Environment and energy

1. Energy consumption

Denmark self-sufficient as regards energy

Since 1997, Denmark has been self-sufficient as regards energy thanks to the increased extraction of crude oil and natural gas from the North Sea. In 2004, the production of oil and gas was 56 per cent higher than the total consumption of energy.

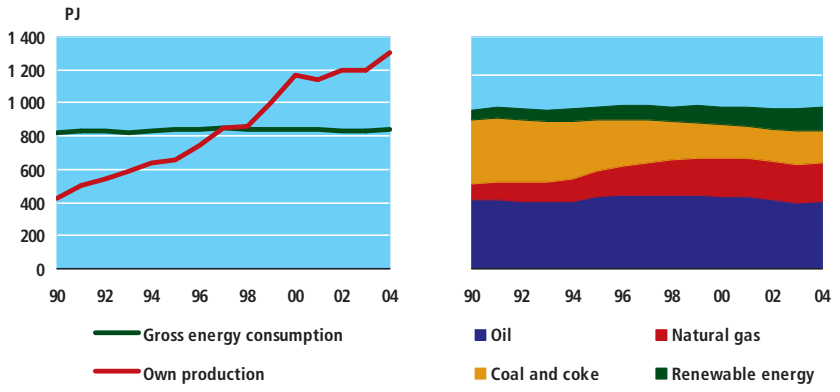
More renewable energy sources

The consumption of coal and coke fell by 7 per cent from 2003 to 2004. The consumption of natural gas had a 3 per cent increase, while the consumption of renewable energy now accounts for 15 per cent of total gross energy consumption. This plays a particularly important part as regards environmental issues, as an increase in the use of such energy can cause a reduction in carbon dioxide emissions by replacing the use of fossil fuels such as coal and oil. Renewable energy sources include the carbon-dioxide free types of energy such as wind power and solar power as well as carbon-dioxide neutral fuels such as hay and wood, which absorb carbon dioxide from the atmosphere during growth, only to release it again when burnt.

Stable energy consumption in recent years

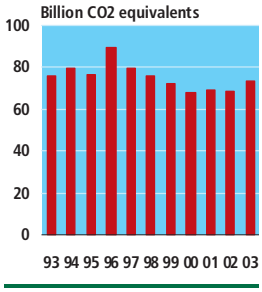
Gross energy consumption comprises the consumption of oil, natural gas, coal and renewable energy. When calculating gross energy consumption, adjustments are made to take into account imports and exports of electricity. Total gross energy consumption has remained stable in recent years, whereas the composition of fuels has changed markedly, resulting in an increase in the consumption of natural gas and renewable energy and a subsequent decrease in coal consumption. In Denmark, the consumption of coal and coke depends on how much electricity we export. In 2004, there was a decrease in the export of electricity to Norway and Sweden and a subsequent decrease in the consumption of coal and coke.

Figure 1 **Gross energy consumption 1990-2004**



2. Air pollution

Figure 2
Emissions of greenhouse gases 1993-2003



Greenhouse gases

The air and the environment are subjected to a significant pressure created by humans from the burning of fossil fuels, which entails emissions of greenhouse gases such as carbon dioxide (CO_2), laughing gas (N_2O), methane (CH_4), and chlorofluorocarbons (CFCs). Carbon dioxide is the most important of these substances. Greenhouse gases are not dangerous in themselves for human beings, but in greater quantities they are assumed to contribute to a gradual increase in average global temperatures.

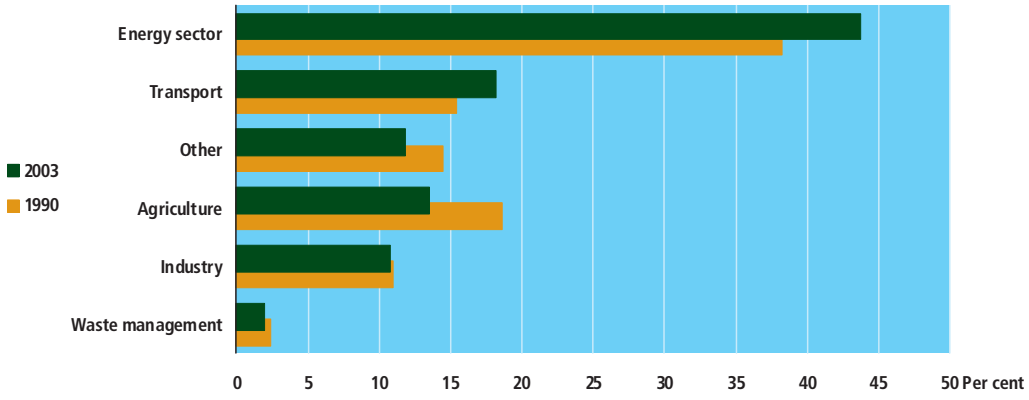
Fall in emissions of greenhouse gases since 1996

Denmark's emissions of carbon dioxide vary over the years, a fact which is partly due to the net exports of electricity. In years when Denmark has a large export of electricity, carbon-dioxide emissions increase as power generation increases. However, reductions in the emissions of carbon dioxide have been achieved by replacing fossil fuels, such as coal, by natural gas and renewable energy and by an increase in energy effectiveness. The effect of the various greenhouse gases on the atmosphere varies. They are therefore converted to the so called CO_2-equivalents. 1 CO_2-equivalent indicates the effect of the various greenhouse gases converted to the quantity of carbon dioxide that would have the same climatic impact – 1 kg carbon dioxide corresponds to 1 CO_2-equivalent. The emission of greenhouse gases peaked in 1996 with 90 billion CO_2-equivalents.

The energy sector is the main source of emissions

In 2003, the energy sector accounted for 44 per cent of total greenhouse gases measured in CO_2-equivalents compared to 38 per cent in 1990. The transport sector was also a large contributor accounting for 18 per cent of total emissions in 2003. The majority of emissions of methane (CH_4) come from agriculture and nature (e.g. emissions from ruminant animals and bogs). Emissions of laughing gas (N_2O) result mainly from the use of nitrogenous fertilisers. Agriculture contributed with 14 per cent of total emissions of greenhouse gases in 2003 measured in CO_2-equivalents.

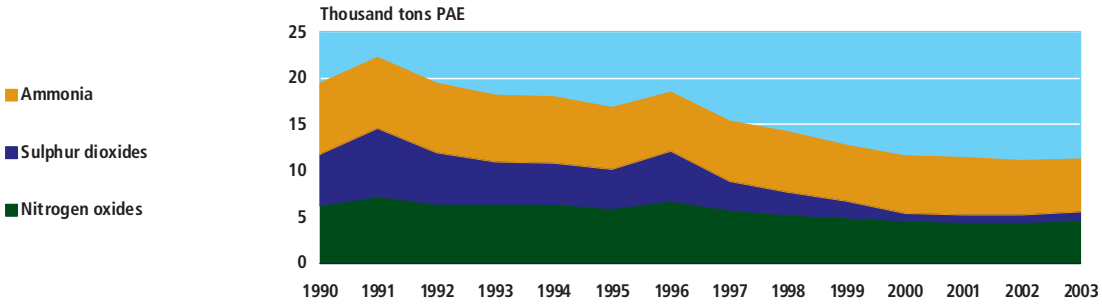
Figure 3 Emissions of greenhouse gases (CO_2-equivalents) by sectors



Acidification

The environment is also subjected to significant pressure from the increased acidity of the air. Acidification occurs when emissions of nitrogen and sulphur fall with precipitation in the form of ammonia (NH_3), nitrogen oxides (NO_x) and sulphur dioxides (SO_2). Sulphur and nitrogen combine to form acidic chemical compounds which cause buildings to deteriorate and are harmful to plants and the aquatic environment. Acidification is calculated by means of Potential Acidification Equivalents (PAEs), which is a common acidification unit for all acidifying substances and is used to compare the effect of the various substances on the environment.

Figure 4 **Acidification from Danish activities 1990-2003**



Source: National Environmental Research Institute of Denmark.

The total emission of ammonia, sulphur dioxides and nitrogen oxides has fallen from 20,000 tonnes PAE in 1990 to 11,000 tonnes in 2003. The largest fall has been for sulphur dioxides. The acidifying substances come mainly from agriculture, from energy conversion within the energy sector, and from the transport sector. In 1990, agriculture was the largest contributor, accounting for 40 per cent of total Danish emissions. Energy conversion accounted for 31 per cent and the transport sector for 15 per cent. In 2003, agriculture accounted for the greater share of emissions, 50 per cent, while the transport sector and energy conversion accounted for 17 per cent of emissions.

The environmental strain caused by the transport sector

Transport interlinks a society, but is also a strain on the environment. Construction of roads, railways, ports and airports is the prerequisite of transport, which may have a negative impact on our recreational natural resorts. The strain caused by transport in urban areas is, for example, noise, particulates, laughing gas, nitrogen oxides, carbon monoxide, sulphur dioxide, volatile hydrocarbons (NMVOC), etc. In the present context, the transport sector is defined as overall road transport, railway transport, air and sea transport in Denmark.

A decrease in the environmental strain caused by the transport sector

One method in which to estimate the environmental strain caused by the transport sector is to look at the trends in emissions of the most important substances from the transport sector and the transport sector's energy consumption, compared to the social and economic activities in terms of the Gross National Product (GDP). If an index in the figure below is less than 100 over time, a so-called decoupling effect from the energy consumption is taking place.

Figure 5 Relaxation indicators for the transport sector 1990-2003

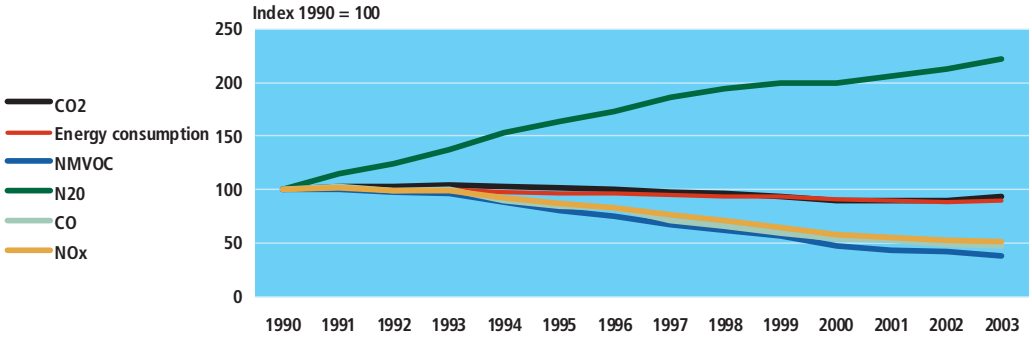
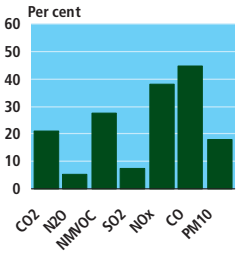


Figure 6
Percentage of all national emissions accounted for by the transport sector, 2003



Source: National Environmental Research Institute.

The period 1990 to 2003 saw a considerable relaxation of the most important environmental emissions from the transport sector. The greatest relaxation is attributed to volatile hydrocarbons, where emissions in 2002 only reached 42 per cent of the 1990 level. Since 1997, there has been a steady relaxation in emissions of carbon dioxide, whereas emissions of laughing gas accounted for a considerably higher increase in emissions from the transport sector.

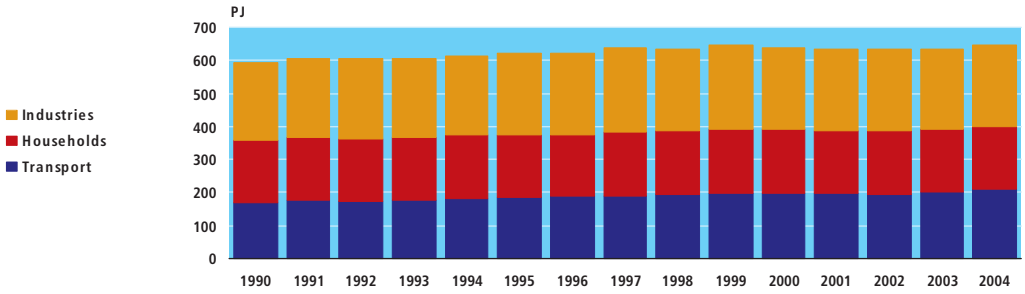
The transport sector accounts for the highest share of emissions of carbon monoxide

The transport sector's share of total national emissions in 2003 was the highest for carbon monoxide reaching 45 per cent and the lowest for laughing gas reaching 5 per cent. The largest contributor to emissions of carbon monoxide is the transport sector. The shares do not reflect absolute emissions measured in tonnes or the damaging effects on the environment.

The transport sector accounts for an increasing share of energy consumption

Comparisons of energy consumption in terms of energy units by the transport sector with energy consumption by households and industries over the period 1990 to 2004 show that there is a minor increase in the transport sector's share of total energy consumption, whereas the share of industries and households shows a minor fall. The transport sector's share has increased from 29 per cent of total energy consumption in 1990 to 32 per cent in 2004.

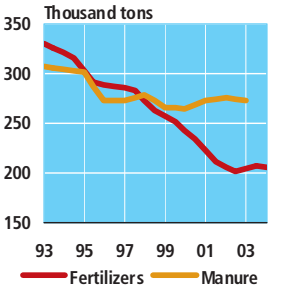
Figure 7 Final energy consumption by sector 1990-2004



Source: Danish Energy Authority.

3. Agriculture

Figure 8
Nitrogen in manure and commercial fertilizers
1993-2004



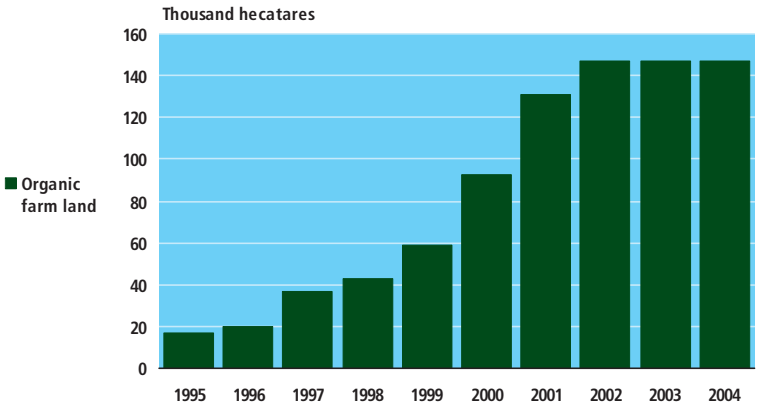
Declining use of fertilizers in agriculture

Agricultural production of animal and vegetable products involves the use of manure and commercial fertilizers. This causes large quantities of nitrogen and small quantities of phosphorus to be discharged into the soil. Some nitrogen and phosphorus is not received by plants and as a consequence is leached from the soil, leading to a discharge of these substances into the ocean via water run offs. The adverse effects include undesirable algae growth, resulting in an undesirable environmental state. The use of especially commercial fertilizers has declined over a long period, but has shown a minor increase in the crop year 2003/2004.

More organic farmland

The proportion of organic farmland has increased significantly since 1995. For example, the amount of land used for organic farming doubled from 1997 to 1999. In recent years, the growth in organic farmland has been decreasing and accounted for 147,000 hectares in 2004, corresponding to 6 per cent of all Danish farmland.

Figure 9 Total area extent of organic farms 1990-2004

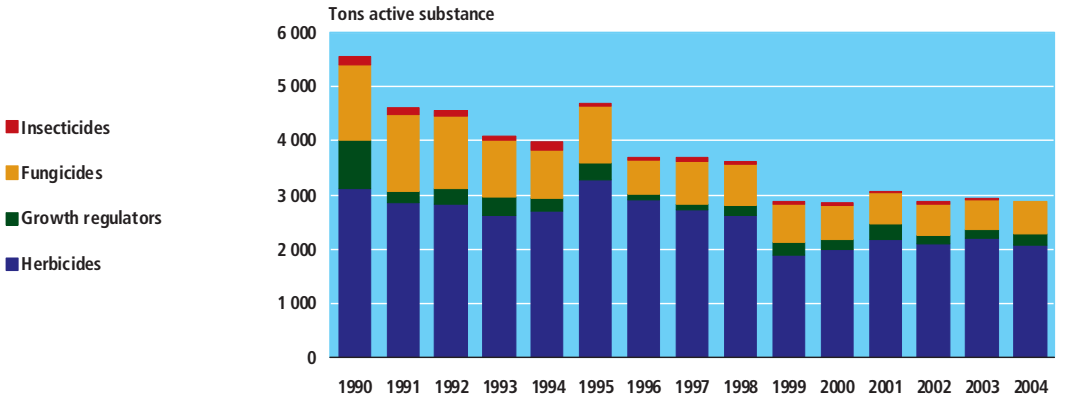


Source: Plant Directorate. Note: the area extent includes forests.

Combat of weeds, pests, and fungi is harmful for the environment

Pesticides are chemical products mainly used within agriculture to combat weeds, fungi, and insects. Effective control of pests, weeds, and fungi in fields has had an indirect effect on the number of animals that feed on insects. The effect might be fatal or entail a reduction in the reproductive abilities of the relevant animals. Pesticides are divided into products that protect crops against weeds, herbicides, against fungus infection, fungicides, and against insects, insecticides. There are also products that shorten crops, growth regulators.

Figure 10 Pesticide sales to agriculture 1990-2004



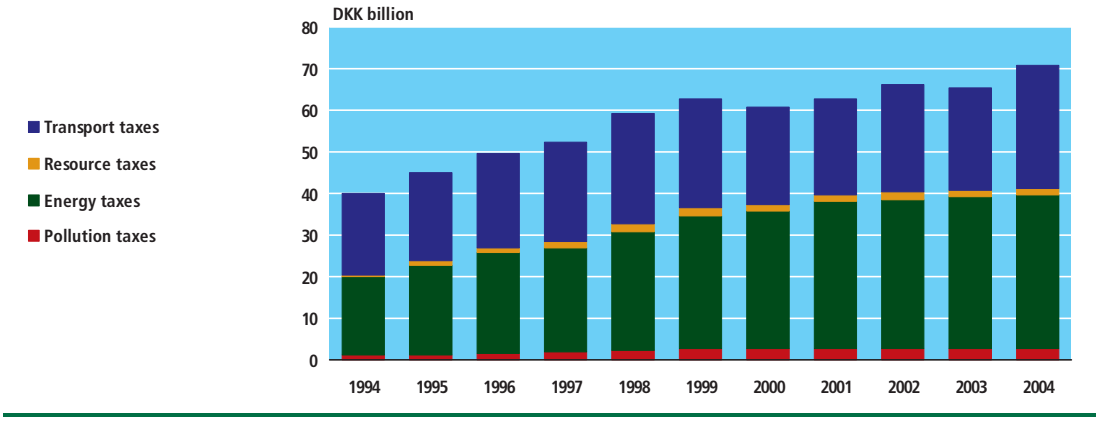
Source: Danish Environmental Protection Agency.

4. Public sector response

Environmental taxes

Denmark's environmental policy involves an increasing use of environmental taxes. Environmental taxes comprise pollution taxes, energy taxes, resource taxes and transport taxes. In 2004, the total revenue generated from these taxes was DKK 70.6 billion, corresponding to 10 per cent of total revenues from taxes and duties. Energy taxes accounted for the greatest increase. Total revenue generated from energy taxes amounted to DKK 37 billion in 2004, corresponding to 52.4 per cent of total revenue from environmental taxes. In the same year, transport taxes accounted for DKK 29.3 billion or 41.5 per cent of environmental taxes. Pollution taxes accounted for 4 per cent and resource taxes for 2 per cent

Figure 11 Environmental taxes 1994-2004



Energy taxes comprise taxes and duties on carbon dioxide, sulphur dioxide, electricity, natural gas, petrol and specific petroleum products. Transport taxes comprise taxes and duties on tyres, third-party liability insurance and sales of number

plates for motor vehicles, weight duties and registration duties and passenger duties. Pollution taxes comprise taxes and duties on CFCs, PVCs, phthalates, chlorinate solvents, growth stimulants, pesticides, specific retail containers, nickel/cadmium batteries, and waste and waste water. Resource taxes comprise taxes and duties on game and fishing licence, quarrying and imports of raw materials, and piped water.

Table 357 Air pollution in cities

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	µg/m3 sulphur dioxide									
Copenhagen	9.0	7.1	4.6	4.4	4.0	3.3	. . .[1]	. . .	. . .	. . .
Ålborg	4.0	5.0	2.7	2.7	1.8	. . .	. . .[1]	. . .	. . .	. . .
Odense	3.8	4.9	2.6	2.2	1.7	1.3	. . .[1]	. . .	. . .	. . .
	µg/m3 nitrogen dioxide									
Copenhagen	52.6	44.7	43.0	43.0	47.0	42.0	40.0	47.0	47.0	46.0
Ålborg	37.4	37.6	34.0	34.0	40.0	35.0	35.0	33.0	35.0	35.0
Odense	34.0	34.0	36.0	32.0	33.0	31.0	31.0	37.0	35.0	32.0
Århus	. . .	. . .	. . .	. . .	. . .	. . .	43.0	44.0	46.0	45.0
	ng/m3 lead									
Copenhagen	26.0	24.8	16.6	16.4	16.6	29.6	23.4[2]	17.5	15.1	10.7
Ålborg	31.4	18.6	13.9	13.0	12.5	. . .	12.5[2]	10.5	9.9	6.8
Odense	22.3	22.0	15.0	14.5	13.6	13.0	11.3[2]	12.0	19.5	11.4
Århus	. . .	. . .	. . .	. . .	. . .	. . .	8.9[2]	8.5	11.5	7.6
	µg/m3 particulates									
Copenhagen	61.4	65.3	46.8	45.6	47.2	48.7	34.2[2]	36.0	32.9	32.0
Ålborg	56.1	68.9	53.7	50.7	51.3	. . .	29.0[2]	31.8	31.2	27.0
Odense	53.3	62.7	61.4	45.5	48.7	44.4	30.9[2]	33.2	36.7	31.0
Århus	. . .	. . .	. . .	. . .	. . .	. . .	31.7	29.6	29.4	23.2

Note. µg/ m^3 corresponds to a millionth of a gram per cubic meter, while ng/m^3 corresponds to a billionth of a gram per cubic meter.

[1] Due to the low concentration of sulphur dioxide in the air, measurements have been discontinued. [2] From 2001 new measurement method.

Source: National Environmental Research Institute.

For further information visit www.statbank.dk/term8

Table 358 Extraction of raw materials

	1990	1995	2000	2004
	m3 in thousands			
Extraction of raw materials, total	**33 976**	**34 211**	**40 945**	**39 444**
Extraction from land area:	**28 106**	**28 558**	**33 809**	**32 774**
Stone, gravel, sand	22 534	21 721	27 587	27 058
Granite	810	662	199	186
Chalk, limestone	2 924	4 049	3 405	3 252
Clay	462	739	788	648
Plastic clay and bentonite	303	311	313	297
Quartz sand	186	191	479	486
Moler	195	186	227	226
Peat and sphagnum	399	259	247	345
Other raw materials	292	440	563	276
Extraction from sea area				
Sand, gravel, sand for land filling etc.	**5 870**	**5 652**	**7 136**	**6 670**

Source: Extraction from sea area is collected in the National Forest and Nature Agency.

For further information visit www.statbank.dk/rst1

Table 359 Consumption of drinking water by counties 2003

	House-holds	Industry and institutions	Irrigation	Losses, etc.	All Denmark
	mio. m^3				
All Denmark	**250.0**	**191.6**	**189.2**	**28.0**	**658.9**
Copenhagen County[1]	55.8	28.8	0.0	4.3	88.9
Frederiksborg County	16.6	5.6	1.0	1.8	25.0
Roskilde County	10.3	8.5	0.1	1.2	20.1
West Zealand County	10.6	18.3	0.2	1.8	30.9
Storstrøm County	11.1	7.5	0.7	1.4	20.7
Bornholm Municipality	2.7	1.0	0.0	0.1	3.9
Funen County	21.2	16.4	0.4	2.8	40.8
South Jutland County	14.9	8.3	25.4	1.8	50.4
Ribe County	10.9	13.3	48.6	1.3	74.0
Vejle County	13.9	14.5	20.2	2.2	50.9
Ringkøbing County	13.8	17.2	57.0	2.1	90.1
Aarhus County	31.8	15.8	4.0	3.3	54.9
Viborg County	13.6	9.6	8.1	1.7	33.1
North Jutland County	23.0	26.7	23.5	2.1	75.3

[1] Copenhagen County includes Copenhagen and Frederiksberg Municipalities.

For further information www.statbank.dk/vand1

Table 360 Consumption of drinking water by purpose

	2002	2003	2004
	m^3 in mio.		
All Denmark	**645.8**	**629.9**	**658.9**
Households	247.7	245.5	250.0
Industry and institutions	215.4	193.3	191.6
Irrigation	157.6	162.8	189.2
Losses, etc.	25.0	28.2	28.0

For further information www.statbank.dk/vand1

Table 361 Decoupling indicators for the transport sector

	1995	2000	2003
	Index 1990 = 100		
CO_2	101	90	93
Energy consumption	97	91	89
NMVOC	81	48	38
N_2O	164	200	222
CO	85	54	47
NO_x	87	58	51

Note. The indicators expresses the development in emissions from the transport sector in relation to the development in the economy expressed in the Gross domestic product (GDP).

Table 362 Sales of pesticides

	1999	2000	2001	2002	2003	2004
	tons					
Sales of pesticide products[1]						
Total sale	**12 445**	**12 141**	**12 120**	**12 090**	**11 736**	**11 634**
Repellents	84	35	23	30	32	24
Fungicides	1 999	1 757	1 625	1 684	1 744	1 849
Rodenticides	441	458	625	422	420	380
Herbicides	5 740	5 641	6 368	6 340	6 096	6 330
Insecticides	900	745	672	803	837	686
Soil disinfectants	4	2	10	6	5	4
Combined fungicides and insecticides	16	15	12	23	22	9
Algicides	1	4	5	3	2	2
Slimicides for use in paper pulp	60	61	54	39	28	33
Products against pests on farm animals	111	134	189	250	106	80
Products for the protection of woodwork	2 657	2 869	1 992	2 234	2 126	1 874
Plant growth regulators	432	420	546	256	317	364
Of which active ingredients[2]						
Active ingredients, total	**3 605**	**3 551**	**3 687**	**3 556**	**3 553**	**3 513**
Repellents	6	7	4	4	6	3
Fungicides	884	734	654	683	665	720
Rodenticides	3	6	2	4	3	4
Herbicides	2 059	2 136	2 364	2 369	2 390	2 311
Insecticides	86	77	87	89	92	82
Soil disinfectants	4	2	2	5	5	4
Combined fungicides and insecticides	2	4	6	11	12	8
Algicides	1	1	1	1	1	1
Slimicides for use in paper pulp	42	42	33	32	28	33
Products against pests on farm animals	1	1	2	2	2	1
Products for the protection of woodwork	261	295	189	197	171	137
Plant growth regulators	257	245	337	158	179	209

[1] A pesticide product comprises one or more effective substances, emulators, adhesives and inactive fillers. [2] That part of the product, which has a toxic effect.

Source: Danish Environmental Protection Agency.

For further information visit www.statbank.dk/pest2

Table 363 Bathing water quality

	Monitoring stations	Acceptable water quality	Unacceptable water quality	Beach areas where bathing is forbidden
1985	1 374	1 017	288	69
1990	1 370	1 251	70	49
1991	1 338	1 230	70	38
1992	1 307	1 225	54	28
1993	1 282	1 206	55	21
1994	1 288	1 234	33	21
1995	1 301	1 227	54	20
1996	1 299	1 223	57	19
1997	1 310	1 275	18	17
1998	1 307	1 244	45	18
1999	1 307	1 260	30	17
2000	1 295	1 250	28	17
2001	1 279	1 247	17	15
2002	1 275	1 222	38	15
2003	1 269	1 223	30	16
2004	1 256	1 219	23	16
2005	1 249	1 225	10	14

Source: Environmental Protection Agency.

Table 364 Emissions from the transport sector 2003

	CO_2	NO_x	SO_2	CO
	thousand tons			
Total[1]	**12 785**	**77**	**2.2**	**294**
Road transport	11 864	65	0.4	273
Railway transport	218	4	0.0	1
Air transport	138	1	0.0	1
Sea transport	565	9	1.9	20
	per cent			
Total[1]	**100**	**100**	**100**	**100**
Road transport	93	83	17	93
Railway transport	2	5	0	0
Air transport	1	1	0	0
Sea transport	4	11	83	7

[1] Emissions from military not included.

Source: National Environmental Research Institute.

For further information visit www.statbank.dk/term6

Table 365 Emission of greenhouse gases[1]

	1994	1995	1996	1997	1998	1999	2000	2001	2001	2003
	mia. GWP									
Total	**79**	**76**	**90**	**80**	**76**	**72**	**68**	**69**	**68**	**73**
Transport	12	12	12	13	13	13	13	13	13	13
Manufacturing and production	8	8	8	9	8	9	8	8	8	8
Energy sector	36	33	45	36	32	29	26	27	27	32
Waste disposal	2	2	2	2	1	1	1	1	1	1
Agriculture	12	12	12	11	11	11	11	10	10	10
Other	10	10	11	10	10	10	9	9	9	9

[1] Carbon dioxide, laughing gas and methane.

Source: National Environmental Research Institute.

For further information visit www.statbank.dk/luft4

Table 366 Emission of acidification[1]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	thousand tons PAE									
Total	**18**	**17**	**19**	**15**	**14**	**13**	**12**	**11**	**11**	**11**
Transport	3	3	3	3	2	2	2	2	2	2
Manufacturing and production	1	1	1	1	1	1	1	1	0	0
Energy sector	6	5	7	4	3	2	2	1	2	2
Waste disposal	-	-	-	-	-	-	-	-	-	-
Agriculture	7	7	6	6	6	6	6	6	6	6
Other	2	2	2	2	2	2	1	1	1	1

[1] Sulphur dioxide, nitrogen oxides and ammonia.

Source: The National Environmental Research Institute of Denmark.

For further information visit www.statbank.dk/luft5

Table 367 Expenditure and revenue by environmental domains. General government

	2000	2002	2004*
	DKK mio.		
Current and capital expenditure, total	**23 415**	**24 515**	**24 894**
Air and climate	2 315	1 429	795
Waste water	5 438	5 846	6 693
Waste	7 135	8 078	8 581
Soil and ground water	752	843	823
Biodiversity and landscape	2 118	2 511	2 470
Research and development	1 541	1 522	1 538
Environmental assistance	1 840	1 949	1 490
Other[1]	2 276	2 337	2 504
Current and capital revenue, total[2]	**14 125**	**15 271**	**15 701**
Air and climate	11	18	200
Waste water	5 534	5 765	6 230
Waste	7 242	7 587	7 896
Soil and ground water	153	102	77
Biodiversity and landscape	273	901	350
Research and development	576	571	603
Other[1]	337	327	344

Note. Includes market services.

[1] Including administration. [2] Excluding environmental taxes.

For further information visit www.statbank.dk/mreg2

Table 368 Environmental expenditure and revenues. General government

	2000	2002	2004*
	mio. kr.		
Current and capital expenditure, total	**23 415**	**24 515**	**24 894**
Current expenditure, total	18 688	19 757	19 979
Compensation of employees	4 121	4 422	4 728
Intermediate consumption	10 614	11 117	11 754
Current transfers, total	3 954	4 218	3 496
Capital expenditure, total	4 727	4 758	4 916
Fixed gross investments	3 211	3 864	4 499
Other capital expenditure	1 516	894	417
Current and capital revenue, total[1]	**14 125**	**15 271**	**15 701**
Capital revenue, total	13 687	14 741	15 374
Sales of goods and services	12 757	13 327	14 185
Current transfers, total	930	1 414	1 189
Compulsory contributions	6	6	6
Other current transfers	924	1 408	1 183
Capital revenue, total	438	530	327

[1] Excluding environmental taxes.

For further information visit www.statbank.dk/mreg2

Table 369 Expenditure and revenue by environmental domaines 2004* Subsectors

	Central government	Counties	Municipalities	General government sector, total[1]
	DKK mio.			
Current and capital expenditure, total	5 608	2 337	16 950	24 894
Air and climate	795	0	0	795
Waste water	3	0	6 690	6 693
Waste	261	0	8 321	8 581
Soil and ground water	137	618	67	823
Biodiversity and landscape	976	1 101	392	2 470
Research and development	1 538	0	0	1 538
Environmental assistance	1 490	0	0	1 490
Other[3]	407	618	1 480	2 504
Current and capital revenue, total[2]	1 183	166	14 352	15 701
Air and climate	200	0	0	200
Waste water	1	0	6 230	6 230
Waste	2	0	7 894	7 896
Soil and ground water	57	17	3	77
Biodiversity and landscape	271	40	40	350
Research and development	603	0	0	603
Other[3]	49	110	185	344

[1] Unconsolidated. [2] Excluding enviromental taxes. [3] Including administration.

For further information visit www.statbank.dk/mreg2

Table 370 Environmental expenditure and revenues 2004*. Subsectors

	Central government	Counties	Municipalities	General government, total[1]
	DKK mio.			
Current and capital expenditure, total	5 608	2 337	16 950	24 894
Current expenditure, total	5 002	2 161	12 816	19 979
Compensation of employees	1 100	908	2 720	4 728
Intermediate consumption	973	1 022	9 759	11 754
Current transfers, total	2 929	231	337	3 496
Capital expenditure, total	606	176	4 134	4 916
Fixed gross investments	292	148	4 059	4 499
Other capital expenditure	314	28	75	417
Current and capital revenue, total[2]	1 183	166	14 352	15 701
Capital revenue, total	1 161	151	14 061	15 374
Sales of goods and services	259	51	13 874	14 185
Current transfers, total	902	100	187	1 189
Compulsory contributions	0	0	6	6
Other current transfers	902	100	181	1 183
Capital revenue, total	21	15	291	327

[1] Unconsolidated. [2] Excluding environmental taxes.

For further information visit www.statbank.dk/mreg2

Table 371 Energy balance sheet for Denmark 2004*

	Crude oil and semi-manufactured oil	Coal, coke, etc.	Oil products	Natural gas	Other gas	Renewable energy resources	Electricity	District heating
	thousand tons			mio Nm^3	thousand tons	TJ	GWh	TJ
Production	**19 275**	**-**	**8 074**	**9 202**	**451**	**96 006**	**38 380**	**130 074**
Imports	**3 761**	**7 616**	**5 467**	**-**	**4**	**7 992**	**8 673**	**-**
Stock	**2**	**231**	**1 211**	**1 099**	**11**	**-**	**-**	**-**
Waste and cable losses	**87**	**76**	**83**	**3**	**5**	**550**	**2 259**	**26 046**
Exports	**14 352**	**8**	**5 262**	**3 208**	**103**	**-**	**11 545**	**-**
Total domestic supply	**8 594**	**7 301**	**6 986**	**4 891**	**336**	**103 448**	**33 249**	**104 028**
Households	**-**	**2**	**2 568**	**738**	**49**	**13 102**	**10 316**	**64 036**
Agriculture, fishing, quarrying	**-**	**6**	**802**	**826**	**4**	**3 837**	**1 979**	**1 989**
Agriculture, horticulture, and forestry	-	4	583	87	3	3 771	1 828	1 985
Fishing	-	-	175	-	0	-	59	-
Mining and quarrying	-	2	43	739	1	66	92	4
Manufacturing	**8 594**	**330**	**742**	**914**	**259**	**4 174**	**9 596**	**7 654**
Mfr. of food, beverages and tobacco	-	82	205	314	6	136	2 274	852
Mfr. of textile and leather	-	-	10	27	0	33	208	181
Mfr. of wood products, printing and publishing	-	1	33	101	2	1 635	1 157	2 510
Mfr. of chemicals and plastic products	8 594	23	69	168	232	21	2 243	1 787
Mfr. of other non-metallic mineral products	-	224	289	137	8	823	852	96
Mfr. of basic metals and fabr. metal products	-	0	120	150	10	94	2 298	1 961
Mfr. of furniture and manufacturing n.e.c.	-	-	16	19	1	1 431	564	267
Electricity, gas and water supply	**-**	**6 963**	**380**	**2 105**	**0**	**82 336**	**508**	**16**
Construction	**-**	**-**	**388**	**6**	**5**	**-**	**297**	**-**
Wholesale and retail trade, hotels, restaurants	**-**	**-**	**331**	**102**	**3**	**-**	**3 960**	**10 232**
Sale and repair of motor vehicles, sale of auto. fuel	-	-	82	11	0	-	391	1 090
Wholesale, except of motor vehicles	-	-	177	41	2	-	1 304	4 140
Retail trade and repair work, exc. of m. vehicles	-	-	56	27	0	-	1 730	2 684
Hotels and restaurants	-	-	16	23	1	-	535	2 319
Transport, post and telecommunications	**-**	**-**	**1 390**	**12**	**10**	**-**	**1 506**	**1 180**
Transport	-	-	1 370	6	10	-	1 214	557
Post and telecommunications	-	-	20	6	-	-	292	622
Finance and business activities	**-**	**-**	**119**	**51**	**1**	**-**	**1 345**	**5 061**
Finance and insurance	-	-	8	9	-	-	254	923
Letting and sale of real estate	-	-	25	7	0	-	129	714
Business activities	-	-	86	34	1	-	962	3 424
Public and personal services	**-**	**-**	**265**	**138**	**4**	**-**	**3 743**	**13 860**
Public administration	-	-	123	17	2	-	444	1 688
Education	-	-	32	31	0	-	866	3 141
Human health activities	-	-	14	19	0	-	525	1 903
Social institutions etc.	-	-	35	32	-	-	870	3 157
Associations, culture and refuse disposal	-	-	61	40	1	-	1 038	3 970

For further information visit www.statbank.dk/ene1

Table 372 Energy consumption in Denmark

	1995	2000	2004
Energy consumption, gross		thousand tons	
Hard coal etc.	10 987	6 571	7 269
Coke and furnace coke	51	41	30
Brown coal etc.	9	2	1
Waste	2 314	2 905	3 530
Fuel wood, etc.	1 255	1 338	2 044
Straw	843	843	1 408
Kerosene	14	4	11
Jet fuel	657	535	668
Motor gasoline[1]	1 887	1 965	1 969
Other petrol and oil products[2]	750	1 251	1
Gas/Diesel oil	3 897	3 493	3 598
Fuel oil	998	596	655
Petroleum-coke	176	224	275
Liquid gas (LPG)	87	76	70
Refinery gas	370	294	231
		mio. Nm^3	
Natural gas[3]	3 009	4 205	4 212
		thousand GJ	
Biogas	1 277	1 433	1 495
Wind energy and water power	4 347	15 375	23 794
Electricity supply		mio. KWh	
Electricity sold, total	**31 435**	**32 835**	**33 247**
Dwellings	9 550	9 592	9 718
Agriculture, etc.	2 544	2 568	2 475
Manufacturing	9 449	9 832	9 671
Other industries, public administration, etc.	9 891	10 843	11 384
Crude oil and natural gas		thousand tons	
Crude oil, Danish production	9 263	17 780	19 262
		mio. Nm^3	
Natural gas, Danish production	5 165	7 883	9 202

[1] 1995 corrected for cross-border trade. [2] Including waste oil and orimulsion. [3] Excl. consumption on North-Sea platforms.

Source: Association of Danish Energy Companies.

For further information visit www.statbank.dk/ene1

Table 373 Manufacturers' energy consumption 2003

		Solid fuel	Liquid fuel	Gas	Electricity	District heating
		thousand GJ				
	Manufacturing, total[1,2]	**11 936**	**20 934**	**51 271**	**29 397**	**6 619**
14009	**Extraction of gravel and clay etc.**	**150**	**903**	**2 448**	**253**	**1**
15009	**Mfr. of food, beverages and tobacco**[2]	**2 073**	**6 799**	**13 926**	**7 584**	**1 460**
151000	Production etc. of meat and meat products	0	938	2 118	1 941	98
155000	Mfr. of dairy products	-	638	3 326	1 417	6
158909	Mfr. of other food products	2 070	5 024	5 673	3 525	1 056
159000	Mfr. of beverages	-	182	2 679	615	291
160000	Mfr. of tobacco products	3	17	129	86	10
17009	**Mfr. of textiles and leather**	**3**	**60**	**883**	**544**	**55**
170000	Mfr. of textiles	-	52	807	484	35
180000	Mfr. of wearing apparel	3	5	34	33	20
190000	Mfr. of leather and footwear	-	3	43	27	0
20000	**Mfr. of wood and wood products**	**1 287**	**323**	**195**	**832**	**573**
21009	**Mfr. of paper prod.; printing and publ.**	**39**	**219**	**3 360**	**1 914**	**1 340**
210000	Mfr. of pulp, paper and paper products	36	194	3 036	1 175	1 158
221200	Publishing of newspapers	-	1	13	98	60
221309	Publishing activities, excluding newspapers	-	3	30	61	19
222009	Printing activities	3	22	281	581	102
23000	**Mfr. of refined petroleum products etc.**	**-**	**918**	**12 431**	**891**	**260**
24000	**Mfr. of chemicals**	**556**	**952**	**5 159**	**4 120**	**1 228**
241009	Mfr. of chemical raw materials	-	400	3 247	1 819	444
243009	Mfr. of paints and soap	556	156	966	946	83
244000	Mfr. of pharmaceuticals	-	396	946	1 354	700
25000	**Mfr. of rubber and plastic products**	**14**	**186**	**1 146**	**2 305**	**112**
26000	**Mfr. of other non-metallic mineral prod.**	**6 644**	**9 026**	**5 436**	**2 628**	**61**
261009	Mfr. of glass and ceramic goods	0	15	1 409	518	13
263009	Mfr. of tiles, bricks cement and concrete	6 644	9 011	4 028	2 111	48
27009	**Mfr. and processing of basic metal**	**56**	**604**	**2 993**	**2 891**	**331**
270000	Mfr. of basic metal	0	136	1 663	1 249	95
281009	Mfr. of building materials of metal	32	359	580	819	155
286009	Mfr. of various metal products	24	109	751	824	81
29000	**Mfr. of machinery and equipment**	**8**	**565**	**1 449**	**1 950**	**545**
291000	Mfr. of marine engines and compressors	-	104	697	946	274
292000	Mfr. of ovens and cold-storage plants	2	208	255	431	130
293000	Mfr. of agricultural machinery	-	99	230	129	13
294009	Mfr. of machinery for industries	4	136	184	328	85
297000	Mfr. of domestic appliances	3	19	83	115	44
30009	**Mfr. of electronic components**	**40**	**150**	**811**	**1 370**	**425**
300009	Mfr. of computers and electric motors	6	87	465	659	237
320000	Mfr. of radio and communication equipment	31	15	207	326	40
330000	Mfr. of medical and optical instruments	3	49	139	385	148
35009	**Mfr. of transport equipment**	**10**	**95**	**594**	**591**	**89**
351000	Building of ships and boats	3	37	277	233	37
352009	Mfr. of transport equipment, excl. ships	7	58	317	358	53
36000	**Mfr. of furniture; manufacturing n.e.c.**	**1 056**	**135**	**439**	**1 524**	**139**
361000	Mfr. of furniture	1 036	119	324	1 026	76
365009	Mfr. of toys and jewellery	20	15	115	498	63

Note. The table includes workplaces in firms with 20 or more employed in the industry.

[1] Incl. extraction of gravel, clay, stone and salt, etc. [2] Excl. bakeries.

For further information visit www.statbank.dk/ene1

Table 374 Final energy consumption by sector

	1990	2000	2004
	PJ		
Transport	170	199	209
Households	186	190	189
Industry	236	249	247

Note. Figures are climate-corrected which means that variations in the climate are incorporated.

For further information www.statbank.dk/term1

Table 375 Production of renewable energy

	1990	2000	2004
	TJ		
Total production	**52 631**	**89 205**	**118 472**
Solar energy	100	335	392
Wind power	2 197	15 268	23 699
Water power	101	109	95
Straw	12 481	12 220	17 939
Wood chips	1 724	2 744	6 760
Firewood	8 757	11 655	12 163
Wood pellets	1 575	2 984	3 276
Wood wastes	6 191	6 895	6 455
Biogas	752	2 912	3 738
Waste combustion	15 499	30 392	36 990
Biodiesel	-	-	2 444
Fish oil	744	49	649
Geothermal heat[1]	2 510	3 644	3 872

[1] Heat pumps and geothermal power.

Source: Danish Energy Authority.