



Guide to environment statistics 2013

Statistics Norway



Statistisk sentralbyrå

Guide to environment statistics 2013

This guide contains a selection of statistics published by Statistics Norway supplemented by selected data from other national and international sources.

More information can be found in reports, in articles on our web-site, and in StatBank Norway.

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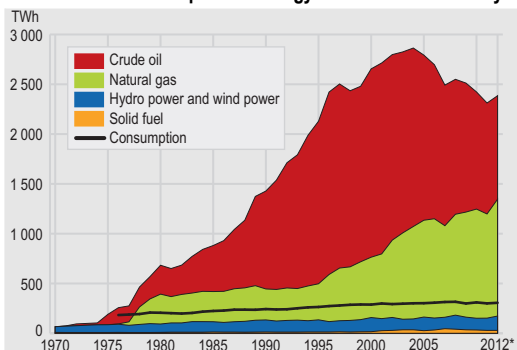
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Standard symbols in the tables

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Not for publication	: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	.

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Extraction and consumption¹ of energy commodities in Norway



¹ Including the energy sectors, excluding ocean 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. 2012*

	Total		Oil Million tonnes	Gas Mtoe	Coal Mtoe
	Mtoe	Per cent			
World, total	11 070	100	4 249	2 855	3 966
1. China	2 187	19.8	206	90	1 891
2. USA	1 463	13.2	407	558	498
3. Russia	1 260	11.4	522	539	199
4. Saudi Arabia	633	5.7	556	78	0
5. Indonesia	361	3.3	44	67	249
6. Canada	350	3.2	186	130	34
7. India	335	3.0	43	33	258
8. Iran	324	2.9	189	134	1
9. Australia	308	2.8	23	52	233
10. Qatar	224	2.0	82	142	0
11. United Arab Emirates	209	1.9	166	43	0
14. Norway	188	1.7	89	98	1

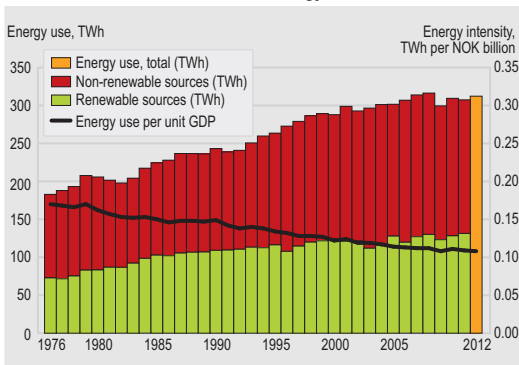
Source: International Energy Agency - IEA.

More information

Latest article	http://www.ssb.no/en/energiregn/ http://www.ssb.no/en/ogprodre/
IEA	http://www.iea.org

Energy

Energy use per unit GDP¹ and total energy use (TWh). Renewable and non-renewable energy sources



¹ GDP at constant 2012 prices. Ocean transport not included.

Source: Statistics Norway.

Energy use per capita. Selected countries. kWh

	1990	2000	2011
World, total	19 510	19 395	22 144
EU-27	40 649	40 989	38 609
Iceland	96 234	129 617	211 091
USA	89 939	94 589	82 511
Finland	66 882	73 172	75 795
Norway	58 190	68 265	66 749
Sweden	64 794	62 982	60 981
Japan	41 761	48 042	42 418
Denmark	39 687	41 017	37 972
China	9 012	10 808	23 845
India	4 259	5 097	7 093

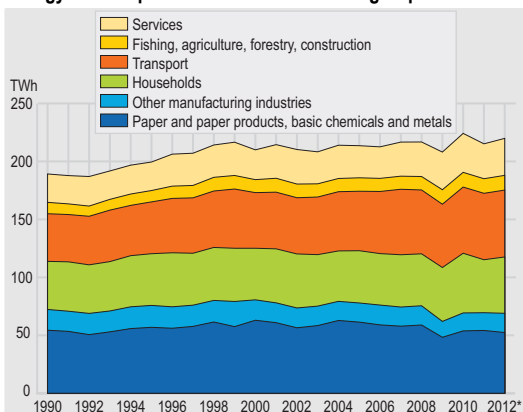
Source: International Energy Agency - IEA.

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IEA

<http://www.iea.org/>

Energy consumption in different consumer groups¹



¹ Excluding the energy producing industries and energy products used as raw materials.

Source: Statistics Norway.

Energy consumption in different consumer groups. Per cent

	1990	2000	2011*	2012*
Energy consumption, total	100	100	100	100
Manufacture of pulp and paper, basic chemicals and metals	29	30	25	24
Other manufacturing industries, mining and quarrying	9	8	7	8
Households	22	21	21	22
Transport	22	23	27	26
Fishing, agriculture, forestry, construction	5	5	6	6
Services	13	12	14	14

Source: Energy balance, Statistics Norway.

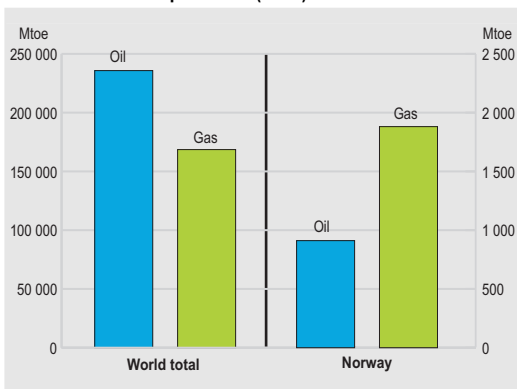
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Energy

Proved reserves of oil and natural gas by the end of 2012. Million tonnes oil equivalents (Mtoe)



Source: BP - Statistical Review of World Energy 2013.

Proved reserves of fossil energy commodities

	Oil Billion barrels	Gas Trillion m ³	Coal Billion tonnes
World, 31 December 1991	1 039.3	117.6	..
World, 31 December 2001	1 321.5	154.9	..
World, 31 December 2011	1 668.9	187.3	860.9
North America ¹	220.2	10.8	245.1
Latin and Central America	328.4	7.6	12.5
Europe incl. former Soviet Union	140.8	58.4	304.6
Middle East	807.7	80.5	1.2
Africa	130.3	14.5	31.7
Asia and Oceania	41.5	15.5	265.8
Norway ²	7.5	2.1	0.0

¹ North America includes Mexico.

² Norwegian coal reserves in Svalbard were 11 million tonnes in 2012.

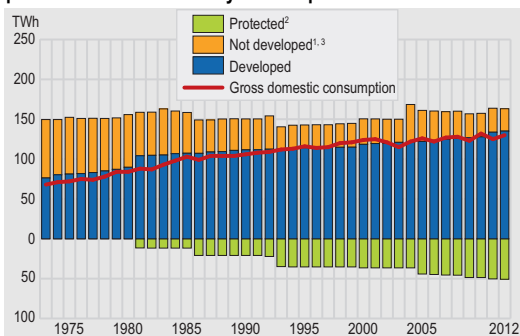
Source: BP - Statistical Review of World Energy 2013 and Store Norske Spitsbergen Kulkompani.

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BP

<http://www.bp.com>

Hydropower potential: developed, not developed and protected. Actual electricity consumption



¹ Includes projects under licensing and planning. ² Hydrometric areas that are permanently preserved by the parliament are not included in the figures prior to 1981. ³ The large increase in 2004 is due to mapping of small power plants between 50 kW and 10 000 kW that is included in the potential.

Source: Norwegian Water Resources and Energy Directorate.

Electricity trade between Norway and other countries. GWh

	1990	2000	2010	2011	2012
From Norway to other countries					
Total	16 401	20 529	7 123	14 329	22 006
Sweden	12 329	15 763	4 174	7 106	10 601
Denmark	3 958	4 634	1 459	3 600	5 457
Netherlands	0	0	1 377	3 492	5 870
Finland	114	131	114	131	78
To Norway from other countries					
Total	408	1 474	14 673	11 255	4 190
Sweden	399	919	7 993	7 026	3 186
Denmark	7	146	4 056	2 413	674
Netherlands	0	0	2 259	1 489	90
Russia	0	236	209	199	150
Finland	2	174	156	127	90
Net exports from Norway	15 993	19 055	-7 549	3 074	17 816

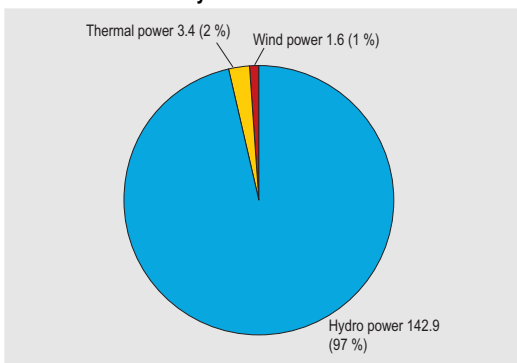
Source: Statistics Norway.

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<http://www.ssb.no/en/elektrisitetaar/>
<http://www.ssb.no/en/muh/>

Production of electricity. 2012. TWh



Source: Statistics Norway.

Energy consumption in households, per household and per person¹. kWh

	1990	1995	2000	2005	2011*
Energy consumption per household	23 594	24 098	22 795	22 172	20 499
Electricity	17 300	18 779	17 836	16 802	16 095
Heating oil, kerosene, LPG	2 851	1 908	1 414	1 234	709
Fuel wood	3 239	3 231	3 407	3 890	3 318
Coal, gas, district heating	203	181	138	246	377
Energy consumption per person	9 762	10 219	9 882	9 742	9 112

¹ Energy consumption in residences and holiday cottages. Excl. energy use for private cars and tools and equipment for outdoor use.

Source: Statistics Norway.

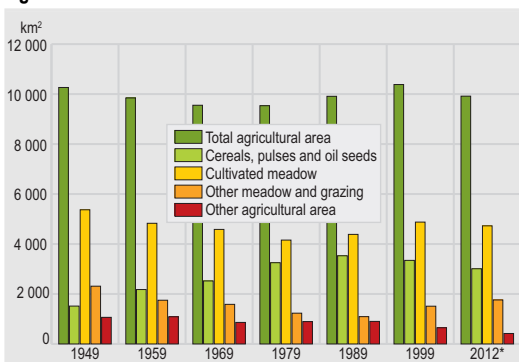
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<http://www.ssb.no/en/elektrisitetaar/>

Agriculture

Agricultural area in use



Source: Statistics Norway.

Areas farmed ecologically or in the process of 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
2010	5.7	14.2	6.4	7.5
2012*	5.6	15.7	6.8	8.7

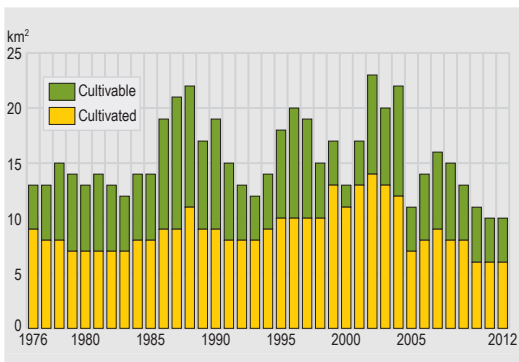
Source: Debio and Statistics Norway (Norway); KRAV, Statistics Sweden and Swedish Board of Agriculture (Sweden); Danish Plant Directorate and Statistics Denmark (Denmark); KTTK, Evira and TIKE (Finland).

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Irreversible conversion of cultivated and cultivable land



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

Nitrogen and phosphorus in commercial fertilisers¹ and manure. Tonnes

	Nitrogen		Phosphorus	
	Commercial fertilisers	Manure	Commercial fertilisers	Manure
1990	110 418	51 945	16 002	14 795
2000	107 410	48 356	13 325	14 144
2005	106 882	51 657	12 660	14 647
2008	116 351	51 618	13 403	14 286
2009	82 549	51 458	7 071	14 709
2010	83 081	50 479	7 669	14 179
2011	96 851	48 917	8 901	13 671
2012	95 767	49 171	8 565	13 741

¹ Commercial fertilisers refer to sold quantity from wholesalers and importers. Sales in 2008, 2009 and 2010 are affected by stockpiling due to expected price increase in 2009.

Source: Norwegian Food Safety Authority and Statistics Norway.

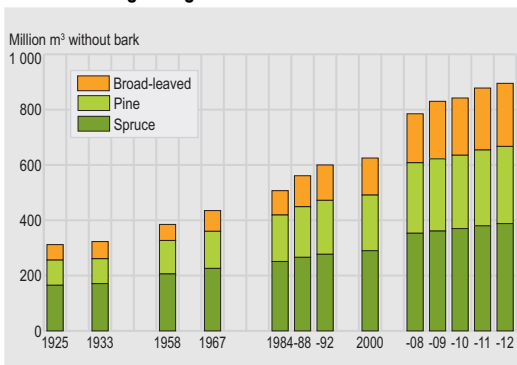
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Forest

Volume of the growing stock¹



¹ As from the inventory cycle 2005-2009, forest areas above the coniferous forest line are included.
Source: Statistics Norway and National Forest Inventory.

Forest area and other wooded area in selected European countries

	Forest area. 1 000 km ²	Other wooded area. 1 000 km ²	Forest area per capita. Decares
Norway	101	27	21.1
Sweden	282	30	30.6
Finland	222	11	41.8
Denmark	5	0	0.9
UK	29	0	0.5
Germany	111	0	1.4
France	160	16	2.6
Spain	182	96	4.0

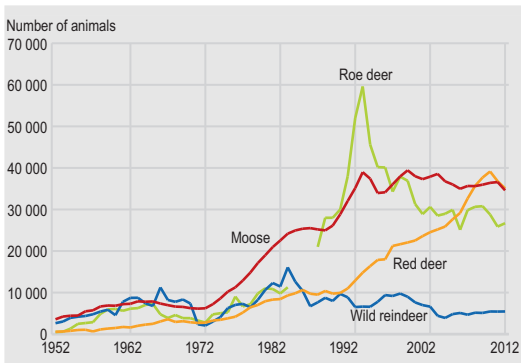
Source: The Global Forest Resources Assessment 2010, FAO.

More information

Latest article	http://www.ssb.no/en/1st
FAO	http://www.fao.org/forestry/fra/en/

Game species

Number of moose, red deer, wild reindeer and roe deer felled



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	-	-	17	43
1996-2005	4	5	37	87
2006/2007	2	4	79	82
2007/2008	5	13	77	111
2008/2009	5	12	90	136
2009/2010	8	18	89	147
2010/2011	13	10	105	157
2011/2012	9	16	112	92
2012/2013	8	13	157	92

Source: Statistics Norway.

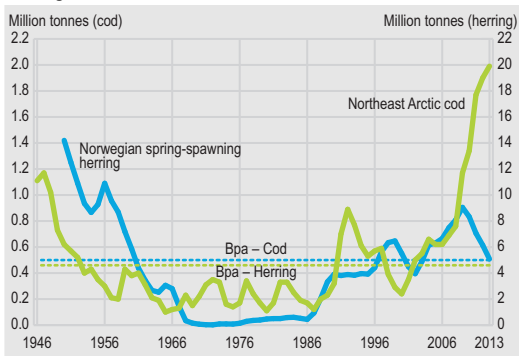
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<http://www.ssb.no/en/hjortejakt/>
<http://www.ssb.no/en/reinjakt/>
<http://www.ssb.no/en/srjakt/>

Fish and fisheries

Spawning stock biomass and precautionary reference point (Bpa) for Northeast Arctic cod and Norwegian spring-spawning herring



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	2012*
Fisheries. Fish and shellfish, total	2 400	1 592	2 699	2 140
Pelagic fish	1 703	1 101	2 079	1 235
Cod fish	599	315	479	729
Flatfish and other demersal fish	27	88	63	53
Other fish	21	15	8	3
Molluscs and crustaceans	50	73	71	119
Fish farming, salmon and trout	8	150	489	1 312

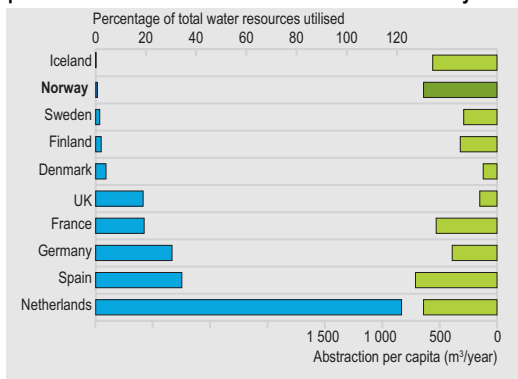
Source: Directorate of Fisheries and Statistics Norway.

More information

Latest article	http://www.ssb.no/en/fiskeri/ http://www.ssb.no/en/fiskeoppdrett/
Other data sources	http://www.fiskeridir.no/ http://www.imr.no http://www.ices.dk

Water

Percentage of total freshwater resources utilised and abstraction per inhabitant. Selected countries. 2010 or latest available year



Source: OECD.

Municipal water supply

		2005	2011	2012
Population connected to municipal water supply	Per cent	84.7	84.1	84.8
Total water delivered via the municipal distribution system	Million cubic metres	..	740	724
distributed to households (residences/apartments)	Per cent	..	41	41
distributed to households (holiday cottages, etc.)	Per cent	..	2	2
distributed to manufacturing industry	Per cent	..	13	8
distributed to service sector	Per cent	..	6	11
distributed to primary industries (agriculture, forestry and fishing)	Per cent	..	3	3
distributed to other sectors/use	Per cent	..	4	4
leakages	Per cent	..	32	32
Average household consumption	Litres/person*day	202	209	199

Source: KOSTRA (Municipality-State Reporting System).

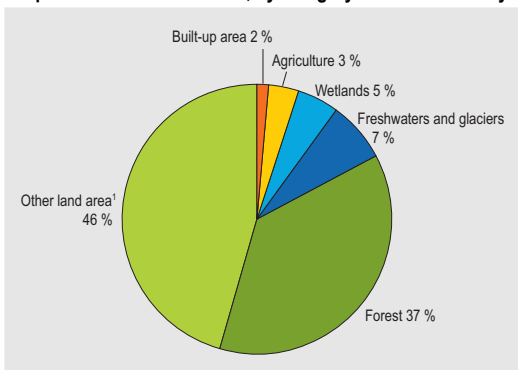
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http://www.ssb.no/en/vann_kostra/

Land and land use

Proportion of land resources, by category. Mainland Norway



¹ Other land area consists of open firm ground, bare rock, gravel and block fields.

Source: Norwegian Mapping Authority, The Norwegian Forest and Landscape Institute and Statistics Norway.

Total area and distribution of area¹. 2013. km²

	Total	Distribution of area, land/freshwater		Distribution of area, continental/islands	
		Land	Freshwater	Continental	Islands in the ocean
Kingdom of Norway	385 178	365 268	19 910	301 483	83 672
Mainland	323 779	304 270	19 509	301 483	22 275
Svalbard	61 022	60 627	395	.	61 020
Jan Mayen	377	371	6	.	377

¹ The figures for land and freshwater have been quality improved and the sum differs from sum of the continental/islands distribution.

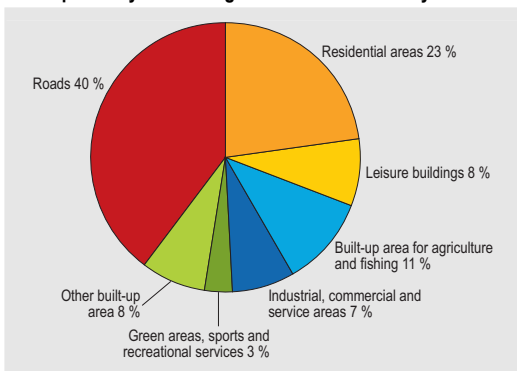
Source: Norwegian Mapping Authority.

More information

Latest article	http://www.ssb.no/en/arealdekke/
Norwegian Mapping Authority	http://www.kartverket.no/en/

Land and land use

Built-up area by main categories. Mainland Norway. 2011



Source: Norwegian Mapping Authority, Norwegian Forest and Landscape Institute and Statistics Norway.

Urban settlements, area and residents as of 1 January

	Area. km ²	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
2011	2 403	3 899 115	79
2012	2 423	3 958 038	79

Source: Statistics Norway.

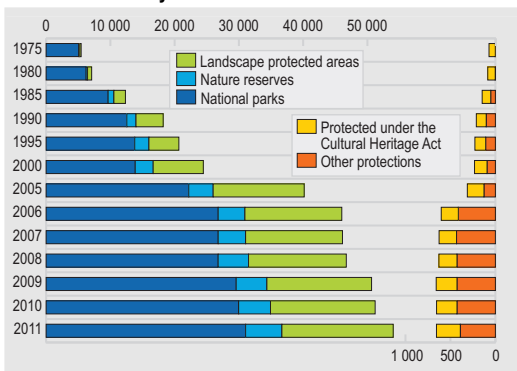
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<http://www.ssb.no/en/befteft/>
<http://www.ssb.no/en/arealstat/>

Land and land use

Protected areas¹ by conservation form. km². 31 December



¹ Areas on Svalbard are protected according to the Svalbard law and are not included.

Source: Statistics Norway, Norwegian Environment Agency and Directorate for Cultural Heritage.

Land use in the shore zone by municipality groups. 1 January 2012. Per cent

	Potentially accessible areas		Land use		
	Less than 25 degrees terrain steepness	25 degrees and more terrain steepness	Influence area around buildings < 50m from building	Cultivated land	Road and railway surface
All municipalities with shoreline	49.4	19.8	16.7	11.8	2.3
Municipalities along the Oslo fjord ¹	34.2	5.1	51.5	5.8	3.5
Municipalities with high pressure on land areas ¹	43.6	11.7	29.2	12.8	2.7
Municipalities with low pressure on land areas ¹	51.4	22.2	12.3	11.9	2.1

¹ The government's shore zone management areas.

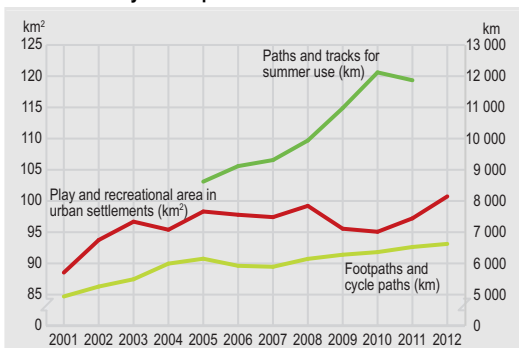
Source: Statistics Norway.

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Latest article	http://www.ssb.no/en/strandsone/ http://www.ssb.no/en/arealvern/ http://www.ssb.no/en/fysplan/
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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



Source: KOSTRA (Municipality-State Reporting System).

Approval of applications for exemptions. 2001 and 2012

Type of area and activity	Year	Applications that include exemptions, approved	Percentage of applications for exemptions approved
New buildings in agricultural areas, nature areas and outdoor recreational areas	2001	3 646	74
	2012	1 496	87
New buildings in areas along rivers and lakes where building is prohibited	2001	269	80
	2012	440	88
New buildings in the coastal zone where building is prohibited	2001	1 096	67
	2012	1 101	86
Motor traffic in outlying fields and waterways	2001	11 863	94
	2012	14 334	95

Source: KOSTRA (Municipality-State Reporting System).

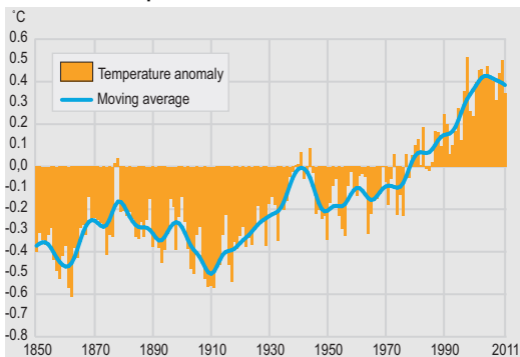
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http://www.ssb.no/en/miljo_kostr/

Climate change

Global mean temperature¹



¹ Deviation from the normal value for the period 1961-1990.

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

CO₂ emissions, selected countries

	CO ₂ emissions 2010. Million tonnes	Change from 1990. Per cent	CO ₂ emissions per capita 2010. Tonnes
USA	5 697	11.9	18.4
Russia	1 593	-36.2	11.1
Japan	1 192	4.4	9.4
Germany	819	-21.4	10.0
UK	502	-14.7	8.1
France	388	-2.5	6.2
Ukraine	290	-59.7	6.3
Finland	64	12.5	11.9
Sweden	53	-7.0	5.6
Denmark	50	-7.1	9.1
Norway	45	30.6	9.3

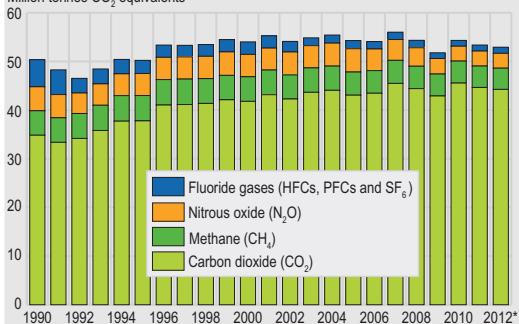
Source: UNFCCC and UNSD.

More information

Temperature	http://hadobs.metoffice.com/hadcrut3/diagnostics/global/nh+sh/
Emissions	http://unfccc.int/ghg_data/items/3800.php http://unstats.un.org/unsd/demographic/

Norwegian emissions of greenhouse gases

Million tonnes CO₂ equivalents



Source: Statistics Norway.

Emissions of greenhouse gases by source. Million tonnes CO₂ equivalents

	1990	2000	2010	2012*
Total	50.4	54.0	54.3	52.9
Oil and gas extraction	7.7	12.6	13.9	13.7
Manufacturing industries and mining	19.1	17.1	12.0	11.8
Energy supply	0.3	0.5	2.4	1.6
Heating in other industries and households	2.6	1.8	1.9	1.4
Road traffic	7.8	8.5	10.1	10.1
Aviation, navigation, fishing, motor equip. etc.	5.6	6.3	7.1	7.4
Agriculture	5.0	5.0	4.5	4.5
Other	2.2	2.2	2.4	2.5

Source: Statistics Norway.

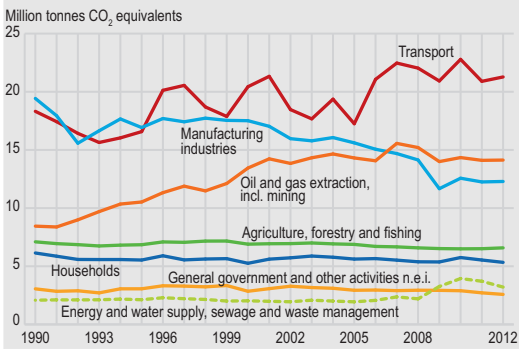
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Climate change

Emissions of greenhouse gases by industries and households



Source: Statistics Norway.

Greenhouse gas emissions and output, by households and industries. Per cent of total. 2012*

	Emissions of greenhouse gases. Per cent	Output. Per cent
Agriculture, forestry and fishing	10	2
Oil and gas extraction, incl. mining	22	13
Manufacturing industries	19	17
Energy and water supply, sewage and waste management	5	2
Transport, incl. ocean transport and international air transport	32	8
General government and other activities n.e.i.	4	58
Households	8	.

Source: Statistics Norway.

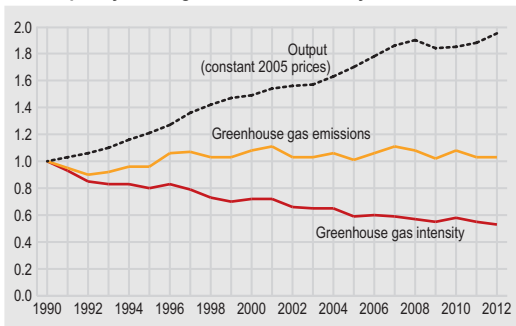
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<http://www.ssb.no/en/knr/>

Climate change

Greenhouse gas intensity¹, emissions of greenhouse gases and output by Norwegian economic activity^{2, 3}. Index 1990=1



¹ Greenhouse gas intensity is the ratio between emissions and output. ² Greenhouse gas emissions from Norwegian economic activity differ from the national data on air emissions that are published by Statistics Norway since both ocean transport and international air transport are included. ³ Excl. households.

Source: Statistics Norway.

Greenhouse gas emission intensity, by industry. Tonnes CO₂ equivalents per NOK million output

	1990	2000	2011	2012*
Total for industries	31.2	22.5	17.0	16.4
Agriculture, forestry and fishing	181.3	128.2	92.9	86.0
Oil and gas extraction, incl. mining	31.4	27.2	28.2	28.8
Manufacturing industries	53.6	35.8	20.4	20.1
Energy and water supply, sewage and waste management	38.3	29.9	46.9	37.2
Transport	99.9	83.7	81.0	79.1
General government and other activities n.e.i.	3.2	2.0	1.3	1.2

Source: Statistics Norway.

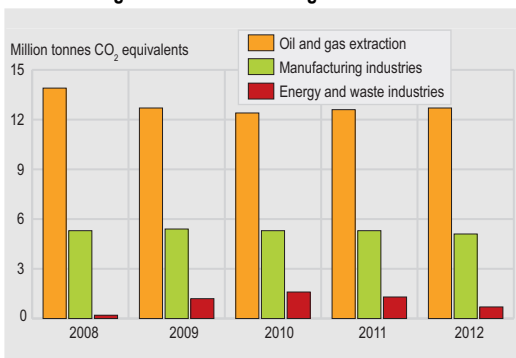
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Climate change

Greenhouse gas emissions in the regulated sector¹



¹ Emissions from enterprises subject to the emission allowances regulation.

Source: Statistics Norway.

Greenhouse gas emissions and allowances allocated free of charge. Total for the period 2008-2011. Million tonnes CO₂ equivalents

	Emissions	Free allowances
Regulated sector, total	95.6	40.2
Industries with no free allowances	57.7	-
Industries eligible to free allowances	38.0	40.2
Oil and gas extraction – eligible to free allowances	6.6	5.8
Manufacturing industries eligible to free allowances	26.4	31.3
Manufacture of food products, beverages and tobacco products	0.4	0.5
Manufacture of paper and paper products	1.8	2.4
Manufacture of petroleum products, chemicals and basic metals	16.5	19.7
Manufacture of rubber and plastic products, mineral products	7.7	8.7
Energy and waste industries eligible to free allowances	5.0	3.2

Source: Statistics Norway.

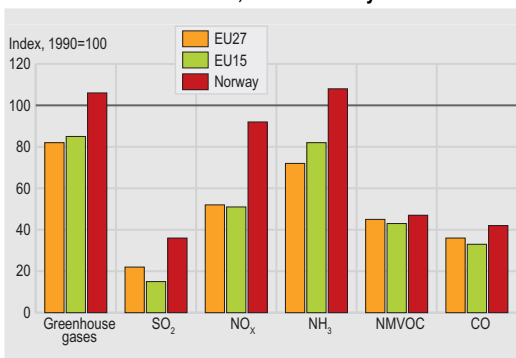
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<http://www.ssb.no/natur-og-miljo/artikler-og-publikasjoner/fire-av-ti-klimavoter-gratis>

Climate change and air pollution

Emissions in 1990 and 2011, EU and Norway



Source: European Environment Agency - EEA and Statistics Norway.

Norwegian emissions of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), percentage change and GWP¹ values of the gases

	CO ₂ Million tonnes	CH ₄ 1 000 tonnes	N ₂ O 1 000 tonnes
1990	34.8	239.5	15.9
1995	37.8	247.6	14.6
2000	41.8	240.8	14.8
2005	43.1	226.8	15.4
2010	45.5	215.3	9.8
2012*	44.3	207.5	9.8
Change 1990-2012 (per cent)	27.0	-13.4	-38.2
GWP value	1	21	310

¹ Impact on greenhouse effect of emission of 1 tonne of the gas compared with that of 1 tonne CO₂.

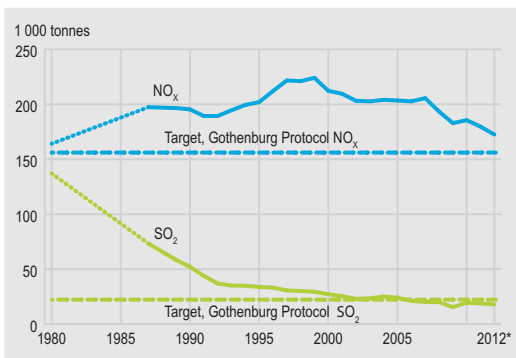
Source: Statistics Norway.

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International data	http://www.eea.europa.eu/publications/european-union-greenhouse-gas-inventory-2013 http://www.eea.europa.eu/publications/eu-emission-inventory-report-lrtap

Air pollution

Emissions of NO_x and SO₂ and 2010 target, Gothenburg Protocol



Source: Statistics Norway.

Emissions of NO_x and SO₂ by source. 1 000 tonnes

	1980	1990	2000	2012*
NO_x, total	164	195	212	173
Oil and gas extraction	12	27	45	51
Manufacturing industries and mining	26	24	24	19
Road traffic	50	65	52	36
Aviation, navigation, fishing, motor equip. etc.	69	74	87	62
Other sources	7	5	4	4
SO₂, total	136	52	27	18
Manufacturing industries and mining	106	37	20	12
Energy supply	1	1	1	1
Heating in other industries and households	12	3	1	1
Road traffic	4	3	0	0
Aviation, navigation, fishing, motor equip. etc.	13	7	3	3
Other sources	0	0	0	1

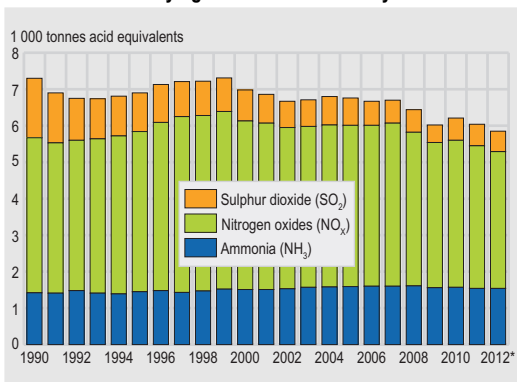
Source: Statistics Norway.

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Emissions of acidifying substances in Norway¹



¹ Acid equivalents = total acidifying effect of SO₂, NO_x and NH₃.

Source: Statistics Norway.

Emissions of SO₂ and NO_x per capita, selected countries

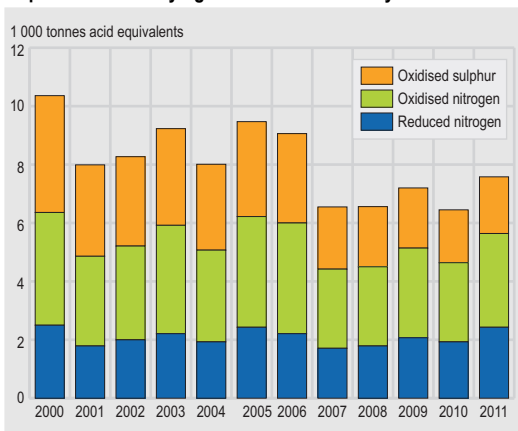
	SO ₂ kg per capita		NO _x kg per capita	
	1990	2011	1990	2011
UK	65	6	50	17
Germany	67	5	36	16
Finland	53	11	65	28
Sweden	12	3	31	15
Denmark	34	2	53	23
Norway	12	4	45	36

Source: EMEP - European Monitoring and Evaluation Programme: «Emissions as used in EMEP models» and UN (population figures).

More information

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EMEP	http://www.ceip.at/

Deposition of acidifying substances in Norway



Source: EMEP.

Imports of ozone-depleting substances to Norway. ODP tonnes¹

	ODP-tonnes
1986	2 911.0
1990	2 196.0
1995	97.1
2000	60.3
2005	14.8
2010	2.0
2011	0.0
2012	1.5

¹ 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).

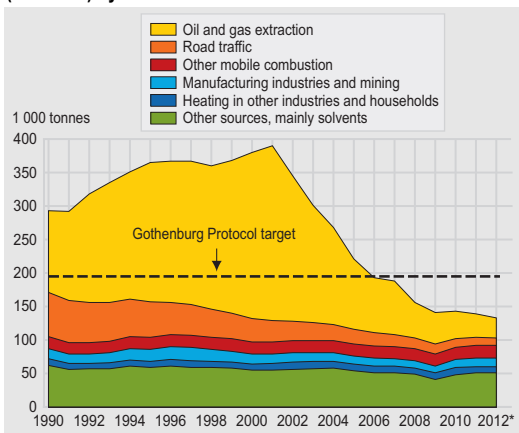
Source: Norwegian Environment Agency.

More information

EMEP	http://www.emep.int/publ/reports/2013/Country_Reports/report_NO.pdf
State of the Environment Norway	http://www.environment.no/Topics/Climate/Ozone-layer/

Air pollution

Emissions of non-methane volatile organic compounds (NMVOCs) by source



Source: Statistics Norway.

Emissions of carbon monoxide (CO) by source. 1 000 tonnes

	1990	2000	2005	2012*
Total	747	520	397	298
Oil and gas extraction	6	8	9	11
Manufacturing industries and mining	67	41	26	16
Energy supply	1	1	3	5
Heating in other industries and households	177	178	156	132
Road traffic	434	228	140	68
Aviation, navigation, fishing, motor equip, etc.	63	63	63	66
Agriculture	-	-	-	-
Other	1	1	0	0

Source: Statistics Norway.

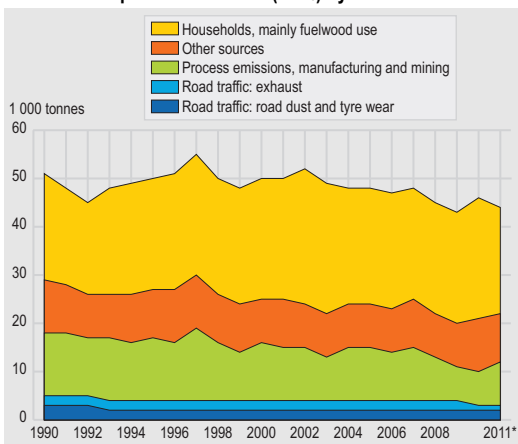
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Air pollution

Emissions of particulate matter (PM₁₀) by source



Source: Statistics Norway.

Emissions of heavy metals. kg

	1990	1995	2000	2011*
Lead	188 738	24 594	9 841	6 182
Mercury	1 423	795	683	409
Cadmium	1 174	1 047	778	578
Copper	25 743	22 900	23 694	28 869
Chromium	12 793	11 353	8 702	2 710
Arsenic	3 508	3 300	2 900	1 749

Source: Statistics Norway.

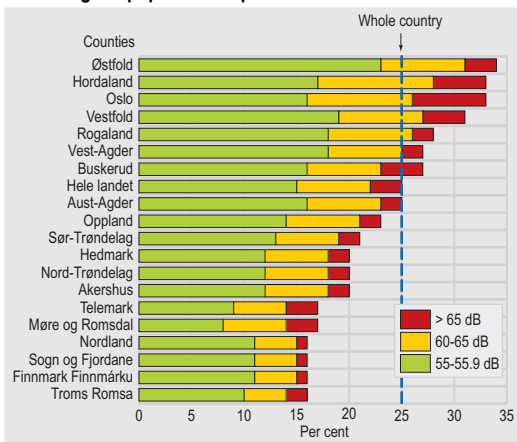
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Noise

Percentage of population exposed to road traffic noise. 2011



Source: Statistics Norway and Directorate of Public Roads.

Noise annoyance index¹, by source

	Index 2011	Percentage 2011	Change 1999-2011. Per cent
Total – all identified sources	452 900	100	-4
Road traffic	325 300	72	-2
Manufacturing	23 300	5	-10
Other industry	14 200	3	-7
Air traffic	27 700	6	-4
Railways	24 300	5	-28
Other sources ²	38 000	8	...

¹ The index is calculated by multiplying the number of exposed persons within each sound level with an average degree of annoyance for the sound level in question. ² Construction, motor racing tracks and shooting ranges.

Source: Statistics Norway.

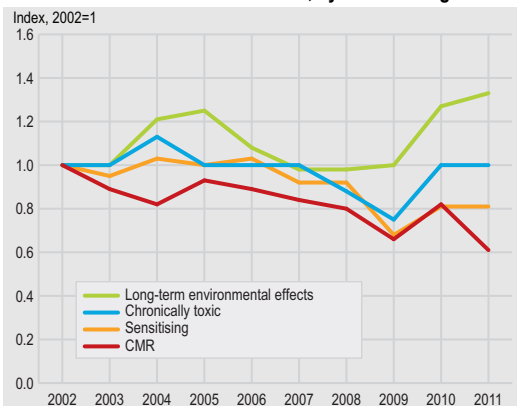
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State of the Environment Norway

<http://www.environment.no/Topics/Noise/>

Hazardous substances

Emissions of hazardous substances, by hazard categories



Source: Statistics Norway.

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

	2002	2005	2011
Consumption			
CMR (carcinogenic, mutagenic and reprotoxic)	3 001	1 953	1 187
Chronically toxic	160	186	216
Sensitising	141	154	132
Long-term environmental effects	587	609	599
Emissions			
CMR (carcinogenic, mutagenic and reprotoxic)	4.4	4.1	2.7
Chronically toxic	0.8	0.8	0.8
Sensitising	3.7	3.7	3.0
Long-term environmental effects	4.8	6.0	6.4

Source: Statistics Norway.

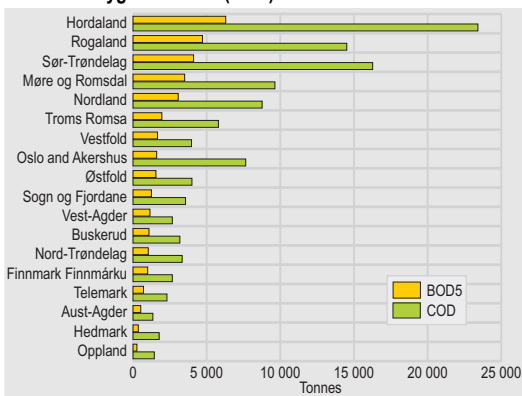
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Water pollution

Municipal waste water. Discharges of organic material measured as biochemical oxygen demand (BOD5) and chemical oxygen demand (COD). Counties. 2011



Source: Statistics Norway.

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

	Phosphorus		Nitrogen	
	Total	Of this from municipal waste water	Total	Of this from municipal waste water
1985	1 465	928	32 231	11 929
1995	837	343	26 864	10 332
2005	651	216	21 140	7 124
2010	587	206	22 716	8 022
2011	585	222	22 593	8 135

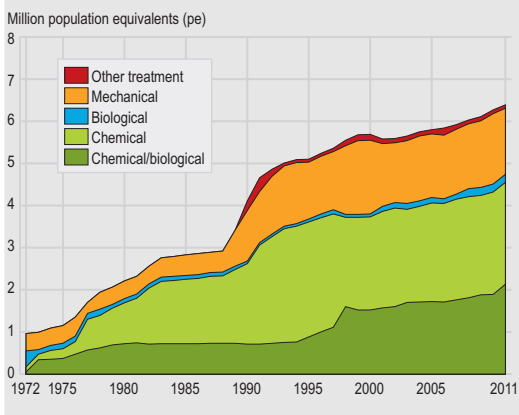
Source: Norwegian Institute for Water Research.

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State of the Environment Norway	http://www.environment.no/Topics/Freshwater/ http://www.environment.no/Topics/Marine-areas/

Water pollution

Trend in treatment capacity at waste water treatment plants



Source: Statistics Norway.

Discharges of phosphorus and nitrogen from large wastewater treatment plants (50 pe or more)

	2000	2005	2010	2011
Phosphorus				
Total (tonnes)	825	735	813	825
Discharges per inhabitant connected (kg)	0.2	0.2	0.2	0.2
Treatment efficiency (per cent)	66.8	70.1	69.8	68.6
Nitrogen				
Total (tonnes)	13 191	11 880	13 313	13 582
Discharges per inhabitant connected (kg)	3.7	3.2	3.3	3.3
Treatment efficiency (per cent)	27.7	31.1	32.3	31.6

Source: Statistics Norway.

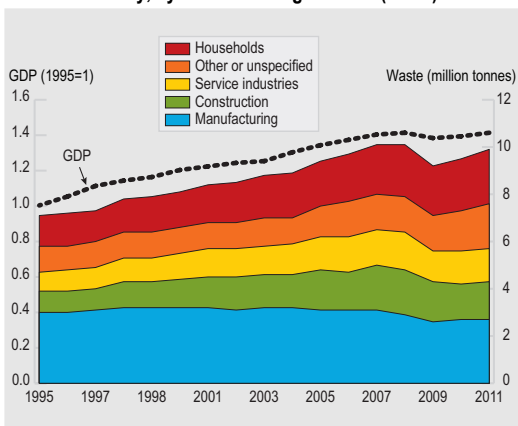
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Waste

Waste in Norway, by source. Change in GDP (index)



Source: Statistics Norway.

Waste in Norway, by material. 1 000 tonnes

	1995	2000	2005	2011
Total	7 100	8 176	9 383	9 890
Paper, cardboard and pasteboard	1 037	1 118	1 198	1 085
Wood waste	1 334	1 300	1 584	1 815
Biodegradable waste	1 079	1 256	1 421	1 452
Plastic	377	414	413	478
Metals	593	758	920	1 096
Hazardous waste	573	611	970	1 259
Other materials	2 109	2 718	2 879	2 705

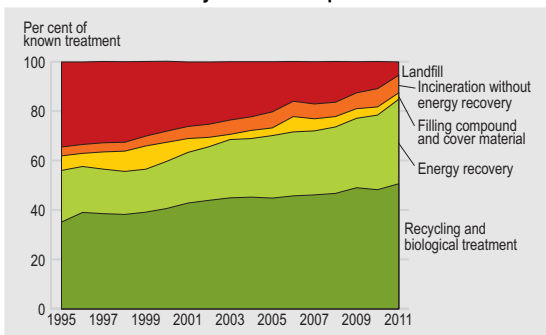
Source: Statistics Norway.

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Non-hazardous waste by treatment/disposal



Emissions from waste incineration and landfills. Percentages of total Norwegian emissions in 2011 and change since 1990

	Percentage of total Norwegian emissions	Percentage change from 1990
Incineration plants		
Sulphur dioxide	0.9	-50
Nitrogen oxides	0.4	-23
Carbon dioxide ¹	1.0	454
Lead	0.3	-99
Cadmium	0.1	-99
Mercury	19.6	-51
Arsenic	0.2	-98
Chromium	0.2	-98
Copper	0.0	-96
Total PAH	1.3	-12
Dioxins	1.2	-99
Landfills		
Methane (greenhouse gas) ¹	2.0	-38

¹ Calculated as a percentage of total greenhouse gas emissions in CO₂ equivalents.

Source: Statistics Norway.

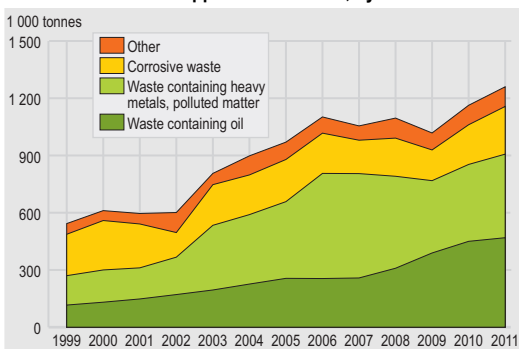
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<http://www.ssb.no/en/avfregno/>

Waste

Hazardous waste for approved treatment, by material



Source: Statistics Norway.

Hazardous waste handled at approved facilities, by type of treatment¹. 1 000 tonnes

Treatment	2003	2011
Generated in Norway, total	806	1 259
Material recycling	64	219
Energy recovery	105	143
Final disposal	647	862
Stock changes ²	..	35
Imported	255	390
Exported	77	180

¹ Exported waste is included in the actual treatment or disposal categories.

² Stock changes 2003 included in final disposal.

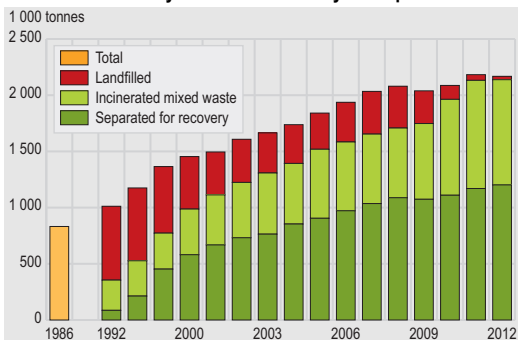
Source: Statistics Norway.

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Household waste by method of recovery or disposal



Source: Statistics Norway.

Quantity of household waste and percentage for recovery. The ten largest municipalities. 2012

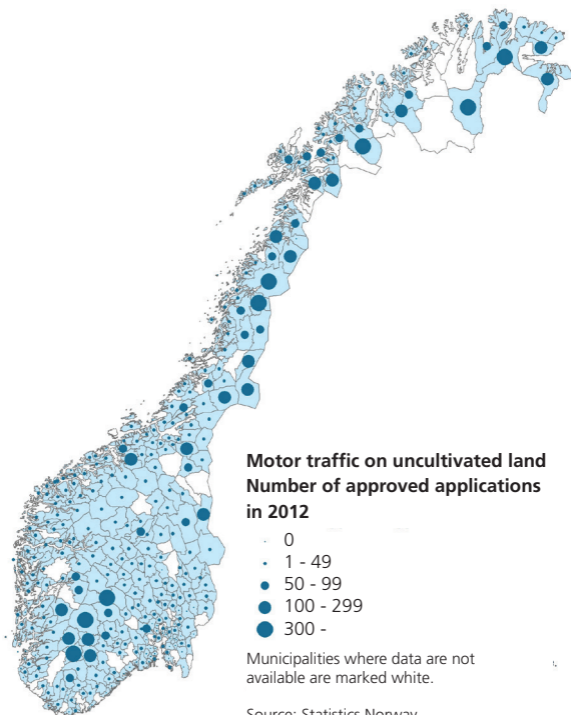
Municipalities by decreasing population	Household waste per capita. kg	Separated for recovery. Per cent
Oslo	362	50
Bergen	377	44
Trondheim	404	50
Stavanger	392	63
Bærum	407	53
Kristiansand	527	60
Fredrikstad	594	59
Tromsø	338	37
Sandnes	391	63
Drammen	508	66

Source: Statistics Norway.

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Source: Statistics Norway.

Map source: Norwegian Mapping Authority.

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