

# Geography, environment and energy

Climate and area

Infrastructure

Energy and air emissions

Water and wastewater

Material flows and waste

Green economy



## Climate and area

### The long Danish coastline

Denmark is a small country, compared to its closest neighbours. Sweden and Germany are, respectively, ten times and eight times larger than Denmark, which has an area of more than 43,000 km<sup>2</sup>. On the other hand, Denmark's coastline is extraordinarily long for a country of this size. Denmark stretches along a coast of more than 7,300 km, which is longer than the Great Wall of China. It corresponds to almost one and a half metre of coast per inhabitant.

One characteristic of Denmark's geography is the many islands, a total of 391. The largest islands are, by order of mention, Sjælland, Vendsyssel-Thy, Fyn, Lolland and Bornholm. Jutland (including Vendsyssel-Thy) account for 69 per cent of Denmark's total area.

In addition to Denmark, the Kingdom of Denmark includes the self-governing areas of Greenland and the Faroe Islands. The ice-free part of Greenland is almost ten times larger than Denmark and Denmark is 30 times larger than the Faroe Islands.

### Denmark's nature is characterized by agriculture and forests

For thousands of years, Denmark has been an agricultural country, and this has largely characterized the Danish landscape. Consequently, two thirds of the landscape consists of man-made agricultural areas. However, forests are also evident in the landscape in the form of, among other types, deciduous forest and coniferous forest. Rold Skov and Gribskov are the largest forests.

Figure 1

Distribution of Denmark's area by type of area

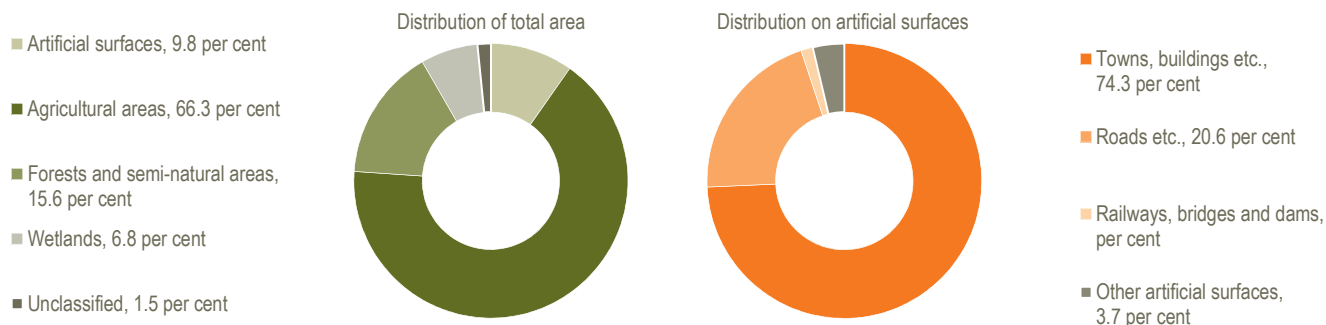


Table 399

### Man-made infrastructure and buildings characterize the landscape

Cities, roads, railroads, bridges and other types of man-made surfaces cover a total of 10 per cent of Denmark's area, corresponding to three times the area of the Faroe Islands – or 56 per cent of Sjælland. Urban centres, such as residential neighbourhoods and industrial districts, dominate and account for three-fourths of the man-made surfaces.

### It rains or snows every other day

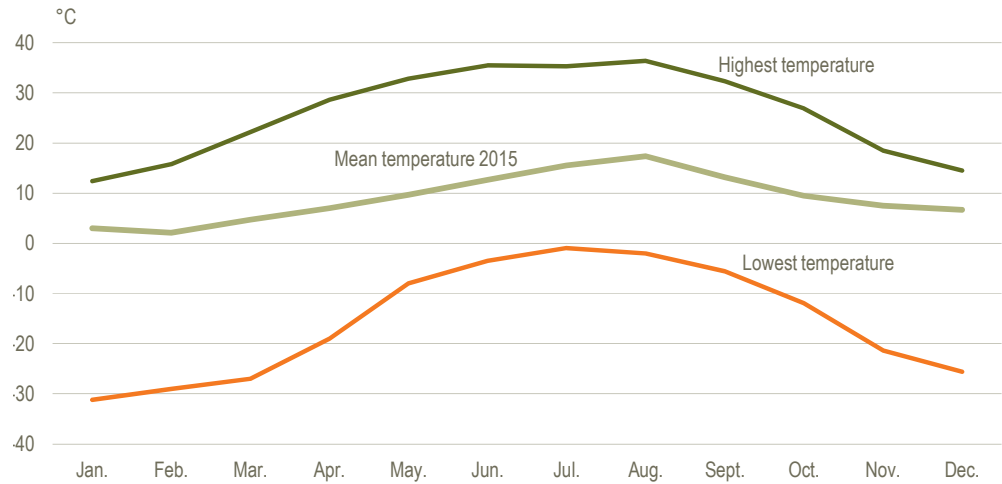
The Danish weather is known for being variable. It is a fact that it rains or snows every other day in Denmark, since a year has an average of 171 days of precipitation.

### Snow seven days a month during the wintertime

Denmark has mild winters without large amounts of snow, but with much rain. On average, it snows seven days every month in December, January and February. This

decreases to five days of snow in March, and April has an average of three days of snow.

**Figure 2** Temperatures in Denmark



Source: [www.dmi.dk](http://www.dmi.dk)

#### **Temperature variations of 16 °C during a year**

In a year, the mean temperature generally varies from 0 °C in January to 16 °C in August. Great variations occur in relation to the average. The coldest day in more than 100 years was a January day in 1982 with temperatures of -31 °C, and the warmest day was an August day in 1975 with temperatures of 36 °C.

#### **"... and it will be overcast again today"**

A natural feature of everyday life in Denmark is overcast days and many clouds in the sky. The clouds cover an average of two thirds of the sky in a year, but the summer is the least cloudy season with an average cloudiness of 60 per cent.

#### **Not many days of sunshine in a year**

Denmark is a country where the total hours of sunshine a year gives occasion to enjoy the sun while it is out. There is an average of four hours of sunshine a day, naturally primarily during the spring and summertime. From May to August, there are more than six hours of sunshine a day.

## Infrastructure

### Extension of motorways and dual-carriageways

There were 74,472 km of public roads in Denmark on 1 January 2015. The state road network comprises 5 per cent of the public road network. The other 95 per cent are administered by the municipalities.

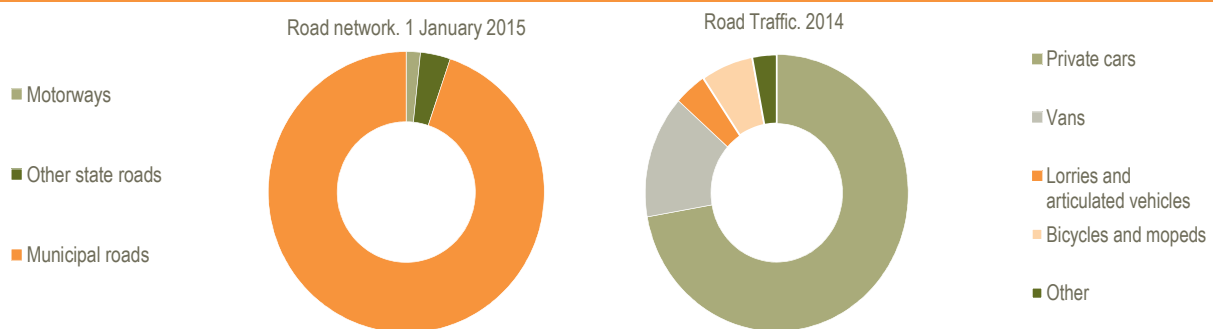
The majority of the public road network (65 per cent) is in Jutland, while the rest is distributed between the Copenhagen region (9 per cent) and the remaining part of the islands (26 per cent).

The public road network has increased by 2,215 km over the past ten years, mainly because of more municipal roads.

Since 2005, the motorway network has been extended by 19 per cent to 1,232 km in 2015, and the length of the dual-carriageways has increased by 7 per cent to 377 km in 2015.

Figure 3

Distribution of road network and of road traffic



[www.statbank.dk/vej11](http://www.statbank.dk/vej11) and [vej20](http://vej20)

### Almost a quarter of the rail network is electrified

The length of the total rail network was 2,633 km on 1 January 2015, a very small decrease of 3 km since the previous year. Viewed in relation to the total area of Denmark, there is 62 km of railway per 1,000 km<sup>2</sup>. The main part of the rail network is operated by the state-owned Banedanmark.

The regional railways are responsible for operating 517 km of rail network and Copenhagen Metro for 21 km. Since 1990, the rail network has decreased by more than 200 km, mainly due to closure, by Banedanmark, of sections carrying goods.

At the beginning of 2015, almost a quarter of the rail network was electrified. This is three times more than in 1990, but unchanged compared to 2014.

### Goods transport by ship is concentrated at 27 sea ports

In 2014, there were 110 Danish ports handling freight. The 27 largest ports each handled more than 1 million tonnes of goods annually, and accounted for 86 per cent of the total goods transport by sea.

In terms of throughput of goods, the ports of Fredericia and Aarhus are the largest Danish ports handling, respectively, 10 per cent and 8 per cent of total throughput of goods in sea.

**Ferry and passenger ship traffic is concentrated at 35 ports**

71 ports are engaged in transport of passengers, of which 35 of them have more than 200,000 arriving and departing passengers every year and account for more than 90 per cent of passengers in Danish ports. The largest Danish ferry port is Helsingør accounting for 19 per cent of all sea passengers, followed by Rødby Færgehavn with 15 per cent of all passengers in 2014.

**Energy and air emissions****Decreasing gross energy consumption and self-sufficiency**

Despite a general increase in economic activity, Denmark's total gross energy consumption has remained around 800 petajoules for many years, when the large energy consumption for international transport operations outside Denmark is not included. In the years following the financial crisis, energy consumption, however, has been at a slightly lower level.

Gross energy consumption is calculated as the consumption of oil, natural gas, coal and renewable energy. The calculation is adjusted for import and export of electricity.

Since 1998, Denmark has been self-sufficient in energy thanks to an increasing extraction of crude oil and natural gas from the North Sea as well as the production of renewable energy. In 2006, for the first time in several years a major drop in energy production occurred, mainly due to a lower production of oil and natural gas. The decline continued in subsequent years. The declining production meant that energy production in 2014 was slightly below the level of gross energy consumption in Denmark.

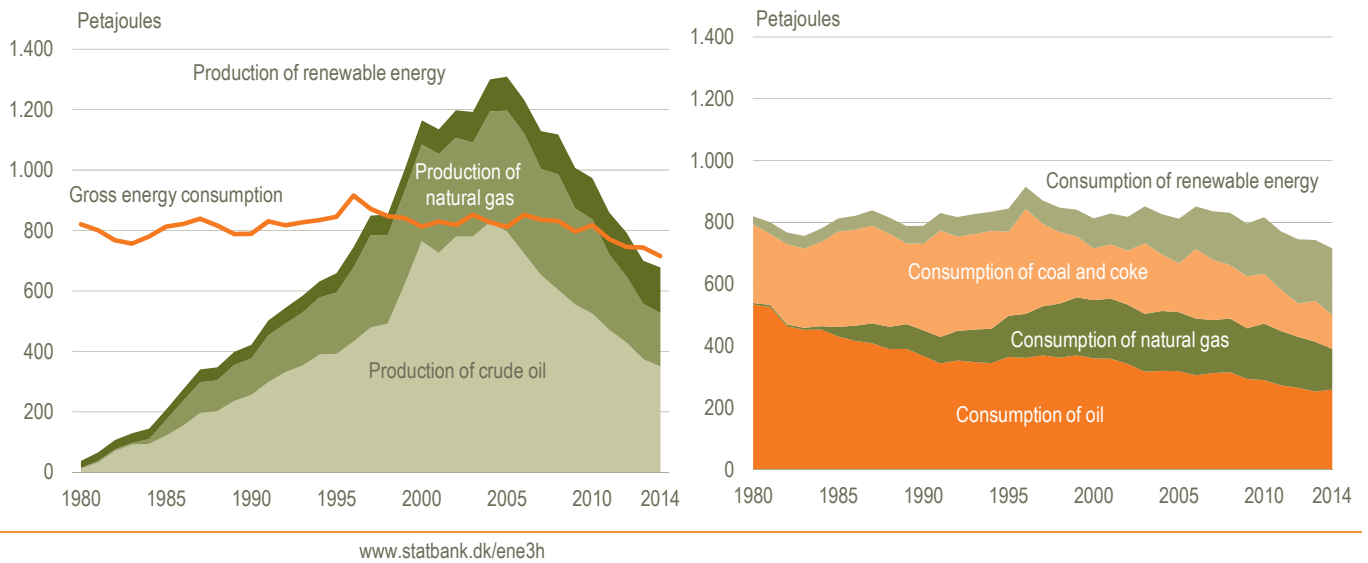
**More natural gas and renewable energy**

Since the 1990's, the fuel mix changed significantly with an increasing consumption of natural gas and renewable energy at the expense of especially coal.

The consumption of renewable energy has been rising in recent years and now accounts for 27 per cent of total gross energy consumption. Renewable energy plays a special role in relation to greenhouse gases and global warming with increasing use of renewable energy in general leading to a reduction in greenhouse gas emissions when fossil fuels such as coal and oil are replaced.

Renewable energy sources partly include energy such as wind power and solar energy, which lead to no emissions of greenhouse gases and partly of fuels such as straw and wood which during growth absorbs CO<sub>2</sub> from the atmosphere and emit CO<sub>2</sub> again when burnt.

**Figure 4** Energy consumption and production



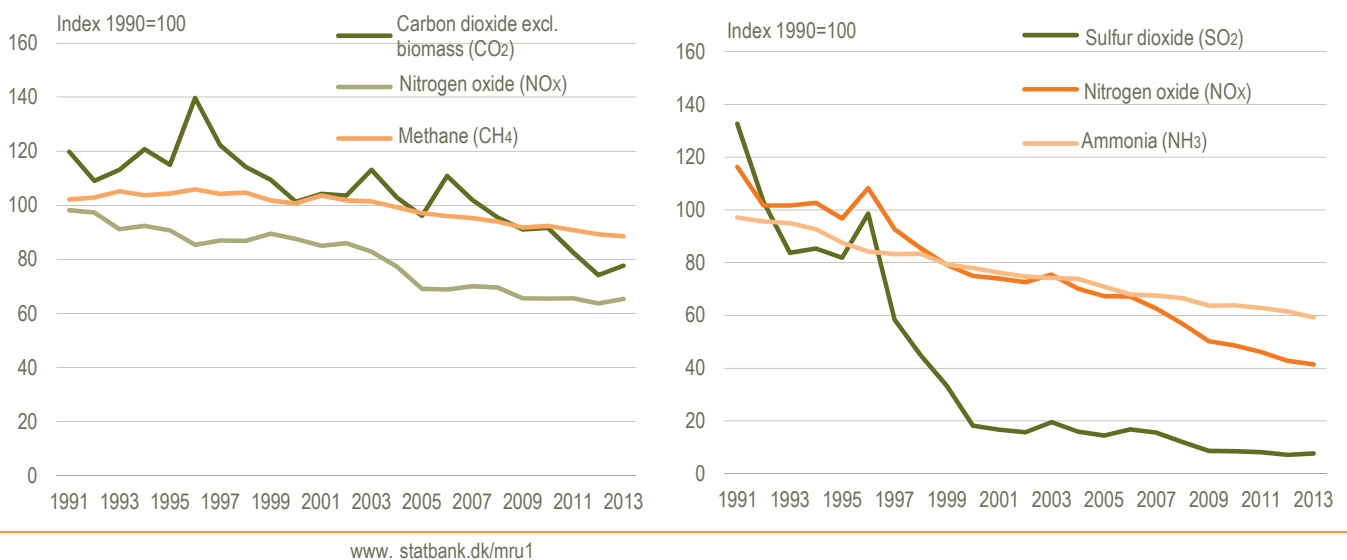
### Air emissions

Industry and household energy consumption is the main cause of emissions of CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO and other air pollutants. However, there are also emissions not related to energy use but to fertilizer application and use of solvents and acids etc. For the greenhouse gases N<sub>2</sub>O and CH<sub>4</sub> as well as for NH<sub>3</sub> and NMVOC these non-energy emissions are significant.

### Reduction in greenhouse gas and acidifying substance emissions

Emissions of the main greenhouse gas, CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>, and of acidifying substances, SO<sub>2</sub>, NO<sub>x</sub> and NH<sub>3</sub>, from the Danish area have generally declined over the past several years. In contrast, emissions caused by Danish international transport activities, has in the period from 1990 to 2013 more than tripled. The increase in emissions caused by Danish international transport activities is due to a significant expansion of the Danish maritime activity in the decade up to the financial crisis in 2008.

**Figure 5** Emissions of greenhouse gases and acidifying substances (Index 1990=100)



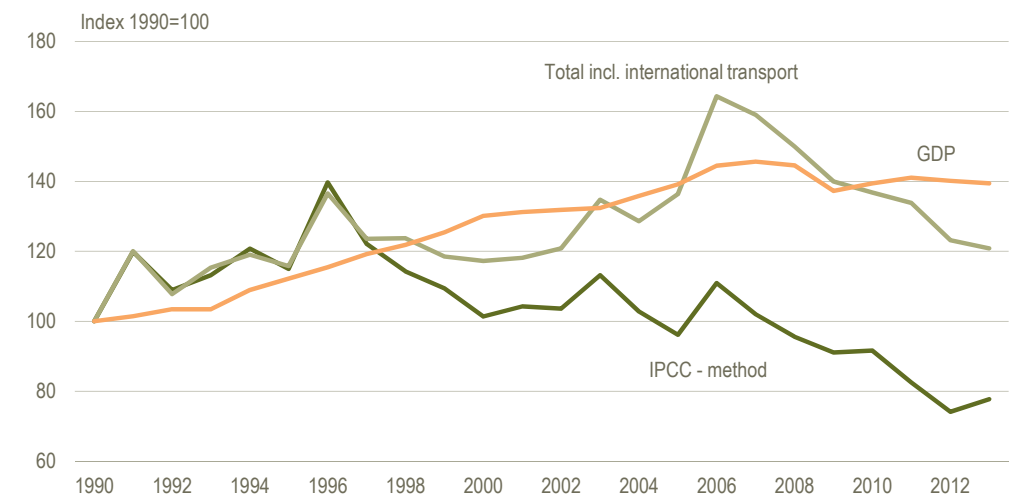
### The Danish contribution to the greenhouse effect

The individual greenhouse gases have different effects in the atmosphere and thus different warming potential and impacts of the greenhouse effect. It is therefore necessary for them to be weighted to get an overall impression of the extent to which the Danish activities contribute to global warming.

A weighting to the so-called CO<sub>2</sub> equivalents shows that the Danish contribution to the greenhouse effect was 21 per cent lower in 2013 than in 1990, not including the contribution of emissions associated with the Danish international transport activities (IPCC statement). If, however, these emissions are included, there was an increase of approximately 11 per cent. In comparison, the gross domestic product, GDP, increased by almost 39 per cent, thus a decoupling between economic growth and the contribution to the greenhouse effect has taken place, in either cases.

In 2013 86 per cent of the contribution to the greenhouse effect came from CO<sub>2</sub>. Methane accounted for 7 per cent while nitrous oxide accounted for 6 per cent. The emissions of halocarbons were below 1 per cent of the total releases from all Danish economic activities.

**Figure 6** The contribution from Danish economy to the greenhouse effect and GDP



The contribution to the greenhouse effect is calculated as CO<sub>2</sub> equivalents.

## Water and waste water

Water is one of our most important resources and invaluable both to human survival and to maintain production and consumption.

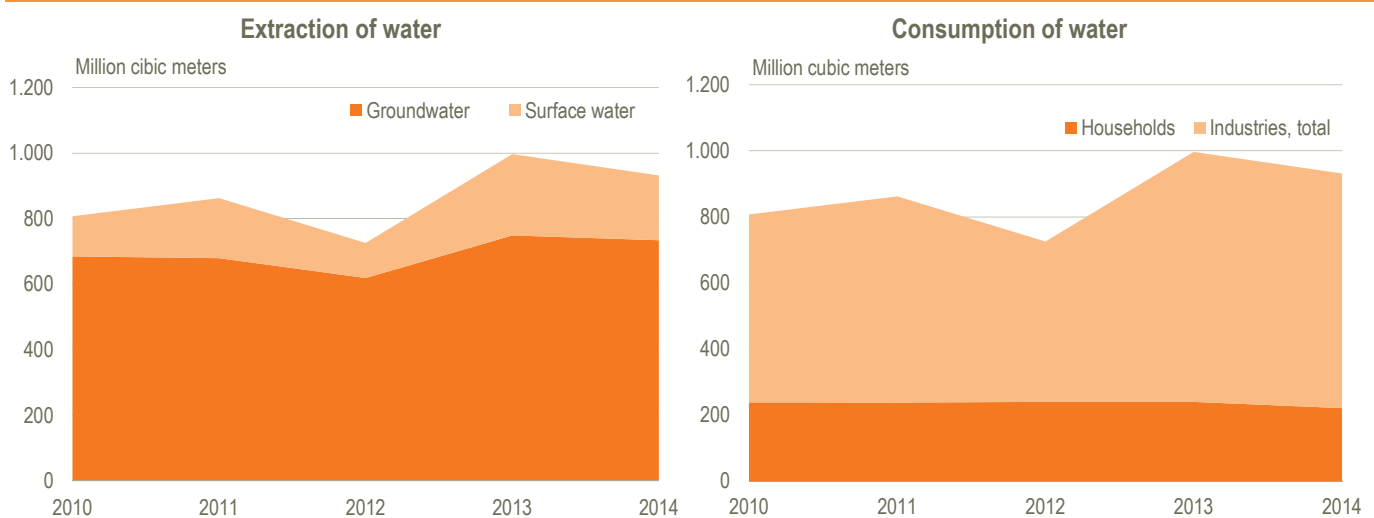
### A lot of groundwater

In Denmark, most of the water we use stem from aquifers in the ground. In 2014 extraction and consumption of groundwater was 735 million m<sup>3</sup>, while 198 million m<sup>3</sup> of surface water was recovered. Of the extracted water 221 million m<sup>3</sup> was used in households, while 711 million m<sup>3</sup> was used by industries. Especially agriculture and fish farming had a high level of water consumption. Agricultural water is especially used for watering the fields and this consumption fluctuates considerably from year to year depending on weather conditions.

### Regional differences

In the western part of Denmark, there is generally sufficient groundwater while it is necessary to collect groundwater to supply Copenhagen from other parts of Zealand. Excessive consumption of groundwater may negatively affect water quality and oxygen levels in streams and lakes. Normally, the Danish groundwater need not be treated or only treated slightly before it can be used. Groundwater is, however, in many places in Denmark under threat from pollution with nitrates or pesticides.

**Figure 7** Extraction and consumption of water



[www.statbank.dk/vandind](http://www.statbank.dk/vandind) Og vandrg01

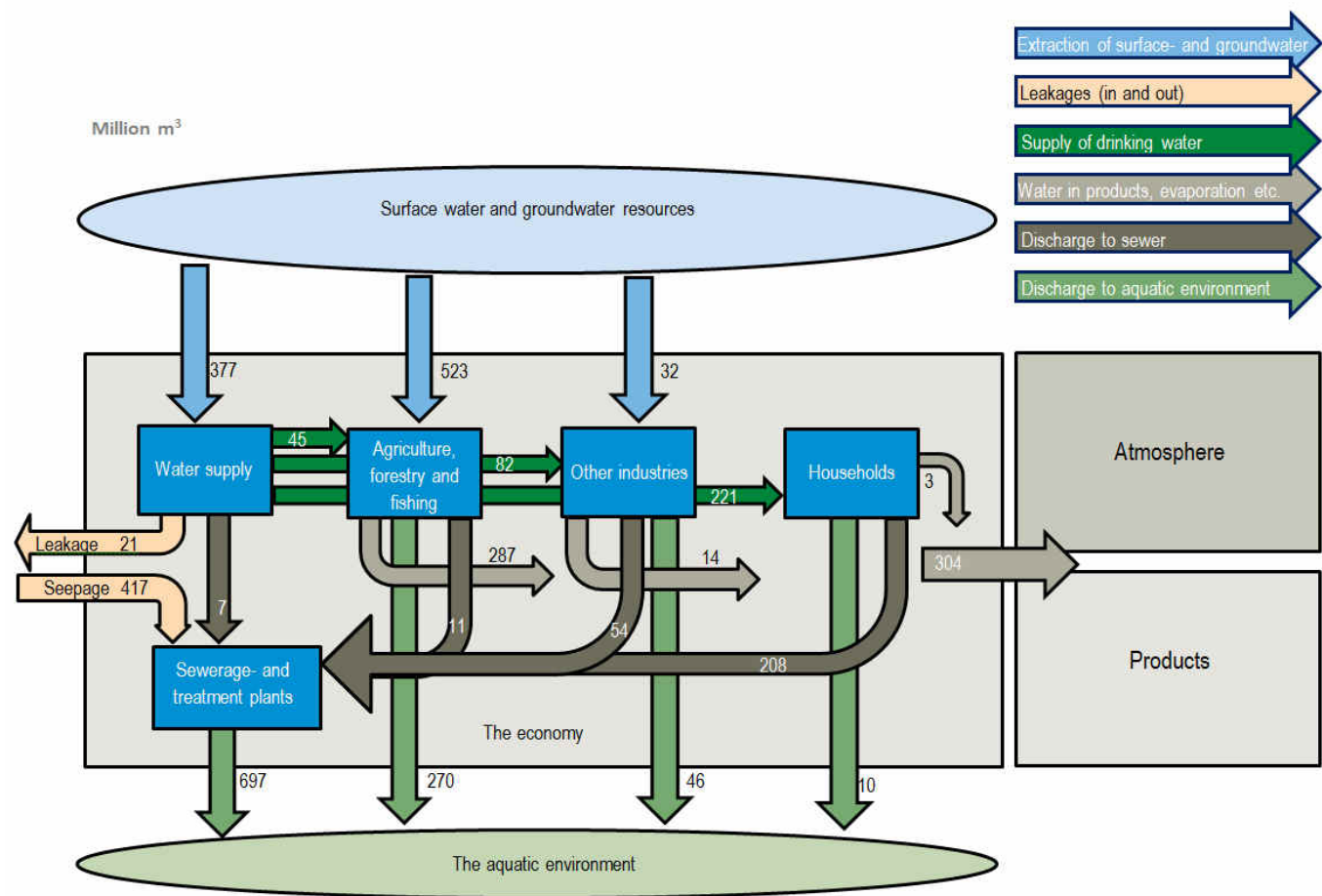
### From clean water to wastewater

After use in industry and households, a large part of wastewater is treated before it is discharged back to nature. In 2014, the total amount of wastewater produced in industries and households amounted to 606 million m<sup>3</sup>. Of these, 218 million m<sup>3</sup> came from households and 388 million m<sup>3</sup> came from industries.

However, not all the water ends up as waste water. Some of the water is absorbed by plants or added to other products, some water evaporates into the atmosphere and some water leaks from the sewage network. And finally, there is some leakage of water into the sewer network.

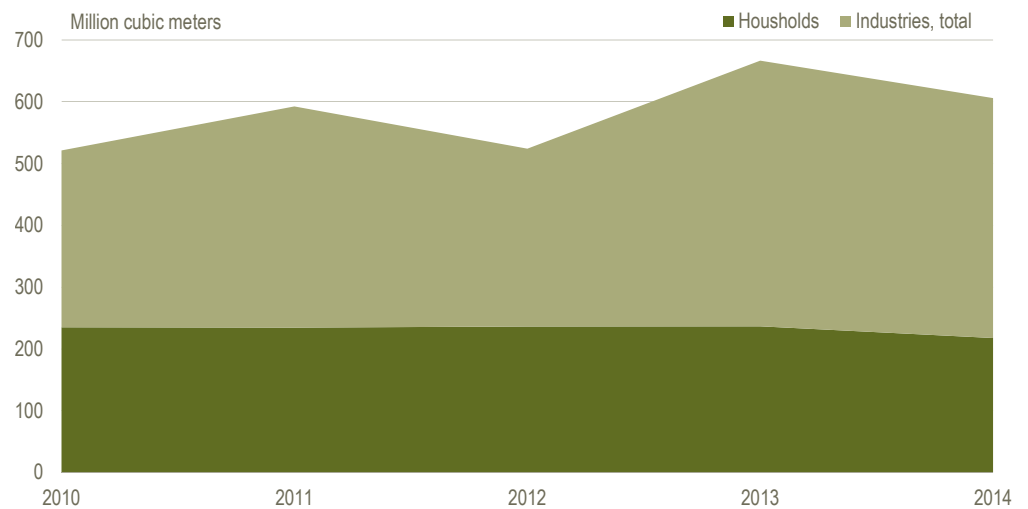


Figure 8 Streams of water and wastewater 2014



Taking into account all these flows, discharges of wastewater to nature can be calculated to 1.023 million m<sup>3</sup> in 2014. Of these, 697 million m<sup>3</sup> came from public treatment plants, 270 million m<sup>3</sup> came from agriculture, forestry and fishing, 46 million m<sup>3</sup> was industrial emissions and 10 million m<sup>3</sup> was wastewater from households.

The Capital Region has the largest share of emissions. The regions wastewater discharge depends on the industry mix and the size of the population. In addition, some wastewater treatment plants treat wastewater from other regions.

**Figure 9 Discharge of wastewater. 2014**

[www.statbank.dk/vandrg02](http://www.statbank.dk/vandrg02)

### Material flow and waste

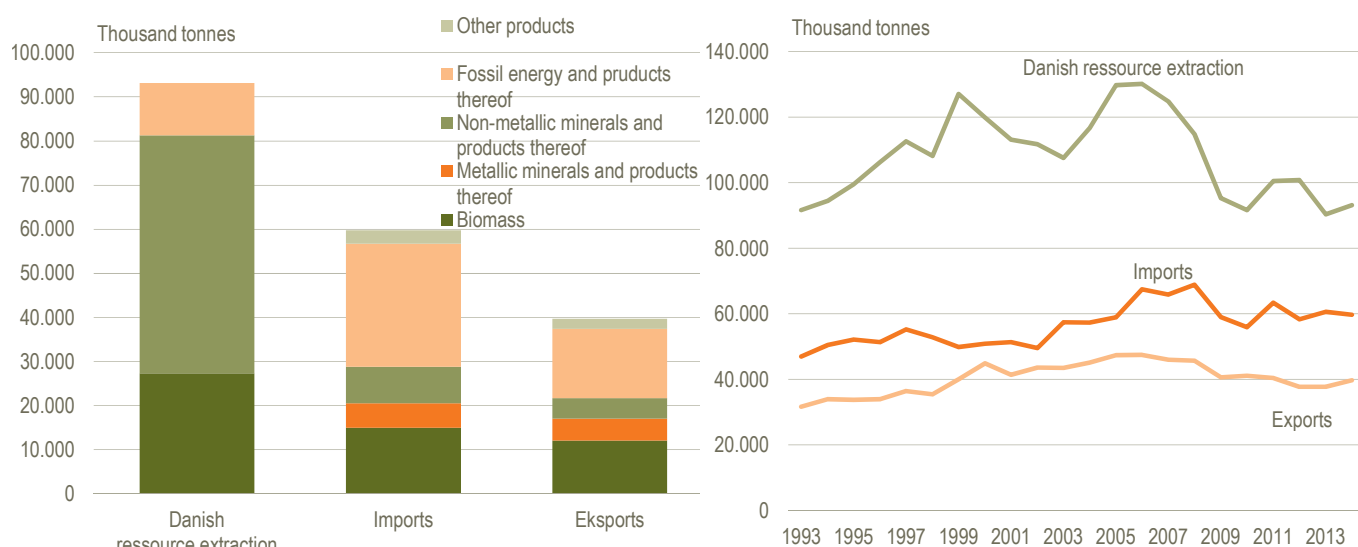
Each year, the Danish society and the Danish economy are totally dependent on being supplied millions of tonnes of raw materials, energy, food and other materials. The materials cost money and the acquisition and use of these often have consequences for the environment and natural resources. In the end, a large part of these materials also ends up as waste, which must be taken care of.

#### Danish resource extraction

When all the main natural resources are included, 93 million tonnes of materials from Danish nature, equivalent to 16.4 tonnes per inhabitant was extracted in 2014. Of this amount, the extraction of stone, gravel and sand etc. amounted to 54 million tonnes, while the extraction of fossil energy in the form of oil and natural gas was 12 million tonnes. Additionally, 27 million tonnes of biomass was harvested.

#### Imports and exports of goods

In addition to the domestic resources, the Danish economy imported a large amount of materials from abroad. Imports amounted to 60 million tonnes in 2014. Imports of fossil energy weighed almost 28 million tonnes or almost half of the total import. Denmark exported a somewhat smaller quantity of material abroad. Denmark's export of goods weighed 40 million tonnes. Of these, 16 million tonnes were energy products. Export of biomass including animal products amounted to 12 million tonnes.

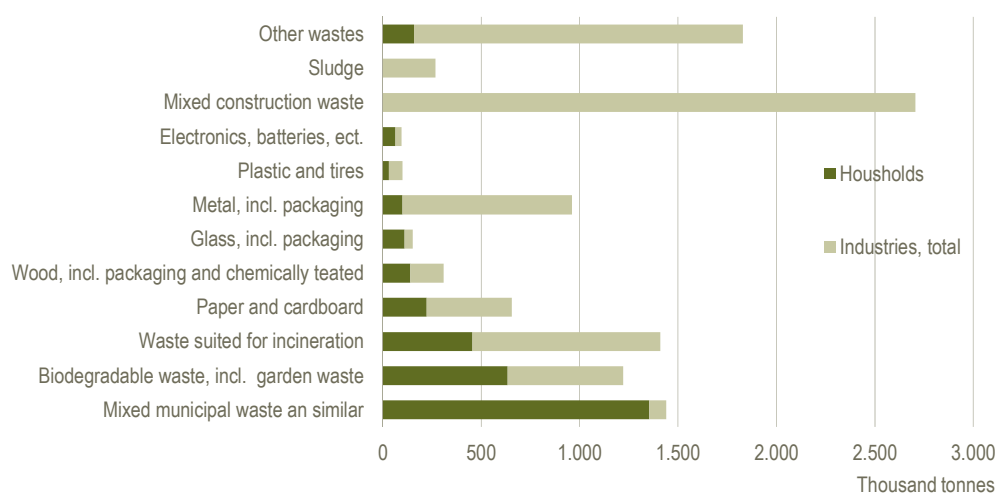
**Figure 10** Material flows to and from the Danish economy

www.statbank.dk/mrm2

### Production of waste

Of the materials used in Denmark, some is accumulated in buildings, machinery, transport equipment and consumer durables etc. until these at some point are scrapped. Other parts end up as air emissions, and the rest ends up as waste.

The total amount of waste in Denmark was 11 million tonnes in 2013. 8 million tonnes came from industries and 3 million tonnes came from households. The largest part of industrial waste derives from the construction industry.

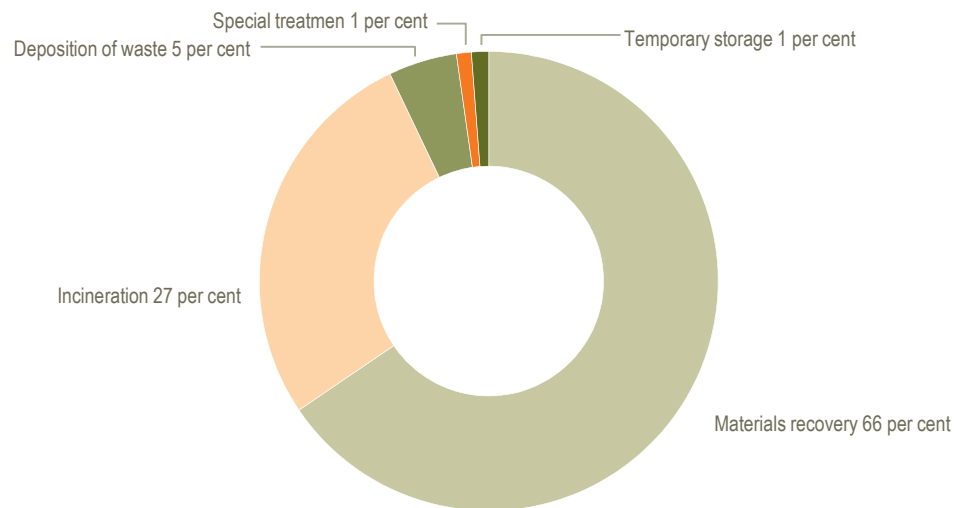
**Figure 11** Production of waste. 2013

www.statbank.dk/affald01

### Treatment of waste

As much as 66 per cent of waste was recycled in 2013. For commercial and industrial waste, 76 per cent was recycled, while for households 41 per cent was recycled. The proportion of re-used waste is increasing for both industries and households. In 2011, 72 per cent of commercial waste was recycled and 37 per cent of household waste was recycled. Most of the waste not recycled is incinerated, while only a small percentage (7 per cent) is deposited or undergoing special treatment.

**Figure 12 Treatment of waste. 2013**



[www.statbank.dk/affald02](http://www.statbank.dk/affald02)

### Green economy

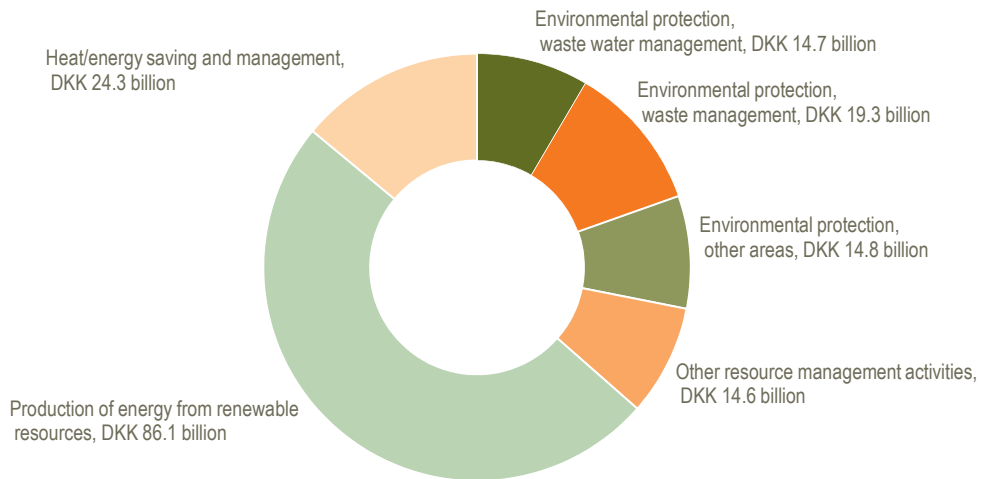
For many years Denmark has had a major focus on developing and using green technologies including renewable energy production and environmental protection, and the authorities have, for example, used green taxes to move the economy in a more environmentally friendly and resource-saving direction.

#### Sales of environmental goods and services

So-called environmental goods and services not only include goods and services which directly protect the environment, but also products and services that reduce the consumption of natural resources. Research and development in these areas are also included.

In 2014, companies generated environmental goods and services amounting to DKK 174 billion. The most extensive production of environmental goods and services was related to energy, partly to the production of renewable energy and partly for energy-saving initiatives. The production had a value of DKK 110 billion in total.

The turnover for the more traditional environmental protection, such as waste water treatment and waste treatment amounted to DKK 49 billion, which is slightly more than a quarter of the total green production.

**Figure 13 Environmental goods and services. Turnover 2014**

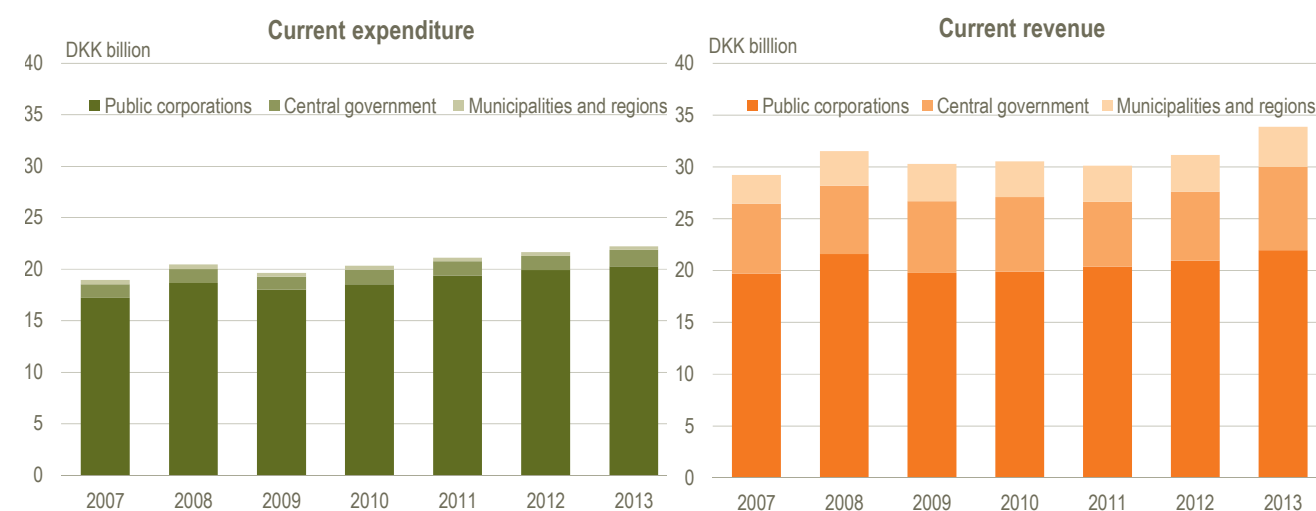
[www.statbank.dk/gron1](http://www.statbank.dk/gron1)

### Public environmental expenditure and revenue

The public sector has environmental expenses and it receives environmental revenues. Environmental protection expenditure covers activities which are aimed at prevention and control of pollution and transition to sustainable technologies. The public environmental revenue primarily includes payments that the public sector receives from citizens and businesses in the provision of services in sewage and waste areas.

The total public environmental expenditure is quite stable over time. In 2007, the total environmental expenditure amounted to DKK 29.2 billion, or 2.9 per cent of the total expenditure in the public sector, compared to DKK 33.9 billion or 2.7 per cent in 2013.

The total public environmental revenues of DKK 22.2 billion in 2013 were made up mainly of tariff payments for public utilities.

**Figure 14** Environmental protection expenditure and revenue

www.statbank.dk/mreg2

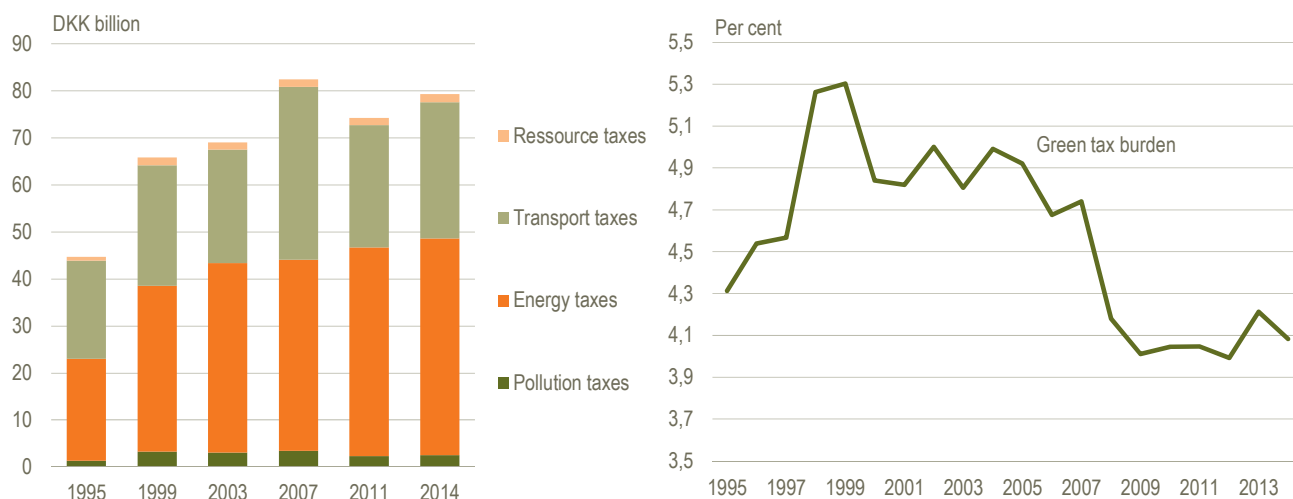
### Environmental taxes

In the Danish environmental policy, green taxes, or more precisely environmental related taxes, are used as a management instrument but also to generate revenue to the government. The green taxes are divided into pollution-related, energy-related, resource-related and transportation-related taxes.

### Green tax burden of 4.1 per cent of GDP

Environmental taxes rose from 1995 to 2007. The financial crisis affected the environment tax revenue downwards. In 2013, the government's total revenue from environment-related taxes was DKK 79.2 billion, which corresponds to 8.8 per cent of the total taxes. Measured as a percentage of GDP, green taxes amounted to 4.1 per cent. The green tax burden peaked in 1999 with 5.3 per cent of GDP.

The energy-related taxes made up 58 per cent of the total environment-related taxes. Taxes on electricity, gasoline and certain petroleum products as well as the PSO (Public Service Obligation) tax are the most dominant among energy taxes. Transport taxes also made up a significant portion of the total environmental taxes.

**Figure 15** Environmental taxes

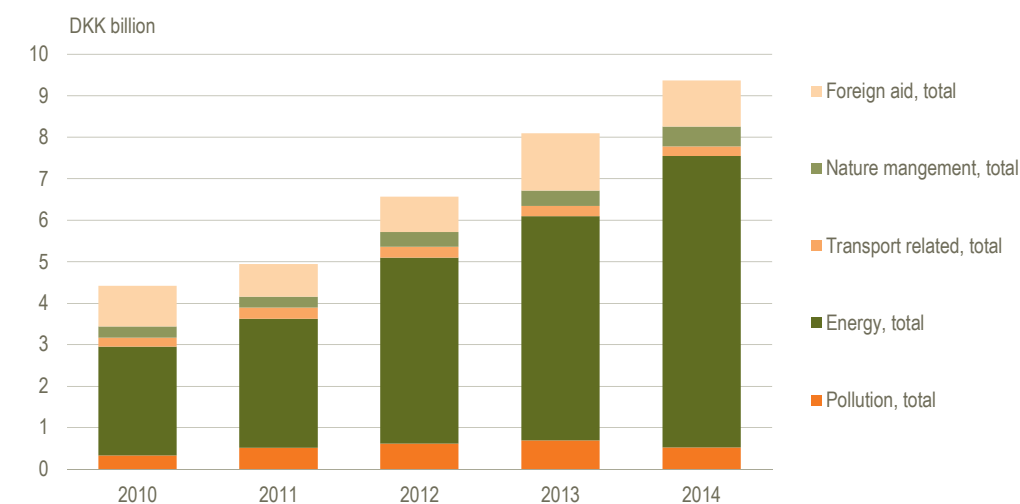
www.statbank.dk/mreg21

### Environmental support

Each year, in addition to regulation by green taxes, the government provides environmentally motivated subsidies and transfers to industries, international organizations and households. These subsidies and transfers include aid for environmental protection, such as waste management, protection of soil and groundwater, and to reduce the exploitation of exhaustible natural resources and better utilization of renewable energy resources.

Environmental subsidies and transfers amounted to DKK 9.4 billion in 2014, a little under half a percent of GDP. There was an increase of DKK 1.3 billion compared to 2013 and has more than doubled since 2010. The energy-related subsidies consist primarily of support for wind power and other renewable energy financed by the PSO tax (Public Service Obligation) and accounted for 75 per cent of the total environmental motivated subsidies and transfers in 2014.

**Figure 16 Environmental subsidies**



[www.statbank.dk/mms3](http://www.statbank.dk/mms3)

Table 399 Land cover

	Km <sup>2</sup>	Per cent
<b>Total area</b>	<b>43 560.76</b>	<b>100.00</b>
<b>Artificial surfaces</b>	<b>4 246.46</b>	<b>9.75</b>
Urban fabric, industrial and commercial units <sup>1</sup>	3 154.63	7.24
Motorway	43.96	0.10
Expressway	9.10	0.02
Road broader than 6 metres	269.02	0.62
Road 3 – 6 metres	551.58	1.27
Railway	58.22	0.13
Bridge	0.02	0.00
Embankment	2.64	0.01
Runway	3.31	0.01
Mineral extraction sites	19.94	0.05
Technical sites	17.46	0.04
Cemeteries	6.96	0.02
Sport facilities	52.18	0.12
Leisure facilities	57.44	0.13
<b>Agricultural areas</b>	<b>28 897.85</b>	<b>66.34</b>
Arable land	28 615.01	65.69
Market garden	33.87	0.08
Pastures	155.18	0.36
Pastures in urban areas	93.72	0.22
Land principally occupied by agriculture, with significant areas of natural vegetation	0.07	0.00
<b>Forests and semi-natural areas</b>	<b>6 788.32</b>	<b>15.58</b>
Forest	1 829.48	4.20
Broad-leaved forest	1 309.40	3.01
Coniferous forest	2 147.34	4.93
Mixed forest	7.98	0.02
Natural grassland	391.92	0.90
Moors and heath land	981.76	2.25
Beaches, dunes and sand plains	51.21	0.12
Sparsely vegetated areas	69.23	0.16
<b>Wetlands</b>	<b>2 274.89</b>	<b>5.22</b>
Meadows	808.89	1.86
Inland wetlands	205.66	0.47
Peat bogs	875.60	2.01
Salt marshes	384.74	0.88
<b>Water bodies</b>	<b>670.59</b>	<b>1.54</b>
Lakes	616.49	1.42
Stream width 8-12 metres	49.42	0.11
Reeds	0.34	0.00
Fish farms	4.34	0.01
<b>Unclassified</b>	<b>682.65</b>	<b>1.57</b>

Note: The figures are based on different primary data covering the period from the end of the 1980s to the middle of the 1990s. Due to different compilation methods figures deviate from figures in table 1. The Primary data are the *land use map; Area Information System* (The Ministry of Environment). Further information can be obtained from: [www.dmu.dk](http://www.dmu.dk). The figures are a revision (not an update) of the collected data. The National Environmental Research Institute conducted the revision in 2001. The classification is based on the three-digit *CORINE land cover nomenclature*, as a fourth number is added for national purposes.

Source: National Environmental Research Institute  
[www.dmu.dk](http://www.dmu.dk)

<sup>1</sup> Include city centres, human locality areas with low buildings, human locality areas with high buildings, built-up areas in rural areas and industrial areas. Roads are excluded.



**Table 400** Area, population and coastline

	Land and inland water area km <sup>2</sup>	Population 1 January 2016	Density of population per km <sup>2</sup>	Number of islands	Inland water area 1959 km <sup>2</sup>	Coastline 1959 km
<b>All Denmark</b>	<b>42 925.5</b>	<b>5 707 251</b>	<b>133.0</b>	<b>394<sup>1</sup></b>	<b>700</b>	<b>8 509</b>
<b>Provinces</b>						
Byen København	179.5	752 964	4 195.5	14	18	264
Københavns omegn	342.2	539 241	1 575.6	1	...	60
Nordsjælland	1 449.1	457 122	315.5	22	80	318
Bornholm <sup>2</sup>	588.4	39 847	67.7	5	3	214
Østsjælland	808.2	244 698	302.8	14	7	184
Vest- og Sydsjælland	6 415.8	582 801	90.8	102	102	1 900
Fyn	3 479.0	491 474	141.3	98	26	1 260
Syddjylland	8 777.4	720 296	82.1	22	...	1 021
Østjylland	5 841.6	865 830	148.2	50	...	887
Vestjylland	7 165.0	427 479	59.7	26	...	893
Nordjylland	7 879.3	585 499	74.3	38	...	1 509
<b>Regions</b>						
Hovedstaden	2 559.2	1 789 174	699.1	42	101	...
Sjælland	7 224.0	827 499	114.5	116	109	...
Syddanmark	12 256.4	1 211 770	98.9	120	...	...
Midtjylland	13 006.6	1 293 309	99.4	76	...	...
Nordjylland	7 879.3	585 499	74.3	38	...	...
<b>Faroe Islands</b>	<b>1 396.0</b>	<b>49 126<sup>3</sup></b>	<b>35.2</b>	<b>17<sup>4</sup></b>	<b>...</b>	<b>1 117<sup>5</sup></b>
<b>Greenland</b>	<b>410 449.0<sup>6</sup></b>	<b>55 847</b>	<b>0.1</b>	<b>...</b>	<b>...</b>	<b>44 087</b>

Note: The most southern point in Denmark is Gedserodde on Falster, the most northerly point is near Skagen, the most westerly point is Blåvandshuk, and the most easterly point is Christiansø (Østerskær).

Source: Danish Geodata Agency  
www.statbank.dk/folk1 and are207

<sup>1</sup> Incl. Zealand and Jutland peninsula. <sup>2</sup> Incl. Christiansø. <sup>3</sup> 1 December 2015. <sup>4</sup> 1 January 2013. <sup>5</sup> Measured in 1955. <sup>7</sup> Only the part of Greenland free of ice is included. The total area of Greenland is 2,166,086 km<sup>2</sup>, of which 81 per cent is covered by inland ice.

**Table 401 Administrative division of Denmark. 2016**

	Municipalities	Parishes	Customs and tax regions <sup>1</sup>	Constituencies <sup>2</sup>	
				Counties and large constituencies	Constituencies
<b>Total</b>	<b>98</b>	<b>2 170</b>	<b>35</b>	<b>10</b>	<b>92</b>
<b>The Islands</b>	<b>56</b>	<b>889</b>	<b>17</b>	<b>6</b>	<b>48</b>
<b>Jutland</b>	<b>42</b>	<b>1 281</b>	<b>18</b>	<b>4</b>	<b>44</b>
<b>Region Hovedstaden</b>	<b>29</b>	<b>240</b>	<b>7</b>	<b>4</b>	<b>28</b>
Byen København	4	71	2	1	12
Københavns omegn	13	56	1	1	8
Nordsjælland	11	91	3	1	6
Bornholm	1	22	1	1	2
<b>Region Sjælland</b>	<b>17</b>	<b>417</b>	<b>6</b>	<b>1</b>	<b>12</b>
Østsjælland	5	60	2	}	3
Vest- og Sydsjælland	12	357	4		9
<b>Region Syddanmark</b>	<b>22</b>	<b>521</b>	<b>9</b>	<b>2</b>	<b>21</b>
Fyn	10	232	4	1	8
Syddjylland	12	289	5	1	13
<b>Region Midtjylland</b>	<b>19</b>	<b>636</b>	<b>9</b>	<b>2</b>	<b>22</b>
Østjylland	11	353	5	1	11
Vestjylland	8	283	4	1	11
<b>Region Nordjylland</b>	<b>11</b>	<b>356</b>	<b>4</b>	<b>1</b>	<b>9</b>

<sup>1</sup> 2015. <sup>2</sup> In accordance with Act no. 1292 of 8 December 2006 on elections to the Danish Parliament.

www.statbank.dk/02

**Table 402 Denmark's 15 largest lakes**

Lake's name	Province	2016	Lake's name	Province	2016
		km <sup>2</sup>			km <sup>2</sup>
Arresø	Nordsjælland	39.7	Søndersø	Vest- og Sydsjælland	8.4
Esrum sø	Nordsjælland	17.4	Tystrup sø	Vest- og Sydsjælland	6.6
Mossø	Østjylland	16.5	Ulvedybet	Nordjylland	5.8
Stadil Fjord <sup>1</sup>	Vestjylland	16.2	Tømmerby Fjord	Nordjylland	5.7
Saltbæk Vig <sup>1</sup>	Vest- og Sydsjælland	16.1	Julsø	Østjylland	5.6
Tissø	Vest- og Sydsjælland	12.5	Tange sø	Østjylland	5.4
Furesø	Nordsjælland	9.4	Lund Fjord	Nordjylland	5.1
Skanderborg sø	Østjylland	8.7			

<sup>1</sup> Area of brackish water.

Source: Danish Geodata Agency

www.gst.dk

Table 403 Area and population on islands

Municipality code	Population 1 January 2016	Area in km <sup>2</sup>	Municipality code	Population 1 January 2016	Area in km <sup>2</sup>
<b>All Denmark</b>	<b>5 707 251</b>	<b>43 048.56</b>	<b>Funen and its islands</b>	<b>491 474</b>	<b>3 489.50</b>
<b>Zealand and its islands</b>	<b>2 473 209</b>	<b>7 478.47</b>	430 Avernakø	114	5.72
330 Agersø	174	8.09	492 Birkholm	12	0.90
Flere Amager	192 709	96.38	430 Bjørnø	34	1.46
390 Bogø	1 121	14.39	420 Båge	24	6.19
370 Enø	384	3.52	479 Drejø	65	4.26
250 Eskilsø	6	1.63	479 Frederikse	4	0.06
390 Farø	5		Flere Fyn	462 625	2 988.03
370 Gavnø	34	5.64	410 Fænø	2	3.91
330 Glænø	41	5.26	479 Hjortø	7	0.89
190 Klaus Nars holm	2	0.00	482 Langeland	12 345	283.48
390 Langø	2	1.34	430 Lyø	96	6.31
390 Masnedø	184	1.71	482 Siø	16	1.43
390 Møn	9 455	218.35	479 Skarø	32	1.93
326 Nekselø	19	2.22	482 Strynø	186	4.91
390 Nyord	37	5.56	479 Thurø	3 519	7.54
330 Omø	156	4.46	440 Tornø	4	0.25
316 Orø	850	15.04	479 Tåsinge	6 111	69.99
185 Saltholm	2	16.71	492 Ærø	6 278	87.51
326 Sejerø	351	12.55	80 named and uninhabited islands	•	14.74
Flere Sjælland	2 267 659	7 053.71	<b>Jutland and its islands</b>	<b>2 599 104</b>	<b>29 694.75</b>
101 Slotsholmen	17	0.21	773 Agerø	26	3.48
101 Trekroner	1	0.03	727 Alrø	146	7.73
84 named and uninhabited islands	•	11.67	540 Als	49 980	311.08
<b>Lolland-Falster and their islands</b>	<b>103 617</b>	<b>1 796.38</b>	707 Anholt	145	21.72
360 Askø	39	2.79	580 Barsø	22	2.67
376 Falster	42 399	513.72	851 Egholm	44	6.07
360 Fejø	442	17.05	615 Endelave	167	13.20
360 Femø	119	11.38	563 Fanø	3 290	60.45
360 Lilleø	7	0.84	779 Fur	765	22.10
Flere Lolland	60 607	1 244.54	813 Hirsholm	2	0.16
360 Vejrø	4	1.59	766 Hjarnø	106	3.42
42 named and uninhabited islands	•	4.47	671 Jegindø	419	7.70
<b>Bornholm and its islands</b>	<b>39 847</b>	<b>589.46</b>	Flere Jyske halvø	2 219 359	23 845.86
400 Bornholm	39 756	589.12	580 Kalvø	13	0.19
411 Christiansø og Frederikse	91	0.25	820 Livø	7	3.33
3 named and uninhabited islands	•	0.09	825 Læsø	1 817	113.75
			561 Mandø	43	8.28
			773 Mors	20 603	364.08
			550 Rømø	591	86.36
			741 Samsø	3 710	112.67
			580 Store Okseø	2	0.08
			727 Tunø	114	3.57
			Flere Vendsyssel-Thy	297 382	4 669.11
			671 Venø	195	6.26
			615 Vorsø	1	0.60
			510 Årø	155	5.88
			111 named and uninhabited islands	•	14.99

Note.: The area is based on map10 of the Danish Geodata Agency and Cadastre. In relation to the area in table 405, non-registered areas are also included here, e.g. lakes and roads.

www.statbank.dk/bef4 and are207

<sup>1</sup> Incl. Lindø. <sup>2</sup> Incl. Skælø. <sup>3</sup> Not included in the division of municipalities, administered by the Ministry of Defence.

**Table 404** Meteorological conditions

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
<b>Mean temperature</b> °C													
Normal (1961-1990)	0.0	0.0	2.1	5.7	10.8	14.3	15.6	15.7	12.7	9.1	4.7	1.6	7.7
2015	3.0	2.1	4.7	7.0	9.7	12.7	15.5	17.4	13.2	9.5	7.5	6.7	9.1
<b>Average daily temperature</b>													
Normal (1961-1990)	2.0	2.2	4.9	9.6	15.0	18.7	19.8	20.0	16.4	12.1	7.0	3.7	10.9
2015	4.8	4.2	7.7	11.5	13.5	16.6	19.7	22.1	16.9	12.2	9.6	8.4	12.3
<b>Average nightly temperature</b>													
Normal (1961-1990)	-2.9	-2.8	-0.8	2.1	6.5	9.9	11.5	11.3	9.1	6.1	2.3	-0.7	4.3
2015	0.9	-0.3	1.8	2.9	5.9	8.6	11.3	12.8	9.8	6.9	4.9	4.7	5.9
<b>Maximum temperature</b>													
1874-2015 Temp.	12.4	15.8	22.2	28.6	32.8	35.5	35.3	36.4	32.3	26.9	18.5	14.5	36.4
Measured during the years	<b>2005</b>	<b>1990</b>	<b>1990</b>	<b>1993</b>	<b>1892</b>	<b>1947</b>	<b>1941</b>	<b>1975</b>	<b>1906</b>	<b>2011</b>	<b>1968</b>	<b>1953</b>	<b>1975</b>
2015	11.1	9.7	14.6	20.9	23.1	26.0	31.9	31.5	23.8	19.6	15.7	13.4	31.9
<b>Minimum temperature</b>													
1874-2015 Temp.	-31.2	-29.0	-27.0	-19.0	-8.0	-3.5	-0.9	-2.0	-5.6	-11.9	-21.3	-25.6	-31.2
Measured during the years	<b>1982</b>	<b>1942</b>	<b>1888</b>	<b>1922</b>	<b>1900</b>	<b>1936</b>	<b>1903</b>	<b>1885</b>	<b>1886</b>	<b>1880</b>	<b>1973</b>	<b>1981</b>	<b>1982</b>
2015	-10.0	-13.6	-6.5	-6.1	-4.2	2.2	2.1	2.8	0.7	-0.9	-9.9	-4.0	-13.6
<b>Degree-days</b> degree-days													
Normal (1961-1990)	522	491	461	337	198	84	43	47	128	243	361	469	3 382
2015	435	418	383	299	228	129	61	15	114	232	286	320	2 921
<b>Precipitation</b> mm.													
Normal (1961-1990)	57	38	46	41	48	55	66	67	73	76	79	66	712
2015	97	30	66	27	86	59	86	69	94	29	146	115	904
<b>Bright sunshine, all DK</b> hours													
Normal (1961-1990)	43	69	110	162	209	209	196	186	128	86	54	43	1 495
2015	48	60	127	241	184	209	211	242	164	89	52	36	1 662
<b>Summer days (max. &gt;25°)</b> days													
Normal (1961-1990)	0.0	0.0	0.0	0.0	0.2	1.9	2.6	2.3	0.1	0.0	0.0	0.0	7.2
2015	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.4	0.0	0.0	0.0	0.0	5.3
<b>Frost days (min. &lt;0°)</b>													
Normal (1961-1990)	19.0	19.0	15.0	6.6	0.7	<	0.0	0.0	0.2	1.8	7.3	15.0	84.0
2015	8.5	10.3	6.2	3.7	0.5	0.0	0.0	0.0	0.0	0.0	2.9	2.1	34.3
<b>Ice days (max. &lt;0°)</b>													
Normal (1961-1990)	8.6	7.5	2.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.0	23.0
2015	1.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
<b>Precipitation days (R ≥ 0.1 mm.)</b>													
Normal (1961-1990)	17.0	13.0	14	12.0	12.0	12.0	13.0	13.0	15.0	16.0	18.0	17.0	171.0
2015	25.5	15.3	16.6	11.7	23.2	15.0	17.6	14.8	22.3	15.6	25.4	25.8	228.8
<b>Days with snow cover</b>													
Normal (1961-1990)	12.0	9.3	4.6	0.7	0.0	0.0	0.0	0.0	0.0	<	1.3	5.1	33.0
2015	3.3	3.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	8.1

Note 1: Degree days are used as a measurement for heating needs in the heating season (1 September - 31 May). Degree days are shade-temperature days.

Note 2: < means less than 0.1, but greater than 0.0.

Source: Danmarks Meteorologiske Institut  
www.dmi.dk

**Table 405** Infrastructure for transport

1 January	2014	2015
	km	
<b>Road network, total</b>	<b>74 407</b>	<b>74 472</b>
Of which motorways	1 216	1 232
State roads	3 796	3 796
Municipality roads	70 568	70 635
<b>Railway network, total</b>	<b>2 636</b>	<b>2 633</b>
Of which Copenhagen Metro	21	21
Of which private railways	520	517
	number	
Stations and halts	528	527
Sea ports	111	111
Airports	23	23

www.statbank.dk/vej11, bane41 and skib101

**Table 406** Infrastructure for transport, expenditure

	2013	2014
	DKK mio.	
<b>Road network</b>	<b>14 670</b>	<b>14 145</b>
Construction expenditure	7 808	8 212
Operation and maintenance	6 862	5 933
<b>State railway network</b>	<b>4 211</b>	<b>5 059</b>
New investments	2 845	3 962
Reinvestments	1 334	895
Other investments	32	242
<b>Private railways</b>	<b>0</b>	<b>40</b>
<b>Sea ports</b>	<b>1 122</b>	...
Constructions	1 014	...
Buildings	108	...
<b>Airports</b>	<b>594</b>	...
<b>Great Belt Link</b>	<b>44</b>	<b>121</b>
<b>Øresund Link</b>	<b>4</b>	<b>3</b>
<b>Copenhagen Metro</b>	<b>3 170</b>	<b>3 420</b>

www.statbank.dk/vej2, bane42, flyv2 and skib2

**Table 407** Extraction of raw materials

	1990	1995	2000	2014
	m³ in thousands			
<b>Extraction of raw materials, total</b>	<b>33 976</b>	<b>34 210</b>	<b>40 945</b>	<b>32 667</b>
<b>Extraction from land area:</b>	<b>28 106</b>	<b>28 558</b>	<b>33 809</b>	<b>25 914</b>
Sand, gravel and stone	22 534	21 721	27 587	21 457
Quartz sand	186	191	479	262
Granite	811	662	199	134
Clay	462	739	788	308
Expanded clay	303	311	313	217
Moler	195	186	227	190
Chalk, limestone	2 924	4 049	3 405	2 610
Peat	399	259	247	192
Other raw materials	292	440	563	543
<b>Extraction from sea area</b>				
Sand, gravel, sand for land filling etc.	5 870	5 652	7 136	6 753

Source: National Forest and Nature Agency

www.statbank.dk/rst01 and rst3

**Table 408** Sales of pesticides

	2013	2014*
	tonnes	
<b>Sales of pesticide products<sup>1</sup></b>		
<b>Weight</b>	<b>13 626</b>	<b>9 075</b>
Herbicides	7 329	3 820
Fungicides	2 633	1 752
Algicides	19	27
Insecticides	1 393	1 214
Slimicides for use in paper pulp	–	–
Products against pests on farm animals	94	107
Plant growth regulators	468	269
Combined fungicides and insecticides	14	15
Soil disinfectants	5	1
Rodenticides	410	291
Repellents	15	1
Products for the protection of woodwork	1 246	1 578
<b>Of which active ingredients<sup>2</sup></b>		
<b>Active ingredients, total</b>	<b>4 323</b>	<b>1 983</b>
Herbicides	2 937	1 239
Fungicides	881	412
Algicides	4	5
Insecticides	80	55
Slimicides for use in paper pulp	–	–
Products against pests on farm animals	2	3
Plant growth regulators	289	115
Combined fungicides and insecticides	5	6
Soil disinfectants	5	1
Rodenticides	7	2
Repellents	3	5
Products for the protection of woodwork	110	140

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

Source: Danish Environmental Protection Agency

www.statbank.dk/pest2

**Table 409**                      **Manufacturers' energy consumption. 2014**

	Solid fuel	Liquid fuel	Gas	Electricity	District heating
	thousand GJ				
<b>Total<sup>1</sup></b>	<b>8 328</b>	<b>12 058</b>	<b>43 283</b>	<b>23 406</b>	<b>3 469</b>
Extraction of gravel and stone	876	556	677	236	3
Mining support service activities	0	7	5	20	6
Production of meat and meat products	0	100	2 196	1 518	91
Processing and preserving of fish	583	46	1 151	457	46
Other food products	701	2 772	2 026	1 848	175
Dairy products	0	44	3 754	1 565	37
Grain mill and bakery products	1	19	1 238	695	53
Beverages	10	20	972	468	82
Tobacco products	0	4	30	27	7
Textiles	0	3	223	319	29
Wearing apparel	2	0	6	7	7
Wood and wood products	1 309	137	85	583	211
Paper and paper products	15	49	1 360	599	51
Printing etc.	1	6	135	375	54
Oil refinery etc.	0	423	15 484	1 064	578
Basic chemicals	0	265	1 121	1 543	127
Paints and soap etc.	498	33	2 817	962	60
Pharmaceuticals	0	30	807	1 195	329
Rubber and plastic products	5	52	406	1 543	90
Glass and ceramic products	0	67	1 079	432	21
Concrete and bricks	3 933	6 996	3 274	1 631	43
Basic metals	1	35	1 672	1 237	59
Fabricated metal products	43	148	970	1 474	258
Computers and communication equipment etc.	0	0	121	153	35
Other electronic products	0	3	29	160	91
Electric motors, etc.	0	5	38	94	23
Wires and cables	1	4	71	158	22
Household appliances, lamps, etc.	0	1	54	58	22
Engines, windmills and pumps	13	59	532	1 222	359
Other machinery	100	120	489	634	225
Motor vehicles and related parts	6	13	211	180	22
Ships and other transport equipment	3	7	17	75	48
Furniture	225	11	114	394	44
Toys and other manufacturing	3	5	31	276	22
Medical instruments, etc.	0	5	20	75	26
Repair and installation of machinery and equipment	0	11	69	129	115

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

<sup>1</sup> Incl. extraction of gravel, clay, stone and salt, etc.

**Table 410** Gross energy consumption by industries and households

	2012	2013	2014	Distribution 2014	Change from 2013 to 2014
	PJ			per cent	
<b>Total industries and households</b>	<b>1 235</b>	<b>1 221</b>	<b>1 164</b>	<b>100.0</b>	<b>-4.7</b>
Households	325	328	305	26.2	-6.8
<b>Total industries</b>	<b>910</b>	<b>894</b>	<b>859</b>	<b>73.8</b>	<b>-4.0</b>
Agriculture, forestry, fishing	40	40	38	3.3	-4.5
Mining and quarrying	31	30	29	2.5	-2.3
Manufacturing	123	120	120	10.3	-0.1
Utility services	13	13	12	1.0	-3.5
Construction	22	18	20	1.7	11.9
Trade and transport etc.	602	597	566	48.7	-5.1
Information and communication	8	7	6	0.5	-4.3
Financial and insurance	4	3	3	0.3	-8.3
Real estate;rent.of non-res.b.	3	3	2	0.2	-4.7
Dwellings	1	1	1	0.1	-3.6
Other business services	15	13	13	1.1	-2.1
Public adm., education, health	41	41	38	3.3	-6.5
Arts, entertainm. oth.service	9	8	8	0.6	-7.0
Of which Danish ships bunkering abroad	442	397	390	33.5	-1.8
Of which Danish planes bunkering abroad	17	24	28	2.4	14.7
Of which Danish vehicles bunkering abroad	30	57	30	2.6	-46.6
Memo: Use of energy excl. bunkering	745	743	716	61.5	-3.7

www.statbank.dk/ene3h

**Table 411** Energy expenditure by industries and households. 2014

	Basic prices	Trade margins	Taxes	VAT	Purchasers prices
	DKK mill.				
<b>Total industries and households</b>	<b>152 782</b>	<b>7 761</b>	<b>41 297</b>	<b>18 563</b>	<b>220 403</b>
Households	34 835	4 288	25 364	15 266	79 752
<b>Total industries</b>	<b>117 947</b>	<b>3 473</b>	<b>15 933</b>	<b>3 297</b>	<b>140 651</b>
Agriculture, forestry, fishing	3 892	333	652	13	4 890
Mining and quarrying	217	20	29	1	266
Manufacturing	38 760	274	2 134	31	41 199
Utility services	16 656	262	1 103	33	18 054
Construction	2 124	390	1 365	26	3 905
Trade and transport etc.	47 590	1 753	5 139	669	55 151
Information and communication	806	22	215	17	1 060
Financial and insurance	365	15	276	145	801
Real estate;rent.of non-res.b.	289	27	189	53	558
Dwellings	145	12	116	66	338
Other business services	1 534	129	949	113	2 725
Public adm., education, health	4 652	199	3 283	1 952	10 085
Arts, entertainm. oth.service	918	37	484	179	1 618
Of which Danish ships bunkering abroad	3 208	-	-	-	3 208
Of which Danish planes bunkering abroad	3 387	-	-	-	3 387
Of which Danish vehicles bunkering abroad	28 089	-	-	-	28 089

www.statbank.dk/ene4ha



Table 412 Energy Accounts for Denmark in specific units. 2014

	Crude oil and refinery feedstocks	Coal and coke	Oil products	Natural gas - extraction and imports	Natural gas - consumption and exports <sup>2</sup>	Renewable energy etc <sup>3</sup>	Electricity	District heat
	1 000 tonnes			mill. Nm <sup>3</sup>		TJ	GWh	TJ
Production	8 168	-	7 014	4 478	4 436	168 690	31 569	119 881
Imports	3 697	4 597	16 810	592	241	49 117	12 702	-
<b>Total supply (=total use)</b>	<b>11 865</b>	<b>4 597</b>	<b>23 824</b>	<b>5 070</b>	<b>4 678</b>	<b>217 807</b>	<b>44 272</b>	<b>119 881</b>
Exports	4 813	167	5 602	-	1 984	6 514	10 603	-
Changes in inventories	112	77	1 369	-	- 16	423	-	-
Distribution losses etc	-	-	-	85	4	2 359	1 974	24 091
<b>Industries and households</b>	<b>6 940</b>	<b>4 353</b>	<b>16 853</b>	<b>4 985</b>	<b>2 705</b>	<b>208 510</b>	<b>31 695</b>	<b>95 790</b>
Households	-	0	2 033	-	613	42 233	10 104	62 051
<b>Total industries</b>	<b>6 940</b>	<b>4 353</b>	<b>14 819</b>	<b>4 985</b>	<b>2 092</b>	<b>166 277</b>	<b>21 591</b>	<b>33 739</b>
<b>Agriculture, forestry and fishing</b>	-	42	482	-	36	3 002	1 859	1 585
<b>Mining and quarrying</b>	-	4	21	582	17	887	92	9
<b>Manufacturing</b>	<b>6 940</b>	<b>169</b>	<b>902</b>	-	<b>702</b>	<b>6 316</b>	<b>8 086</b>	<b>3 460</b>
<b>Utility services</b>	-	<b>4 137</b>	<b>142</b>	<b>4 403</b>	<b>1 163</b>	<b>150 404</b>	<b>1 362</b>	<b>1 131</b>
Electricity, gas, steam and air conditioning supply	-	4 137	93	4 403	1 156	121 541	745	-
Water supply, sewerage and waste management	-	-	49	-	6	28 863	618	1 131
<b>Construction</b>	-	-	<b>386</b>	-	<b>12</b>	<b>881</b>	<b>357</b>	-
<b>Trade and transport etc.</b>	-	-	<b>12 539</b>	-	<b>61</b>	<b>2 778</b>	<b>5 365</b>	<b>10 204</b>
Wholesale and retail trade	-	-	262	-	43	709	3 302	7 061
Transportation	-	-	12 262	-	4	2 028	1 319	640
Accommodation and food service activities	-	-	15	-	15	41	744	2 504
<b>Information and communication</b>	-	-	<b>16</b>	-	<b>8</b>	<b>46</b>	<b>590</b>	<b>1 397</b>
<b>Financial and insurance</b>	-	-	<b>12</b>	-	<b>5</b>	<b>33</b>	<b>190</b>	<b>807</b>
<b>Real estate activities and renting of non-residential buildings</b>	-	-	<b>22</b>	-	<b>2</b>	<b>62</b>	<b>156</b>	<b>318</b>
<b>Dwellings</b>	-	-	<b>9</b>	-	<b>2</b>	<b>28</b>	<b>46</b>	<b>336</b>
<b>Other business services</b>	-	-	<b>97</b>	-	<b>17</b>	<b>296</b>	<b>592</b>	<b>3 101</b>
Knowledge-based services	-	-	36	-	9	109	413	1 630
Travel agents, cleaning, and other operational services	-	-	61	-	8	187	178	1 471
<b>Public administration, education and health</b>	-	-	<b>164</b>	-	<b>57</b>	<b>1 453</b>	<b>2 384</b>	<b>9 415</b>
Public administration, defence and compulsory social security	-	-	111	-	9	368	311	1 273
Education	-	-	26	-	22	431	847	3 782
Human health and social work	-	-	28	-	26	654	1 226	4 359
<b>Arts, entertainment and other services</b>	-	-	<b>27</b>	-	<b>11</b>	<b>91</b>	<b>512</b>	<b>1 977</b>
Arts, entertainment and recreation activities	-	-	11	-	9	46	427	1 559
Other service activities	-	-	16	-	2	45	85	418
Activities of households as employers of domestic personnel	-	-	-	-	-	-	-	-
Of which Danish ships bunkering abroad <sup>1</sup>	-	-	9 584	-	-	-	-	-
Of which Danish planes bunkering abroad <sup>1</sup>	-	-	645	-	-	-	-	-
Of which Danish vehicles bunkering abroad <sup>1</sup>	-	-	714	-	-	-	-	-

<sup>1</sup> Danish operated ships, planes and vehicles bunkering abroad is included in the industry *transportation*.

www.statbank.dk/ene1ht og ene1ha

<sup>2</sup> Includes gas works gas. <sup>3</sup> Includes non-renewable waste.

**Table 413** Production of renewable energy

	1990	2000	2005	2010	2014
	GJ				
<b>Renewable energy</b>	<b>45 509 381</b>	<b>79 857 176</b>	<b>112 384 001</b>	<b>136 220 494</b>	<b>151 266 483</b>
Wind power	2 197 080	15 268 317	23 810 400	28 113 919	47 082 613
Hydro power	100 800	108 720	81 000	74 311	54 374
Solar power	0	4 320	7 776	21 698	2 143 865
Solar heat	99 800	330 700	411 465	635 641	1 226 693
Geothermal	96 000	116 078	343 983	424 656	165 745
Straw	12 481 150	15 893 450	21 023 550	23 269 600	20 768 350
Firewood	8 757 120	12 431 616	17 666 749	23 778 598	15 634 086
Wood chips	1 723 680	2 744 455	6 082 192	11 318 853	11 074 968
Wood pellets	1 575 000	3 092 916	4 718 600	4 364 425	6 683 360
Wood waste	6 191 013	6 895 078	6 499 627	8 500 208	6 685 581
Biogas	752 000	2 911 659	3 829 964	4 278 002	5 143 032
Bio oil	744 000	48 900	3 392 552	4 824 033	6 264 145
Heat pumps	2 267 270	3 295 500	3 730 622	5 643 404	7 244 647
Waste, renewable	8 524 468	16 715 466	20 785 521	20 973 145	21 095 025

www.statbank.dk/ene2ho

**Table 414** CO2\* emissions from industries and households

	1990	2000	2010	2013
	1.000 tons			
<b>Total industries and households</b>	<b>65 518</b>	<b>75 848</b>	<b>86 983</b>	<b>76 801</b>
Households	10 360	10 168	9 242	7 936
<b>Total industries</b>	<b>55 158</b>	<b>65 680</b>	<b>77 741</b>	<b>68 865</b>
Agriculture, forestry, fishing	3 294	2 824	2 305	2 280
Mining and quarrying	1 127	2 451	1 998	1 708
Manufacturing	7 320	7 956	5 677	5 640
Utility services	24 913	24 149	21 944	16 934
Construction	900	1 136	1 594	1 271
Trade and transport etc.	16 034	25 804	42 613	39 624
Information and communication	151	127	109	74
Financial and insurance	87	54	64	52
Real estate;rent.of non-res.b.	44	70	98	78
Dwellings	50	21	31	31
Other business services	252	289	425	332
Public adm., education, health	826	633	716	714
Arts, entertainm. oth.service	160	166	167	127
Of which Danish ships bunkering abroad	9 176	19 068	34 140	31 380
Of which Danish planes bunkering abroad	272	514	1 205	1 138
Of which Danish vehicles bunkering abroad	...	...	1 798	2 018

\*Excluding biomass.

www.statbank.dk/mru1 and mro1

**Table 415** Link between total Danish CO<sub>2</sub>-emissions and the IPCC-method

	1990	2000	2010	2013
	1.000 tons			
<b>Total CO<sub>2</sub> emissions from the Danish economy (Green National Accounts)</b>	<b>70 087</b>	<b>82 692</b>	<b>101 877</b>	<b>92 099</b>
- Biomasse as fuel	4 572	6 842	14 894	15 298
- Danish CO <sub>2</sub> emissions abroad	9 448	19 583	37 143	34 537
Ships	9 176	19 068	34 140	31 380
Planes	272	514	1 205	1 138
Vehicles	•	•	1 798	2 018
- Other differences related to transports and cross border trade	2 499	2 000	754	643
<b>= Total emissions on Danish territory (IPCC method)</b>	<b>58 140</b>	<b>61 110</b>	<b>63 980</b>	<b>56 920</b>

[www.statbank.dk/mro1](http://www.statbank.dk/mro1)
**Table 416** Emissions by type of air pollutant

	1990	2000	2010	2013
	1 000 tonnes			
CO <sub>2</sub>	70 087	82 692	101 877	92 099
Of which biomass	4 572	6 842	14 894	15 298
SO <sub>2</sub>	353	439	231	212
NO <sub>x</sub>	518	721	1095	999
CO	861	557	509	439
NH <sub>3</sub>	125	98	80	74
N <sub>2</sub> O	27	24	20	19
CH <sub>4</sub>	313	315	289	277
NM VOC	223	190	154	141
PM <sub>10</sub>	...	98	58	50
PM <sub>2,5</sub>	...	85	46	39
SF <sub>6</sub> (CO <sub>2</sub> -equivalents)	..	56	36	131
PFC (CO <sub>2</sub> -equivalents)	..	23	19	11
HFC (CO <sub>2</sub> -equivalents)	..	703	950	782

[www.statbank.dk/mru1](http://www.statbank.dk/mru1)

**Table 417** Water consumption by industry and households

	Groundwater					Surface water				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
	-mill. cubic meter-									
<b>Total industries and households</b>	<b>685.1</b>	<b>679.5</b>	<b>619.2</b>	<b>748.8</b>	<b>734.5</b>	<b>122.4</b>	<b>183</b>	<b>106.6</b>	<b>248.2</b>	<b>197.5</b>
Households	238.4	238.2	239.8	240.1	220.9	-	-	-	-	-
<b>Total industries</b>	<b>446.7</b>	<b>441.3</b>	<b>379.4</b>	<b>508.7</b>	<b>513.6</b>	<b>122.4</b>	<b>183.0</b>	<b>106.6</b>	<b>248.2</b>	<b>197.5</b>
Agriculture, forestry, fishing	288.1	285.9	230.1	374.0	376.3	115.9	176.5	101.8	241.7	192.2
Mining and quarrying	7.5	7.5	7.5	6.2	5.5	0.5	0.4	0.2	1.1	0.2
Manufacturing	54.7	53.0	49.0	47.8	55.2	4.3	4.1	2.7	3.3	2.9
Utility services	49.1	50.2	45.7	37.6	35	1.6	1.5	1.6	1.4	1.5
Construction	0.5	0.5	0.5	0.6	1.0	-	-	-	-	-
Trade and transport etc.	16.3	14.4	16.5	14.5	12.3	-	-	-	-	-
Information and communication	0.4	0.5	0.3	0.3	0.3	-	-	-	-	-
Financial and insurance	0.3	0.4	0.3	0.2	0.2	-	-	-	-	-
Real estate; renting of non-residential buildings	2.2	2.8	2.4	2.4	1.8	-	-	-	-	-
Dwellings	-	-	-	-	-	-	-	-	-	-
Other business services	1.2	1.5	1.9	1.7	1.9	-	-	-	-	-
Public adm., education, health	19.1	17.6	17.9	16.9	17.8	-	-	-	-	-
Arts, entertainment and other service	7.4	7.1	7.3	6.5	6.5	0.1	0.4	0.3	0.6	0.7

www.statbank.dk/vandrg01

**Table 418** Waste water discharge by industry and households

	2010	2011	2012	2013	2014
	-mill. cubic meter-				
<b>Total industries and households</b>	<b>521.2</b>	<b>592.5</b>	<b>524.1</b>	<b>666.5</b>	<b>606.0</b>
Households	234.9	234.6	236.2	236.5	217.6
<b>Total industries</b>	<b>286.3</b>	<b>357.9</b>	<b>287.9</b>	<b>430.1</b>	<b>388.4</b>
Agriculture, forestry, fishing	166.6	241.0	175.6	324.8	281.5
Mining and quarrying	7.8	7.8	7.7	7.2	5.6
Manufacturing	49.9	48.4	43.4	43.3	49.6
Utility services	17.1	18.3	16.7	14.1	12.5
Construction	0.5	0.5	0.5	0.6	0.9
Trade and transport etc.	16.0	14.2	16.2	14.2	12.1
Information and communication	0.4	0.5	0.3	0.2	0.3
Financial and insurance	0.3	0.4	0.3	0.2	0.2
Real estate; renting of non-residential buildings	2.2	2.7	2.4	2.4	1.8
Dwellings	-	-	-	-	-
Other business services	1.2	1.5	1.9	1.7	1.9
Public adm., education, health	18.8	17.3	17.7	16.7	17.5
Arts, entertainment and other service	5.5	5.3	5.3	4.6	4.7

www.statbank.dk/vandrg02

**Table 419 Economy-wide material flow accounts by material type. 2014**

	Domestic extraction	Import	Export	Domestic Material Consumption	Physical Trade Balance
—million tonnes—					
<b>Total</b>	<b>93.1</b>	<b>59.8</b>	<b>39.7</b>	<b>113.2</b>	<b>20.1</b>
Biomass	27.3	14.9	12.1	30.2	2.9
Metallic minerals and products thereof	0.0	5.6	5.0	0.6	0.6
Non-metallic minerals and products thereof	54.0	8.3	4.6	57.6	3.7
Fossil energy and products thereof	11.9	27.9	15.7	24.1	12.2
Other products	0.0	3.0	2.3	0.7	0.7

www.statbank.dk/mrm2

**Table 420 Waste generation by industry and waste category. 2013**

	Total waste (excl. soil)	Mixed municipal waste and similar	Biodegradable waste, incl. Garden waste	Waste suited for incineration	Paper and card-board	Wood, incl. packaging and chemically treated	Glass, incl. packaging	Metals, incl. packaging	Plastics and tires	Electronics, batteries, etc.	Mixed construction waste	Sludge	Other waste
—1 000 tonnes—													
<b>Industries and households</b>	<b>11 149</b>	<b>1 440</b>	<b>1 222</b>	<b>1 409</b>	<b>656</b>	<b>310</b>	<b>152</b>	<b>961</b>	<b>101</b>	<b>96</b>	<b>2 706</b>	<b>268</b>	<b>1 829</b>
Households	3 275	1 354	634	456	224	141	111	100	32	64	-	-	158
<b>Total industries</b>	<b>7 874</b>	<b>85</b>	<b>588</b>	<b>953</b>	<b>432</b>	<b>169</b>	<b>41</b>	<b>861</b>	<b>70</b>	<b>31</b>	<b>2 706</b>	<b>268</b>	<b>1 671</b>
Agriculture, forestry and fishing	119	2	29	35	1	9	0	20	9	0	-	10	4
Mining and quarrying	13	0	0	1	0	0	0	4	0	0	-	0	7
Manufacturing	1 350	9	274	122	122	44	18	283	28	5	-	108	337
Utility services	1 235	5	19	48	4	12	2	53	1	2	-	134	956
Construction	3 624	2	40	211	4	87	10	317	4	6	2 706	2	236
Trade and transport etc.	1 114	40	142	402	238	10	8	163	25	7	-	5	73
Information and communication	12	0	0	5	5	0	0	1	0	1	-	0	0
Financial and insurance	14	0	0	6	6	0	0	1	0	0	-	0	0
Real estate activities and renting of non-residential buildings	8	0	0	5	1	0	0	0	0	0	-	0	0
Dwellings	2	0	0	1	0	0	0	0	0	0	-	0	0
Other business services	172	11	44	34	17	5	1	12	1	1	-	6	39
Public administration, education and health	164	14	26	62	29	1	1	6	1	6	-	2	16
Arts, entertainment and other services	48	2	12	21	5	0	0	1	0	3	-	0	2

www.statbank.dk/affald01

**Table 421** Environmental taxes and resource rent by industries and households. 2014

	Total including resource rent	Resource rent	Total excluding resource rent	Pollution taxes	Energy taxes	Transport taxes	Resource taxes
DKK mill.							
<b>Industries and households</b>	<b>95 021</b>	<b>15 709</b>	<b>79 312</b>	<b>2 507</b>	<b>46 100</b>	<b>28 965</b>	<b>1 739</b>
Households	45 464	-	45 464	788	26 365	16 929	1 383
Other final uses	8 161	-	8 161	67	0	8 094	0
<b>Total industries</b>	<b>41 396</b>	<b>15 709</b>	<b>25 687</b>	<b>1 653</b>	<b>19 736</b>	<b>3 943</b>	<b>356</b>
Agriculture, forestry and fishing	1 701	-	1 701	413	1 094	193	1
Mining and quarrying	15 793	15 709	84	1	57	6	19
Manufacturing	5 139	-	5 139	428	4 367	303	41
Utility services	933	-	933	83	783	67	0
Construction	1 905	-	1 905	51	1 005	792	58
Trade and transport etc.	7 852	-	7 852	423	5 924	1 500	5
Information and communication	497	-	497	16	409	72	0
Financial and insurance	613	-	613	5	375	230	3
Real estate activities and renting of non-residential buildings	302	-	302	6	224	67	5
Dwellings	254	-	254	7	117	14	115
Other business services	1 665	-	1 665	71	1 071	516	7
Public administration, education and health	3 984	-	3 984	129	3 643	119	92
Arts, entertainment and other services	757	-	757	18	667	62	10

www.statbank.dk/mrs1

**Table 422** Environmental subsidies and similar transfers by industries and households

	2010	2011	2012	2013	2014
DKK mill.					
<b>Industries and households</b>	<b>4 423</b>	<b>4 942</b>	<b>6 567</b>	<b>8 093</b>	<b>9 369</b>
Households	782	941	1 187	1 380	1 680
Other final uses	1 615	1 537	2 189	3 034	3 256
<b>Total industries</b>	<b>2 026</b>	<b>2 465</b>	<b>3 191</b>	<b>3 680</b>	<b>4 433</b>
Agriculture, forestry and fishing	457	484	612	710	906
Mining and quarrying	5	6	10	11	14
Manufacturing	500	626	804	1 005	1 227
Utility services	354	491	626	574	588
Construction	23	31	43	52	58
Trade and transport etc.	365	425	567	682	851
Information and communication	43	51	71	79	103
Financial and insurance	17	20	25	31	40
Real estate activities and renting of non-residential buildings	11	13	19	22	28
Dwellings	4	5	6	6	8
Other business services	55	86	105	142	134
Public administration, education and health	155	184	245	291	378
Arts, entertainment and other services	38	45	60	74	96

www.statbank.dk/mms3

**Table 423** Turnover and export of environmental goods and services by industry

	Turnover			Export		
	2012	2013	2014	2012	2013	2014
	—DKK mio.—					
<b>Industry total</b>	<b>169 703</b>	<b>164 771</b>	<b>173 793</b>	<b>66 777</b>	<b>65 402</b>	<b>71 615</b>
Agriculture and horticulture	3 612	3 782	3 861	76	80	80
Forestry	293	331	341	-	-	-
Manufacture of textiles	397	382	416	263	227	242
Manufacture of wearing apparel	6	7	8	2	3	2
Manufacture of wood and wood products	1 049	963	1 046	190	185	196
Manufacture of paper and paper products	2 802	2 787	2 787	1 068	879	944
Manufacture of chemical products	5 210	6 023	5 866	3 490	4 033	4 428
Manufacture of rubber and plastic products	5 440	5 829	5 928	2 792	2 444	2 679
Manufacture of products of glass, clay, marl etc.	2 212	2 146	2 403	342	370	388
Manufacture of basic metals	1 254	1 074	1 278	884	757	813
Manufacture of fabricated metal products	4 597	5 848	5 510	1 371	2 137	1 968
Manufacture electronic products	1 638	1 889	1 644	1 308	1 438	1 429
Manufacture of electrical equipment	2 155	2 307	2 775	1 122	1 187	1 486
Manufacture of machinery and equipment	73 840	65 415	70 932	41 590	42 148	46 194
Manufacture of motor vehicles and related parts	996	1 032	1 066	1 555	786	788
Manufacture of ships and other transport equipment	22	32	40	6	6	7
Repair and installation of machinery and equipment	508	505	645	64	83	83
Electricity, gas and steam supply	12 289	14 309	14 442	1 325	1 191	961
Sewerage	9 290	9 443	9 707	-	-	-
Waste management and materials recovery	15 926	15 349	16 923	5 511	3 212	4 427
Construction of buildings	5 313	4 984	5 130	183	87	45
Civil engineering	1 095	1 131	1 409	39	53	83
Specialised construction activities	8 142	7 669	7 858	59	41	60
Architectural and engineering activities	8 602	8 788	9 022	3 156	3 411	3 514
Scientific research and development	2 859	2 601	2 627	359	623	775
Other technical business services	159	146	128	23	23	23

www.statbank.dk/gron2

**Table 424** Environmental protection expenditure by environmental domain

	2007	2008	2009	2010	2011	2012	2013
	DKK mill.						
<b>Current and capital expenditure, total</b>	<b>29 229</b>	<b>31 508</b>	<b>30 288</b>	<b>30 549</b>	<b>30 116</b>	<b>31 147</b>	<b>33 885</b>
Protection of ambient air and climate	1 239	930	1 208	1 488	210	402	1 682
Wastewater management	9 240	10 124	8 821	8 524	8 870	8 857	9 594
Waste management	10 912	11 882	11 317	11 752	11 957	12 580	12 839
Protection of soil, groundwater and surface water	544	700	749	780	812	825	795
Noise and vibration abatement	21	34	20	38	77	59	43
Protection of biodiversity and landscapes	3 833	3 950	3 976	3 606	4 216	4 298	4 168
Protection against radiation	33	28	38	35	40	39	60
Research and development	1 475	1 535	2 033	1 695	1 654	1 772	1 974
Other (incl. administration)	1 933	2 324	2 126	2 630	2 280	2 316	2 728
<b>Current plus capital revenue, total</b>	<b>18 968</b>	<b>20 462</b>	<b>19 643</b>	<b>20 332</b>	<b>21 114</b>	<b>21 649</b>	<b>22 223</b>
Protection of ambient air and climate	36	15	19	19	22	70	69
Wastewater management	6 463	7 204	7 094	7 385	7 596	8 009	8 082
Waste management	10 787	11 467	10 928	11 159	11 816	11 944	12 242
Protection of soil, groundwater and surface water	56	49	46	75	114	84	51
Noise and vibration abatement	0	0	0	0	0	1	0
Protection of biodiversity and landscapes	760	828	827	908	826	751	970
Protection against radiation	14	11	12	11	11	10	5
Research and development	587	517	529	580	607	660	668
Other (incl. administration)	263	371	188	196	121	119	137

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