, steam.....	1.5	1.5	1.5
38	35.2	Manufactured gas.....	0.4	0.6	0.4
39	E	Water supply; sewerage, waste management and remediation services.....	1.1	1.1	1.1
40	36	Natural water; water treatment and supply services.....	0.2	0.2	0.2
41	37-39	Sewerage services; waste collection and materials recovery services.....	0.9	0.9	0.9
42	37	Sewerage services, sewerage sludge.....	-	-	-
43	38-39	Waste collection, treatment and disposal services.....	-	-	-
44	F	Constructions and construction works.....	4.4	4.7	4.8
45	41-42	Building and building construction works.....	1.3	1.4	1.4
46	43	Specialised construction works.....	3.1	3.3	3.4
47	G	Wholesale and retail trade services; repair services of motor vehicles.....	11.1	10.9	10.0
48	45	Wholesale and retail trade and repair services of motor vehicles.....	1.8	1.7	1.5
49	46	Wholesale trade services, except of motor vehicles and motorcycles.....	5.5	5.2	4.7
50	47	Retail trade services, except of motor vehicles and motorcycles.....	3.8	4.1	3.8
51	H	Transportation and storage services.....	4.3	4.0	4.2
52	49.1-2	Passenger rail transport services, freight rail transport services.....	-	-	-
53	49.3-5	Other passenger land transport services, transport service via pipeline...	-	-	-
54	50	Water transport services.....	0.4	0.4	0.3
55	51	Air transport services.....	0.2	0.2	0.2
56	52	Warehousing and support services for transportation.....	1.5	1.4	1.4
57	53	Postal and courier services.....	0.5	0.5	0.4
58	I	Accommodation and food services.....	1.7	1.9	1.7
59	J	Information and communication services.....	4.2	4.6	4.3
60	K	Financial and insurance services.....	3.6	4.3	4.4
61	L	Real estate services.....	12.7	13.1	12.7
62	M	Professional, scientific and technical services.....	6.8	6.3	6.2
63	N	Administrative and support services.....	5.3	5.0	5.1
64	O	Public administration and defence services.....	5.9	6.5	6.2
65	P	Education services.....	4.4	4.7	4.6
66	Q	Human health and social work services.....	6.8	7.5	7.4
67	R-T	Other services.....	4.6	4.8	4.7
68	93	Sports activities and amusement and recreation activities.....	0.5	0.5	0.5
69		<b>All homogeneous branches.....</b>	<b>100</b>	<b>100</b>	<b>100</b>

1) Statistical Classification of Products by Activity (CPA) of the European Union (2008 edition).