

Statistics Norway



Statistisk sentralbyrå

# Guide to environment statistics 2009



# Guide to environment statistics 2009

This booklet contains a selection of statistics published by Statistics Norway in 2009. More information can be found in reports, in articles on our web-site, and in StatBank Norway.

The booklet is available in electronic format at [http://www.ssb.no/english/subjects/01/sa\\_nrm](http://www.ssb.no/english/subjects/01/sa_nrm)

In the electronic version, a click on the "More information-boxes" will give direct access to the statistics.



# Contents

## Supply and use of natural resources

Energy.....	2
Agriculture.....	6
Forest.....	8
Game species.....	9
Fish and fisheries.....	10
Water .....	11
Land and land use .....	12

## Pollution and environmental problems

Climate change.....	15
Air pollution .....	20
Noise .....	24
Hazardous chemicals .....	25
Water pollution .....	26
Waste.....	28

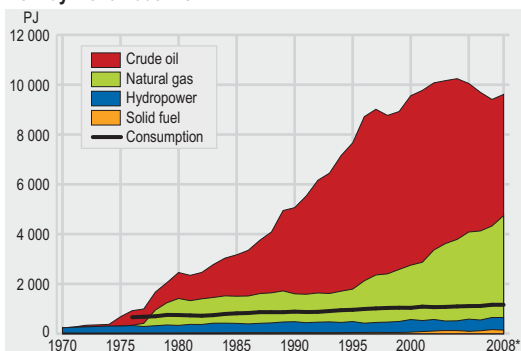
## Environmental protection expenditure

Environmental protection expenditure.....	31
---	----

### Standard symbols in the tables

Category not applicable	.
Data not available	..
Data not yet available	...
Not for publication	:
Nil	-
Less than 0.5 of the unit employed	0
Less than 0.05 of the unit employed	0.0
Provisional or preliminary figure	*
Break in the homogeneity of a vertical series	—
Break in the homogeneity of a horizontal series	
Decimal point	.

## Extraction and consumption<sup>1</sup> of energy commodities in Norway. 1970-2008. PJ



<sup>1</sup> Including the energy sectors, excluding international maritime transport.

Source: Statistics Norway, Norwegian Petroleum Directorate and Norwegian Water Resources and Energy Directorate.

## Production of oil, gas and coal. World total and selected countries. 2008

	Total		Oil Million tonnes	Gas mtoe	Coal mtoe
	mtoe	Per cent			
<b>World, total</b>	<b>10 021.7</b>	<b>100.0</b>	<b>3 928.8</b>	<b>2 768.0</b>	<b>3 324.9</b>
China	1 672.7	16.7	189.7	68.5	1 414.5
USA	1 435.0	14.3	305.1	533.0	596.9
Russia	1 182.8	11.8	488.5	541.5	152.8
Saudi Arabia	585.6	5.8	515.3	70.3	-
Canada	350.4	3.5	156.7	157.7	36.0
Iran	314.5	3.1	209.8	104.7	-
Australia	278.1	2.8	23.8	34.4	219.9
India	257.9	2.6	36.1	27.5	194.3
Indonesia	252.9	2.5	49.1	62.7	141.1
Mexico	212.3	2.1	157.4	49.4	5.5
Norway	205.8	2.0	114.2	89.3	2.3

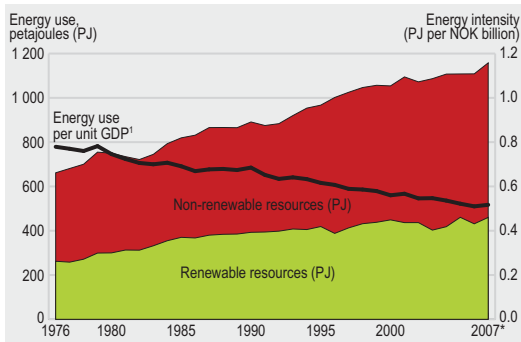
Source: BP - Statistical Review of World Energy 2009 and Store Norske Spitsbergen Kulkompani.

### More information

Latest article	<a href="http://www.ssb.no/energiregn_en/">http://www.ssb.no/energiregn_en/</a> <a href="http://www.ssb.no/ogprodre_en/">http://www.ssb.no/ogprodre_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article
BP	<a href="http://www.bp.com">http://www.bp.com</a>

# Energy

## Energy use per unit GDP<sup>1</sup> and total energy use (PJ) for renewable and non-renewable energy sources. 1976-2007\*



<sup>1</sup> GDP at constant 2007 prices. Ocean transport not included.

Source: Statistics Norway.

## Energy use per capita. Selected countries. kWh per capita

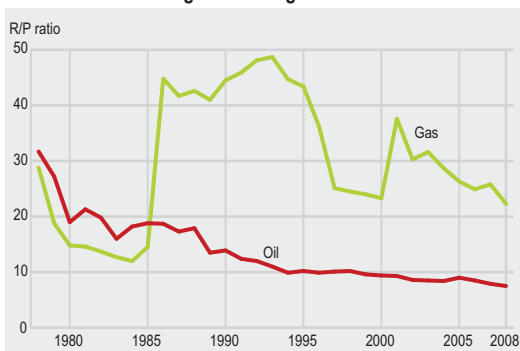
	1990	2000	2006
<b>World</b>	<b>19 505</b>	<b>19 388</b>	<b>21 150</b>
<b>EU-27</b>	<b>41 125</b>	<b>41 948</b>	<b>43 358</b>
Iceland	99 594	135 157	167 172
USA	90 469	95 784	90 945
Finland	67 657	73 673	83 530
Norway	59 346	67 255	81 773
Sweden	65 292	63 912	66 388
Japan	42 242	48 784	48 522
Denmark	40 958	42 624	45 239
China	9 048	10 340	16 920
India	4 465	5 288	5 993

Source: International Energy Agency - IEA.

## More information

International Energy Agency <http://www.iea.org/>

## R/P-ratio<sup>1,2</sup> for Norwegian oil and gas reserves. 1978-2008



<sup>1</sup> The R/P ratio, or the ratio between reserves and the current annual rate of production, indicates how many years it will take before the reserves are exhausted.

<sup>2</sup> Because of a change in the classification system for petroleum resources, there is a break in the time series between 2000 and 2001.

Source: Statistics Norway and Norwegian Petroleum Directorate.

## Proven reserves of fossil energy commodities

	Oil Billion tonnes	Gas Billion m <sup>3</sup>	Coal Billion tonnes
<b>World, 31 December 1988</b>	<b>135.5</b>	<b>109.7</b>	<b>..</b>
<b>World, 31 December 1998</b>	<b>145.0</b>	<b>148.0</b>	<b>..</b>
<b>World, 31 December 2008</b>	<b>170.7</b>	<b>185.0</b>	<b>826.0</b>
North America <sup>1</sup>	9.7	8.9	246.1
Latin America	17.6	7.3	15.0
Europe incl. former Soviet Union	19.2	62.9	272.2
Middle East	102.0	75.9	1.4
Africa	16.6	14.7	32.0
Asia and Oceania	5.6	15.4	259.3
Norway <sup>2</sup>	0.9	2.9	0.0

<sup>1</sup> North America includes Mexico.

<sup>2</sup> Norwegian coal reserves in Svalbard were 8 million tonnes in 2008.

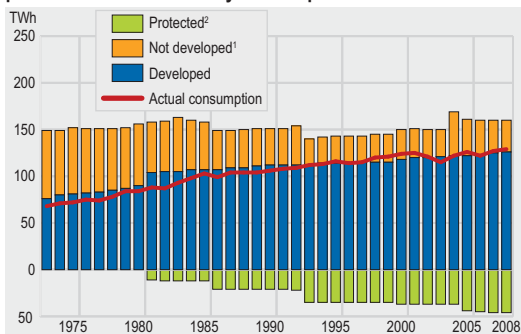
Source: BP - Statistical Review of World Energy 2009 and Store Norske Spitsbergen Kulkompani.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/ogprodre_en/">http://www.ssb.no/ogprodre_en/</a> <a href="http://www.ssb.no/olje_gass_en/">http://www.ssb.no/olje_gass_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Energy

## Hydropower resources: developed, not developed and protected. Actual electricity consumption. 1973-2008<sup>1</sup>. TWh



<sup>1</sup> From 2004 onwards, power plants of capacity 50-10 000 kW were included. As a result, the resource estimate was revised upwards.

Source: Norwegian Water Resources and Energy Directorate.

## Electricity trade between Norway and other countries. GWh

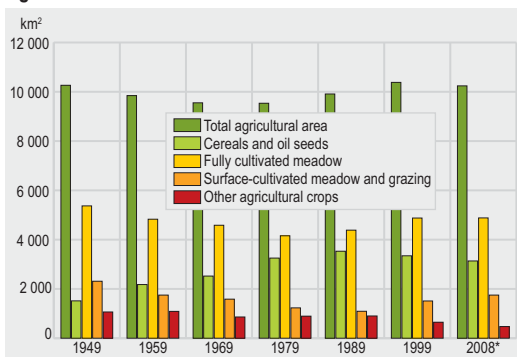
	1990	2000	2007	2008
<b>From Norway to other countries</b>				
<b>Total</b>	<b>16 401</b>	<b>20 529</b>	<b>15 320</b>	<b>17 275</b>
Denmark	3 958	4 634	3 974	4 806
Finland	114	131	202	159
Netherlands	0	0	0	3 369
Sweden	12 329	15 763	11 144	8 941
<b>To Norway from other countries</b>				
<b>Total</b>	<b>408</b>	<b>1 474</b>	<b>5 284</b>	<b>3 412</b>
Denmark	7	146	1 159	427
Finland	2	174	110	59
Netherlands	0	0	0	326
Russia	0	236	190	176
Sweden	399	919	3 826	2 424
<b>Net export from Norway</b>	<b>15 993</b>	<b>19 055</b>	<b>10 036</b>	<b>13 863</b>

Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/elektrisitetar_en/">http://www.ssb.no/elektrisitetar_en/</a> <a href="http://www.ssb.no/muh_en/">http://www.ssb.no/muh_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

## Agricultural area in use. 1949-2008\*. Km<sup>2</sup>



Source: Statistics Norway.

## Areas farmed ecologically or under conversion in the Nordic countries. Percentage of total agricultural area

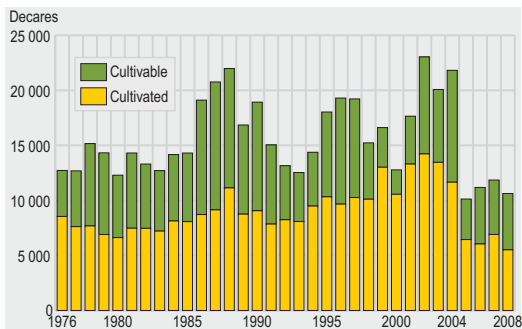
	Norway	Sweden	Denmark	Finland
1991	0.2	1.0	0.6	0.3
1995	0.6	2.6	1.4	2.1
2000	2.0	5.4	6.0	6.6
2005	4.2	6.9	5.4	6.5
2008	5.1	8.5	5.6	6.5

Source: Debio and Statistics Norway (Norway); KRAV, Statistics Sweden and Swedish Board of Agriculture (Sweden); Danish Plant Directorate and Statistics Denmark (Denmark); Evira and agricultural statistics from TIKE (Finland).

More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/stjord_en/">http://www.ssb.no/stjord_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

## Irreversible conversion of cultivated and cultivable land. 1976-2008. Decares



Source: KOSTRA (Municipality-State-Reporting) and Norwegian Agricultural Authority.

## Nitrogen and phosphorus in commercial fertilisers and manure. Tonnes

	Nitrogen		Phosphorus	
	Commercial fertilisers	Manure	Commercial fertilisers	Manure
1990	110 418	33 978	16 002	11 723
1995	110 851	34 467	13 291	11 761
2000	107 410	35 822	13 325	12 381
2005	106 882	35 316	12 660	12 283
2008	116 351	34 218	13 403	11 982

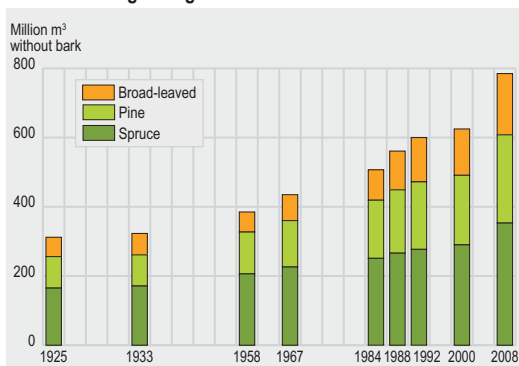
Source: Norwegian Food Safety Authority and Statistics Norway.

### More information at [www.ssb.no](http://www.ssb.no)

Overview	<a href="http://www.ssb.no/jordbruk_en/">http://www.ssb.no/jordbruk_en/</a>
Latest article	<a href="http://www.ssb.no/kofola_en/">http://www.ssb.no/kofola_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Forest

## Volume of the growing stock. 1925-2008



Source: Statistics Norway and National Forest Inventory.

## Forest area and other wooded area in selected European countries

	Forest area. 1 000 km <sup>2</sup>	Other wooded area. 1 000 km <sup>2</sup>	Forest area per capita. Decares
Norway	94	26	20.5
Sweden	275	33	30.6
Finland	225	8	43.1
Denmark	5	1	0.9
UK	28	0	0.5
Germany	111	0	1.3
France	156	17	2.6
Spain	179	103	4.3

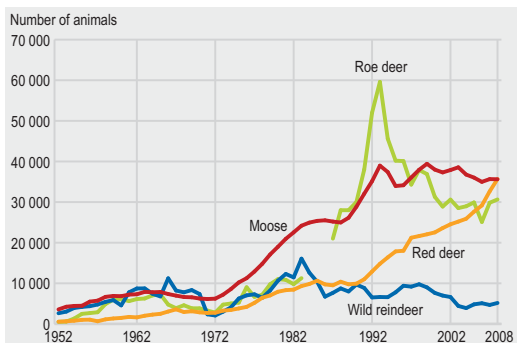
Source: The Global Forest Resources Assessment 2005, FAO.

## More information

Latest article	<a href="http://www.ssb.no/lst_en/">http://www.ssb.no/lst_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article
FAO	<a href="http://www.fao.org/forestry/fra/en/">http://www.fao.org/forestry/fra/en/</a>

# Game species

## Number of moose, red deer, wild reindeer and roe deer killed. 1952-2008



Source: Statistics Norway.

## Average number of large predators killed per year

	Wolf	Bear	Wolverine	Lynx
1866-1875	42	122	59	157
1926-1935	4	3	12	4
1966-1975	0	0	17	43
1998-2007	5	5	49	83
1996-2005	4	5	37	87
2006	2	4	79	82
2007	5	13	77	111
2008	5	12	90	136

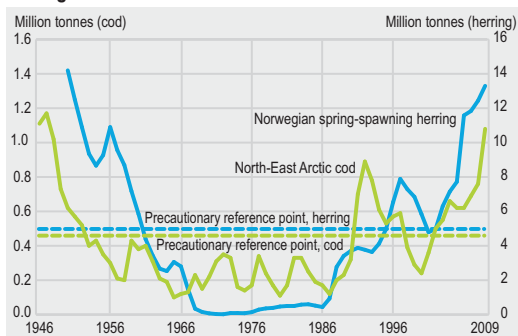
Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/rovdyravg_en/">http://www.ssb.no/rovdyravg_en/</a> <a href="http://www.ssb.no/elgjakt_en/">http://www.ssb.no/elgjakt_en/</a> <a href="http://www.ssb.no/hjortejakt_en/">http://www.ssb.no/hjortejakt_en/</a> <a href="http://www.ssb.no/reinjakt_en/">http://www.ssb.no/reinjakt_en/</a> <a href="http://www.ssb.no/srjakt_en/">http://www.ssb.no/srjakt_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Fish and fisheries

## Spawning stock biomass and precautionary reference point for Northeast Arctic cod and Norwegian spring-spawning herring. 1946-2009



Source: The International Council for the Exploration of the Sea - ICES.

## Norwegian catches by groups of fish species, molluscs and crustaceans. Sales of farmed salmon and trout. 1 000 tonnes

	1980	1990	2000	2008
<b>Fisheries. Fish and shellfish, total</b>	<b>2 400</b>	<b>1 592</b>	<b>2 699</b>	<b>2 435</b>
Pelagic fish	1 703	1 101	2 079	1 711
Cod fish	599	315	479	559
Flatfish and other demersal fish	27	88	63	49
Other fish	21	15	8	4
Molluscs and crustaceans	50	73	71	112
<b>Fish farming, salmon and trout</b>	<b>8</b>	<b>150</b>	<b>489</b>	<b>818</b>

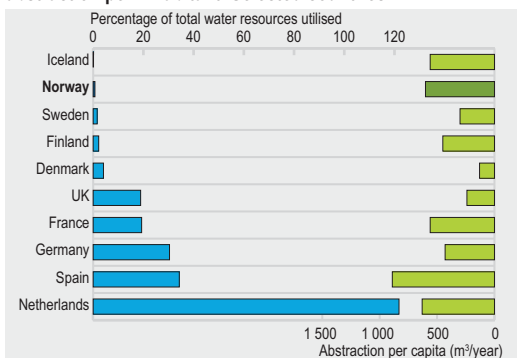
Source: Directorate of Fisheries and Statistics Norway.

## More information

Latest article	<a href="http://www.ssb.no/fiskeri_en/">http://www.ssb.no/fiskeri_en/</a> <a href="http://www.ssb.no/fiskeoppdrett_en/">http://www.ssb.no/fiskeoppdrett_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article
Other data sources	<a href="http://www.fiskeridir.no/">http://www.fiskeridir.no/</a> <a href="http://www.imr.no">http://www.imr.no</a> <a href="http://www.ices.dk">http://www.ices.dk</a>

# Water

## Percentage of total freshwater resources utilised and abstraction per inhabitant. Selected countries



Source: OECD and Statistics Norway.

## Use of fresh water, by industries and households<sup>1</sup>. Norway. 2006 or latest available year

	Estimated water use Million m <sup>3</sup>
<b>Total</b>	<b>2 817</b>
Households	354
Primary industries	935
Manufacturing industries	1 191
Mining and quarrying	41
Services	115
Others	179

<sup>1</sup> Leakages not included.

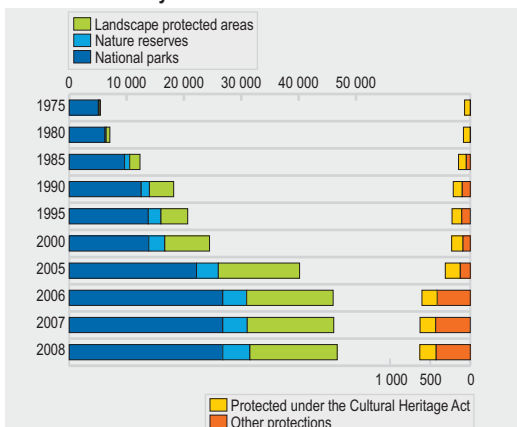
Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/vann_koetra_en/">http://www.ssb.no/vann_koetra_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Land and land use

## Protected areas<sup>1</sup> by conservation form. Km<sup>2</sup>. 31 December



<sup>1</sup> Areas on Svalbard are protected according to the Svalbard law and are not included.

Source: Directorate for Nature Management.

## Proportion of the coastal area accessible for outdoor activities as of 1 January 2008 and change 2000-2008

Groups of counties	2008 Per cent	Change 2000-2008 Percentage points
<b>Whole country</b>	<b>13.6</b>	<b>-1.5</b>
Østfold – Hordaland	23.2	-2.3
Oslofjord area	25.9	-2.3
Telemark and the Agder counties	22.6	-2.7
Rogaland and Hordaland	22.9	-2.2
Sogn og Fjordane and northwards	10.5	-0.9

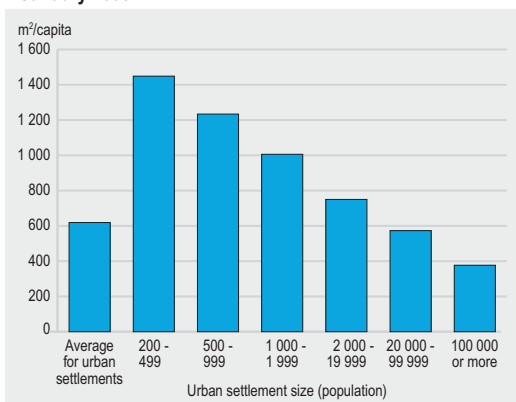
Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/strandsone_en/">http://www.ssb.no/strandsone_en/</a> <a href="http://www.ssb.no/arealvern_en/">http://www.ssb.no/arealvern_en/</a> <a href="http://www.ssb.no/fysplan_en/">http://www.ssb.no/fysplan_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Land and land use

## Urban settlement area per capita, by size of population. 1 January 2009



Source: Statistics Norway.

## Urban settlements, area and residents

	Area. km²	Residents	Share of total population resident in urban settlements. Per cent
2000	2 139	3 396 382	76
2002	2 194	3 474 623	77
2003	2 225	3 514 417	77
2004	2 218	3 536 454	77
2005	2 219	3 560 137	77
2006	2 263	3 607 813	78
2007	2 294	3 655 391	78
2008	2 334	3 722 786	79
2009	2 340	3 780 068	79

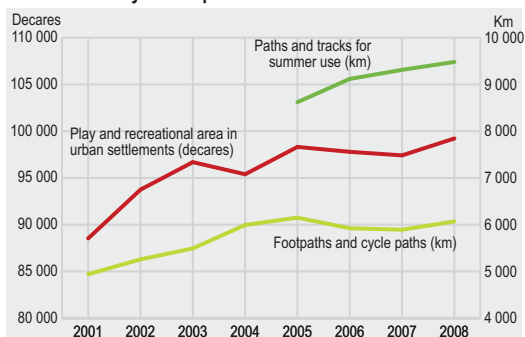
Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/befteftt_en/">http://www.ssb.no/befteftt_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Land and land use

## Play and recreational area in urban settlements. Footpaths and cycle paths and paths and tracks for summer use administered by municipalities. 2001-2008



Source: KOSTRA (Municipality-State Reporting System).

## Approval of applications for exemptions. 2001 and 2008

Type of area and activity	Year	Applications that include exemptions, approved	Percentage of applications for exemptions, approved
New buildings in agricultural areas, areas of natural environment and outdoor recreation areas	2001	3 646	74
	2008	1 555	80
New buildings in areas along rivers and lakes where building is prohibited	2001	269	80
	2008	215	74
New buildings in the coastal zone where building is prohibited	2001	1 096	67
	2008	812	67
Projects in areas set aside for protection of the cultural heritage	2001	96	55
	2008	329	65
Motor traffic in outlying fields and waterways	2001	11 863	94
	2008	13 068	93

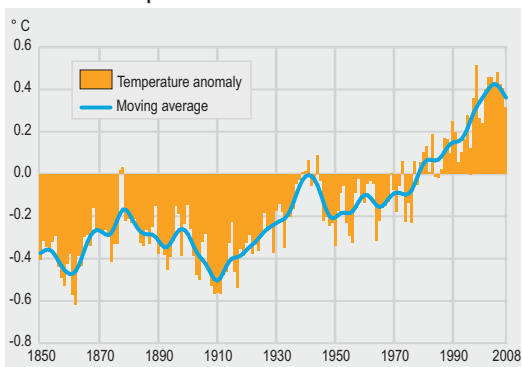
Source: KOSTRA (Municipality-State Reporting System).

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/fysplan_en/">http://www.ssb.no/fysplan_en/</a> <a href="http://www.ssb.no/miljo_kostr_en/">http://www.ssb.no/miljo_kostr_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Climate change

## Global mean temperature<sup>1</sup>. 1850-2008



<sup>1</sup> Deviation from the normal value for the period 1961-1990.

Source: Climate Research Unit - University of East Anglia og Hadley Centre - UK Meteorological Office.

## CO<sub>2</sub> emissions, selected countries. 2006 and change from 1990

	CO <sub>2</sub> -emissions 2006, million tonnes	Per cent of world total	Change from 1990. Per cent
China	6 103	21.3	152.8
USA	5 975	20.8	18.1
Russia	1 578	5.5	-36.8
Japan	1 274	4.4	11.3
Germany	880	3.1	-14.7
UK	558	1.9	-5.5
France	409	1.4	3.3
Ukraine	345	1.2	-51.8
Finland	68	0.2	20.1
Denmark	59	0.2	9.1
Sweden	52	0.2	-8.5
Norway	43	0.2	24.4

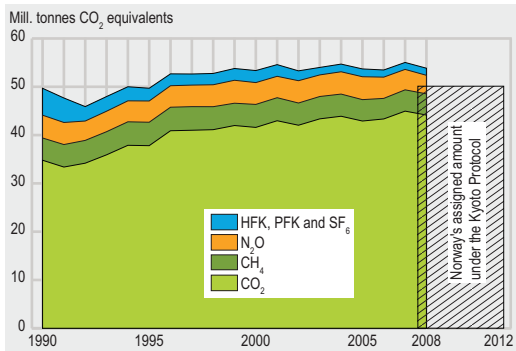
Source: UN Statistics Division (UNFCCC data).

## More information

Temperature	<a href="http://hadobs.metoffice.com/hadcrut3/diagnostics/global/nh+sh/">http://hadobs.metoffice.com/hadcrut3/diagnostics/global/nh+sh/</a>
Emissions	<a href="http://unfccc.int/2860.php">http://unfccc.int/2860.php</a>

# Climate change

## Total emissions of greenhouse gases in Norway. 1990-2008



Source: Statistics Norway and Norwegian Pollution Control Authority.

## Emissions of greenhouse gases by source. Million tonnes CO<sub>2</sub> equivalents

	1990	2000	2008*
<b>Total</b>	<b>49.7</b>	<b>53.4</b>	<b>53.8</b>
Manufacturing industries	19.4	17.4	14.1
Oil and gas activities <sup>1</sup>	7.5	12.2	14.3
Road traffic	7.7	8.5	10.4
Agriculture, non-combustion	4.4	4.5	4.3
Shipping (fishing and coastal traffic)	3.4	4.0	3.5
Other emissions	7.2	6.7	7.3

<sup>1</sup> Includes oil and gas activities offshore and gas terminals on shore.

Source: Statistics Norway and Norwegian Pollution Control Authority.

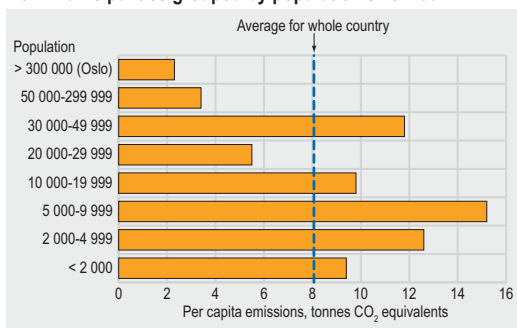
## More information at [www.ssb.no](http://www.ssb.no)

Latest article [http://www.ssb.no/klimagassn\\_en/](http://www.ssb.no/klimagassn_en/)

StatBank Norway [Click on "More tables in StatBank" in Latest article](#)

# Climate change

## Average per capita greenhouse gas emissions in Norway, from municipalities grouped by population size. 2007



Source: Statistics Norway and Norwegian Pollution Control Authority.

## Greenhouse gas emission intensity, by industry<sup>1</sup>. Tonnes CO<sub>2</sub> equivalents per NOK million output

	1990	2000	2007*
<b>Norway excl. ocean transport</b>	<b>40.6</b>	<b>28.4</b>	<b>22.6</b>
Agriculture, forestry and fishing	164.3	117.5	94.0
Manufacturing industries	53.9	36.3	23.8
Oil and gas extraction, incl. mining	41.9	36.0	40.8
Transport	248.3	206.6	178.3
Other industries in the Norwegian economy	13.1	7.6	6.0

<sup>1</sup> Ocean transport not included.

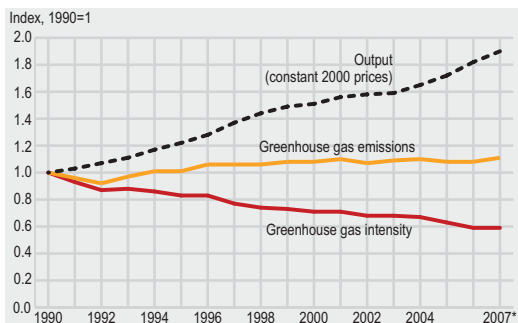
Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/klimagassr_en/">http://www.ssb.no/klimagassr_en/</a> <a href="http://www.ssb.no/nrmiljo_en/">http://www.ssb.no/nrmiljo_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Climate change

## Greenhouse gas intensity<sup>1</sup>, emissions of greenhouse gases and output. Norway excl. ocean transport. 1990-2007\*. Index 1990=1



<sup>1</sup> Greenhouse gas intensity is the ratio between emissions and output.

Source: Statistics Norway.

## Greenhouse gas emissions and output, by households and industries. Per cent of total. 2007\*

	Emissions of greenhouse gases. Per cent	Output (constant 2000 prices). Per cent
Agriculture, forestry and fishing	9	2
Oil and gas extraction, incl. mining	23	12
Manufacturing industries	20	20
Transport excl. ocean transport	14	4
Ocean transport	18	3
Energy, water supply and construction	4	8
Services <sup>1</sup>	2	36
General government <sup>2</sup>	2	15
Households	8	.

<sup>1</sup> Services incl. Wholesale, Maintenance, Hotels and Restaurants.

<sup>2</sup> General government incl. Education and Health and social work.

Source: Statistics Norway.

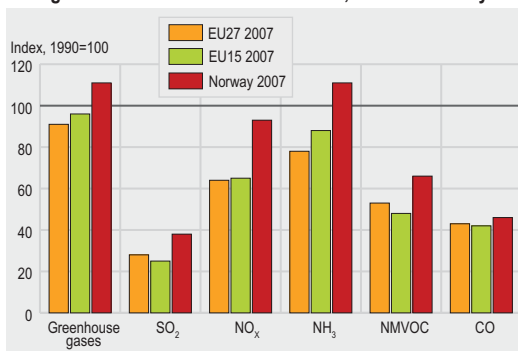
## More information at [www.ssb.no](http://www.ssb.no)

Latest article [http://www.ssb.no/nrmiljo\\_en/](http://www.ssb.no/nrmiljo_en/)

StatBank Norway [Click on "More tables in StatBank" in Latest article](#)

# Climate change

## Changes in emissions from 1990 to 2007, EU<sup>1</sup> and Norway



<sup>1</sup> The EU provides figures for SO<sub>x</sub> rather than SO<sub>2</sub>.

Source: European Environment Agency - EEA, Statistics Norway and Norwegian Pollution Control Authority.

## Emissions of (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), percentage change and GWP value of the gases

	CO <sub>2</sub> Million tonnes	CH <sub>4</sub> 1 000 tonnes	N <sub>2</sub> O 1 000 tonnes
1990	34.8	219.7	15.2
1995	37.8	230.8	14.2
2000	41.6	226.6	14.6
2005	42.9	211.1	15.3
2008	44.2	208.9	12.4
Change 1990-2008 (per cent)	26.9	-4.9	-18.6
GWP value <sup>1</sup>	1	21	310

<sup>1</sup> Impact on greenhouse effect of emission of 1 tonne of the gas compared with that of 1 tonne CO<sub>2</sub>.

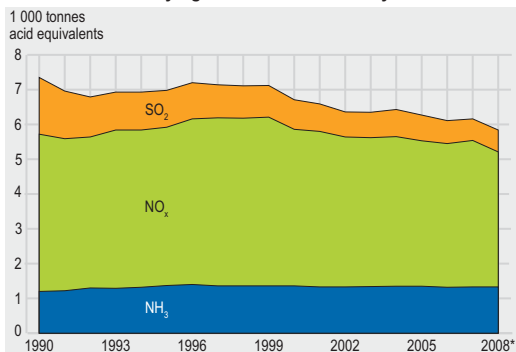
Source: Statistics Norway and Norwegian Pollution Control Authority.

## More information

Latest article	<a href="http://www.ssb.no/klimagassn_en/">http://www.ssb.no/klimagassn_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article
International data	<a href="http://www.eea.europa.eu/publications/european-community-greenhouse-gas-inventory-2009">http://www.eea.europa.eu/publications/european-community-greenhouse-gas-inventory-2009</a> <a href="http://www.eea.europa.eu/publications/lrtap-emission-inventory-report-1990-2007">http://www.eea.europa.eu/publications/lrtap-emission-inventory-report-1990-2007</a>

# Air pollution

## Emissions of acidifying substances in Norway. 1990-2008



Source: Statistics Norway and Norwegian Pollution Control Authority.

## Emissions of SO<sub>2</sub> and NO<sub>x</sub> per capita, selected countries

	SO <sub>2</sub> Tonnes per capita		NO <sub>x</sub> Tonnes per capita	
	1990	2007	1990	2007
UK	65	10	48	26
Germany	67	6	36	16
Russia <sup>1</sup>	41	12	24	24
Sweden	12	4	35	18
Denmark	35	4	53	31
Norway	12	4	49	41

<sup>1</sup> Figures according to "Expert emissions used in EMEP models". The figures apply to the European part within the EMEP area.

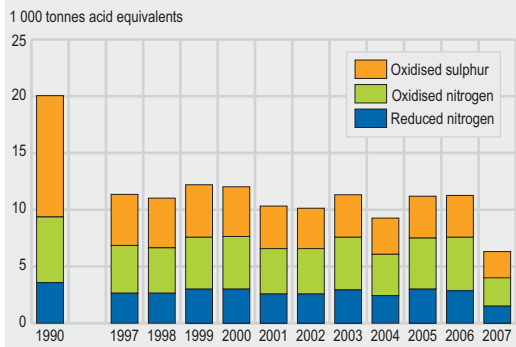
Source: EMEP - European Monitoring and Evaluation Programme.

## More information

Latest article	<a href="http://www.ssb.no/svoveln_en/">http://www.ssb.no/svoveln_en/</a> <a href="http://www.ssb.no/agassn_en/">http://www.ssb.no/agassn_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article
EMEP	<a href="http://www.ceip.at/">http://www.ceip.at/</a>

# Air pollution

## Deposition of acidifying substances in Norway. 1990-2007



Source: EMEP.

## Imports of ozone-depleting substances to Norway. ODP tonnes<sup>1</sup>

	ODP tonnes
1986	2 911
1990	2 196
1995	97
2000	60
2005	15
2008	15

<sup>1</sup> The ozone-depleting potential (ODP) varies from one substance to another, and the figures are totals weighted according to the ODP of each substance (ODP factors)

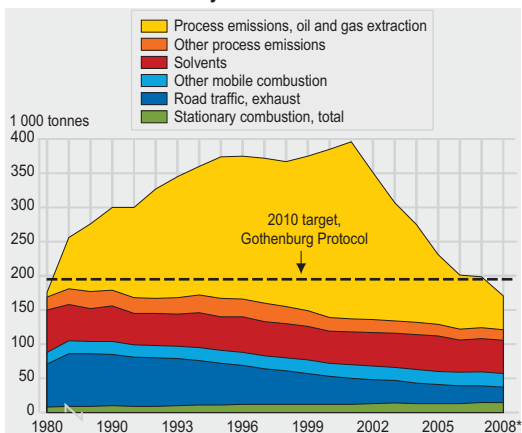
Source: Norwegian Pollution Control Authority.

## More information

EMEP	<a href="http://www.emep.int/publ/reports/2009/Country_Reports/report_NO.pdf">http://www.emep.int/publ/reports/2009/Country_Reports/report_NO.pdf</a>
State of Environment Norway	<a href="http://www.miljostatus.no/Mal-og-nokkeltall/Mal-og-nokkeltall/Nedbryting-av-ozonlaget/">http://www.miljostatus.no/Mal-og-nokkeltall/Mal-og-nokkeltall/Nedbryting-av-ozonlaget/</a>

# Air pollution

## Emissions of NMVOCs by source. 1980-2008



Source: Statistics Norway and Norwegian Pollution Control Authority.

## Emissions of carbon monoxide by source. 1 000 tonnes

	1990	1995	2000	2007*
<b>Total</b>	<b>868</b>	<b>735</b>	<b>566</b>	<b>399</b>
Road traffic: exhaust	553	434	277	163
Housing	152	159	163	129
Other sources	162	142	126	108

Source: Statistics Norway and Norwegian Pollution Control Authority.

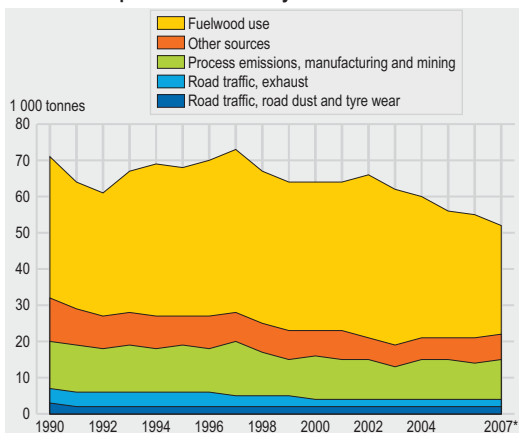
More information at [www.ssb.no](http://www.ssb.no)

Latest article [http://www.ssb.no/agassn\\_en/](http://www.ssb.no/agassn_en/)

StatBank Norway [Click on "More tables in StatBank" in Latest article](#)

# Air pollution

## Emissions of particulate matter by source. 1990-2007



Source: Statistics Norway and Norwegian Pollution Control Authority.

## Emissions of heavy metals. kg

	1990	1995	2000	2007*
Lead	187 457	23 459	9 014	7 623
Mercury	1 506	877	756	691
Cadmium	1 112	985	690	557
Copper	22 131	19 001	19 531	22 244
Chromium	12 603	11 176	8 498	2 244
Arsenic	3 144	2 947	2 439	1 629

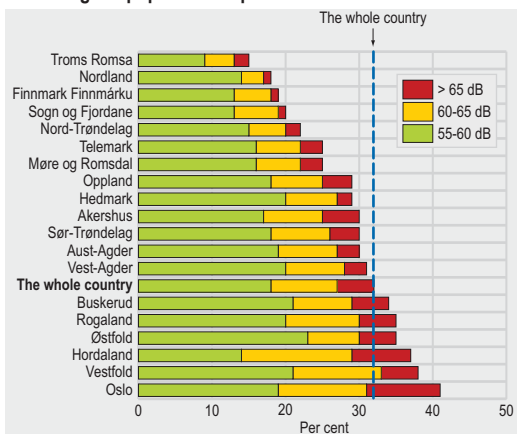
Source: Statistics Norway and Norwegian Pollution Control Authority.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/milgiftn_en/">http://www.ssb.no/milgiftn_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Noise

## Percentage of population exposed to road traffic noise. 2007



Source: Statistics Norway and Directorate of Public Roads.

## Noise annoyance index, by source

	Index 2007	Percentage 2007	Change 1999-2007. Per cent
<b>Total - all identified sources</b>	<b>603 900</b>	<b>100</b>	<b>9</b>
Road traffic	476 700	79	15
Manufacturing	27 100	4	5
Other industry	15 100	3	-1
Air traffic	25 100	4	-13
Railways	21 900	4	-31
Other sources <sup>1</sup>	38 000	6	...

<sup>1</sup> Construction, motor racing tracks and shooting ranges.

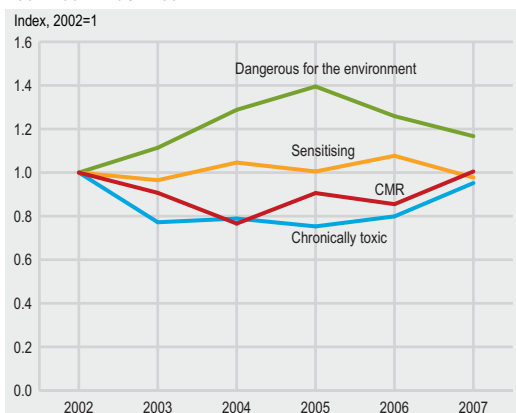
Source: Statistics Norway.

## More information

State of Environment Norway <http://www.environment.no/Topics/Noise/>

# Hazardous chemicals

## Emissions of hazardous substances, by hazard categories. 2002-2007. Index 2002=1



Source: Statistics Norway.

## Consumption and emissions of hazardous substances, by hazard categories. 1 000 tonnes

	2002	2004	2007
<b>Consumption</b>			
CMR (carcinogenic, mutagenic and reprotoxic)	5 883	7 474	6 242
Chronically toxic	264	219	211
Sensitising	141	126	153
Long-term environmental effects	587	418	592
<b>Emissions</b>			
CMR (carcinogenic, mutagenic and reprotoxic)	15.3	11.7	15.4
Chronically toxic	1.1	0.8	1.0
Sensitising	3.1	3.3	3.1
Long-term environmental effects	4.8	5.3	5.6

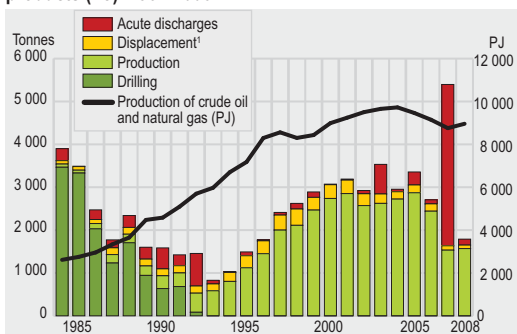
Source: Statistics Norway.

More information at [www.ssb.no](http://www.ssb.no)

Latest report [http://www.ssb.no/english/subjects/01/04/rapp\\_emissions\\_en/](http://www.ssb.no/english/subjects/01/04/rapp_emissions_en/)

# Water pollution

## Discharges of oil from petroleum activities (tonnes). Production of crude oil, natural gas and other petroleum products (PJ). 1984-2008



¹ Oil-contaminated ballast water in storage cells on production platforms, displaced when the cells are filled with produced oil.

Source: Norwegian Pollution Control Authority and Statistics Norway.

## Inputs of phosphorus and nitrogen to the North Sea region. Tonnes

Year	Phosphorus		Nitrogen	
	Total	Of this from municipal waste water	Total	Of this from municipal waste water
1985	1 465	929	32 231	11 929
1995	685	307	23 363	9 531
2005	589	214	18 842	7 062
2006	569	215	19 956	7 660
2007	554	201	20 034	7 768

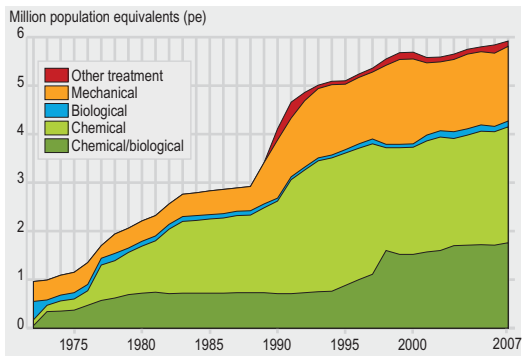
Source: Norwegian Institute for Water Research.

## More information

State of Environment Norway <http://www.environment.no/Tema/Hav-og-vann/>

# Water pollution

## Trend in treatment capacity at waste water treatment plants. 1972-2007



Source: Statistics Norway.

## Discharges of phosphorus and nitrogen from waste water treatment plants

Year	Phosphorus		Nitrogen	
	Total	Discharges per inhabitant connected	Total	Discharges per inhabitant connected
	Tonnes	Kg	Tonnes	Kg
2000	1 296	0.29	17 374	3.88
2005	1 187	0.26	15 901	3.45
2006	1 205	0.26	16 467	3.50
2007	1 237	0.26	16 626	3.54

Source: Statistics Norway.

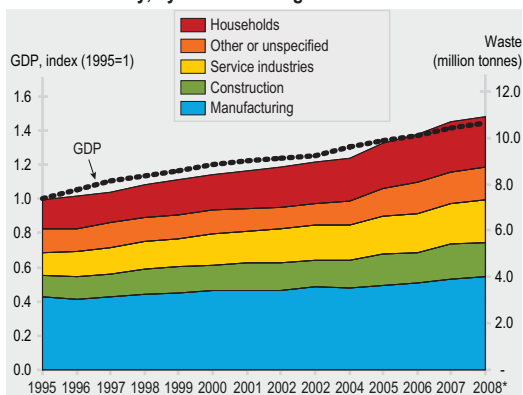
## More information at [www.ssb.no](http://www.ssb.no)

Latest article [http://www.ssb.no/avlut\\_en/](http://www.ssb.no/avlut_en/)

StatBank Norway [Click on "More tables in StatBank" in Latest article](#)

# Waste

## Waste in Norway, by source. Change in GDP. 1995-2008



## Waste in Norway, by material. 1 000 tonnes

	1995	2000	2005	2008* <sup>1</sup>
<b>Total</b>	<b>7 336</b>	<b>8 419</b>	<b>9 762</b>	<b>10 900</b>
Paper, cardboard and pasteboard	844	1 046	1 173	1 300
Wood waste	1 328	1 311	1 474	1 700
Biodegradable waste	1 096	1 306	1 523	1 800
Plastic	327	380	437	510
Metals	919	936	1 054	1 100
Hazardous waste	630	672	963	1 100
Other materials	2 192	2 767	3 138	3 500

<sup>1</sup> The total sum differs from the sum of the categories due to rounding off of figures.

Source: Statistics Norway.

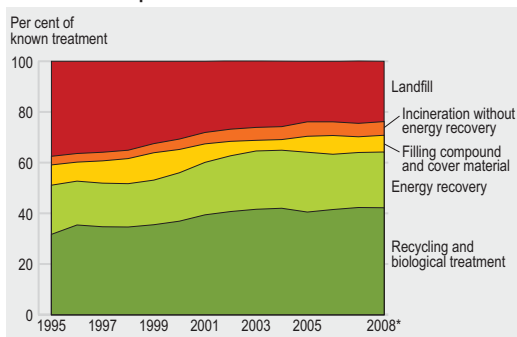
## More information at [www.ssb.no](http://www.ssb.no)

Latest article [http://www.ssb.no/avfregno\\_en/](http://www.ssb.no/avfregno_en/)

StatBank Norway [Click on "More tables in StatBank" in Latest article](#)

# Waste

## Non-hazardous waste by treatment/disposal. 1995-2008\*. As a percentage of waste for which information is available on treatment or disposal



Source: Statistics Norway.

## Hazardous waste handled at approved facilities, by type of treatment and material. 1 000 tonnes

	2003	2007
<b>Treatment</b>		
Recycling and energy recovery	93.3	99.8
Final disposal <sup>1</sup>	637.0	862.0
Exported	76.7	66.5
Stock changes <sup>2</sup>	..	6.2
<b>Material</b>		
Corrosive waste	213.3	175.2
Containing oil	194.7	232.9
Containing heavy metals, polluted matter	340.2	546.3
Other materials	58.7	80.1

<sup>1</sup> Includes all types of landfilling, permanent storage, incineration without energy recovery and treatment that results only in non-hazardous products.

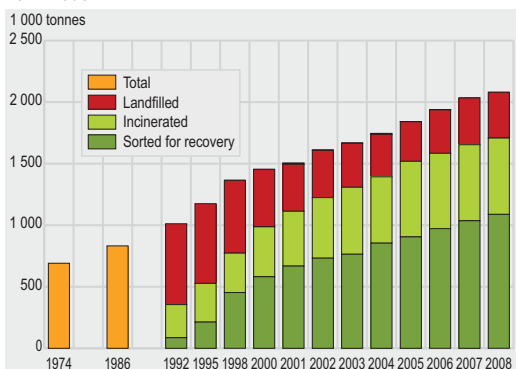
<sup>2</sup> Stock changes 2003 included in final disposal.

Source: Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/avfhand_en/">http://www.ssb.no/avfhand_en/</a> <a href="http://www.ssb.no/spesavf_en/">http://www.ssb.no/spesavf_en/</a> <a href="http://www.ssb.no/avfregno_en/">http://www.ssb.no/avfregno_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

## Household waste by method of recovery or disposal. 1974-2008



Source: Statistics Norway.

## Quantity of household waste and percentage sorted for recovery. The 10 largest municipalities. 2008

Municipalities by decreasing population	Household waste per capita. kg	Sorted for recovery. Per cent
Oslo	391	41
Bergen	414	40
Trondheim	399	44
Stavanger	398	64
Bærum	475	58
Kristiansand	495	61
Fredrikstad	590	49
Tromsø	322	52
Sandnes	398	64
Drammen	517	57

Source: Statistics Norway.

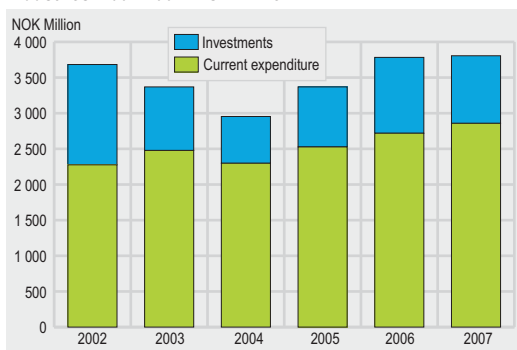
More information at [www.ssb.no](http://www.ssb.no)

Latest article [http://www.ssb.no/avfkomm\\_en/](http://www.ssb.no/avfkomm_en/)

StatBank Norway [Click on "More tables in StatBank" in Latest article](#)

# Environmental protection expenditure

**Investments and current expenditure for environmental protection in manufacturing, mining and quarrying industries. 2002-2007. NOK Million**



Source: Statistics Norway.

**Environmental protection expenditure in manufacturing, mining and quarrying industries, by environmental domain. 2007**

	NOK Billion	Per cent
<b>Total</b>	<b>3.8</b>	<b>100.0</b>
Solid waste	1.5	39.8
Waste water	1.2	32.1
Air/climate	0.8	21.4
Soil and groundwater	0.1	2.3
Biodiversity and landscape	0.0	0.3
Other	0.2	4.1

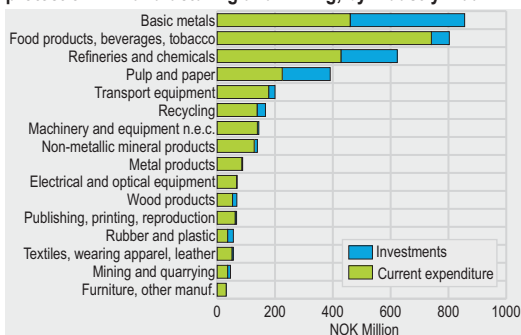
Source: Statistics Norway.

**More information at [www.ssb.no](http://www.ssb.no)**

Latest article	<a href="http://www.ssb.no/miljokostind_en/">http://www.ssb.no/miljokostind_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

# Environmental protection expenditure

## Investments and current expenditure for environmental protection in manufacturing and mining, by industry. 2007



Source: Statistics Norway.

## Environmental protection expenditure in the manufacturing industry, as percentage of GDP. Norway, the EU and selected countries

	2002	2005	2006	2007
<b>Norway</b>	<b>0.24</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>
EU-27 <sup>1</sup>	0.38	0.32	0.31	..
EU-15 <sup>1</sup>	0.38	0.31	0.31	..
Italy	0.73	0.59	..	..
Belgium	0.50	..	..	..
Poland	0.62	0.43	0.42	0.40
Finland	0.37	0.33	0.33	..
Netherlands	0.35	0.27	..	..
Austria	0.32	0.27	..	..
Sweden	0.30	0.27	0.26	0.26
Portugal	0.23	0.22	0.23	..
Spain	0.23	0.23	0.23	..
UK	0.20	0.19	0.18	..

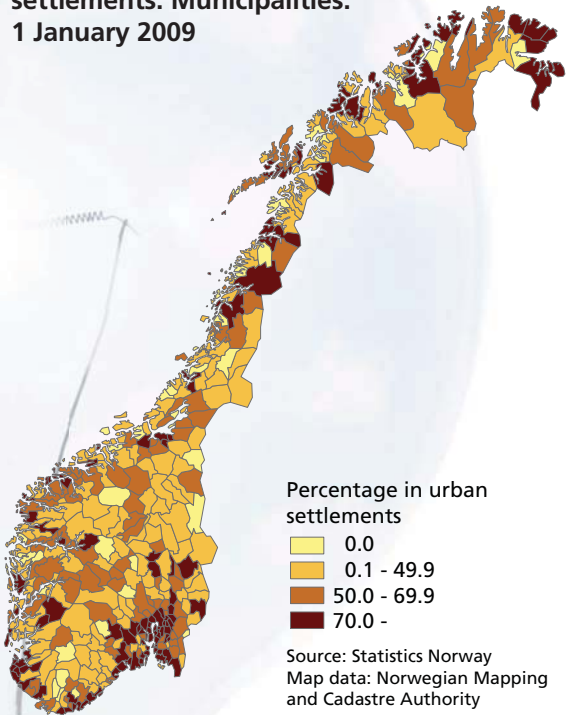
<sup>1</sup> Eurostat estimates.

Source: Eurostat and Statistics Norway.

## More information at [www.ssb.no](http://www.ssb.no)

Latest article	<a href="http://www.ssb.no/miljokostind_en/">http://www.ssb.no/miljokostind_en/</a>
StatBank Norway	Click on "More tables in StatBank" in Latest article

Percentage of population in urban settlements. Municipalities.  
1 January 2009



## Statistics Norway

### *Oslo:*

Kongens gate 6  
PO Box 8131 Dep  
NO-0033 Oslo  
Telephone: +47 21 09 00 00  
Telefax: +47 21 09 49 73

### *Kongsvinger:*

Oterveien 23  
NO-2225 Kongsvinger  
Telephone: +47 62 88 50 00  
Telefax: +47 62 88 50 30

E-mail: [ssb@ssb.no](mailto:ssb@ssb.no)  
Internet: [www.ssb.no](http://www.ssb.no)

ISBN 978-82-537-7709-2 Printed version  
ISBN 978-82-537-7710-8 Electronic version



**Statistisk sentralbyrå**  
Statistics Norway