



NATIONAL STATISTICAL COMMITTEE OF THE REPUBLIC OF BELARUS

ENVIRONMENTAL PROTECTION IN THE REPUBLIC OF BELARUS

Statistical Book



MINSK 2018



**NATIONAL STATISTICAL COMMITTEE
OF THE REPUBLIC OF BELARUS**

**ENVIRONMENTAL PROTECTION
IN THE REPUBLIC OF BELARUS**

Statistical book

MINSK

2018

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The statistical book presents data on the state of the natural environment and environmental impact of economic activities for the years 2011-2017.

Intended for senior management, government agencies and financial and economic departments of organisations, research community, higher education teaching staff, postgraduates and students, and other interested users.

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Foreword

The data book provides information for the years 2011-2017 on the state of the environment, availability and use of natural resources, and environmental expenditure. It also presents climate change and green growth indicators, information on areas of radioactive contamination as a result of the Chernobyl Nuclear Power Plant catastrophe. For the main indicators international comparisons are provided.

The book also presents indicators to monitor the implementation of the 2030 Agenda for Sustainable Development (SDG indicators) that contains 17 global Goals. Eight out of 17 Goals include targets and indicators involving environmental issues. SDG indicators are provided in sections “2. Conservation areas”, “3. Green growth indicators”, “7. Protection and use of water resources”, “10. Protection and use of forest resources”, and “12. Waste”.

The information is presented at the national and regional level. Some indicators are provided by districts and selected cities. A number of indicators are broken down by economic activities.

The information source is the official statistics compiled by state statistics bodies and other producers of official statistics as well as administrative data compiled by government agencies whose activities are connected with environmental management, ecological monitoring and environmental protection.

In certain cases data for 2017 are provisional and will be revised in further issues.

ABBREVIATIONS:

m	- metre	O ₂	- oxygen
m ²	- square metre	N	- nitrogen
m ³	- cubic metre	P	- phosphorus
ha	- hectare	NO ₃	- nitrates
km	- kilometre	CO ₂	- carbon dioxide
km ²	- square kilometre	BYR/BYN	- Belarusian rubles
kg	- kilogramme	thsd	- thousand
t	- tonne	mln	- million
pcs	- units, pieces	bn	- billion
Ci	- Curie	k	- coefficient

Explanation of symbols:

–	not applicable
0.0	negligible magnitude
...	data not available

Relative indicators are calculated on the basis of absolute figures with smaller units of measure than those presented in the tables.

In certain cases minor discrepancies between the total and the sum of its components can be explained by data rounding.

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1. GEOGRAPHIC CHARACTERISTICS OF THE REPUBLIC OF BELARUS

1.1. Main geographic characteristics

The **Republic of Belarus** is situated in Central and Eastern Europe.

Average annual population, 2017:
9 498.3 thsd

Area: 207.6 thsd sq km
(forest land 42%; agricultural land 41%; surface water, including wetlands 6%; other land 11%).

Extension:
from North to South: 560 km,
from West to East: 650 km.

State frontier:
with Latvia and Russian Federation in the North;
with Lithuania in the North-West;
with Poland in the West;
with Ukraine in the South;
with Russian Federation in the East and North-East.

Administrative division

6 regions (Brest, Vitebsk, Gomel, Grodno, Minsk, Mogilev) and Minsk city – the capital

Each region is subdivided into districts and cities of regional subordination.

The highest point above sea level

345 metres (Dzerzhinskaya mountain, Dzerzhinsk district of Minsk region).

The lowest place above sea level

80-90 metres (valley of the Neman river, Grodno region).

Climate:

moderate climate, with mild and humid winters and warm and humid summers.



- Land area, thsd sq km
- Average annual population for 2017, thsd

1.2. Main characteristics of large and medium-sized rivers¹⁾

	Length, km		Catchment area, km ²	
	total	within country's territory	total	within country's territory
Large rivers				
Berezina	561	561	24 500	24 500
Goryn'	659	82	27 700	670
Dnieper	2 145	700	504 000	118 360
Western Dvina	1 020	338	87 900	33 150
Western Bug	772	169	73 470	9 990
Neman	914	436	98 200	34 610
Pripyat	761	495	121 000	50 900
Sozh	648	493	42 140	21 700
Medium-sized rivers				
Besed'	261	185	5 600	3 880
Viliya	510	276	25 100	10 920
Drut'	266	266	5 020	5 020
Western Berezina	182	182	4 000	4 000
Iput'	437	64	10 900	1 250
Oster	274	78	3 370	640
Ptich	421	421	9 470	9 470
Svisloch	257	257	5 160	5 160
Uborť	292	126	5 820	1 910
Shchara	300	300	6 730	6 730
Yaselda	214	214	7 790	7 790

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

1.3. Main characteristics of largest reservoirs¹⁾

	Surface area, km ²	Type of reservoir	Main function	Put into operation	Location (region, district)
Western Dvina basin					
Khorobrovka	31.97	lake-type	fish farming, recreation	1967	Vitebsk, Miory
Yezerishchenskoye	16.90	lake-type	flow regulation	1959	Vitebsk, Gorodok

Continued

	Surface area, km ²	Type of reservoir	Main function	Put into operation	Location (region, district)
Western Bug basin					
Belovezhskaya Pushcha	3.32	in-channel	nesting of wild birds, fish raising	1964 ²⁾	Brest, Kamenets
Lukovskoye	5.40	lake-type off-channel	moistening, water supply of fish farm	1980	Brest, Malorita
Neman basin					
Vileyskoye	63.80	in-channel	water supply for Minsk City, power generation, recreation	1974	Minsk, Vileyka
Zelvenskoye	11.90	in-channel	power generation, flow regulation, irrigation, recreation	1983 ²⁾	Grodno, Zelva
Dnieper basin					
Zaslavskoye	26.86	in-channel	flow regulation, recreation, water supply	1958	Minsk, Minsk
Osipovichskoye	11.87	in-channel	power generation, water supply of fish farm, irrigation	1953 ²⁾	Mogilev, Osipovichy
Svetlogorskoye	14.10	off-channel	diversion of runoff, irrigation, recreation	1986	Gomel, Svetlogorsk
Chighirinskoye	21.19	in-channel	power generation, recreation	1960	Mogilev, Kirovsk
Pripyat basin					
Krasnoslobodskoye	23.65	in-channel	watering, water supply of fish farm	1973	Minsk, Soligorsk
Lyubanskoye	22.50	in-channel	moistening, water supply of fish farm	1966	Minsk, Lyuban and Staryie Dorogi
Pogost	16.16	lake-type off-channel	moistening, water supply of fish farm	1978	Brest, Pinsk
Selets	20.70	in-channel	moistening, water supply of fish farm	1986	Brest, Bereza
Soligorskoye	23.10	in-channel	water supply, watering	1967	Minsk, Soligorsk

¹⁾ Data of the research laboratory for limnology of the Belarusian State University.

²⁾ Year when the reservoir filling began.

1.4. Main characteristics of largest lakes¹⁾

	Area, km ²	Depth, m		Location (region, district)
		maximum	average	
Naroch	79.6	24.8	8.9	Minsk, Myadel
Osveyskoye	52.8	7.5	2.0	Vitebsk, Verkhnedvinsk
Chervonoye	40.8	2.9	0.7	Gomel, Zhitkovichy
Lukomskoye	37.7	11.5	6.6	Vitebsk, Chashniki
Drivyaty	36.1	12.0	6.1	Vitebsk, Braslav
Vygonoshchanskoye	26.0	2.3	1.2	Brest, Ivatsevichy
Neshcherdo	24.6	8.1	3.4	Vitebsk, Rossony
Svir	22.3	8.7	4.7	Minsk, Myadel
Snudy	22.0	16.5	4.9	Vitebsk, Braslav
Chernoye	17.3	3.0	1.3	Brest, Bereza
Ezerishche	16.8	11.5	4.4	Vitebsk, Gorodok
Myadel	16.2	24.6	6.3	Minsk, Myadel
Lisno	15.7	6.1	2.6	Vitebsk, Verkhnedvinsk
Selyava	15.0	17.6	6.3	Minsk, Krupki
Myastro	13.1	11.3	5.4	Minsk, Myadel
Strusto	13.0	23.0	7.3	Vitebsk, Braslav
Richy	12.8	51.9	10.2	Vitebsk, Braslav
Losvido	11.4	20.2	7.2	Vitebsk, Gorodok
Lepelskoye	10.2	33.7	7.3	Vitebsk, Lepel

¹⁾ Data of the research laboratory for limnology of the Belarusian State University.

2. CONSERVATION AREAS

Conservation areas are the part of the territory of the Republic of Belarus with the unique, etalon or other valuable natural complexes and features that have special ecological, scientific and/or aesthetic value, in respect to which special protection and use regulations are established.

Nature reserve is a conservation area designated as such for the purpose of preservation of etalon and other high-value natural habitats and features, study of flora and fauna, natural ecosystems and landscapes, establishing of conditions for the natural course of processes in nature.

National park is a conservation area designated as such to restore and/ or preserve the unique, etalon and other high-value natural habitats and features, and to serve for nature protection, research, educational, tourism and recreational purposes.

Habitat/ species management area is a conservation area designated as such to restore, preserve and/or reproduce natural habitats and features, natural resources of one or several species, with limited use of other natural resources.

The section is prepared on the basis of data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

2.1. Conservation areas in the Republic of Belarus

(as of January 1)

	2012	2015	2016	2017	2018		
					number of areas	total area, thsd ha	share of conservation areas in total country area, %
Total conservation areas	1 302	1 231	1 265	1 287	1 285	1 811.6	8.7
of which:							
nature reserves, national parks	5	5	5	5	5	474.9	2.3
habitat/ species management areas	417	352	373	376	376	1322.6	6.4
of which of:							
national significance	85	85	98	98	99	958.6	4.6
local significance	332	267	275	278	277	364.0	1.8
natural monuments	880	874	887	906	904	14.1	0.1
of which of:							
national significance	306	306	319	329	326	3.3	0.0
local significance	574	568	568	577	578	10.8	0.1

**2.2. Conservation areas
by regions and Minsk city as of January 1, 2018**

	Nature reserves, national parks			Habitat/species management areas of national significance		
	number	thsd ha	as % of total land area	number	thsd ha	as % of total land area
Republic of Belarus	5 ¹⁾	474.9	2.3	99 ¹⁾	958.6	4.6
Regions and Minsk city:						
Brest	1	86.3	2.6	18	335.3	10.2
Vitebsk	3	131.8	3.3	25	188.9	4.7
Gomel	1	88.0	2.2	13	113.0	2.8
Grodno	2	64.0	2.6	15	130.7	5.2
Minsk city	–	–	–	2	0.5	1.4
Minsk	2	104.8	2.6	23	125.1	3.1
Mogilev	–	–	–	5	65.1	2.2

	Habitat/species management areas of local significance			Natural monuments	
	number	thsd ha	as % of total land area	of national significance	of local significance
Republic of Belarus	277	364.0	1.8	326	578
Regions and Minsk city:					
Brest	29	47.9	1.5	29	60
Vitebsk	60	57.3	1.4	86	162
Gomel	43	96.8	2.4	13	51
Grodno	28	55.0	2.2	95	125
Minsk city	–	–	–	2	–
Minsk	51	72.1	1.8	87	104
Mogilev	66	34.9	1.2	14	76

¹⁾ The total number of nature reserves, national parks and habitat/species management areas of national significance is given considering the fact that the Berezinsky Biosphere Reserve, the National Park "Belovezhskaya Pushcha", the National Park "Narochansky" and some habitat/species management areas of national significance are situated in the territory of several regions.

2.3. Proportion of conservation areas in the area of the country, regions and Minsk city¹⁾

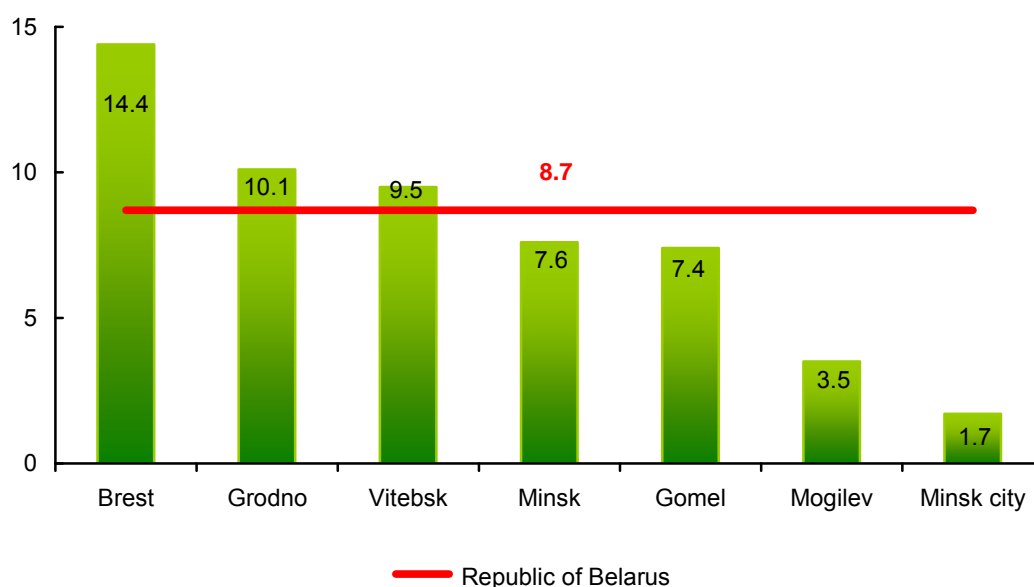
(as of January 1; percent)

	2012	2013	2014	2015	2016	2017	2018
Republic of Belarus	7.7	7.6	7.8	8.2	8.8	8.7	8.7
Regions and Minsk city:							
Brest	13.9	13.9	14.0	14.1	14.2	14.4	14.4
Vitebsk	8.9	8.7	8.8	8.8	9.5	9.5	9.5
Gomel	4.8	5.0	5.7	6.8	7.4	7.4	7.4
Grodno	10.4	9.8	9.9	9.8	9.9	10.1	10.1
Minsk city	0.5	0.4	0.4	0.4	1.7	1.7	1.7
Minsk	6.3	6.2	6.4	6.9	7.6	7.6	7.6
Mogilev	2.4	2.3	2.3	3.8	4.4	3.0	3.5

¹⁾ The indicator from the National list of SDG indicators (15.1.2.1).

2.4. Proportion of conservation areas in the area of the country, regions and Minsk city as of January 1, 2018

(percent)



2.5. Main characteristics of nature reserves and national parks

(as of January 1, 2018)

	Location (region, district), year of foundation	Total area, thsd ha	Designation
Nature reserves			
Berezinsky Biosphere Reserve	Vitebsk region, Dokshytsy and Lepel districts; Minsk region, Borisov district 1925	85.2	Preservation of the natural reference and other high-value natural complexes and features, study of flora and fauna, typical and unique ecosystems and landscapes characteristic of the Eastern European mixed forest zone, creation of conditions to ensure the conservation of natural processes. A distinctive feature of the reserve is a unique complex of forest and wetland ecosystems that almost completely preserved their natural state.
Polessky State Radiation and Ecological Reserve	Gomel region, Bragin, Narovlya and Hoyniki districts 1988	216.1	Restricting public access to the areas contaminated as a result of the disaster at the Chernobyl nuclear power plant, from which the population was evacuated and resettled; radiation protection, prevention of the spread of radionuclides, radiation monitoring, radio-ecological research, study of flora and fauna, typical and unique ecosystems and landscapes, natural processes characteristic of Pripyat Polessye. The features of the reserve are the presence of high levels of environmental pollution as a result of the disaster at the Chernobyl nuclear power plant, including transuranic isotopes, restoration of the natural state of biogeocenoses as a result of removal of anthropogenic load.

Continued

	Location (region, district), year of foundation	Total area, thsd ha	Designation
National parks			
Belovezhskaya Pushcha	Brest region, Kamenets and Pruzhaný districts; Grodno region, Svisloch district 1939	150.1	Preservation in the natural state and comprehensive study of the natural standard and unique features of the Bialowieza forest, of biological and landscape diversity of the area, restoration of damaged natural complexes and objects of special ecological, historical, cultural and aesthetic value as well as their use for nature protection, scientific, educational and recreational purposes.
Braslavskie Ozera (the Braslav Lakes)	Vitebsk region, Braslav district 1995	64.5	Preservation of the natural complex of the Braslav Lakes as an etalon of natural landscapes, storage of genetic stock of the flora and fauna of the Belarusian Lake Land and its use for nature protection, scientific, educational, tourism and recreational purposes.
Pripyatsky	Gomel region, Zhitkovichi, Petrikov and Lelchitsy districts 1969	88.0	Preservation of the natural complex of the valley of the Pripyat river as an etalon of natural landscapes, storage of the genetic stock of flora and fauna of Belarusian Polesse and its use for nature protection, scientific, educational, tourism and recreational purposes.
Narochansky	Minsk region, Myadel and Vileyka districts; Vitebsk region, Postavy district; Grodno region, Smorgon district 1999	87.1	Preservation of unique natural complexes joined by Lake Narach as etalon landscapes, storage of genetic stock of the flora and fauna of the Belarusian Lake Land and their more complete and efficient use for nature protection, scientific, educational, tourism and recreational purposes.

**2.6. Rare and endangered wildlife species listed
in the Red Book of the Republic of Belarus or protected
under international treaties of the Republic of Belarus**

(number of species)

	2011	2012	2013	2014	2015	2016	2017
Plants – total	293	293	293	303	303	303	303
of which:							
angiosperms	166	166	166	173	173	173	173
gymnosperms	1	1	1	1	1	1	1
horsetails, club mosses, ferns	15	15	15	15	15	15	15
mosses	31	31	31	34	34	34	34
lichens	24	24	24	25	25	25	25
algae	21	21	21	21	21	21	21
fungi	35	35	35	34	34	34	34
Mammals	17	17	17	20	20	20	20
Birds	71	71	71	70	70	70	70
Reptiles	2	2	2	2	2	2	2
Amphibians	2	2	2	2	2	2	2
Fish and fish-shaped ¹⁾	9	9	9	9	9	9	9

¹⁾ According to the resolution of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus No. 26 of 9 June 2014, 10 subspecies (including 2 subspecies of one species).

3. GREEN GROWTH INDICATORS

The **green growth indicators (GGI)** have been produced in compliance with the Guide for the EU Eastern Partnership countries “*Measuring the Green Transformation of the Economy*” prepared by the Organisation for Economic Cooperation and Development (OECD).

GGI are divided into four basic groups:

- The environmental and resource productivity of the economy;
- Natural assets;
- The environmental quality of life;
- Economic opportunities;

as well as the group of socio-economic indicators.

The indicators of **the environmental and resource productivity of the economy** characterise environmental and economic efficiency of the use of natural resources and materials in the processes of production and consumption.

Production-based carbon productivity represents the GDP generated per unit of CO₂ emitted in production.

Demand-based carbon productivity represents the volume of gross national income per unit of carbon dioxide emissions.

Waste recovery ratios are defined as the amount of waste used in production of products, energy, works and services as a percent of the amount of industrial waste generated.

The **natural assets** indicators characterise the efficiency on natural resource management and their rational use. In terms of natural assets, resource efficiency aims to ensure the required stocks of renewable and non-renewable resources for economic activity and economic growth as well as the proper management of processes related to the extraction and processing of natural resources, and non-admittance of degradation and depletion of natural resources.

The indicators characterizing **the environmental quality of life** evidence that the increase in production and growth of income not always lead to the better quality of life. Excessive concentration of economic activity may have negative impact on the state of the environment and the quality of life of the population.

The indicators reflecting **economic opportunities** characterise the support of the government and the role of business as the key stakeholders of green growth.

Labour force participation rate is a ratio of the number of labour force (employed and unemployed) aged 15-74 to the total population of the corresponding age group, in percent.

Actual unemployment rate (according to the ILO methodology) is a ratio of the number of unemployed aged 15-74 to the number of labour force of the corresponding age group, in percent.

Ageing coefficient is a ratio of the number of population over age 64 to the number of population under age 15.

3.1. Socio-economic indicators

	2011	2012	2013	2014	2015	2016	2017
Socio-demographic dimension							
Average annual population, thsd	9 473	9 464	9 466	9 475	9 490	9 502	9 498
Population density, inhabitants per 1 km ²	46	46	46	46	46	46	46
Ageing coefficient, k	0.908	0.894	0.885	0.888	0.885	0.884	0.890
Life expectancy at birth, years	70.6	72.2	72.6	73.2	73.9	74.1	74.4
Labour force participation rate, %	...	...	...	71.7	71.8	70.8	71.3
Actual unemployment rate (ILO methodology), %	...	...	...	5.1	5.2	5.8	5.6
Average annual registered unemployment rate, %	0.7	0.6	0.5	0.5	0.9	1.0	0.8
Access to education:							
gross graduation ratio from higher education, % of population 22 years old	49.4	58.0	60.0	61.4	63.2	65.8	76.4
gross graduation ratio from secondary education, % of population 18 years old	37.7	43.3	45.5	42.7	42.9	40.4	39.8
Gini coefficient, k	0.284	0.285	0.283	0.275	0.276	0.279	0.269
Economic dimension							
Gross domestic product							
BYR bn ¹⁾	307 245	547 617	670 688	805 793	899 098	94.9	105.2
% of previous year	105.5	101.7	101.0	101.7	96.2	97.5	102.4
Gross domestic product, USD mln	60 884	65 428	74 761	78 536	55 317	47 479	54 414
Gross domestic product by PPP ²⁾ , USD bn	162.6	168.0	172.3	177.9	172.9	170.8	178.2
Net national income, BYR bn ¹⁾	280 268	484 600	584 833	699 247	773 481	80.8	90.4

Continued

	2011	2012	2013	2014	2015	2016	2017
Labour productivity by GDP, BYR thsd ¹⁾	65 494	118 735	146 490	177 078	199 977	21.6	24.2
Volume of foreign trade in goods and services to GDP (relative importance of trade) ³⁾ , %	154.8	154.0	120.2	110.8	115.3	124.6	134.0
Consumer price index, % of previous year	153.2	159.2	118.3	118.1	113.5	111.8	106.0

¹⁾ Since 2016 – BYN (in terms of the new denomination; 1 BYN = 10 000 BYR).

²⁾ Belstat's estimates; Years 2011 and 2014 – official results of the International Comparison Programme rounds.

³⁾ Balance of Payments data at the moment of GDP estimation.

3.2. Environmental and resource efficiency of the economy

	2011	2012	2013	2014	2015	2016	2017
Production-based carbon productivity, BYN per kg	0.5	0.9	1.0	1.3	1.5	1.6	...
Demand-based carbon productivity, BYN per kg	0.5	0.8	1.0	1.2	1.5	1.5	...
Energy productivity, BYN thsd per kg of fuel equivalent (GDP at constant prices (2005))	2.4	2.3	2.6	2.6	2.7	2.7	2.7
Energy intensity of GDP, kg of fuel equivalent / BYN mln (GDP at constant prices (2005))	412.1	438.9	386.7	387.7	369.9	374.9	376.8
Renewable electricity as % of total electricity generation	0.4	0.6	0.9	0.7	0.9	1.1	2.2
Waste generation intensity per unit of GDP, kg per BYN	1.44	0.75	0.60	0.65	0.55	0.52	0.53
Waste generation intensity per capita, tonnes per capita	4.7	4.3	4.3	5.5	5.3	5.2	5.8
Waste recovery rate, k	0.3	0.3	0.5	0.3	0.2	0.3	0.3
Water productivity, BYN per m ³	19	33	43	52	61	63	72

3.3. Natural assets

3.3.1. Freshwater resources

	2011	2012	2013	2014	2015	2016
River flow						
mln m ³ per year ¹⁾	58 300	62 400	73 900	40 900	29 800	42 400
m ³ per inhabitant	6 154	6 593	7 807	4 317	3 140	4 462
Water abstraction from surface water bodies						
mln m ³ per year ¹⁾	747	743	696	704	603	632
m ³ per inhabitant	79	79	74	74	64	67
Intensity of freshwater use (water stress) ²⁾ , %	1.3	1.2	0.9	1.7	2.0	1.5

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

²⁾ The indicator from the National list of SDG indicators (6.4.2.1).

3.3.2. Land resources¹⁾

(at 1 January)

	2012	2013	2014	2015	2016	2017	2018
Total, thousand hectares							
Land resources	20 760	20 760	20 760	20 760	20 760	20 760	20 760
of which:							
agricultural land	8 874	8 817	8 726	8 632	8 582	8 540	8 502
forest land	8 585	8 589	8 631	8 653	8 742	8 769	8 774
wetlands and land under water bodies	1 338	1 330	1 328	1 309	1 286	1 271	1 273
other land	1 963	2 025	2 075	2 166	2 150	2 180	2 212
Percent of total							
Land resources	100	100	100	100	100	100	100
of which:							
agricultural land	42.7	42.5	42.0	41.6	41.3	41.1	41.0
forest land	41.4	41.4	41.6	41.7	42.1	42.2	42.3
wetlands and land under water bodies	6.4	6.4	6.4	6.3	6.2	6.1	6.1
other land	9.5	9.8	10.0	10.4	10.4	10.5	10.7

¹⁾ Data of the State Committee for Property of the Republic of Belarus.

3.3.3. Forest resources¹⁾

	2011	2012	2013	2014	2015	2016	2017
Forested land:							
thsd hectares	8 087.6	8 123.3	8 160.4	8 204.1	8 239.8	8 259.4	8 260.9
hectares per capita	0.85	0.86	0.86	0.87	0.87	0.87	0.87
% of total land area of the country	39.0	39.1	39.3	39.5	39.7	39.8	39.8
Total growing stock, mln m ³	1 635.6	1 669.3	1 692.7	1 714.3	1 739.9	1 772.5	1 796.0
Marketable timber harvested, mln m ³	17.7	18.1	18.5	19.6	18.5	21.1	23.8
Area of forest felling, thsd hectares	578.3	545.0	535.3	523.9	466.9	487.5	451.0
of which final cutting	28.9	28.1	30.5	37.5	31.3	25.1	25.0

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

3.3.4. Wildlife resources¹⁾

	2011	2012	2013	2014	2015	2016	2017
Animals							
Mammals – total species	78	78	78	79	81	81	80
of which threatened and endangered species	17	17	17	20	20	20	20
as % of total species ²⁾	21.8	21.8	21.8	25.3	24.7	24.7	25.0
Birds – total species	318	319	322	323	325	329	329
of which threatened and endangered species	71	71	71	70	70	70	70
as % of total species ²⁾	22.3	22.3	22.0	21.7	21.5	21.3	21.3
Reptiles – total species	7	7	7	7	7	7	7
of which threatened and endangered species	2	2	2	2	2	2	2
as % of total species ²⁾	28.6	28.6	28.6	28.6	28.6	28.6	28.6
Amphibians – total species	13	13	13	13	13	13	13
of which threatened and endangered species	2	2	2	2	2	2	2
as % of total species ²⁾	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Fish and fish-shaped species – total species	68	68	68	68	68	68	68
of which threatened and endangered species	9	9	9	9	9	9	9
as % of total species ²⁾	13.2	13.2	13.2	13.2	13.2	13.2	13.2

Continued

	2011	2012	2013	2014	2015	2016	2017
Plants							
Vascular plants – total species	3 022	3 030	3 990	4 000	4 003	4 010	4 027
of which threatened and endangered species	182	182	182	189	189	189	189
as % of total species ³⁾	6.0	6.0	4.6	4.7	4.7	4.7	4.7
Bryophytes – total species	435	433	433	433	433	435	437
of which threatened and endangered species	31	31	31	34	34	34	34
as % of total species ³⁾	7.1	7.2	7.2	7.9	7.9	7.8	7.8
Lichens – total species	477	554	554	586	630	669	669
of which threatened and endangered species	24	24	24	25	25	25	25
as % of total species ³⁾	5.0	4.3	4.3	4.3	4.0	3.7	3.7
Algae – total species	2 338	2 338	2 338	2 338	2 338	2 338	2 338
of which threatened and endangered species	21	21	21	21	21	21	21
as % of total species ³⁾	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Fungi – total species	4 035	4 100	4 119	4 125	4 143	4 150	4 150
of which threatened and endangered species	35	35	35	34	34	34	34
as % of total species ³⁾	0.9	0.9	0.8	0.8	0.8	0.8	0.8

¹⁾ Data of the National Academy of Sciences of Belarus.

²⁾ The indicator from the National list of SDG indicators (15.5.1.1).

³⁾ The indicator from the National list of SDG indicators (15.5.1.2).

3.4. Environmental quality of life

3.4.1. Average annual concentrations of selected pollutants in the atmosphere of selected cities¹⁾

(microgrammes per cubic metre of air)

	2011	2012	2013	2014	2015	2016	2017
Average annual concentrations of fine particulate matter (class PM ₁₀) ²⁾							
Average annual maximum permissible concentration	40	40	40	40	40	40	40
Brest	33	27	...	22	15	11	10
Vitebsk	20	...	17	18	16	15	...
Gomel	48	31	28	38	53	...	32
Grodno	23	24	20	21	...	20	19
Minsk							
residential area	21	22	20	20	15	12	10
industrial area	36	34	35	40	35	24	13
Mogilev							
residential area	19	19	18	22	14	15	13
industrial area	28	26	23	34	29	22	22
Novopolotsk	20	19	18	22	17	18	17
Polotsk	23	24	18	16	12	...	11
Average annual concentration of ground-level ozone							
Average annual maximum permissible concentration	90	90	90	90	90	90	90
Brest	...	62	65	54	61	58	58
Vitebsk	42	...	...	...	...	...	...
Gomel	...	52	54	44	45	45	47
Grodno	...	57	65	62	57	43	60
Minsk	40	38	49	32	44	40	34-44 ³⁾
Mogilev	...	48	...	34	49	...	...
Novopolotsk	...	55	59	48	55	47	39
Polotsk	...	50	55	47	56	48	44

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

²⁾ The indicator from the National list of SDG indicators (11.6.2.1).

³⁾ Monitoring was carried out in two industrial areas.

3.4.2. Access to water supply and sewerage facilities
(based on data of sample household living standards survey;
beginning of year; % of total households)

	2012	2013	2014	2015	2016	2017	2018
Share of households living in apartments/ houses equipped with:							
piped water	86.3	88.6	89.9	90.5	92.6	93.7	94.7
hot water supply	77.8	80.8	82.7	83.6	85.1	86.1	88.6
sewerage	83.7	86.6	87.8	88.5	91.1	91.9	93.4

3.5. Economic opportunities

	2011	2012	2013	2014	2015	2016	2017
Total environmental expenditure, BYR bn ¹⁾	3 467.3	6 117.1	7 077.2	7 559.7	9 178.7	1 041.6	1 085.9
of which fixed capital investment spent on environmental protection and rational use of natural resources, BYR bn ¹⁾	747.6	883.3	963.5	1 261.4	2 158.7	290.8	251.6
Total environmental expenditure as % of GDP	1.1	1.1	1.1	0.9	1.0	1.1	1.0
Environmental tax – total, BYR bn ¹⁾	350	642	838	1 478	1 292	138	173
% of GDP	0.1	0.1	0.1	0.2	0.1	0.1	0.2
% of total tax revenues	0.5	0.5	0.5	0.8	0.6	0.6	0.7

¹⁾ Since 2016 – BYN million (in terms of the new denomination; 1 BYN = 10 000 BYR).

4. ENVIRONMENTAL PROTECTION EXPENDITURE

Total environmental protection expenditure is the amount of environmental protection expenditure and fixed capital investment spent on environmental protection and rational use of natural resources.

Current expenditure on environmental protection is the amount of expenditure incurred on the maintenance and operation of fixed assets intended for environmental protection – for collection, transportation and treatment of wastewater; recycling and reused water supply; treatment, neutralization and detoxification of air polluting emissions; collection, segregation, disposal and/ or use of industrial waste; as well as expenditures for protection and rational use of land; fee for environmental protection services, and other environmental protection expenditures. The total environmental protection expenditure is calculated as current expenditure, excluding payments to other organisations for collection and treatment of wastewater; collection (procurement), disposal, storage, dumping and neutralization of industrial waste; land reclamation.

Fixed capital investment is total costs spent on acquisition, reproduction and creation of new fixed assets.

4.1. Total environmental protection expenditure

(at current prices; BYR billion¹⁾)

	2011	2012	2013	2014	2015	2016	2017
Total environmental protection expenditure	3 467.3	6 117.1	7 077.2	7 559.7	9 178.7	1 041.6	1 085.9
of which:							
expenditure on environmental protection	2 719.7	5 233.8	6 113.7	6 298.3	7 020.0	750.8	834.3
of which:							
current expenditure on environmental protection	2 386.1	4 659.0	5 470.2	5 539.9	6 195.2	677.4	751.8
of which:							
protection and rational use of water resources	1 607.0	3 247.4	3 722.9	3 336.9	3 750.4	405.1	445.9
air protection, conservation of ozone layer and climate	377.9	691.4	789.6	983.2	1 050.0	116.0	128.6
environmental protection against industrial pollution	357.0	614.1	792.3	1 024.2	1 174.6	129.6	144.6

ENVIRONMENTAL PROTECTION EXPENDITURE

Continued

	2011	2012	2013	2014	2015	2016	2017
capital repairs of fixed assets intended for environmental protection	44.8	114.2	119.1	171.7	191.8	11.5	8.2
maintenance of nature reserves and national parks	130.2	241.4	257.4	302.2	280.9	27.5	37.5
reproduction and conservation of wild animal species	9.9	28.9	30.4	33.8	44.0	3.5	3.6
extinguishing forest fires caused by population and businesses and related recovery operations	0.1	0.1	0.0	0.1	2.4	0.0	0.0
research in the field of environmental protection	2.9	4.1	4.0	6.1	4.3	0.4	0.9
training of specialists in the field of environmental protection	69.5	114.5	133.8	157.0	186.6	18.5	19.3
functioning of environmental government authorities	76.2	71.6	98.8	87.5	114.9	11.9	13.0
fixed capital investment spent on environmental protection and rational use of natural resources	747.6	883.3	963.5	1 261.4	2 158.7	290.8	251.6
of which:							
protection and rational use of water resources	241.1	337.3	422.0	401.6	582.0	57.3	60.1
air protection	188.4	231.2	329.5	658.7	1 134.1	184.1	144.9
protection and rational use of land	104.3	240.7	148.1	147.0	357.8	28.3	22.6
Share of total environmental expenditure in GDP, %	1.1	1.1	1.1	0.9	1.0	1.1	1.0

¹⁾ Since 2016 – BYN million (in terms of the new denomination, 1 BYN = 10 000 BYR).

4.2. Total environmental protection expenditure

(at constant prices; % of previous year)

	2011	2012	2013	2014	2015	2016	2017
Total environmental protection expenditure	104.5	100.0	99.7	93.9	105.1	101.9	95.8
of which:							
expenditure on environmental protection	101.0	109.2	101.8	90.7	95.9	95.3	101.3
of which:							
current expenditure on environmental protection	102.1	110.9	103.4	89.8	95.4	97.6	101.1
of which:							
protection and rational use of water resources	105.5	114.8	100.9	79.5	95.9	96.4	100.3
air protection, conservation of ozone layer and climate	100.6	104.0	100.5	110.4	91.1	98.7	101.0
environmental protection against industrial pollution	95.9	97.7	113.6	114.6	97.9	98.5	101.7
capital repairs of fixed assets intended for environmental protection	70.3	153.4	94.1	131.1	85.0	50.7	69.3
maintenance of nature reserves and national parks	92.5	99.6	82.2	93.3	99.0	81.6	120.8
reproduction and conservation of wild animal species	73.9	150.6	98.6	90.3	124.3	75.9	90.2

ENVIRONMENTAL PROTECTION EXPENDITURE

Continued

	2011	2012	2013	2014	2015	2016	2017
extinguishing forest fires caused by population and businesses and related recovery operations	54.0	41.0	23.7	286.4	2 001	4.7	74.7
research in the field of environmental protection	60.3	64.2	71.5	165.7	60.3	77.1	252.6
training of specialists in the field of environmental protection	104.2	103.5	98.8	99.4	104.7	88.8	98.4
functioning of environmental government authorities	114.5	51.8	99.3	71.1	109.1	96.7	101.9
fixed capital investment spent on environmental protection and rational use of natural resources	119.2	66.7	87.9	114.6	151.2	123.3	81.5
of which:							
protection and rational use of water resources	72.3	78.9	100.8	83.3	128.1	90.2	98.7
air protection	133.7	69.2	114.8	175.0	152.1	148.6	74.2
protection and rational use of land	83.2	130.1	49.6	86.9	215.0	72.4	75.2

4.3. Current expenditure on environmental protection by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
BYR billion ¹⁾ (at current prices)							
Republic of Belarus	2 846.3	5 573.4	6 606.8	6 819.4	7 651.8	833.1	919.7
Regions and Minsk city:							
Brest	263.6	435.6	479.1	617.2	733.6	93.3	104.8
Vitebsk	425.3	783.0	1 018.3	1 137.1	1 291.3	132.0	146.7
Gomel	802.0	1 987.2	2 151.7	1 618.7	1 845.6	190.2	198.5
Grodno	257.5	441.9	583.6	747.3	855.7	89.4	93.2
Minsk city	334.2	634.1	789.7	875.4	1 014.9	119.6	145.9
Minsk	353.3	607.3	744.2	880.1	983.9	112.2	126.6
Mogilev	410.5	684.4	840.1	943.7	926.7	96.4	104.0
As % of total							
Republic of Belarus	100	100	100	100	100	100	100
Regions and Minsk city:							
Brest	9.3	7.8	7.3	9.1	9.6	11.2	11.4
Vitebsk	14.9	14.0	15.4	16.7	16.9	15.8	16.0
Gomel	28.2	35.7	32.6	23.7	24.1	22.8	21.6
Grodno	9.0	7.9	8.8	11.0	11.2	10.7	10.1
Minsk city	11.7	11.4	12.0	12.8	13.3	14.4	15.9
Minsk	12.4	10.9	11.3	12.9	12.9	13.5	13.8
Mogilev	14.4	12.3	12.7	13.8	12.1	11.6	11.3

¹⁾ Since 2016 – BYN million (in terms of the new denomination, 1 BYN = 10 000 BYR).

4.4. Current expenditure on environmental protection by economic activity

(at current prices; BYN million)

	2016	2017				
		total	of which by kind of expenditure			
			protection and rational use of water resources	air protection, conservation of ozone layer and climate	environmental protection against industrial pollution	protection and rational use of land
Republic of Belarus	833.1	919.7	582.6	128.6	172.9	10.8
of which:						
Agriculture, forestry and fishing	20.9	23.1	9.8	0.5	11.7	0.6
Mining	10.2	10.5	2.3	2.1	1.5	4.4
Manufacturing	432.4	477.5	275.8	116.1	65.9	2.2
of which:						
Manufacture of food products, beverages and tobacco products	64.4	68.5	55.9	5.2	5.9	0.0
Manufacture of textile articles, wearing apparel, articles of leather and fur	18.1	16.4	13.4	0.9	1.8	–
Manufacture of products of wood and paper; printing and reproduction of recorded media	16.7	20.4	11.2	6.1	2.7	0.0
Manufacture of coke and refined petroleum products	100.8	115.2	78.8	30.6	2.2	0.0
Manufacture of chemicals and chemical products	85.2	95.2	39.2	18.5	31.7	1.5
Manufacture of basic pharmaceuticals and medicinal products	1.5	1.5	1.2	0.0	0.1	–

Continued

	2016	2017				
		total	of which by kind of expenditure			
			protection and rational use of water resources	air protection, conservation of ozone layer and climate	environmental protection against industrial pollution	protection and rational use of land
Manufacture of rubber and plastics products, of other non-metallic mineral products	33.0	37.9	14.3	17.0	5.6	0.4
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	46.9	48.2	25.9	15.8	6.0	0.0
Manufacture of computer, electronic and optical products	9.8	9.4	7.8	0.9	0.5	0.0
Manufacture of electrical equipment	5.8	5.9	2.5	0.8	2.0	0.0
Manufacture of machinery and equipment n.e.c.	29.9	31.7	16.2	10.9	3.5	0.3
Manufacture of transport vehicles and equipment	10.9	16.7	7.3	3.2	2.0	0.0
Other manufacturing; repair and installation of machinery and equipment	9.5	10.5	2.1	6.1	1.8	–
Electricity, gas, steam, hot water and air conditioning supply	152.3	165.8	97.5	5.9	56.3	2.7
Water supply; waste management and remediation activities	181.5	197.1	166.3	1.0	28.8	0.1

ENVIRONMENTAL PROTECTION EXPENDITURE

Continued

	2016	2017				
		total	of which by kind of expenditure			
			protection and rational use of water resources	air protection, conservation of ozone layer and climate	environmental protection against industrial pollution	protection and rational use of land
Construction	2.9	5.2	2.7	0.5	1.1	0.5
Wholesale and retail trade; repair of motor vehicles and motorcycles	10.1	12.7	10.1	0.9	1.4	0.1
Transportation and storage, postal and courier activities	11.2	16.0	10.5	1.5	2.5	0.3
Accommodation and food service activities	0.0	0.0	0.0	–	0.0	–
Financial and insurance activities	0.9	–	–	–	–	–
Real estate activities	6.1	4.6	4.2	–	0.4	–
Professional, scientific and technical activities	0.4	2.7	0.5	0.0	2.1	–
Administrative and support service activities	1.8	1.9	0.9	0.1	0.8	–
Public administration	0.9	0.8	0.7	–	0.1	0.0
Education	0.0	0.0	0.0	–	0.0	–
Human health and social work activities	1.3	1.6	1.3	0.0	0.2	–
Arts, sports, entertainment and recreation	0.2	0.2	0.1	0.0	0.0	–

4.5. Fixed capital investment spent on environmental protection and rational use of natural resources by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
BYR billion ¹⁾ (at current prices)							
Republic of Belarus	747.6	883.3	963.5	1 261.4	2 158.7	290.8	251.6
Regions and Minsk city:							
Brest	212.7	50.5	96.4	114.2	107.9	6.2	18.9
Vitebsk	165.6	181.8	279.3	681.9	1 286.8	73.3	71.4
Gomel	86.5	218.2	208.5	111.5	264.0	130.3	95.6
Grodno	86.9	39.6	80.0	83.8	3.7	13.6	10.2
Minsk city	32.3	89.9	29.5	49.3	86.4	37.2	15.1
Minsk	159.2	224.5	223.5	188.1	390.3	26.7	28.1
Mogilev	4.4	78.7	46.4	32.7	19.7	3.4	12.3
As % of total							
Republic of Belarus	100	100	100	100	100	100	100
Regions and Minsk city:							
Brest	28.5	5.7	10.0	9.1	5.0	2.1	7.5
Vitebsk	22.1	20.6	29.0	54.1	59.6	25.2	28.4
Gomel	11.6	24.7	21.6	8.8	12.2	44.8	38.0
Grodno	11.6	4.5	8.3	6.6	0.2	4.7	4.0
Minsk city	4.3	10.2	3.1	3.9	4.0	12.8	6.0
Minsk	21.3	25.4	23.2	14.9	18.1	9.2	11.2
Mogilev	0.6	8.9	4.8	2.6	0.9	1.2	4.9

¹⁾ Since 2016 – BYN million (in terms of the new denomination, 1 BYN = 10 000 BYR).

5. AIR PROTECTION

Air polluting emissions refer to the discharge of contaminants into the atmospheric air from sources of emission. Total air polluting emissions comprise emissions from mobile and stationary sources.

Mobile sources of emission are transport vehicles and self-propelled machines equipped with engines, the operation of which results in air polluting emissions.

Air polluting emissions from mobile sources are estimated in accordance with the Instruction on the procedure of recording of air polluting emissions from mobile sources, based on the amount of consumed fuels and data on the distribution of automotive vehicle fleet in use in the territory of the Republic of Belarus.

The volume of air polluting emissions from mobile sources is estimated by the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

Stationary sources of emission are sources of emission, the displacement of which is impossible without incommensurable detriment to their function. Stationary sources of emission are subdivided into organised and non-organised.

Organised stationary sources of emission refer to the sources equipped with the units allowing for localisation of air polluting emissions from sources of pollution.

Non-organised stationary sources of emission are sources that are not equipped with the units allowing for localisation of air polluting emissions from sources of pollution.

Beginning from 2015 the volume of air polluting emissions from stationary sources is estimated by the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

Amount of pollutants from stationary sources of emission includes both substances collected in flue systems, irrespective of whether they are directed or not to gas-treatment units, and substances emitted directly into the air. Pollutants from stationary sources do not include substances contained in technological gases and specially captured for production purposes.

Amount of captured and detoxified air pollutants includes all types of pollutants captured by and detoxified at gas-treatment plants out of the total volume of pollutants coming from stationary sources.

Amount of utilized air pollutants includes captured pollutants that are returned to production and utilized in industry.

Air polluting emissions from stationary and mobile sources are recorded by individual substances (ingredients).

5.1. Main indicators of air polluting emissions

	2011	2012	2013	2014	2015	2016	2017
Air polluting emissions – total, thsd t	1 315	1 389	1 374	1 344	1 259	1 245	1 241
of which:							
from mobile sources	944	956	928	881	801	792	787
from stationary sources	371	433	445	463	458	453	453
Air pollutants from stationary sources, thsd t	3 171	3 124	3 332	4 109	3 645	3 374	3 073
Captured and detoxified air pollutants from stationary sources, thsd t	2 800	2 691	2 887	3 646	3 187	2 921	2 619
Share of captured and detoxified air pollutants in total air polluting emissions from stationary sources, %	88	86	87	89	87	87	85
Reduction of air polluting emissions after emission-reducing activities, thsd t	4	3	26	14	6	19	5

Continued

	2011	2012	2013	2014	2015	2016	2017
As percentage of the previous year							
Air polluting emissions – total	99.7	105.6	98.9	97.8	93.7	98.9	99.7
of which:							
from mobile sources	100.2	101.3	97.1	94.9	90.9	98.9	99.4
from stationary sources	98.4	116.7	102.8	104.0	99.0	98.9	100
Air pollutants from stationary sources	97.9	98.5	106.7	123.3	88.7	92.6	91.1
Captured and detoxified air pollutants from stationary sources	97.8	96.1	107.3	126.3	87.4	91.7	89.7
As percentage of 2010							
Air polluting emissions – total	99.7	105.3	104.2	101.9	95.5	94.4	94.1
of which:							
from mobile sources	100.2	101.5	98.5	93.5	85.0	84.0	83.5
from stationary sources	98.4	114.9	118.0	122.8	121.5	120.2	120.2
Air pollutants from stationary sources	97.9	96.4	102.8	126.8	112.5	104.1	94.8
Captured and detoxified air pollutants from stationary sources	97.8	94.0	100.8	127.3	111.3	102.0	91.5

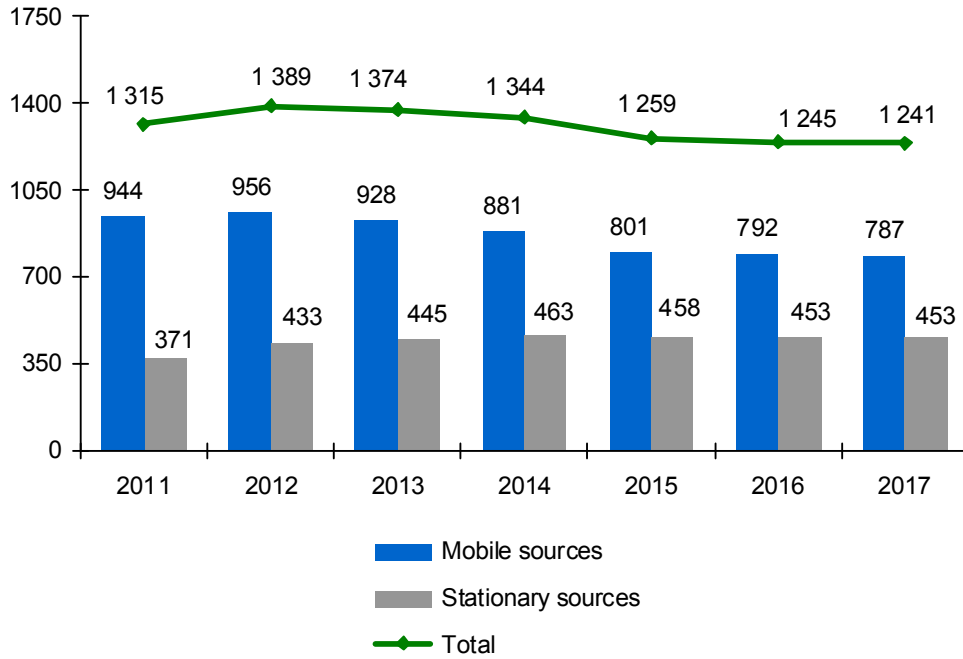
5.2. Air polluting emissions by regions and Minsk city

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Air polluting emissions – total							
Republic of Belarus	1 315.5	1 389.0	1 373.7	1 343.6	1 258.9	1 244.8	1 240.6
Regions and Minsk city:							
Brest	176.2	168.6	177.6	179.6	166.6	169.0	166.7
Vitebsk	209.5	223.8	226.1	212.5	208.4	201.4	190.6
Gomel	209.3	222.1	225.9	215.3	205.6	207.7	203.4
Grodno	167.1	161.6	170.0	166.2	154.3	148.9	154.5
Minsk city	207.9	236.5	185.6	181.2	146.4	140.0	155.1
Minsk	220.1	242.5	253.5	256.3	255.6	258.8	247.2
Mogilev	125.3	133.8	134.9	132.5	122.1	118.9	123.1
of which:							
from mobile sources							
Republic of Belarus	944.4	955.8	928.4	880.8	800.6	791.7	787.2
Regions and Minsk city:							
Brest	149.1	133.8	138.4	127.8	116.3	117.5	116.1
Vitebsk	117.3	113.4	120.3	110.0	96.4	93.5	88.3
Gomel	123.9	126.7	123.2	113.7	106.0	103.1	97.8
Grodno	123.2	113.3	116.8	107.4	97.8	95.1	94.2
Minsk city	182.2	209.9	160.5	157.7	126.1	121.9	136.8
Minsk	168.2	173.3	182.5	181.8	179.7	183.9	178.6
Mogilev	80.5	85.4	86.7	82.4	78.3	76.7	75.4
from stationary sources							
Republic of Belarus	371.1	433.2	445.3	462.8	458.3	453.1	453.4
Regions and Minsk city:							
Brest	27.1	34.8	39.2	51.8	50.3	51.5	50.6
Vitebsk	92.2	110.4	105.8	102.5	112.0	107.9	102.3
Gomel	85.4	95.4	102.7	101.6	99.6	104.6	105.6
Grodno	43.9	48.3	53.2	58.8	56.5	53.8	60.3
Minsk city	25.7	26.6	25.1	23.5	20.3	18.1	18.3
Minsk	51.9	69.2	71.0	74.5	75.9	74.9	68.6
Mogilev	44.8	48.4	48.2	50.1	43.8	42.2	47.7

5.3. Dynamics of air polluting emissions from stationary and mobile sources

(thousand tonnes)



5.4. Share of air polluting emissions from mobile sources by regions and Minsk city

(as % of total air polluting emissions)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	71.8	68.8	67.6	65.6	63.6	63.6	63.5
Regions and Minsk city:							
Brest	84.6	79.4	77.9	71.2	69.8	69.5	69.6
Vitebsk	56.0	50.7	53.2	51.8	46.3	46.4	46.3
Gomel	59.2	57.0	54.5	52.8	51.6	49.6	48.1
Grodno	73.7	70.1	68.7	64.6	63.4	63.9	61.0
Minsk city	87.6	88.8	86.5	87.0	86.1	87.1	88.2
Minsk	76.4	71.5	72.0	70.9	70.3	71.1	72.2
Mogilev	64.2	63.8	64.3	62.2	64.1	64.5	61.3

5.5. Air polluting emissions from mobile sources per inhabitant by regions and Minsk city

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	100	101	98	93	84	83	83
Regions and Minsk city:							
Brest	107	96	100	92	84	85	84
Vitebsk	96	94	100	92	81	79	75
Gomel	87	89	86	80	74	73	69
Grodno	116	107	111	102	93	91	90
Minsk city	97	111	84	82	65	62	69
Minsk	120	124	130	129	127	129	125
Mogilev	74	79	81	77	73	72	71

5.6. Air polluting emissions from mobile sources per square kilometre by regions and Minsk city

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	4 549	4 604	4 472	4 243	3 856	3 814	3 792
Regions and Minsk city:							
Brest	4 548	4 080	4 221	3 898	3 547	3 584	3 541
Vitebsk	2 928	2 832	3 004	2 747	2 407	2 335	2 205
Gomel	3 069	3 139	3 052	2 816	2 626	2 554	2 422
Grodno	4 905	4 509	4 648	4 274	3 892	3 785	3 749
Minsk city	593 446	603 135	461 207	453 161	362 356	350 287	393 103
Minsk	4 217	4 350	4 580	4 562	4 510	4 615	4 482
Mogilev	2 768	2 937	2 983	2 835	2 694	2 639	2 594

5.7. Air polluting emissions from mobile sources by selected ingredients by regions and Minsk city

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Total air polluting emissions							
Republic of Belarus	944.4	955.8	928.4	880.8	800.6	791.7	787.2
Regions and Minsk city:							
Brest	149.1	133.8	138.4	127.8	116.3	117.5	116.1
Vitebsk	117.3	113.4	120.3	110.0	96.4	93.5	88.3
Gomel	123.9	126.7	123.2	113.7	106.0	103.1	97.8
Grodno	123.2	113.3	116.8	107.4	97.8	95.1	94.2
Minsk city	182.2	209.9	160.5	157.7	126.1	121.9	136.8
Minsk	168.2	173.3	182.5	181.8	179.7	183.9	178.6
Mogilev	80.5	85.4	86.7	82.4	78.3	76.7	75.4
of which: carbon monoxide							
Republic of Belarus	612.8	618.2	604.4	576.5	526.9	521.3	514.0
Regions and Minsk city:							
Brest	95.0	84.3	88.1	81.2	74.3	74.9	73.6
Vitebsk	74.5	71.2	77.0	70.7	62.3	60.6	56.5
Gomel	79.0	80.2	78.2	71.7	67.6	65.8	61.5
Grodno	79.0	72.2	75.2	69.4	63.6	61.8	60.6
Minsk city	123.5	142.8	109.2	108.4	86.0	83.5	93.3
Minsk	110.2	113.0	120.7	121.3	121.4	124.2	119.2
Mogilev	51.7	54.6	56.0	53.8	51.7	50.5	49.3
nitrogen dioxide							
Republic of Belarus	104.9	105.7	101.7	95.1	85.1	84.0	85.4
Regions and Minsk city:							
Brest	17.3	15.7	16.0	14.8	13.3	13.5	13.5
Vitebsk	13.7	13.4	13.7	12.4	10.7	10.3	10.0
Gomel	14.4	14.7	14.3	13.4	12.1	11.8	11.6
Grodno	14.1	13.0	13.2	12.0	10.7	10.4	10.6
Minsk city	18.1	20.4	15.8	15.0	12.3	11.7	13.3
Minsk	18.2	18.7	19.1	18.6	17.7	18.2	18.3
Mogilev	9.1	9.7	9.6	8.9	8.3	8.1	8.1

Continued

	2011	2012	2013	2014	2015	2016	2017
sulphur dioxide							
Republic of Belarus	2.7	2.7	0.3	0.2	0.1	0.0	0.1
Regions and Minsk city:							
Brest	0.4	0.4	0.1	0.0	0.0	0.0	0.0
Vitebsk	0.3	0.3	0.0	0.0	0.0	0.0	0.0
Gomel	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Grodno	0.4	0.3	0.0	0.0	0.0	0.0	0.0
Minsk city	0.5	0.6	0.1	0.1	0.0	0.0	0.0
Minsk	0.5	0.5	0.1	0.1	0.1	0.0	0.1
Mogilev	0.2	0.2	0.0	0.0	0.0	0.0	0.0
hydrocarbons							
Republic of Belarus	193.4	198.5	192.7	182.0	164.5	163.1	164.0
Regions and Minsk city:							
Brest	31.2	28.6	29.4	27.3	24.7	25.1	25.0
Vitebsk	24.5	24.2	25.4	23.1	20.1	19.5	18.7
Gomel	25.9	26.8	26.2	24.4	22.5	21.9	21.1
Grodno	25.6	23.9	24.5	22.5	20.4	19.9	19.9
Minsk city	35.4	41.4	31.8	30.9	25.0	24.1	27.3
Minsk	34.1	35.7	37.2	36.7	35.9	36.8	36.3
Mogilev	16.7	17.9	18.2	17.1	16.0	15.8	15.7
soot							
Republic of Belarus	30.5	30.8	29.3	27.0	23.9	23.3	23.7
Regions and Minsk city:							
Brest	5.2	4.9	4.8	4.5	4.0	4.0	4.0
Vitebsk	4.1	4.3	4.2	3.8	3.3	3.1	3.1
Gomel	4.3	4.7	4.5	4.2	3.8	3.6	3.6
Grodno	4.2	3.9	3.9	3.5	3.1	3.0	3.1
Minsk city	4.7	4.6	3.6	3.3	2.8	2.6	2.9
Minsk	5.3	5.5	5.4	5.1	4.6	4.7	4.7
Mogilev	2.7	2.9	2.9	2.6	2.3	2.3	2.3

5.8. Air polluting emissions from stationary sources per inhabitant by regions and Minsk city

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	39	46	47	49	48	48	48
Regions and Minsk city:							
Brest	19	25	28	37	36	37	37
Vitebsk	76	91	88	85	94	91	86
Gomel	60	67	72	71	70	74	74
Grodno	41	46	50	56	54	51	58
Minsk city	14	14	13	12	10	9	9
Minsk	37	49	51	53	54	53	48
Mogilev	41	45	45	47	41	40	45

5.9. Air polluting emissions from stationary sources per square kilometre by regions and Minsk city

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	1 788	2 087	2 145	2 229	2 208	2 182	2 184
Regions and Minsk city:							
Brest	828	1 061	1 196	1 580	1 533	1 571	1 545
Vitebsk	2 302	2 758	2 643	2 560	2 796	2 695	2 553
Gomel	2 116	2 363	2 543	2 517	2 467	2 591	2 617
Grodno	1 746	1 924	2 117	2 340	2 248	2 142	2 400
Minsk city	83 853	76 353	72 198	67 517	58 351	51 928	52 618
Minsk	1 302	1 738	1 781	1 870	1 905	1 879	1 723
Mogilev	1 541	1 667	1 660	1 722	1 506	1 453	1 639

5.10. Air polluting emissions from stationary sources by selected ingredients by regions and Minsk city

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	371.1	433.2	445.3	462.8	458.3	453.1	453.4
Regions and Minsk city:							
Brest	27.1	34.8	39.2	51.8	50.3	51.5	50.6
Vitebsk	92.2	110.4	105.8	102.5	112.0	107.9	102.3
Gomel	85.4	95.4	102.7	101.6	99.6	104.6	105.6
Grodno	43.9	48.3	53.2	58.8	56.5	53.8	60.3
Minsk city	25.7	26.6	25.1	23.5	20.3	18.1	18.3
Minsk	51.9	69.2	71.0	74.5	75.9	74.9	68.6
Mogilev	44.8	48.4	48.2	50.1	43.8	42.2	47.7
of which: solids							
Republic of Belarus	39.9	37.4	36.1	34.9	30.1	27.4	27.0
Regions and Minsk city:							
Brest	4.7	4.5	4.3	4.3	3.3	3.2	3.2
Vitebsk	6.1	6.0	6.0	6.2	5.6	5.1	4.9
Gomel	5.7	5.5	5.5	5.4	4.4	4.3	4.7
Grodno	6.8	5.8	5.6	5.2	5.0	4.4	4.3
Minsk city	2.5	2.4	2.2	2.0	1.6	1.4	1.4
Minsk	8.2	7.4	6.9	6.4	6.1	5.1	5.0
Mogilev	5.8	5.8	5.7	5.5	4.1	3.9	3.6
sulphur dioxide							
Republic of Belarus	44.4	63.7	48.5	50.3	56.8	53.3	47.6
Regions and Minsk city:							
Brest	1.4	2.1	1.2	1.3	1.3	1.2	0.9
Vitebsk	17.4	31.5	21.0	23.0	27.5	25.4	22.2
Gomel	18.3	19.6	19.9	19.8	21.8	20.6	19.6
Grodno	0.8	2.1	0.9	0.9	1.0	1.7	1.2
Minsk city	0.9	2.0	0.9	1.0	0.8	0.6	0.4
Minsk	4.2	4.5	3.3	2.4	3.1	2.7	2.3
Mogilev	1.3	1.9	1.3	1.9	1.3	1.3	1.1

Continued

	2011	2012	2013	2014	2015	2016	2017
carbon monoxide							
Republic of Belarus	73.9	78.6	81.9	80.9	75.4	73.1	75.1
Regions and Minsk city:							
Brest	6.7	6.6	6.3	6.2	5.5	5.5	6.0
Vitebsk	12.0	12.8	14.5	14.4	14.6	14.4	13.9
Gomel	13.7	15.6	16.8	15.9	12.9	15.1	15.7
Grodno	9.9	8.7	8.3	8.8	9.9	7.8	9.7
Minsk city	11.5	11.0	10.1	10.3	8.5	7.0	7.0
Minsk	12.5	15.5	17.9	17.1	17.4	16.5	15.4
Mogilev	7.7	8.3	7.8	8.2	6.6	6.8	7.3
nitrogen dioxide							
Republic of Belarus	52.8	52.8	55.7	54.3	49.3	50.8	48.8
Regions and Minsk city:							
Brest	3.8	3.5	3.0	3.8	4.0	3.7	3.6
Vitebsk	12.5	11.0	11.7	9.4	9.6	10.3	10.1
Gomel	9.1	9.7	10.0	9.1	8.7	9.5	9.6
Grodno	8.6	7.5	8.7	9.8	8.5	9.3	8.1
Minsk city	4.6	5.2	6.0	5.4	5.0	5.2	5.1
Minsk	5.7	6.5	5.8	6.4	5.6	5.2	5.1
Mogilev	8.5	9.5	10.4	10.5	8.0	7.6	7.2
non-methane volatile organic compounds							
Republic of Belarus	66.9	70.0	60.9	55.5	54.0	54.0	53.8
Regions and Minsk city:							
Brest	1.6	2.2	2.2	2.4	1.9	1.5	1.9
Vitebsk	32.8	34.9	27.1	25.3	25.8	25.2	26.2
Gomel	16.6	16.5	14.8	13.6	13.8	14.0	13.1
Grodno	3.5	3.7	4.1	3.5	3.0	3.2	3.3
Minsk city	4.4	4.7	4.3	3.3	2.8	2.3	3.0
Minsk	3.2	3.6	4.1	3.5	2.9	3.5	2.9
Mogilev	4.8	4.5	4.4	3.9	3.9	4.3	3.4

Continued

	2011	2012	2013	2014	2015	2016	2017
hydrocarbons							
Republic of Belarus	63.8	99.9	125.8	149.1	157.7	158.8	166.1
Regions and Minsk city:							
Brest	6.8	13.0	18.3	28.0	28.8	30.7	29.6
Vitebsk	6.3	9.4	19.2	18.7	23.2	21.5	19.6
Gomel	17.1	23.4	29.9	30.7	31.8	34.3	36.3
Grodno	8.9	14.9	19.4	23.8	22.5	21.2	26.5
Minsk city	0.9	0.5	0.6	0.5	0.6	0.5	0.5
Minsk	12.0	24.1	23.5	30.7	33.7	34.8	30.9
Mogilev	11.7	14.6	14.8	16.6	17.2	15.7	22.5
nitrogen oxide							
Republic of Belarus	5.9	6.2	6.5	6.0	5.7	5.9	5.8
Regions and Minsk city:							
Brest	0.6	0.5	0.5	0.6	0.7	0.6	0.6
Vitebsk	1.7	1.3	1.5	1.1	1.1	1.4	1.4
Gomel	0.8	0.9	0.9	0.9	0.8	0.9	0.9
Grodno	0.5	0.6	0.7	0.6	0.7	0.7	0.8
Minsk city	0.6	0.7	0.9	0.8	0.8	0.8	0.8
Minsk	1.0	1.2	1.1	1.2	1.1	1.0	1.0
Mogilev	0.7	0.8	0.9	0.8	0.5	0.4	0.4
other							
Republic of Belarus	23.6	24.7	29.9	31.7	29.2	29.7	29.2
Regions and Minsk city:							
Brest	1.6	2.3	3.5	5.3	4.8	5.1	4.9
Vitebsk	3.4	3.5	4.8	4.4	4.7	4.7	3.9
Gomel	4.2	4.2	4.8	6.1	5.5	5.9	5.8
Grodno	4.8	5.1	5.4	6.1	5.9	5.5	6.4
Minsk city	0.2	0.1	0.1	0.1	0.2	0.1	0.1
Minsk	5.3	6.4	8.4	6.9	6.0	6.1	6.0
Mogilev	4.3	3.0	2.9	2.7	2.1	2.3	2.1

**5.11. Air polluting emissions from stationary sources
from fuel combustion by selected ingredients
by regions and Minsk city**

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	91.6	96.0	90.1	83.0	83.1	89.9	87.2
Regions and Minsk city:							
Brest	10.2	10.1	8.6	9.7	9.4	8.7	8.2
Vitebsk	22.3	22.6	21.5	20.6	20.8	26.6	22.8
Gomel	13.6	13.0	12.2	11.3	9.5	12.0	12.9
Grodno	8.4	9.7	8.2	7.3	7.3	7.7	8.7
Minsk city	7.4	8.9	8.8	7.9	7.1	7.3	7.1
Minsk	18.4	20.5	21.3	16.4	20.7	19.6	18.7
Mogilev	11.3	11.2	9.5	9.9	8.4	8.2	8.8
of which: solids							
Republic of Belarus	12.2	11.8	11.5	10.9	9.6	9.2	8.5
Regions and Minsk city:							
Brest	1.8	1.7	1.8	1.7	1.3	1.2	1.1
Vitebsk	2.4	2.6	2.2	2.3	2.2	2.1	1.9
Gomel	1.5	1.5	1.7	1.7	1.0	1.0	1.2
Grodno	1.3	1.2	1.0	0.9	0.9	0.8	0.8
Minsk city	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Minsk	3.0	2.8	2.8	2.4	2.5	2.3	2.2
Mogilev	2.2	2.0	2.0	1.9	1.7	1.8	1.4
sulphur dioxide							
Republic of Belarus	11.6	16.9	7.7	8.5	8.6	12.5	7.9
Regions and Minsk city:							
Brest	1.0	1.7	0.8	0.9	1.0	0.9	0.6
Vitebsk	2.7	4.2	1.3	3.0	2.3	5.0	1.8
Gomel	2.1	2.2	1.1	0.9	0.9	2.1	2.0
Grodno	0.3	1.6	0.4	0.5	0.4	0.8	0.5
Minsk city	0.6	1.7	0.6	0.8	0.6	0.4	0.2
Minsk	3.8	4.1	2.9	1.9	2.8	2.4	2.0
Mogilev	1.0	1.4	0.6	0.6	0.6	0.9	0.8

Continued

	2011	2012	2013	2014	2015	2016	2017
carbon monoxide							
Republic of Belarus	30.5	31.7	33.8	28.8	32.3	32.9	34.6
Regions and Minsk city:							
Brest	3.4	3.2	2.9	2.9	2.6	2.7	2.8
Vitebsk	6.2	6.9	7.9	7.9	8.4	9.3	9.0
Gomel	4.8	4.8	4.6	4.3	3.6	4.2	4.5
Grodno	3.7	3.6	3.0	2.8	3.0	3.0	4.0
Minsk city	2.2	2.0	1.9	1.7	1.5	1.3	1.5
Minsk	6.3	7.5	10.1	5.8	10.3	9.6	9.2
Mogilev	3.9	3.8	3.2	3.4	2.8	2.9	3.5
nitrogen dioxide							
Republic of Belarus	30.8	29.2	29.8	27.1	25.6	26.4	27.0
Regions and Minsk city:							
Brest	3.3	2.8	2.4	3.2	3.4	3.2	3.1
Vitebsk	9.5	7.7	8.6	6.3	6.3	7.1	7.2
Gomel	4.2	3.8	3.8	3.3	3.0	3.6	4.0
Grodno	2.2	2.3	2.5	2.1	1.9	1.9	2.2
Minsk city	3.9	4.4	5.3	4.7	4.3	4.7	4.6
Minsk	4.3	5.1	4.2	4.5	4.0	3.7	3.7
Mogilev	3.4	3.2	3.0	3.0	2.6	2.2	2.3

**5.12. Air polluting emissions from stationary sources
from waste treatment and utilization, technological and other
processes by selected ingredients
by regions and Minsk city**

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	279.4	337.2	355.2	379.8	375.2	363.1	366.2
Regions and Minsk city:							
Brest	16.9	24.7	30.5	42.1	40.9	42.8	42.4
Vitebsk	69.9	87.8	84.4	82.0	91.2	81.4	79.4
Gomel	71.8	82.4	90.5	90.3	90.1	92.6	92.8
Grodno	35.4	38.6	45.0	51.5	49.2	46.2	51.6
Minsk city	18.3	17.7	16.4	15.6	13.2	10.8	11.2
Minsk	33.6	48.7	49.7	58.1	55.2	55.3	49.9
Mogilev	33.5	37.2	38.8	40.2	35.4	34.1	38.8
of which: solids							
Republic of Belarus	27.6	25.6	24.6	24.0	20.5	18.2	18.5
Regions and Minsk city:							
Brest	2.9	2.8	2.5	2.6	2.0	2.0	2.1
Vitebsk	3.8	3.5	3.7	3.9	3.4	3.0	3.0
Gomel	4.2	4.0	3.8	3.7	3.4	3.3	3.5
Grodno	5.5	4.6	4.5	4.3	4.1	3.5	3.4
Minsk city	2.5	2.3	2.2	2.0	1.6	1.4	1.4
Minsk	5.1	4.7	4.1	4.0	3.6	2.8	2.9
Mogilev	3.7	3.7	3.7	3.5	2.4	2.1	2.1
sulphur dioxide							
Republic of Belarus	32.8	46.8	40.8	41.8	48.2	40.8	39.7
Regions and Minsk city:							
Brest	0.4	0.4	0.4	0.4	0.3	0.3	0.2
Vitebsk	14.7	27.4	19.6	19.9	25.2	20.4	20.5
Gomel	16.2	17.4	18.8	18.9	20.9	18.5	17.6
Grodno	0.5	0.5	0.5	0.5	0.6	0.9	0.6
Minsk city	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Minsk	0.3	0.4	0.5	0.5	0.3	0.3	0.3
Mogilev	0.4	0.4	0.7	1.4	0.7	0.4	0.3

Continued

	2011	2012	2013	2014	2015	2016	2017
carbon monoxide							
Republic of Belarus	43.4	46.9	48.1	52.1	43.1	40.2	40.5
Regions and Minsk city:							
Brest	3.3	3.4	3.4	3.2	2.9	2.8	3.3
Vitebsk	5.9	5.9	6.6	6.5	6.2	5.2	4.9
Gomel	8.8	10.8	12.2	11.6	9.2	10.9	11.2
Grodno	6.2	5.2	5.3	6.0	6.8	4.8	5.7
Minsk city	9.3	9.1	8.2	8.7	7.1	5.7	5.5
Minsk	6.2	8.0	7.8	11.3	7.1	6.9	6.2
Mogilev	3.8	4.5	4.6	4.8	3.8	3.9	3.7
nitrogen dioxide							
Republic of Belarus	22.0	23.5	25.9	27.2	23.8	24.4	21.9
Regions and Minsk city:							
Brest	0.5	0.6	0.6	0.5	0.5	0.5	0.5
Vitebsk	3.0	3.3	3.2	3.1	3.3	3.2	2.9
Gomel	4.9	6.0	6.2	5.8	5.7	5.9	5.6
Grodno	6.4	5.2	6.3	7.7	6.6	7.4	6.0
Minsk city	0.7	0.8	0.8	0.7	0.7	0.5	0.5
Minsk	1.4	1.5	1.6	1.9	1.6	1.5	1.4
Mogilev	5.1	6.3	7.4	7.5	5.5	5.4	4.9

5.13. Air polluting emissions from stationary sources by economic activity

(thousand tonnes)

	2016	2017					
		total	of which by ingredient				
			solid	sulphur dioxide	carbon monoxide	nitrogen dioxide	hydrocarbons
Republic of Belarus	453.1	453.4	27.0	47.6	75.1	48.8	166.1
of which:							
Agriculture, forestry and fishing	163.2	165.3	3.3	0.5	2.3	0.9	132.7
Mining	5.0	4.6	1.7	0.0	0.7	0.7	0.0
Manufacturing	176.8	175.2	13.3	42.8	40.9	24.5	4.5
of which:							
Manufacture of food products, beverages and tobacco products	15.8	15.9	1.5	1.4	7.8	1.4	2.5
Manufacture of textile articles, wearing apparel, articles of leather and fur	3.5	3.6	1.2	0.1	0.8	0.5	0.1
Manufacture of products of wood and paper; printing and reproduction of recorded media	7.5	8.8	1.7	0.9	2.8	1.2	0.4
Manufacture of coke and refined petroleum products	84.0	83.9	1.4	37.5	7.4	5.7	0.5
Manufacture of chemicals and chemical products	13.9	13.1	1.8	1.1	1.9	2.1	0.5
Manufacture of basic pharmaceuticals and medicinal products	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Manufacture of rubber and plastics products, of other non-metallic mineral products	26.5	23.5	2.4	0.9	6.1	11.1	0.2

Continued

	2016	2017					
		total	of which by ingredient				
			solid	sulphur dioxide	carbon monoxide	nitrogen dioxide	hydrocarbons
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	11.4	11.7	1.4	0.5	8.0	1.4	0.0
Manufacture of computer, electronic and optical products	0.3	0.4	0.0	0.0	0.1	0.1	0.0
Manufacture of electrical equipment	0.6	0.5	0.5	0.0	0.2	0.1	0.0
Manufacture of machinery and equipment n.e.c.	8.9	8.9	1.2	0.2	4.5	0.6	0.3
Manufacture of transport vehicles and equipment	2.1	2.7	0.5	0.1	0.9	0.2	0.1
Other manufacturing; repair and installation of machinery and equipment	2.2	2.0	0.4	0.0	0.5	0.2	0.0
Electricity, gas, steam, hot water and air conditioning supply	67.7	61.8	5.9	3.7	18.5	20.7	6.4
Water supply; waste management and remediation activities	8.6	8.8	0.1	0.0	0.2	0.0	7.5
Construction	4.3	4.6	1.9	0.2	1.9	0.2	0.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	2.5	2.2	0.1	0.0	0.1	0.0	0.2
Transportation and storage, postal and courier activities	23.0	29.2	0.3	0.2	10.0	1.6	14.5
Real estate activities	0.4	0.5	0.1	0.0	0.2	0.1	0.1
Administrative and support service activities	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Public administration	0.4	0.4	0.1	0.2	0.1	0.0	0.0

5.14. Air polluting emissions from stationary sources by selected cities

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Baranovichy	1.7	1.7	2.7	1.5	1.2	1.3	1.5
Bobruysk	6.7	6.5	6.0	5.3	4.3	3.6	3.7
Borisov	2.3	2.8	2.9	2.8	1.8	1.9	2.3
Brest	3.0	3.5	3.7	3.3	3.3	3.1	2.8
Vitebsk	4.9	4.8	3.8	3.6	3.5	3.1	3.1
Gomel	8.8	9.2	7.2	8.6	7.1	8.9	8.6
Grodno	10.7	11.9	10.6	10.0	9.7	9.6	9.4
Zhlobin	6.3	9.0	8.9	9.1	7.7	9.8	10.7
Zhodino	1.6	1.7	1.5	1.1	1.0	1.1	1.1
Lida	2.1	2.5	2.6	2.1	2.3	2.4	2.2
Minsk city	25.7	26.6	25.1	23.5	20.3	18.1	18.3
Mogilev	6.9	6.8	6.5	5.6	6.4	5.9	4.7
Mozyr	0.4	0.5	0.5	1.8	0.7	0.6	0.6
Molodechno	1.7	1.6	1.3	1.1	1.0	1.0	0.8
Novopolotsk	51.2	67.8	53.5	52.0	57.6	51.1	51.7
Orsha	3.2	3.6	2.0	2.0	2.1	2.2	1.8
Pinsk	1.6	1.5	1.4	1.1	1.2	1.3	1.4
Polotsk	1.7	1.7	2.0	2.3	2.1	2.2	2.4
Rechitsa	1.5	1.4	1.0	1.2	1.2	1.4	1.2
Svetlogorsk	2.6	2.8	2.4	2.7	2.6	2.0	1.7
Slutsk	3.4	3.7	3.3	2.9	2.3	2.9	2.3

5.15. Air polluting emissions from stationary sources per inhabitant by selected cities

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Baranovichy	10	10	15	8	7	7	8
Bobruysk	31	30	28	24	20	17	17
Borisov	15	19	20	19	13	13	16
Brest	9	11	11	10	10	9	8
Vitebsk	14	13	10	10	9	8	8
Gomel	18	18	14	16	14	17	16
Grodno	31	34	30	28	27	26	26
Zhlobin	84	119	118	121	102	129	141
Zhodino	26	28	25	18	16	17	17
Lida	22	25	26	21	23	24	22
Minsk City	14	14	13	12	10	9	9
Mogilev	19	19	18	15	17	16	12
Mozyr	4	4	5	16	6	5	5
Molodechno	18	17	14	12	11	10	8
Novopolotsk	485	636	498	481	562	472	505
Orsha	27	31	17	17	18	19	15
Pinsk	12	11	11	8	9	9	10
Polotsk	20	20	23	27	25	26	28
Rechitsa	24	22	16	19	19	21	18
Svetlogorsk	38	40	34	40	37	29	25
Slutsk	55	60	53	46	37	46	37

5.16. Air polluting emissions from stationary sources by regions, cities and districts

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	371.1	433.2	445.3	462.8	458.3	453.1	453.4
Brest region	27.1	34.8	39.2	51.8	50.3	51.5	50.6
Brest, city of	3.0	3.5	3.7	3.3	3.3	3.1	2.8
District:							
Baranovichy	2.9	3.5	3.4	4.8	3.0	3.5	4.0
Bereza	2.3	3.7	2.4	4.9	4.8	5.0	4.3
Brest	2.0	2.0	1.8	2.3	2.0	2.2	2.5
Gantsevichy	0.2	0.2	0.2	0.7	0.6	0.6	0.8
Drogichin	0.5	1.9	2.7	2.5	2.7	2.7	1.0
Zhabinka	2.4	2.6	2.6	3.0	3.4	3.2	3.9
Ivanovo	1.0	3.4	3.2	3.3	2.8	2.8	3.0
Ivatsevichy	1.3	2.1	2.4	3.1	2.6	2.3	2.4
Kamenets	2.4	2.5	2.9	3.9	4.0	4.3	5.3
Kobrin	1.6	2.0	1.7	3.1	3.4	2.8	3.4
Luninets	1.8	1.8	3.6	3.3	2.9	3.3	3.2
Lyakhovichy	0.8	1.1	1.4	2.2	2.7	2.2	2.6
Malorita	0.3	0.4	1.1	1.6	1.9	1.8	0.6
Pinsk	3.0	2.6	3.9	3.9	4.9	6.2	4.7
Pruzhan'y	1.0	0.9	1.5	4.0	3.9	3.9	3.6
Stolin	0.6	0.6	0.5	1.8	1.5	1.6	2.8

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	92.2	110.4	105.8	102.5	112.0	107.9	102.3
Vitebsk, city of	4.9	4.8	3.8	3.6	3.5	3.1	3.1
District:							
Beshenkovichy	0.4	0.4	0.5	0.5	0.6	0.5	0.6
Braslav	0.8	0.6	2.3	1.6	2.0	1.5	1.1
Verkhnedvinsk	0.9	1.2	1.6	2.1	2.5	2.3	2.4
Vitebsk	3.4	4.0	4.1	3.9	3.2	3.1	3.3
Glubokoye	1.4	1.4	2.4	2.1	3.3	3.4	3.2
Gorodok	0.9	1.0	1.5	1.7	1.6	1.8	1.1
Dokshitsy	0.7	0.8	1.1	1.3	1.5	0.9	0.9
Dubrovno	0.7	0.8	1.8	1.8	1.9	1.7	1.8
Lepel	0.8	0.9	1.4	1.3	1.3	1.7	1.4
Liozno	0.3	0.9	1.2	1.5	1.9	1.8	1.4
Miory	0.4	0.5	1.7	1.6	2.3	2.2	1.8
Orsha	5.8	6.6	8.0	7.5	8.7	8.2	7.4
Polotsk	54.4	71.3	57.5	56.1	61.3	55.0	55.2
Postavy	1.2	1.3	1.3	1.3	1.4	1.3	1.2
Rossony	0.3	0.4	0.5	0.5	0.7	0.7	0.4
Senno	0.6	0.8	0.9	1.0	1.0	0.9	0.4
Tolochin	0.7	0.7	1.6	1.6	1.3	1.7	1.9
Ushachy	0.4	0.4	0.8	0.8	0.8	0.8	0.8
Chashniki	11.7	10.0	9.5	8.4	9.0	13.4	10.8
Sharkovshchina	0.2	0.2	0.3	0.7	0.7	0.7	0.6
Shumilino	1.3	1.3	2.1	1.9	1.5	1.3	1.5

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	85.4	95.4	102.7	101.6	99.6	104.6	105.6
Gomel, city of	8.8	9.2	7.2	8.6	7.1	8.9	8.6
District:							
Bragin	0.4	0.7	0.8	0.9	0.1	0.2	0.6
Buda-Koshelyovo	1.0	1.9	3.3	3.6	4.0	3.2	3.8
Vetka	0.7	1.6	1.6	1.8	1.6	2.4	2.2
Gomel	4.3	5.2	7.0	5.4	5.2	5.2	5.1
Dobrush	0.6	1.5	2.0	2.1	2.1	3.2	2.6
Yelsk	0.2	0.2	0.2	0.8	0.2	1.0	0.9
Zhitkovichy	1.0	1.2	1.8	2.5	2.2	2.3	2.6
Zhlobin	10.8	13.1	12.5	11.5	10.9	13.5	14.7
Kalinkovichy	1.4	1.3	1.8	1.9	2.1	2.8	2.8
Korma	0.6	0.6	1.7	1.6	1.4	1.8	1.8
Lelchitsy	0.3	0.2	0.2	1.8	1.8	1.3	1.8
Loyev	0.5	1.0	0.9	0.9	0.7	0.1	0.2
Mozyr	37.0	38.3	38.4	38.2	40.8	38.2	37.6
Narovlya	0.2	0.2	0.5	0.4	0.3	0.3	0.3
Oktyabrsky	0.3	0.6	1.0	1.3	1.5	1.7	1.6
Petrikov	0.8	0.8	1.7	1.3	1.9	2.0	2.9
Rechitsa	6.7	7.1	8.5	6.0	5.8	6.4	6.3
Rogachev	3.3	3.5	3.6	3.7	3.4	3.8	3.2
Svetlogorsk	4.7	5.3	5.6	5.0	4.3	3.7	3.3
Khoyniki	1.0	0.9	1.3	0.8	1.1	1.5	1.6
Chechersk	0.8	1.0	1.3	1.3	1.3	1.2	1.2

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	43.9	48.3	53.2	58.8	56.5	53.8	60.3
Grodno, city of	10.7	11.9	10.6	10.0	9.7	9.6	9.4
District:							
Berestovitsa	0.7	0.8	0.8	1.2	1.7	2.0	2.1
Volkovysk	8.6	7.6	10.2	10.9	10.6	11.4	9.4
Voronovo	0.7	0.9	1.8	1.4	1.8	1.4	2.1
Grodno	3.9	4.9	5.1	6.9	6.7	5.8	6.7
Dyatlovo	0.5	0.3	0.4	0.5	1.0	1.1	1.7
Zelva	0.6	0.6	0.5	1.1	0.4	1.2	1.7
Ivye	0.6	0.7	0.6	0.6	0.6	0.7	1.3
Korelichy	1.2	1.4	1.9	2.0	2.1	2.0	2.0
Lida	5.3	5.4	5.1	5.1	3.8	3.6	4.5
Mosty	0.6	1.7	1.7	2.4	1.2	1.2	1.6
Novogrudok	1.0	0.9	1.1	1.2	1.5	1.8	1.9
Ostrovets	0.5	1.0	0.3	0.4	0.8	0.4	0.5
Oshmyany	0.8	0.6	0.8	0.9	0.4	0.4	1.1
Svisloch	0.5	1.2	1.3	1.3	1.4	1.5	1.3
Slonim	4.2	4.1	5.0	5.9	5.6	3.2	5.8
Smorgon	1.3	1.9	2.7	3.6	4.2	3.2	3.0
Shchuchin	2.4	2.4	3.4	3.5	3.1	3.3	4.2

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	25.7	26.6	25.1	23.5	20.3	18.1	18.3
Minsk region	51.9	69.2	71.0	74.5	75.9	74.9	68.6
District:							
Berezino	2.2	2.3	2.5	1.9	2.1	0.9	0.8
Borisov	4.0	4.6	4.3	4.7	4.0	4.4	4.2
Vileyka	2.7	2.7	2.6	1.5	1.4	1.1	1.3
Volozhin	0.9	1.5	0.9	1.1	1.4	1.4	1.1
Dzerzhinsk	2.2	2.3	2.3	1.6	1.6	2.3	1.8
Kletsk	1.7	2.3	2.1	3.0	3.3	3.0	2.2
Kopyl	0.9	1.1	1.3	2.0	2.4	2.4	2.1
Krupki	2.7	3.0	3.3	3.2	2.5	2.2	3.0
Logoyisk	0.6	1.3	1.9	1.6	2.0	1.9	1.4
Lyuban	1.4	1.1	2.1	4.9	4.5	4.0	4.7
Minsk	4.1	7.2	9.8	9.9	9.2	10.7	10.7
Molodechno	3.0	2.8	2.6	2.8	3.0	2.6	2.3
Myadel	1.0	0.9	0.7	0.6	0.9	1.2	1.0
Nesvizh	5.9	8.2	8.6	9.1	9.4	9.3	7.1
Pukhovichy	3.5	4.3	3.4	4.4	4.9	4.2	4.0
Slutsk	3.7	5.9	4.9	5.4	5.6	5.6	5.7
Smolevichy	3.7	4.4	3.8	3.4	3.1	4.1	3.9
Soligorsk	5.4	7.5	7.5	7.3	6.9	6.3	5.0
Saryie Dorogi	0.3	1.7	1.7	1.7	1.9	1.7	1.7
Stolbtsy	0.9	2.9	3.0	2.7	2.7	2.6	2.6
Uzda	0.6	0.6	0.7	0.8	1.7	1.7	1.1
Cherven	0.4	0.7	0.8	0.9	1.3	1.3	0.9

Continued

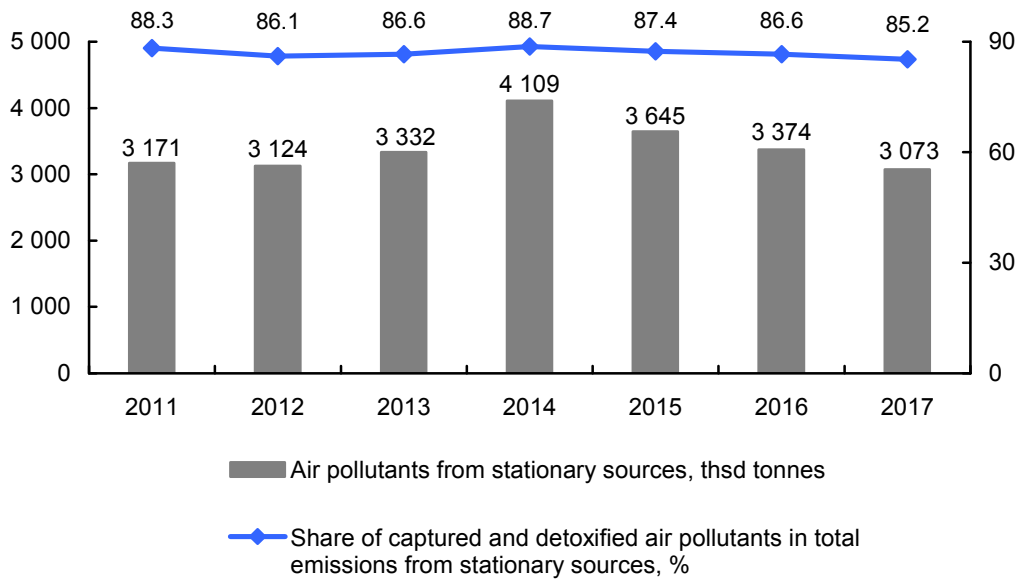
	2011	2012	2013	2014	2015	2016	2017
Mogilev region	44.8	48.4	48.2	50.1	43.8	42.2	47.7
Mogilev, city of	6.9	6.8	6.5	5.6	6.4	5.9	4.7
District:							
Belynychy	0.7	0.7	0.7	1.2	2.1	1.3	1.5
Bobruysk	7.2	7.1	6.5	5.7	4.9	4.4	4.1
Bykhov	1.1	1.2	1.2	1.1	0.8	1.2	1.3
Glusk	0.6	0.6	0.4	0.7	0.9	0.4	0.2
Gorki	0.6	1.1	0.7	1.2	1.4	1.2	1.4
Dribin	0.7	0.7	0.6	0.6	0.5	0.8	0.5
Kirovsk	1.1	1.4	1.5	1.5	0.3	2.0	1.7
Klimovichy	0.5	0.5	0.6	0.6	0.8	0.9	0.6
Klichev	0.6	1.5	1.6	1.6	1.6	1.5	1.7
Kostyukovichy	3.2	4.7	5.5	6.3	5.5	5.0	4.4
Krasnopolye	0.9	0.9	0.9	0.9	0.0	0.0	0.1
Krichev	5.5	5.7	6.8	7.6	4.6	4.3	4.4
Krugloye	0.4	0.3	0.4	0.5	0.5	0.4	0.6
Mogilev	3.0	3.0	2.6	3.1	1.7	1.4	3.5
Mstislavl	0.4	0.4	0.4	0.4	0.6	0.5	1.1
Osipovichy	6.7	5.6	5.9	5.1	4.9	5.1	8.7
Slavgorod	0.5	0.5	0.5	0.4	0.0	0.2	0.4
Khotimsk	0.5	0.1	0.2	0.2	0.0	0.1	0.2
Chausy	0.7	0.7	0.4	0.5	0.2	0.3	0.3
Cherikov	0.3	0.3	0.5	0.5	1.1	0.3	0.3
Shklov	2.7	4.7	3.9	4.7	5.1	5.3	5.9

5.17. Air pollutants from stationary sources by regions and Minsk city

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	3 170.8	3 124.2	3 332.0	4 108.5	3 645.4	3 374.4	3 072.6
Regions and Minsk city:							
Brest	159.9	185.2	123.8	153.9	129.2	139.8	148.0
Vitebsk	215.8	239.6	222.2	214.5	222.3	204.5	204.2
Gomel	260.2	325.8	321.1	332.1	311.1	332.4	328.8
Grodno	349.9	340.1	708.6	831.4	631.1	608.1	386.1
Minsk city	79.7	83.7	86.5	76.2	139.7	106.2	85.9
Minsk	1 460.1	1 288.1	1 069.2	1 514.6	1 442.0	1 448.7	1 462.2
Mogilev	645.1	661.6	800.4	985.9	770.1	534.8	457.4

5.18. Air pollutants from stationary sources



5.19. Captured and detoxified air pollutants from stationary sources by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Thousand tonnes							
Republic of Belarus	2 799.7	2 691.0	2 886.7	3 645.7	3 187.1	2 921.4	2 619.2
Regions and Minsk city:							
Brest	132.8	150.4	84.6	102.1	78.9	88.3	97.3
Vitebsk	123.7	129.2	116.4	112.0	110.3	96.5	102.0
Gomel	174.8	230.4	218.4	230.5	211.4	227.8	223.2
Grodno	306.1	291.8	655.4	772.6	574.6	554.2	325.8
Minsk city	53.9	57.1	61.4	52.7	119.4	88.1	67.6
Minsk	1 408.2	1 218.9	998.3	1 440.1	1 366.1	1 373.8	1 393.5
Mogilev	600.3	613.2	752.2	935.8	726.3	492.6	409.7
As % of total air pollutants from stationary sources							
Republic of Belarus	88.3	86.1	86.6	88.7	87.4	86.6	85.2
Regions and Minsk city:							
Brest	83.0	81.2	68.3	66.3	61.1	63.1	65.8
Vitebsk	57.3	53.9	52.4	52.2	49.6	47.2	49.9
Gomel	67.2	70.7	68.0	69.4	68.0	68.5	67.9
Grodno	87.5	85.8	92.5	92.9	91.0	91.2	84.4
Minsk city	67.7	68.3	71.0	69.2	85.5	83.0	78.7
Minsk	96.4	94.6	93.4	95.1	94.7	94.8	95.3
Mogilev	93.1	92.7	94.0	94.9	94.3	92.1	89.6

5.20. Captured and detoxified air pollutants from stationary sources by regions, cities and districts

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	2 799.7	2 691.0	2 886.7	3 645.7	3 187.1	2 921.4	2 619.2
Brest region	132.8	150.4	84.6	102.1	78.9	88.3	97.3
Brest, city of	2.3	2.1	1.7	1.5	2.7	3.3	2.0
District:							
Baranovichy	16.5	14.5	11.9	11.6	9.7	9.9	8.7
Bereza	3.2	3.7	1.2	10.7	4.5	2.9	3.0
Brest	0.0	0.0	0.0	0.2	0.1	0.1	0.2
Gantsevichy	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Drogichin	0.4	0.5	0.6	1.0	0.6	0.6	0.3
Zhabinka	26.6	21.5	1.4	1.9	1.4	1.0	1.2
Ivanovo	3.0	2.7	2.1	1.6	1.0	1.0	1.1
Ivatsevichy	12.6	11.9	17.0	24.2	15.3	13.2	13.4
Kamenets	0.6	1.9	1.9	2.5	2.8	1.5	2.3
Kobrin	12.3	12.3	0.4	2.3	0.7	0.4	0.4
Luninets	2.2	2.0	1.9	6.3	5.6	7.5	7.5
Lyakhovichy	43.0	43.0	33.2	25.3	21.5	31.8	36.3
Malorita	2.0	1.5	1.2	1.2	1.5	1.4	1.4
Pinsk	5.4	4.3	7.8	10.5	10.4	12.7	12.8
Pruzhany	1.7	1.6	1.5	0.7	0.7	0.6	6.1
Stolin	1.0	26.9	0.8	0.5	0.4	0.3	0.5

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	123.7	129.2	116.4	112.0	110.3	96.5	102.0
Vitebsk, city of	53.6	53.7	54.8	54.7	56.0	53.3	53.3
District:							
Beshenkovichy	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Braslav	1.4	0.6	0.6	0.5	0.5	0.5	0.4
Verkhnedvinsk	0.8	0.8	1.2	0.7	1.7	0.2	1.8
Vitebsk	1.7	2.4	0.5	2.1	0.0	0.0	0.1
Glubokoye	4.1	6.2	7.3	7.5	5.9	0.8	0.3
Gorodok	0.3	0.2	0.2	0.4	0.1	0.1	0.1
Dokshitsy	0.4	0.3	0.2	0.3	0.3	0.3	0.2
Dubrovno	0.3	0.3	0.2	0.2	0.2	0.2	1.1
Lepel	1.1	0.8	1.0	0.8	0.6	0.3	0.3
Liozno	0.1	0.6	0.5	0.9	2.3	1.6	1.2
Miory	0.5	0.5	0.5	0.3	0.6	0.6	0.1
Orsha	13.3	12.9	10.7	10.6	7.9	8.9	6.8
Polotsk	16.2	23.6	16.8	16.8	22.1	19.8	21.6
Postavy	0.9	2.2	3.9	4.4	3.7	3.0	3.0
Rossony	0.3	0.3	0.4	0.3	0.2	0.1	–
Senno	0.2	0.2	0.0	0.2	0.3	0.1	0.0
Tolochin	7.9	11.4	3.7	1.1	1.6	0.7	3.8
Ushachy	0.4	0.3	0.3	0.1	0.1	0.1	0.1
Chashniki	19.4	11.1	13.1	9.7	5.8	5.6	7.7
Sharkovshchina	0.2	0.2	0.2	0.1	0.0	0.0	–
Shumilino	0.4	0.3	0.4	0.2	0.4	0.3	0.1

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	174.8	230.4	218.4	230.5	211.4	227.8	223.2
Gomel, city of	61.7	89.9	98.2	90.9	85.5	95.0	95.1
District:							
Bragin	–	–	–	0.0	0.0	0.0	0.0
Buda-Koshelyovo	0.9	1.0	1.1	1.4	1.0	1.0	0.6
Vetka	0.6	0.4	1.1	0.4	0.6	0.5	0.4
Gomel	1.4	1.5	5.5	0.1	0.2	0.2	0.2
Dobrush	0.5	0.4	0.4	0.7	0.6	0.0	0.6
Yelsk	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Zhitkovichy	7.2	7.7	7.6	5.3	0.8	4.1	4.8
Zhlobin	24.8	40.4	31.9	34.2	39.6	40.8	38.6
Kalinkovichy	2.8	2.6	2.9	2.6	0.3	2.7	2.3
Korma	0.5	0.2	0.3	0.3	1.0	0.6	0.6
Lelchitsy	0.3	0.2	0.2	0.5	0.4	0.2	0.2
Loyev	0.1	0.2	0.0	0.0	0.0	–	–
Mozyr	43.3	52.5	49.4	64.3	64.3	63.3	62.2
Oktyabrsky	1.3	1.1	0.2	0.1	0.3	0.2	0.2
Petrikov	0.5	0.4	0.5	0.6	0.4	0.2	0.3
Rechitsa	4.3	4.9	2.8	13.3	3.7	16.0	15.9
Rogachev	0.2	1.1	1.5	0.6	1.7	1.0	0.4
Svetlogorsk	21.1	22.3	13.1	14.5	11.0	1.8	0.6
Khoyniki	3.3	3.4	1.5	0.3	0.1	0.2	0.2
Chechersk	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	306.1	291.8	655.4	772.6	574.6	554.2	325.8
Grodno, city of	66.9	72.1	66.4	70.5	60.6	38.8	37.4
District:							
Berestovitsa	0.5	0.3	0.4	0.2	0.2	0.0	0.0
Volkovysk	140.2	137.6	517.8	628.9	458.0	461.3	210.9
Voronovo	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Grodno	7.1	8.8	8.9	7.6	5.2	2.0	7.1
Dyatlovo	0.9	2.2	1.7	1.6	1.6	0.1	0.2
Zelva	0.5	0.5	0.2	0.2	0.3	0.1	0.1
Ivye	0.3	0.3	0.3	0.2	0.1	0.1	0.3
Korelichy	0.3	0.3	0.4	0.4	0.4	0.3	2.2
Lida	60.4	41.6	38.6	33.8	22.9	28.3	35.6
Mosty	1.2	0.7	1.5	7.8	4.8	5.4	14.2
Novogrudok	1.6	1.3	1.2	1.1	1.2	0.2	0.6
Ostrovets	0.1	0.1	0.0	0.0	0.2	0.6	0.7
Oshmyany	19.6	19.3	11.9	10.1	8.8	6.1	5.3
Svisloch	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slonim	3.4	3.2	3.2	3.1	3.3	3.0	3.1
Smorgon	2.8	3.0	2.8	6.6	6.8	7.6	7.8
Shchuchin	0.1	0.1	0.2	0.2	0.1	0.1	0.1

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	53.9	57.1	61.4	52.7	119.4	88.1	67.6
Minsk region	1 408.2	1 218.9	998.3	1 440.1	1 366.1	1 373.8	1 393.5
District:							
Berezino	0.6	0.8	0.9	0.5	5.5	15.3	0.4
Borisov	7.8	6.4	7.6	9.5	9.6	1.7	2.7
Vileyka	3.9	2.6	2.6	2.5	2.0	1.6	0.2
Volozhin	1.0	0.7	0.6	0.8	0.8	0.1	0.2
Dzerzhinsk	1.2	3.7	3.0	5.3	2.9	2.9	5.0
Kletsk	3.3	0.8	0.9	1.2	–	–	–
Kopyl	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Krupki	2.7	3.0	2.3	3.6	2.2	1.8	2.2
Logoysk	0.8	0.8	0.8	1.0	0.2	0.4	0.4
Lyuban	1.4	1.0	75.6	123.4	102.7	85.2	107.5
Minsk	1.5	2.9	2.5	2.8	13.2	14.8	13.9
Molodechno	6.3	11.8	11.1	10.4	8.4	8.7	13.5
Myadel	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Nesvizh	0.9	1.4	1.3	1.1	0.9	1.0	2.4
Pukhovichy	10.8	9.0	3.0	4.8	15.0	4.7	1.4
Slutsk	13.3	16.1	8.0	5.5	4.1	2.5	4.3
Smolevichy	4.5	4.3	5.7	4.9	8.9	19.2	21.6
Soligorsk	1 345.5	1 151.4	869.5	1 260.0	1 187.3	1 209.5	1 215.8
Staryie Dorogi	0.2	0.1	0.2	0.4	0.3	0.2	0.3
Stolbtsy	1.3	1.2	1.7	1.0	1.0	3.2	0.7
Uzda	0.0	0.2	0.2	0.2	0.0	0.0	0.0
Cherven	0.8	0.6	0.7	1.2	1.0	0.6	1.1

Continued

	2011	2012	2013	2014	2015	2016	2017
Mogilev region	600.3	613.2	752.2	935.8	726.3	492.6	409.7
Mogilev, city of	16.5	18.3	14.8	8.8	19.9	25.1	8.2
District:							
Belynichy	0.1	0.3	0.1	0.1	0.1	0.1	0.1
Bobruysk	5.5	4.9	4.9	3.1	3.5	2.1	2.7
Bykhov	1.6	1.5	2.0	2.0	0.4	1.7	1.5
Glusk	0.0	0.0	0.0	0.0	–	–	–
Gorki	0.9	1.7	0.3	0.7	0.4	0.3	0.4
Dribin	0.3	0.1	0.1	0.1	–	0.1	–
Kirovsk	0.3	0.2	0.2	0.3	1.5	0.3	0.0
Klimovichy	9.8	10.1	10.9	11.0	10.9	11.3	11.2
Klichev	0.0	0.0	0.0	0.0	–	0.0	0.0
Kostyukovichy	483.3	495.6	513.9	513.0	494.9	276.8	197.1
Krasnopolye	0.0	0.0	0.0	0.0	–	–	0.0
Krichev	79.1	78.2	202.4	395.1	193.2	173.2	174.7
Krugloye	0.2	0.1	0.0	0.0	–	–	0.0
Mogilev	0.0	0.1	0.8	0.2	0.1	0.7	11.3
Mstislavl	0.2	0.2	0.1	0.1	0.0	0.2	0.0
Osipovichy	1.2	1.1	1.1	1.1	0.9	0.9	1.5
Slavgorod	0.2	0.1	0.0	0.1	0.0	0.0	–
Khotimsk	0.1	0.0	0.0	0.0	–	0.0	0.3
Chausy	0.7	0.1	0.0	0.0	–	–	0.3
Cherikov	0.0	0.0	0.0	0.0	0.0	0.0	–
Shklov	0.4	0.4	0.3	0.1	0.3	0.3	0.4

5.21. Utilization of pollutants captured by gas treatment plants by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Thousand tonnes							
Republic of Belarus	2 573.9	2 379.3	2 639.8	3 386.0	2 850.8	2 553.9	2 294.2
Regions and Minsk city:							
Brest	108.4	106.0	70.3	84.3	63.2	68.6	65.6
Vitebsk	105.4	102.9	91.9	88.1	76.3	73.6	75.8
Gomel	101.3	119.2	124.6	128.4	116.7	72.2	97.3
Grodno	280.8	259.2	628.4	744.0	547.6	531.1	315.7
Minsk city	23.5	20.5	21.1	8.8	12.2	15.3	14.1
Minsk	1 372.7	1 177.4	969.5	1 407.8	1 317.7	1 313.8	1 330.1
Mogilev	581.6	594.1	734.1	924.6	717.1	479.2	395.7
As % of total pollutants captured and detoxified							
Republic of Belarus	91.9	88.4	91.4	92.9	89.5	87.4	87.6
Regions and Minsk city:							
Brest	81.7	70.5	83.0	82.6	80.0	77.7	67.4
Vitebsk	85.2	79.7	79.0	78.7	69.2	76.2	74.3
Gomel	58.0	51.7	57.0	55.7	55.2	31.7	43.6
Grodno	91.8	88.8	95.9	96.3	95.3	95.8	96.9
Minsk city	43.6	35.8	34.4	16.6	10.2	17.4	20.9
Minsk	97.5	96.6	97.1	97.8	96.5	95.6	95.4
Mogilev	96.9	96.9	97.6	98.8	98.7	97.3	96.6

5.22. Utilization of pollutants captured by gas treatment plants by regions, cities and districts

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	2 573.9	2 379.3	2 639.8	3 386.0	2 850.8	2 553.9	2 294.2
Brest region	108.4	106.0	70.3	84.3	63.2	68.6	65.6
Brest, city of	1.4	1.2	0.9	1.0	2.5	2.3	0.2
District:							
Baranovichy	9.0	7.3	7.2	6.7	6.5	6.4	5.8
Bereza	2.4	3.2	0.8	10.3	4.3	2.5	2.7
Brest	–	–	0.0	0.0	0.0	0.0	0.1
Gantsevichy	0.0	0.0	0.0	0.0	–	0.0	0.0
Drogichin	0.0	0.2	0.3	0.6	0.3	0.5	0.3
Zhabinka	19.9	20.3	0.7	0.7	1.1	0.9	1.2
Ivanovo	2.6	2.2	1.7	1.2	0.9	0.9	1.0
Ivatsevichy	12.4	11.3	16.4	23.6	14.6	13.0	13.1
Kamenets	0.6	1.8	1.9	2.5	2.5	1.2	1.8
Kobrin	12.2	12.1	0.1	2.0	0.3	–	–
Luninets	0.9	0.7	0.9	1.1	0.0	0.8	0.7
Lyakhovichy	40.5	40.5	31.8	24.3	20.7	30.6	28.8
Malorita	1.9	1.5	1.2	1.2	0.9	0.8	0.8
Pinsk	3.6	2.8	5.7	8.3	7.9	8.0	8.3
Pruzhany	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Stolin	0.7	0.5	0.5	0.3	0.4	0.3	0.5

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	105.4	102.9	91.9	88.1	76.3	73.6	75.8
Vitebsk, city of	53.3	53.5	53.5	53.5	53.1	53.1	53.3
District:							
Beshenkovichy	0.0	0.0	0.0	0.0	0.0	–	–
Braslav	1.4	0.6	0.5	0.4	0.4	0.4	0.3
Verkhnedvinsk	0.7	0.7	–	–	–	–	0.1
Vitebsk	1.7	2.4	0.5	2.1	–	–	–
Glubokoye	4.1	5.9	7.0	7.2	0.5	0.5	–
Gorodok	0.3	0.2	0.2	0.4	0.1	0.1	0.1
Dokshitsy	0.4	0.3	–	–	–	0.0	0.0
Lepel	0.9	0.5	0.7	0.4	0.3	0.3	0.2
Liozno	0.1	0.6	0.2	0.5	1.0	0.6	0.7
Miory	0.0	0.4	0.3	0.3	0.5	0.5	–
Orsha	10.4	10.1	6.8	7.8	5.7	5.0	3.9
Polotsk	4.8	4.9	4.6	4.3	4.3	3.9	3.6
Postavy	0.4	0.6	1.3	1.2	2.6	2.7	2.8
Senno	–	–	–	–	0.3	0.1	–
Tolochin	7.3	10.9	3.1	0.5	1.6	0.7	3.1
Ushachy	0.4	0.3	0.3	0.1	0.1	0.1	0.1
Chashniki	19.1	10.8	12.9	9.3	5.8	5.5	7.7
Sharkovshchina	0.1	0.2	0.2	0.1	0.0	0.0	–
Shumilino	–	–	–	–	–	–	–

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	101.3	119.2	124.6	128.4	116.7	72.2	97.3
Gomel, city of	46.4	61.5	69.5	64.4	62.1	65.7	75.0
District:							
Buda-Koshelyovo	0.4	0.5	0.5	0.8	0.7	1.0	0.6
Vetka	0.6	0.4	1.1	0.4	0.6	0.5	0.4
Gomel	1.4	1.2	1.6	0.0	0.1	0.0	0.0
Dobrush	0.4	0.3	0.3	0.4	0.4	0.0	0.4
Zhitkovichy	0.6	0.3	0.3	0.1	0.1	0.2	0.2
Zhlobin	18.6	21.3	31.8	33.9	39.4	1.8	18.9
Kalinkovichy	2.7	2.6	2.7	2.5	0.2	0.1	0.1
Korma	0.5	0.2	–	0.0	0.8	0.6	0.6
Lelchitsy	0.2	0.2	0.2	0.2	0.0	–	–
Loyev	0.0	0.0	–	–	–	–	–
Mozyr	1.3	1.3	0.3	0.6	0.1	0.1	0.1
Oktyabrsky	1.3	1.1	0.1	0.1	0.3	0.1	0.1
Petrikov	0.4	0.3	0.4	0.4	0.3	0.0	0.1
Rechitsa	2.8	2.5	1.1	11.5	0.4	0.4	0.5
Rogachev	0.2	1.1	1.4	0.2	0.8	0.3	0.0
Svetlogorsk	20.1	21.2	11.9	12.8	10.4	1.2	0.1
Khoyniki	3.3	3.3	1.5	0.2	0.1	0.1	0.2
Chechersk	0.0	0.0	–	–	–	0.0	0.0

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	280.8	259.2	628.4	744.0	547.6	531.1	315.7
Grodno, city of	47.9	47.9	48.8	53.7	46.3	27.3	32.3
District:							
Berestovitsa	0.5	0.3	0.4	0.2	–	–	–
Volkovysk	140.1	137.6	517.7	628.7	457.8	461.3	210.8
Voronovo	0.3	0.2	0.3	0.3	0.1	0.2	0.1
Grodno	6.2	7.7	6.4	6.0	1.9	0.8	6.4
Dyatlovo	0.1	0.1	0.1	0.1	0.1	–	0.1
Zelva	0.5	0.5	0.2	0.2	0.3	0.1	0.1
Ivye	0.3	0.2	0.3	0.1	0.1	0.1	0.2
Korelichy	0.3	0.3	0.3	0.3	0.3	0.3	2.1
Lida	58.2	39.3	36.0	31.1	20.6	25.8	33.6
Mosty	1.2	0.7	1.5	7.8	4.6	5.2	13.8
Novogrudok	1.6	1.3	1.0	1.1	1.1	0.1	0.1
Ostrovets	0.1	0.1	0.0	–	0.2	0.3	0.4
Oshmyany	19.6	19.3	11.9	10.1	8.4	5.7	5.3
Slonim	3.2	3.1	3.0	3.0	3.0	2.9	2.9
Smorgon	0.9	0.6	0.6	1.3	3.0	1.1	7.2
Shchuchin	–	–	–	–	–	–	–

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	23.5	20.5	21.1	8.8	12.2	15.3	14.1
Minsk region	1 372.7	1 177.4	969.5	1 407.8	1 317.7	1 313.8	1 330.1
District:							
Berezino	0.1	0.3	0.0	0.0	0.0	–	–
Borisov	3.3	1.7	2.0	1.7	1.9	1.0	0.6
Vileyka	0.6	0.2	0.3	0.3	0.3	0.1	0.0
Volozhin	1.0	0.1	0.1	0.1	0.1	0.1	0.2
Dzerzhinsk	0.9	0.9	2.7	5.0	2.1	2.9	4.7
Kletsk	3.3	0.8	0.9	1.2	–	–	–
Kopyl	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Krupki	0.0	0.1	0.0	0.0	0.1	0.1	0.2
Logoysk	0.2	0.2	0.2	0.2	0.2	0.1	0.0
Lyuban	1.0	0.8	75.3	123.1	102.4	85.0	107.3
Minsk	1.0	1.3	1.1	1.4	5.5	11.4	1.5
Molodechno	5.4	11.1	10.6	10.1	8.3	8.6	9.2
Myadel	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Nesvizh	0.7	1.1	1.1	1.0	0.7	0.7	2.1
Pukhovichy	10.4	8.7	3.0	4.7	13.3	3.6	0.7
Slutsk	2.6	3.1	4.1	2.5	0.5	0.4	1.7
Smolevichy	0.3	0.1	1.7	1.0	1.0	1.1	1.0
Soligorsk	1 339.8	1 144.8	863.8	1 253.1	1 178.8	1 194.7	1 198.9
Saryie Dorogi	–	0.0	–	–	–	–	–
Stolbtsy	1.2	1.0	1.5	0.9	0.9	3.2	0.6
Uzda	–	0.1	0.2	0.2	–	–	–
Cherven	0.8	0.6	0.7	1.2	1.0	0.6	1.1

Continued

	2011	2012	2013	2014	2015	2016	2017
Mogilev region	581.6	594.1	734.1	924.6	717.1	479.2	395.7
Mogilev, city of	5.1	5.5	3.7	1.8	13.6	15.4	0.5
District:							
Belynychy	0.0	0.2	–	–	–	–	–
Bobruysk	2.1	1.9	1.8	1.6	2.1	1.1	1.1
Bykhov	0.5	0.4	0.8	1.0	0.4	0.5	0.3
Glusk	0.0	0.0	0.0	0.0	–	–	–
Gorki	0.1	1.3	0.3	0.3	0.0	0.0	0.0
Dribin	0.3	0.1	0.1	0.1	–	0.1	–
Kirovsk	0.0	0.0	0.0	0.0	1.5	0.2	0.0
Klimovichy	9.8	10.1	10.9	10.9	10.9	11.3	11.2
Klichev	0.0	0.0	–	0.0	–	–	–
Kostyukovichy	483.3	495.5	513.7	513.0	494.9	276.7	197.1
Krasnopolye	0.0	0.0	0.0	0.0	–	–	–
Krichev	79.0	78.1	202.3	395.1	193.1	173.2	174.7
Krugloye	0.0	0.0	0.0	0.0	–	–	0.0
Mogilev	0.0	0.0	0.1	0.1	0.0	0.6	10.4
Mstislavl	0.2	0.2	0.1	0.1	0.0	0.2	0.0
Osipovichy	0.8	0.4	0.2	0.4	0.3	0.3	0.2
Slavgorod	0.2	0.1	0.1	0.1	0.0	0.0	–
Khotimsk	0.1	–	–	–	–	–	–
Shklov	0.0	0.0	0.0	0.0	0.1	0.1	0.0

5.23. Number of stationary sources of air polluting emissions by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	125 171	132 500	136 425	132 282	133 012	135 987	137 484
Regions and Minsk city:							
Brest	15 159	16 593	19 331	18 366	16 408	20 234	20 492
Vitebsk	12 631	13 976	15 789	15 762	16 801	16 641	15 376
Gomel	19 931	20 966	19 962	18 548	19 673	21 457	22 812
Grodno	19 454	20 223	22 148	22 408	22 180	19 471	22 510
Minsk city	14 466	14 308	13 980	13 605	13 702	14 660	14 252
Minsk	26 311	28 682	27 281	26 808	26 924	25 967	25 808
Mogilev	17 219	17 752	17 934	16 785	17 324	17 557	16 234
of which organised sources of emission							
Republic of Belarus	108 095	112 421	114 976	110 270	107 272	108 900	110 426
Regions and Minsk city:							
Brest	12 847	13 576	15 971	15 486	12 643	16 229	16 696
Vitebsk	10 219	11 399	12 931	12 748	13 184	12 435	11 570
Gomel	17 442	18 100	16 880	15 818	16 269	17 463	18 521
Grodno	15 782	16 094	17 337	17 312	16 956	14 454	16 596
Minsk city	14 049	13 903	13 494	13 071	12 599	13 458	13 164
Minsk	22 458	23 932	23 002	21 319	21 162	20 174	20 876
Mogilev	15 298	15 417	15 361	14 516	14 459	14 687	13 003

Continued

	2011	2012	2013	2014	2015	2016	2017
of which equipped with gas treatment plants							
Republic of Belarus	13 088	13 619	13 786	14 023	13 641	13 148	12 852
Regions and Minsk city:							
Brest	1 625	1 697	1 576	1 585	1 655	1 725	1 473
Vitebsk	1 329	1 396	1 557	1 584	1 518	1 408	1 380
Gomel	2 743	2 836	2 781	2 941	2 667	2 670	2 766
Grodno	1 249	1 379	1 468	1 603	1 623	1 424	1 595
Minsk city	2 243	2 228	2 201	2 139	2 101	2 145	1 998
Minsk	1 887	1 963	2 051	2 001	2 025	1 805	1 855
Mogilev	2 012	2 120	2 152	2 170	2 052	1 971	1 785
As % of total organised sources of emission							
Republic of Belarus	12.1	12.1	12.0	12.7	12.7	12.1	11.6
Regions and Minsk city:							
Brest	12.6	12.5	9.9	10.2	13.1	10.6	8.8
Vitebsk	13.0	12.2	12.0	12.4	11.5	11.3	11.9
Gomel	15.7	15.7	16.5	18.6	16.4	15.3	14.9
Grodno	7.9	8.6	8.5	9.3	9.6	9.9	9.6
Minsk city	16.0	16.0	16.3	16.4	16.7	15.9	15.2
Minsk	8.4	8.2	8.9	9.4	9.6	8.9	8.9
Mogilev	13.2	13.8	14.0	14.9	14.2	13.4	13.7

5.24. Number of days with maximum single allowable concentration of pollutants exceeded by selected cities¹⁾

City, pollutant monitored	Maximum single allowable concentration, microgrammes per m ³	Number of days with prescribed maximum single allowable concentration exceeded						
		2011	2012	2013	2014	2015	2016	2017
Bobruysk								
Solid particles	300	0	0	0	0	0	0	0
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	1	0	1	1	0	0	0
Phenol	10	0	0	0	2	0	0	0
Brest								
Solid particles	300	0	0	0	1	0	1	0
Sulphur dioxide	500	0	0	0	...	...	0	0
Carbon monoxide	5 000	0	0	0	1	4	0	0
Nitrogen dioxide	250	2	0	3	14	1	2	3
Vitebsk								
Solid particles	300	0	0	0	0	0	0	0
Sulphur dioxide	500	0	0	...	...	...	...	...
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	0	0	0	0	0	2	0
Phenol	10	0	0	0	0	0	0	...
Ammonia	200	0	0	0	0	2	1	1
Gomel								
Solid particles	300	17	0	1	10	4	0	1
Carbon monoxide	5 000	...	...	...	...	...	35	40
Nitrogen dioxide	250	0	0	0	1	0	0	0
Phenol	10	0	0	0	0	0	0	0
Ammonia	200	0	0	0	0	0	0	0

Continued

City, pollutant monitored	Maximum single allowable concentration, microgrammes per m ³	Number of days with prescribed maximum single allowable concentration exceeded						
		2011	2012	2013	2014	2015	2016	2017
Grodno								
Solid particles	300	5	1	0	0	0	0	0
Sulphur dioxide	500	0	0	0	0	0	...	0
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	13	0	0	0	0	0	1
Ammonia	200	0	0	0	0	0	0	0
Minsk city								
Solid particles	300	16	0	1	3	0	9	1
Sulphur dioxide	500	0	1	0	0	0	0	0
Carbon monoxide	5 000	0	0	0	1	0	6	3
Nitrogen dioxide	250	9	9	9	2	1	5	18
Phenol	10	0	0	0	0	0	0	0
Ammonia	200	1	0	2	0	0	0	0
Mogilev								
Solid particles	300	5	2	0	0	0	0	0
Sulphur dioxide	500	0	0	0	...	0	...	...
Carbon monoxide	5 000	1	0	1	0	0	1	0
Nitrogen dioxide	250	39	25	33	2	22	3	2
Phenol	10	80	30	32	72	42	33	15
Hydrogen sulphide	8	25	8	0	0	1	0	0
Methyl alcohol	1 000	0	2	1	0	0	0	0
Ammonia	200	11	5	2	9	21	16	1
Orsha								
Solid particles	300	0	0	0	0	0	0	0
Carbon monoxide	5 000	0	0	0	0	0	1	0
Nitrogen dioxide	250	2	1	0	0	0	1	0

Continued

City, pollutant monitored	Maximum single allowable concentration, microgrammes per m ³	Number of days with prescribed maximum single allowable concentration exceeded						
		2011	2012	2013	2014	2015	2016	2017
Novopolotsk								
Solid particles	300	6	0	0	3	10	8	4
Sulphur dioxide	500	3	0	16	15	35	13	19
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	11	11	11	15	17	5	1
Phenol	10	6	4	2	3	5	7	6
Hydrogen sulphide	8	5	12	0	0	0	0	0
Ammonia	200	0	1	0	0	0	0	0
Pinsk								
Solid particles	300	0	0	0	12	7	2	2
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	0	0	0	1	0	0	0
Polotsk								
Solid particles	300	1	1	2	3	9	5	5
Sulphur dioxide	500	1	0	8	12	...	...	0
Carbon monoxide	5 000	0	0	0	0	0	1	1
Nitrogen dioxide	250	1	8	10	6	3	1	1
Phenol	10	4	3	1	1	2	1	3
Ammonia	200	0	0	1	0	0	0	0
Hydrogen sulphide	8	0	4	0	0	0	0	0
Svetlogorsk								
Solid particles	300	1	0	0	2	1	0	0
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	0	0	0	0	0	0	0

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus. For nitrogen dioxide and carbon monoxide data are based on surveys in points with discrete sample collection. For sulphur dioxide data are based on continuous monitoring at automatic stations.

5.25. Average annual concentrations of air pollutants by selected cities¹⁾

(microgrammes per cubic metre)

City, pollutant monitored	2011	2012	2013	2014	2015	2016	2017
Bobruysk							
Solid particles	<15	<15	<15	<15	<15	<15	<15
Carbon monoxide	812	738	769	879	1 129	1 263	1 507
Nitrogen dioxide	29	24	33	37	46	49	45
Phenol	0.7	1.1	1.3	3.0	3.1	3.2	3.1
Brest							
Solid particles	18	27	33	35	35	43	48
Sulphur dioxide	9	14	19	...	...	21	12
Carbon monoxide	613	797	913	938	924	859	904
Nitrogen dioxide	26	33	34	39	36	24	28
Vitebsk							
Solid particles	115	112	113	52	42	37	<15
Sulphur dioxide	4	18	...	...	...	...	31
Carbon monoxide	675	610	517	530	519	586	696
Nitrogen dioxide	36	35	32	41	37	38	43
Phenol	1.1	1.2	1.4	1.6	1.2	0.4	–
Ammonia	25	23	29	28	29	13	17
Gomel							
Solid particles	45	23	29	33	37	31	31
Sulphur dioxide	8	36	...	...	...	...	...
Carbon monoxide	444	422	452	500	530	588	549
Nitrogen dioxide	20	21	17	26	27	27	39
Phenol	2.5	1.7	0.6	0.9	0.9	1.1	0.7
Ammonia	36	15	12	11	14	18	24

Continued

City, pollutant monitored	2011	2012	2013	2014	2015	2016	2017
Grodno							
Solid particles	40	37	26	31	26	<15	<15
Sulphur dioxide	7	46	9	15	26	...	26
Carbon monoxide	665	720	664	509	567	417	348
Nitrogen dioxide	28	19	17	26	30	25	27
Ammonia	17	19	15	19	14	15	16
Minsk City							
Solid particles	<15	<15	<15	21	25	<15	<15
Sulphur dioxide	4	18	4	8	15	15	17
Carbon monoxide	386	434	499	470	430	401	413
Nitrogen dioxide	32	37	39	37	35	32	30
Phenol	0.4	0.4	0.3	0.6	0.5	0.6	0.5
Ammonia	13	14	14	11	8	7	6
Mogilev							
Solid particles	47	44	27	<15	<15	<15	<15
Sulphur dioxide	13	30	24	...	43	...	...
Carbon monoxide	875	670	661	495	479	483	429
Nitrogen dioxide	55	49	49	51	57	41	41
Phenol	1.8	1.6	1.8	1.7	1.7	1.4	1.2
Carbon bisulphide	4	6	6	4	1.2	0.8	1.1
Methyl alcohol	125	87	108	68	117	68	48
Novopolotsk							
Solid particles	<15	<15	<15	<15	<15	21	19
Sulphur dioxide	13	19	24	32	64	50	47
Carbon monoxide	835	330	577	916	602	604	569
Nitrogen dioxide	42	47	54	46	34	28	30
Phenol	0.9	1.0	1.0	1.2	1.3	2.5	2.3
Ammonia	8	10	8	11	15	13	13
Hydrogen sulphide	1.0	1.0	1.2	1.1	0.8	0.9	1.1

Continued

City, pollutant monitored	2011	2012	2013	2014	2015	2016	2017
Orsha							
Solid particles	15	<15	<15	<15	<15	<15	<15
Carbon monoxide	762	749	781	1 100	1 058	1 090	1 106
Nitrogen dioxide	21	25	21	23	28	29	27
Pinsk							
Solid particles	52	42	20	43	67	30	<15
Carbon monoxide	369	419	515	517	584	577	683
Nitrogen dioxide	16	32	49	22	26	28	24
Polotsk							
Solid particles	<15	<15	<15	<15	<15	27	24
Sulphur dioxide	11	43	67	46	...	...	39
Carbon monoxide	1 169	483	797	1 256	957	646	535
Nitrogen dioxide	55	63	59	58	42	26	32
Phenol	0.9	1.0	1.0	1.3	1.2	2.4	2.2
Ammonia	18	20	15	12	17	13	13
Hydrogen sulphide	1.0	1.0	1.2	1.0	0.6	0.9	1.2
Hydrogen fluoride	0.4	0.9	0.5	0.8	1.2	0.8	1.2
Svetlogorsk							
Solid particles	54	35	22	50	45	30	31
Carbon monoxide	878	648	705	751	637	397	538
Nitrogen dioxide	33	34	53	32	31	31	37

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus. For nitrogen dioxide and carbon monoxide data are based on surveys in points with discrete sample collection. For sulphur dioxide data are based on continuous monitoring at automatic stations.

5.26. Consumption of ozone depleting substances¹⁾

	2011	2012	2013	2014	2015	2016	2017
Total, metric tonnes	210.1	163.8	140.9	115.1	63.3	51.5	41.2
Total, metric tonnes in terms of ozone-depleting potential	9.6	8.3	7.2	5.8	4.5	3.5	2.6
Assigned for Belarus maximum amount of consumption, metric tonnes in terms of ozone-depleting potential	12.7	12.7	12.7	12.7	5.1	5.1	5.1

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

5.27. Air quality monitoring by regions and Minsk city¹⁾

	2011	2012	2013	2014	2015	2016	2017
Number of tested air samples – total, thousand							
Republic of Belarus	81.6	76.4	67.2	78.3	78.2	81.9	73.3
Regions and Minsk city:							
Brest	6.1	4.1	2.6	4.8	5.2	6.5	3.7
Vitebsk	1.4	0.3	0.6	0.6	0.5	0.5	0.4
Gomel	26.4	24.5	21.0	21.4	23.8	23.0	23.1
Grodno	4.0	4.1	3.6	4.7	5.1	6.5	3.8
Minsk city	17.4	17.4	18.5	21.1	20.4	24.5	23.0
Minsk	10.7	8.6	6.9	8.9	7.3	6.6	6.6
Mogilev	15.6	17.4	14.0	16.8	15.9	14.2	12.8

Continued

	2011	2012	2013	2014	2015	2016	2017
of which air samples with maximum single allowable concentration exceeded, thousand							
Republic of Belarus	0.7	0.5	0.5	0.7	0.6	0.3	0.1
Regions and Minsk city:							
Brest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vitebsk	–	–	–	–	0.0	0.0	–
Gomel	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Grodno	–	–	0.0	0.0	0.0	0.0	–
Minsk city	0.4	0.4	0.4	0.5	0.5	0.2	0.1
Minsk	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Mogilev	0.1	0.1	0.0	0.1	0.0	0.0	–
As % of total air samples tested							
Republic of Belarus	0.9	0.6	0.7	0.9	0.8	0.4	0.2
Regions and Minsk city:							
Brest	0.8	0.2	0.2	0.0	0.1	0.0	0.2
Vitebsk	–	–	–	–	0.0	0.0	–
Gomel	0.3	0.1	0.1	0.1	0.4	0.0	0.0
Grodno	–	–	0.0	0.0	0.0	0.0	–
Minsk city	2.4	2.3	2.2	2.4	2.5	0.8	0.5
Minsk	0.9	0.3	0.3	0.2	0.1	1.5	0.1
Mogilev	0.5	0.4	0.3	0.6	0.2	0.0	–

¹⁾ Data of the Ministry of Health of the Republic of Belarus.

6. CLIMATE CHANGE

The main indicators measuring climate change are air temperature, atmospheric precipitation and greenhouse gas emissions.

Air temperature is directly connected with the state of the climate system of Earth. The indicator shows trends in average annual temperature fluctuations and allows for estimating the impact of temperature on global climate change, resulting both from cyclicity of natural climatic changes and from anthropogenic impact.

Atmospheric precipitation forms renewable resources of surface and groundwater which, in its turn, has an impact on the state of all the components of the environment (soils, forests, flora and fauna). The amount, quality and distribution of precipitation as well as its seasonal and annual variation of distribution influence significantly agriculture and forestry. Moreover, the amount of precipitation can affect the state of air regulating its humidity, as well preventing the distribution of solids concentration in the ground.

Greenhouse gases are gaseous components of the atmosphere, both of natural and anthropogenic origin, that absorb and reradiate infrared radiation. They include carbon dioxide, methane, dinitrogen monoxide, fluorine-containing gases. Greenhouse gas emissions are recalculated in terms of carbon dioxide (CO₂) equivalent.

Carbon dioxide (CO₂) is one of the main greenhouse gases enhancing natural greenhouse effect and underlying temperature changes and other consequences for the Earth's climate. CO₂ accounts for more than 80% of global greenhouse gas emissions.

Greenhouse gas emissions are estimated by the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus using the recommendations of the Intergovernmental Panel on Climate Change (IPCC Guidelines 2006).

The section is prepared on the basis of data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

6.1. Average annual air temperatures by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Average annual temperature, °C							
Republic of Belarus	7.5	6.8	7.5	7.8	8.5	7.7	7.6
Regions and Minsk city:							
Brest	8.1	7.6	8.2	8.5	9.3	8.5	8.3
Vitebsk	6.9	6.0	6.8	7.1	7.8	6.9	6.8
Gomel	8.0	7.4	8.3	8.4	9.2	8.3	8.2
Grodno	7.6	6.9	7.5	7.8	8.6	7.7	7.6
Minsk city	7.5	6.7	7.5	7.8	8.7	7.8	7.6
Minsk	7.4	6.6	7.3	7.7	8.4	7.4	7.4
Mogilev	7.0	6.2	7.1	7.2	8.1	7.2	7.1
Divergence from the norm (1981-2010), °C							
Republic of Belarus	0.8	0.1	0.8	1.1	1.8	1.0	0.9
Regions and Minsk city:							
Brest	0.7	0.2	0.8	1.1	1.9	1.1	0.9
Vitebsk	0.9	0.0	0.8	1.1	1.8	0.9	0.8
Gomel	0.8	0.2	1.1	1.2	2.0	1.1	1.0
Grodno	0.8	0.1	0.7	1.0	1.8	0.9	0.8
Minsk city	0.8	0.0	0.8	1.1	2.0	1.1	0.9
Minsk	0.9	0.1	0.8	1.2	1.9	0.9	0.9
Mogilev	0.8	0.0	0.9	1.0	1.9	1.0	0.9

6.2. Average monthly air temperatures by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
January, °C							
Republic of Belarus	-3.7	-4.8	-7.1	-7.0	-1.1	-7.3	-5.5
Regions and Minsk city:							
Brest	-2.6	-3.3	-5.3	-5.3	0.1	-5.3	-5.0
Vitebsk	-4.5	-5.7	-8.5	-8.0	-1.8	-8.8	-5.8
Gomel	-3.4	-4.8	-6.4	-6.6	-1.0	-7.0	-5.3
Grodno	-3.2	-3.8	-6.5	-6.4	-0.7	-6.5	-5.0
Minsk city	-3.8	-5.0	-7.3	-7.4	-1.3	-7.4	-5.7
Minsk	-3.8	-4.9	-7.5	-7.3	-1.2	-7.8	-5.9
Mogilev	-4.9	-5.8	-8.3	-8.3	-2.0	-8.3	-6.2
Divergence from the norm (1981-2010), °C							
Republic of Belarus	0.8	-0.3	-2.6	-2.5	3.4	-2.8	-1.0
Regions and Minsk city:							
Brest	-2.1	-2.8	-4.8	-4.8	0.6	-4.8	-1.5
Vitebsk	0.5	-0.7	-3.5	-3.0	3.2	-3.8	-0.8
Gomel	0.9	-0.5	-2.1	-2.3	3.3	-2.7	-1.0
Grodno	0.8	0.2	-2.5	-2.4	3.3	-2.5	-1.0
Minsk city	0.7	-0.5	-2.8	-2.9	3.2	-2.9	-1.2
Minsk	0.8	-0.3	-2.9	-2.7	3.4	-3.2	-1.3
Mogilev	0.1	-0.8	-3.3	-3.3	3.0	-3.3	-1.2
July, °C							
Republic of Belarus	20.2	20.6	18.5	20.6	18.4	19.4	17.4
Regions and Minsk city:							
Brest	19.5	21.2	18.8	21.1	19.2	19.7	18.2
Vitebsk	20.5	19.8	18.1	20.1	17.4	18.8	16.6
Gomel	21.0	21.5	19.3	21.3	19.5	20.8	18.1
Grodno	19.2	20.2	18.2	20.2	17.9	18.4	17.1
Minsk city	20.2	21.0	18.6	20.8	18.7	19.5	17.6
Minsk	20.1	20.6	18.3	20.6	18.0	19.2	17.2
Mogilev	20.6	20.4	18.2	20.1	18.3	19.7	17.3
Divergence from the norm (1981-2010), °C							
Republic of Belarus	1.8	2.2	0.1	2.2	0.0	1.0	-1.0
Regions and Minsk city:							
Brest	0.8	2.5	0.1	2.4	0.5	1.0	-0.5
Vitebsk	2.6	1.9	0.2	2.2	-0.5	0.9	-1.3
Gomel	1.8	2.3	0.1	2.1	0.3	1.6	-1.1
Grodno	1.2	2.2	0.2	2.2	-0.1	0.4	-0.9
Minsk city	1.7	2.5	0.1	2.3	0.2	1.0	-0.9
Minsk	1.8	2.3	0.0	2.3	-0.3	0.9	-1.1
Mogilev	2.3	2.1	-0.1	1.8	0.0	1.4	-1.0

6.3. Average annual precipitation by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Average annual precipitation, millimetre							
Republic of Belarus	583	757	671	567	540	742	765
Regions and Minsk city:							
Brest	560	647	712	548	518	743	715
Vitebsk	595	785	670	622	571	741	824
Gomel	604	844	660	533	520	720	712
Grodno	583	672	675	589	569	786	797
Minsk city	631	839	677	604	563	756	788
Minsk	579	766	657	582	574	778	806
Mogilev	574	830	650	523	499	671	730
As % of the norm (1981-2010)							
Republic of Belarus	90	117	104	88	83	115	118
Regions and Minsk city:							
Brest	92	106	117	90	85	122	117
Vitebsk	86	114	97	90	83	107	119
Gomel	95	132	103	83	81	113	111
Grodno	89	102	103	90	87	120	121
Minsk city	91	121	98	87	81	109	114
Minsk	89	117	101	89	88	119	124
Mogilev	92	133	104	84	80	108	117

6.4. Average monthly precipitation by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Average for January, millimetre							
Republic of Belarus	43	60	47	48	54	50	38
Regions and Minsk city:							
Brest	38	50	59	46	46	50	27
Vitebsk	62	64	37	42	59	54	43
Gomel	32	60	47	49	50	49	40
Grodno	40	61	55	53	48	42	36
Minsk city	54	78	50	51	62	55	36
Minsk	44	68	48	46	56	50	40
Mogilev	43	57	34	50	64	53	39
As % of the norm (1981-2010)							
Republic of Belarus	108	150	118	120	135	125	95
Regions and Minsk city:							
Brest	103	135	159	124	124	135	73
Vitebsk	138	142	82	93	131	120	96
Gomel	89	167	131	136	139	136	111
Grodno	91	139	125	120	109	95	82
Minsk city	120	173	111	113	138	122	80
Minsk	105	162	114	110	133	119	95
Mogilev	119	158	94	139	178	147	108
Average for July, millimetre							
Republic of Belarus	129	55	77	64	75	133	113
Regions and Minsk city:							
Brest	158	59	59	50	56	125	121
Vitebsk	94	61	100	65	75	144	122
Gomel	142	69	62	81	99	89	109
Grodno	134	61	79	66	72	171	111
Minsk city	153	71	96	55	53	135	150
Minsk	130	46	74	55	76	153	121
Mogilev	114	34	85	69	72	113	94
As % of the norm (1981-2010)							
Republic of Belarus	152	65	91	75	88	156	133
Regions and Minsk city:							
Brest	186	69	69	59	66	147	142
Vitebsk	115	74	122	79	91	176	149
Gomel	153	74	67	87	106	96	117
Grodno	156	71	92	77	84	199	129
Minsk city	172	80	108	62	60	152	169
Minsk	159	56	90	67	93	187	148
Mogilev	139	41	104	84	88	138	115

6.5. Greenhouse gas emissions

(million tonnes in terms of CO₂ per year)

	2011	2012	2013	2014	2015	2016
Total, without land use, land-use change and forestry	93.6	94.5	95.7	94.9	90.2	91.5
as % of 1990	67.2	67.9	68.7	68.1	64.7	65.7
Total, with land use, land-use change and forestry	56.0	62.5	60.6	64.8	62.8	69.6
as % of 1990	47.4	52.9	51.3	54.8	53.1	58.9

6.6. Greenhouse gas emissions by sector

(million tonnes in terms of CO₂ per year)

	2011	2012	2013	2014	2015	2016
Energy	57.5	58.3	59.2	58.0	54.0	56.0
Industrial processes and product use	6.3	6.3	6.5	6.9	6.4	6.0
Agriculture	24.3	24.4	23.8	23.7	23.1	23.1
Waste	5.5	5.6	6.2	6.3	6.6	6.4
Total, without land use, land-use change and forestry	93.6	94.5	95.7	94.9	90.2	91.5
Land use, land-use change and forestry ¹⁾	-37.6	-32.0	-35.1	-30.1	-27.4	-21.9
Total, with land use, land-use change and forestry	56.0	62.5	60.6	64.8	62.8	69.6

¹⁾ The minus sign (-) means absorption of greenhouse gases.

6.7. Structure of greenhouse gas emissions

(as percentage of total)

	2011	2012	2013	2014	2015	2016
Total, without land use, land-use change and forestry	100	100	100	100	100	100
of which:						
energy	61.4	61.6	61.9	61.1	59.9	61.2
industrial processes and product use	6.7	6.7	6.8	7.3	7.1	6.6
agriculture	26.0	25.8	24.9	25.0	25.6	25.2
waste	5.9	5.9	6.5	6.7	7.4	6.9

6.8. Greenhouse gas emissions in energy sector

	2011	2012	2013	2014	2015	2016
Total, million tonnes in terms of CO ₂ per year						
Greenhouse gas emissions in energy sector	57.5	58.3	59.2	58.0	54.0	56.0
of which:						
carbon dioxide	56.1	56.9	57.8	56.6	52.7	54.7
methane	1.2	1.2	1.2	1.2	1.1	1.1
dinitrogen monoxide	0.2	0.2	0.3	0.3	0.3	0.2
As % of total						
Greenhouse gas emissions in energy sector	100	100	100	100	100	100
of which:						
carbon dioxide	97.6	97.6	97.6	97.5	97.4	97.6
methane	2.0	2.0	2.0	2.0	2.1	2.0
dinitrogen monoxide	0.4	0.4	0.5	0.5	0.5	0.4

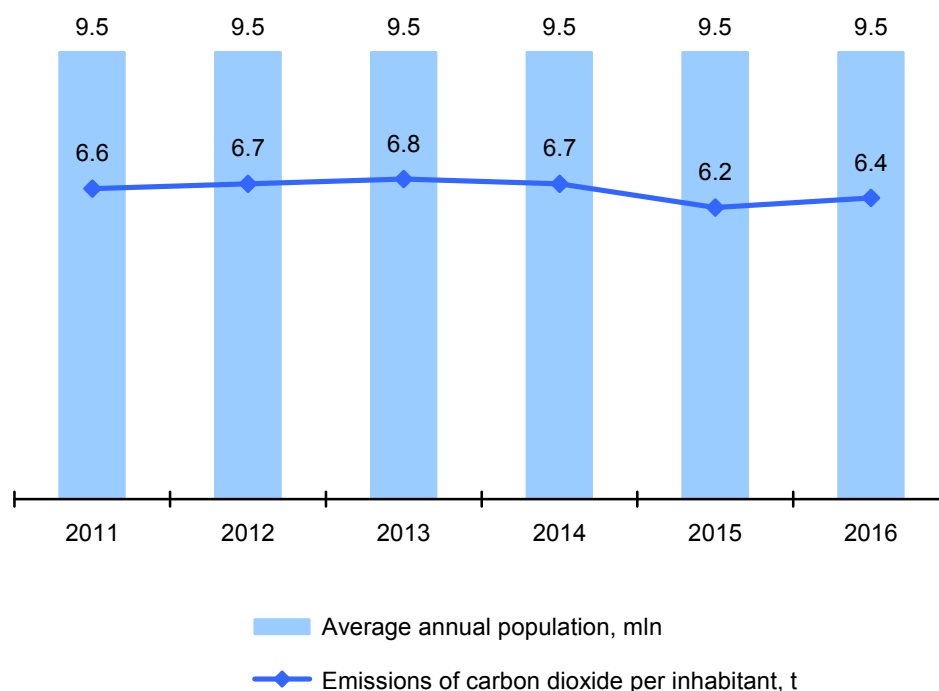
6.9. Greenhouse gas emissions from industrial processes and product use

	2011	2012	2013	2014	2015	2016
Total, million tonnes in terms of CO ₂ per year						
Greenhouse gas emissions from industrial processes and product use	6.3	6.3	6.5	6.9	6.4	6.0
of which:						
carbon dioxide	5.4	5.5	5.7	6.1	5.7	5.3
methane	0.1	0.1	0.1	0.1	0.1	0.1
dinitrogen monoxide	0.7	0.7	0.7	0.7	0.7	0.7
fluorine-containing gases	0.0	0.0	0.0	0.0	0.0	0.0
As % of total						
Greenhouse gas emissions from industrial processes and product use	100	100	100	100	100	100
of which:						
carbon dioxide	87.0	87.5	87.8	88.8	87.9	88.2
methane	1.3	1.3	1.1	1.0	1.1	1.0
dinitrogen monoxide	11.7	11.2	11.1	10.2	11.0	10.8
fluorine-containing gases	0.0	0.0	0.0	0.0	0.0	0.0

6.10. Emissions of carbon dioxide (CO₂)

	2011	2012	2013	2014	2015	2016
Total, million tonnes						
Emissions of carbon dioxide (CO ₂)	62.8	63.7	64.4	63.8	59.0	60.5
of which by sector:						
energy	56.1	56.8	57.8	56.6	52.7	54.7
industrial processes and product use	5.4	5.5	5.7	6.1	5.7	5.3
As percentage of total						
Emissions of carbon dioxide (CO ₂)	100	100	100	100	100	100
of which by sector:						
energy	89.4	89.3	89.7	88.7	89.3	90.4
industrial processes and product use	8.7	8.7	8.9	9.6	9.6	8.8

6.11. Emissions of carbon dioxide (CO₂) per inhabitant of the Republic of Belarus



7. PROTECTION AND USE OF WATER RESOURCES

Water abstraction from natural sources is water withdrawn from groundwater and surface water bodies to be further used for various purposes.

Water use is the water withdrawn from natural sources or received from water supply systems of other water users, to be used for various purposes. Water in circulating and recycling (successive) water supply systems, transit water as well as reusable waste and drainage water are not included.

Water use for domestic and drinking, including curative, purposes is the volume of water consumed to meet drinking and domestic needs of the population and corporate staff, as well as curative (resort, recreational) needs.

Water use for agricultural purposes (except fishery) is the volume of water used for industrial purposes of livestock units, poultry farms, repair facilities, maintenance of motor transport and machinery, field and pasture water supply and a number of other purposes, as well as the volume of water supplied to irrigated area for vegetation watering and all types of non-vegetation watering (moisture supply, flushing, presowing).

Fishery water use is the volume of water for filling fish-farming ponds.

Water use for industrial and other purposes is the total volume of water used for industrial purposes, including manufacture of alcoholic, non-alcoholic and low-alcohol drinks and beer, bottled fresh and mineral waters, as well as for energy needs and other purposes.

Water loss during transport is the volume of water lost as a result of water supply from the point of abstraction (withdrawal) to the point of use or transfer.

Water consumption in circulating water supply systems is the total volume of water which would be needed by enterprise to carry out economic activities without using such systems. Circulating water supply does not include water circulating in heat supply systems.

Volume of water in recycling (successive) water supply systems is the total volume of water reused (successively used) by an enterprise at different stages of production process.

Water discharge is the total volume of water discharged into environment, including discharge into earthen pits, absorption fields, subsurface disposal fields, filtration trenches, sand-gravel filters and water-tight cesspits.

The volume of water discharge includes wastewater in municipal sewage systems, livestock dung disposal systems, other wastewater disposal (sewage) systems, surface wastewater and water after fishing ponds, as well as technical water (abstracted subsoil mineralized industrial water, quarry (mine) water, drainage water).

The section was prepared on the basis of data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus.

7.1. Key indicators of protection and use of water resources

(million cubic metres)

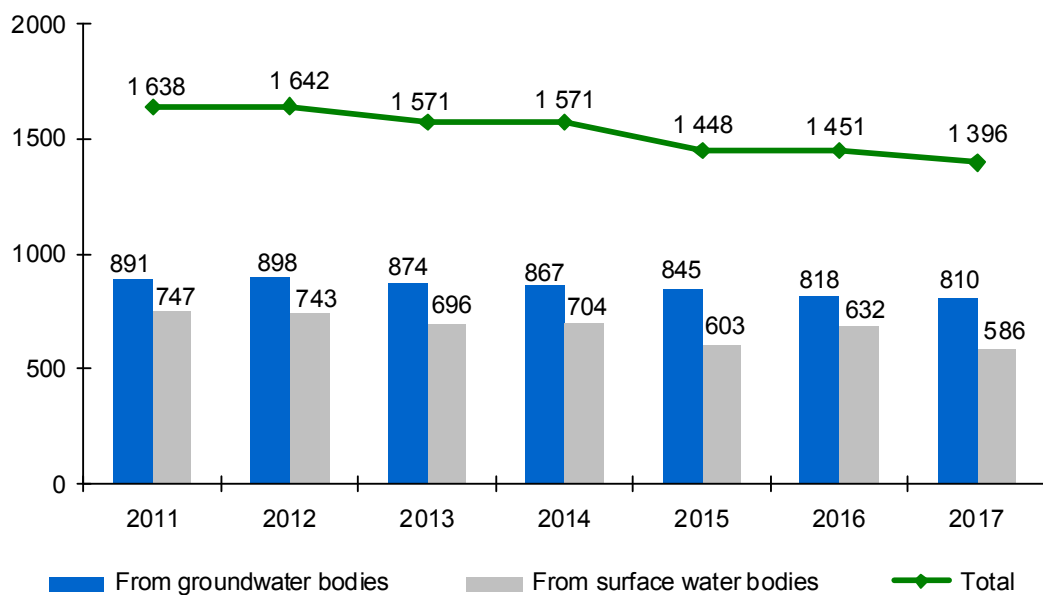
	2011	2012	2013	2014	2015	2016	2017
Water abstraction from natural sources – total	1 638	1 642	1 571	1 571	1 448	1 451	1 396
of which from groundwater bodies	891	898	874	867	845	818	810
Water use – total	1 406	1 442	1 373	1 371	1 270	1 302	1 264
of which for:							
domestic and drinking, including curative, purposes	486	492	477	473	474	504	493
agricultural purposes (except fishery)	114	120	117	115	114	116	119
Fishery	383	401	372	378	293	344	335
industrial and other purposes	423	429	407	405	389	338	317
Water loss during transport	84	84	83	82	78	68	58
Circulating water supply	5 886	5 530	5 574	5 711	5 320	4 921	5 210
Recycling (successive) water supply	87	85	105	93	94	67	81
Water discharge	1 087	1 099	1 058	1 034	948	1 153	1 170
of which wastewater into surface water bodies	1 000	1 015	974	954	870	1 048	1 054

Continued

	2011	2012	2013	2014	2015	2016	2017
As % of the previous year							
Water abstraction from natural sources – total	102.5	100.2	95.7	100.0	92.2	100.2	96.3
of which from groundwater bodies	101.6	100.8	97.3	99.1	97.5	96.9	99.0
Water use	103.5	102.6	95.2	99.8	92.6	102.5	97.1
Water loss during transport	82.7	100.4	98.0	99.0	95.5	86.6	85.4
Circulating water supply	93.7	94.0	100.8	102.5	93.2	92.5	105.9
Recycling (successive) water supply	83.6	96.0	128.5	89.4	101.9	71.1	121.0
Water discharge	101.0	101.2	96.2	97.8	91.7	121.7	101.4
of which wastewater into surface water bodies	101.0	101.5	96.0	98.0	91.1	120.6	100.5
As % of 2010							
Water abstraction from natural sources – total	102.5	102.7	98.3	98.3	90.6	90.8	87.4
of which from groundwater bodies	101.6	102.4	99.7	98.8	96.3	93.3	92.4
Water use	103.5	106.1	101.0	100.8	93.4	95.7	92.9
Water loss during transport	82.7	83.0	81.3	80.4	76.8	66.5	56.8
Circulating water supply	93.7	88.1	88.7	90.9	84.7	78.3	83.0
Recycling (successive) water supply	83.2	81.5	100.8	88.6	89.9	63.9	77.3
Water discharge	101.0	102.2	98.3	96.1	88.1	107.2	108.7
of which wastewater into surface water bodies	101.0	102.5	98.4	96.4	87.8	105.9	106.5

7.2. Water abstraction from natural sources

(million cubic metres)



7.3. Water abstraction from natural sources per inhabitant by regions and Minsk city

(cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	173	173	166	166	153	153	147
Regions and Minsk city:							
Brest	216	224	202	204	192	184	190
Vitebsk	169	170	168	167	163	156	142
Gomel	166	165	148	144	136	123	116
Grodno	135	133	134	152	149	146	142
Minsk city	25	27	23	23	22	21	23
Minsk	388	390	389	381	325	349	325
Mogilev	145	139	135	133	127	136	135

7.4. Water abstraction from natural sources by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	1 638	1 642	1 571	1 571	1 448	1 451	1 396
Regions and Minsk city:							
Brest	301	312	280	284	266	256	263
Vitebsk	206	205	203	200	195	185	168
Gomel	238	235	211	204	193	175	164
Grodno	143	141	141	160	156	153	148
Minsk city	47	51	44	45	42	42	46
Minsk	546	547	546	535	459	495	463
Mogilev	157	150	145	142	136	145	143
of which from groundwater bodies							
Republic of Belarus	891	898	874	867	845	818	810
Regions and Minsk city:							
Brest	142	143	141	141	139	134	139
Vitebsk	105	107	106	104	102	98	91
Gomel	146	140	136	134	128	114	116
Grodno	99	98	97	95	97	91	87
Minsk city	47	50	44	45	42	40	44
Minsk	246	255	249	248	239	232	223
Mogilev	107	105	102	100	98	110	109

7.5. Water abstraction from natural sources by river basin (million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Total							
Total	1 638	1 642	1 571	1 571	1 448	1 451	1 396
Baltic Sea basin	608	604	596	625	600	596	546
of which river basin:							
Neman	359	352	350	376	364	366	330
Western Dvina	181	181	178	176	172	164	149
Western Bug	69	70	68	73	65	66	67
Black Sea basin	1 030	1 038	974	946	847	855	850
of which river basin							
Dnieper	562	561	523	516	498	483	467
Pripyat	468	477	451	430	349	372	383
of which:							
from groundwater bodies							
Total	891	898	874	867	845	818	810
Baltic Sea basin	315	324	316	315	312	296	288
of which river basin:							
Neman	182	188	181	181	178	168	164
Western Dvina	84	85	85	83	81	79	74
Western Bug	50	51	51	50	53	50	50
Black Sea basin	576	575	558	552	532	522	521
of which river basin							
Dnieper	434	437	421	417	402	391	377
Pripyat	142	138	136	135	131	131	144
from surface water bodies							
Total	747	743	696	704	603	632	586
Baltic Sea basin	293	280	280	311	288	300	257
of which river basin:							
Neman	177	165	169	195	185	198	166
Western Dvina	97	96	93	93	90	85	75
Western Bug	19	19	18	22	13	17	17
Black Sea basin	454	463	416	394	315	333	329
of which river basin							
Dnieper	127	125	101	99	97	92	90
Pripyat	327	338	315	295	218	241	239

**7.6. Water abstraction from natural sources
by selected cities**
(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
	Total						
Republic of Belarus	1 638	1 642	1 571	1 571	1 448	1 451	1 396
City:							
Baranovichy	15	15	14	14	14	14	14
Bobruysk	34	33	32	29	26	22	22
Borisov	18	17	17	17	16	14	13
Brest	29	29	28	29	29	28	28
Vitebsk	36	35	35	34	33	34	31
Gomel	61	55	54	51	48	46	46
Grodno	63	60	60	60	58	55	53
Zhodino	9	9	10	9	8	7	8
Minsk city	47	51	44	45	42	42	46
Mogilev	60	51	49	49	47	44	44
Orsha	15	15	15	14	14	13	12
Pinsk	10	11	11	10	11	10	10
Soligorsk	11	10	9	12	11	17	17
	of which from groundwater bodies						
Republic of Belarus	891	898	874	867	845	818	810
City:							
Baranovichy	14	14	13	13	13	13	12
Bobruysk	22	21	20	18	18	16	17
Borisov	15	14	15	15	14	14	13
Brest	27	28	27	27	28	27	27
Vitebsk	31	30	31	29	29	29	27
Gomel	51	47	46	44	41	40	40
Grodno	34	32	32	31	29	28	27
Zhodino	6	6	6	6	6	5	5
Minsk city	47	50	44	45	42	40	44
Mogilev	39	39	37	37	35	34	33
Orsha	12	12	12	11	11	10	10
Pinsk	10	9	9	9	9	8	8
Soligorsk	3	3	3	3	3	9	8

7.7. Water abstraction from natural sources by regions, cities and districts

(million cubic metres)

	Total				Of which from groundwater bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Republic of Belarus	1 638.1	1 447.5	1 450.8	1 396.4	891.2	844.6	818.5	810.2
Brest region	301.0	266.4	255.5	262.9	142.3	139.0	134.3	139.3
Brest, city of	28.8	28.7	28.1	28.4	27.4	27.8	27.0	27.3
District:								
Baranovichy	22.5	22.8	20.3	20.7	18.6	17.5	16.8	17.1
Bereza	58.1	62.9	53.1	52.0	7.5	6.8	6.3	6.4
Brest	11.0	6.0	7.7	8.4	4.2	3.7	3.6	3.7
Gantsevichy	40.9	33.0	33.2	34.1	1.9	2.0	2.2	2.1
Drogichin	3.9	4.0	4.0	3.6	2.7	2.8	2.8	2.5
Zhabinka	7.1	6.3	6.8	6.4	2.4	2.3	2.4	2.3
Ivanovo	4.7	5.2	4.8	4.6	4.0	4.4	4.1	3.9
Ivatsevichy	8.6	6.3	6.3	6.7	6.7	4.6	4.4	4.7
Kamenets	4.4	5.7	4.0	3.8	4.1	5.6	4.0	3.8
Kobrin	6.1	6.2	6.0	6.4	6.0	5.9	5.9	6.1
Luninets	40.4	32.7	34.8	42.9	30.0	27.7	28.6	33.8
Lyakhovichy	2.4	2.4	2.5	2.3	2.4	2.4	2.5	2.2
Malorita	7.9	7.9	8.6	8.4	2.3	3.1	2.7	2.8
Pinsk	45.6	26.2	26.1	25.1	13.5	12.5	11.8	11.5
Pruzhan'y	4.7	5.5	4.9	4.9	4.7	5.5	4.9	4.9
Stolin	4.0	4.5	4.2	4.0	3.8	4.5	4.2	4.0

Continued

	Total				Of which from groundwater bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Vitebsk region	205.8	195.3	185.2	168.4	105.3	102.0	97.7	91.4
Vitebsk, city of	36.5	32.8	33.8	30.7	30.7	28.9	29.3	26.7
District:								
Beshenkovichy	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.1
Braslav	2.0	2.1	2.1	2.1	1.7	1.8	1.8	1.8
Verkhnedvinsk	2.3	2.4	2.5	2.4	2.3	2.4	2.5	2.3
Vitebsk	4.5	5.7	5.2	3.9	4.5	5.7	5.2	3.9
Glubokoye	4.1	4.0	3.5	3.7	4.1	4.0	3.5	3.7
Gorodok	2.5	2.3	2.0	2.0	2.4	2.3	2.0	2.0
Dokshitsy	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8
Dubrovno	1.5	1.3	1.2	1.2	1.5	1.3	1.2	1.2
Lepel	2.1	2.8	3.2	2.5	2.0	2.7	3.0	2.4
Liozno	1.6	2.1	2.2	1.6	1.6	2.1	1.7	1.6
Miory	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Orsha	18.4	17.6	16.0	14.9	15.8	14.9	13.4	12.5
Polotsk	77.7	79.7	73.1	68.4	18.5	17.4	16.6	15.9
Postavy	16.3	15.1	14.8	14.7	3.3	2.8	2.5	2.4
Rossony	0.7	0.8	0.6	0.7	0.7	0.8	0.6	0.7
Senno	2.8	2.8	2.1	2.2	2.4	1.9	1.7	1.8
Tolochin	2.8	2.6	2.6	2.1	2.7	2.5	2.5	2.0
Ushachy	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.8
Chashniki	21.6	13.3	12.6	7.2	3.2	2.7	2.5	2.4
Sharkovshchina	1.0	0.9	1.0	1.0	1.0	0.9	1.0	1.0
Shumilino	2.1	1.9	1.7	1.9	2.1	1.8	1.7	1.9

Continued

	Total				Of which from groundwater bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Gomel region	238.2	193.1	174.7	164.4	145.7	128.1	113.6	116.5
Gomel, city of	61.4	47.6	46.2	46.3	50.8	41.2	39.9	40.3
District:								
Bragin	1.2	1.0	0.9	0.8	1.2	1.0	0.9	0.8
Buda-Koshelyovo	3.1	2.6	2.5	3.0	3.1	2.6	2.5	3.0
Vetka	1.8	1.4	1.5	1.4	1.8	1.4	1.3	1.3
Gomel	5.3	7.6	6.4	6.7	4.6	6.7	5.6	5.7
Dobrush	5.3	4.4	4.5	4.5	3.5	3.7	3.6	3.5
Yelsk	1.4	1.4	1.4	1.2	1.4	1.4	1.4	1.2
Zhitkovichy	19.9	21.9	18.5	7.6	2.6	2.1	2.1	2.0
Zhlobin	13.1	11.1	9.5	9.8	10.9	9.2	7.7	7.8
Kalinkovichy	5.9	5.7	5.3	6.1	5.6	5.4	5.3	6.1
Korma	2.5	1.4	1.2	1.2	2.5	1.4	1.2	1.2
Lelchitsy	1.1	1.1	1.7	1.2	1.1	1.1	1.1	1.2
Loyev	1.1	1.2	1.1	1.0	1.1	1.2	1.1	1.0
Mozyr	27.0	23.6	23.5	21.9	15.2	11.5	10.4	10.7
Narovlya	1.2	1.0	1.5	1.7	1.2	1.0	0.9	1.2
Oktyabrsky	1.5	1.4	1.3	1.3	1.5	1.4	1.3	1.3
Petrikov	15.3	10.3	13.9	15.3	2.1	2.2	2.2	2.2
Rechitsa	15.2	16.1	9.1	9.8	14.7	15.8	9.1	9.5
Rogachev	6.6	6.3	5.3	6.5	6.1	5.5	4.8	6.0
Svetlogorsk	44.0	21.8	16.7	14.5	10.3	8.3	8.2	7.7
Khoyniki	3.1	2.7	1.9	1.8	3.1	2.7	1.9	1.8
Chechersk	1.2	1.2	1.1	0.9	1.2	1.2	1.1	0.9

Continued

	Total				Of which from groundwater bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Grodno region	143.2	156.1	153.1	148.4	98.5	96.7	90.9	87.5
Grodno, city of	62.8	57.6	55.2	53.1	33.9	29.0	28.0	27.2
District:								
Berestovitsa	2.0	2.5	2.2	2.1	2.0	2.1	2.2	2.1
Volkovysk	11.7	10.2	10.0	9.2	8.6	7.9	7.6	7.2
Voronovo	4.9	5.2	3.8	3.7	1.9	3.5	2.4	2.0
Grodno	8.2	8.6	24.7	24.4	6.2	6.3	6.0	5.9
Dyatlovo	3.3	2.9	2.9	2.8	2.9	2.6	2.5	2.4
Zelva	1.6	1.6	1.7	1.6	1.6	1.6	1.7	1.0
Ivye	1.4	1.7	1.4	1.3	1.4	1.7	1.4	1.3
Korelichy	2.2	13.4	1.9	2.1	2.0	2.0	1.8	1.9
Lida	14.3	14.7	12.4	12.2	13.5	13.5	11.9	11.2
Mosty	2.9	2.8	2.8	2.8	2.6	2.6	2.3	2.4
Novogrudok	3.6	3.5	3.5	3.4	3.6	3.5	3.5	3.3
Ostrovets	1.6	1.8	2.4	2.2	1.2	1.6	1.7	1.7
Oshmyany	2.2	2.3	2.4	2.7	2.1	2.3	2.4	2.6
Svisloch	1.4	1.6	1.7	1.6	1.4	1.5	1.6	1.5
Slonim	6.4	12.4	10.4	10.1	5.5	5.6	5.7	5.2
Smorgon	8.4	7.3	8.2	8.2	4.3	4.9	4.2	4.3
Shchuchin	4.5	6.0	5.6	4.9	3.8	4.2	4.0	4.1

Continued

	Total				Of which from groundwater bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Minsk city	47.0	42.1	42.0	45.8	46.8	41.8	40.1	43.7
Minsk region	545.7	459.0	495.5	463.1	246.1	238.9	232.3	222.6
District:								
Berezino	2.6	2.2	2.2	2.7	2.4	2.2	2.2	2.1
Borisov	20.7	20.5	21.0	18.8	18.1	18.4	17.5	16.7
Vileyka	119.5	114.2	125.2	93.1	4.1	4.0	3.8	3.7
Volozhin	3.8	2.6	3.1	3.0	3.8	2.6	3.1	2.7
Dzerzhinsk	17.0	18.6	18.4	18.0	16.9	18.6	18.3	18.0
Kletsk	4.1	4.0	4.0	3.9	4.1	4.0	4.0	3.9
Kopyl	3.4	3.3	3.4	3.1	3.4	3.3	3.4	3.1
Krupki	2.8	2.1	2.3	2.4	2.8	2.1	2.3	2.4
Logoysk	3.9	5.9	3.8	4.5	3.9	4.9	3.6	3.4
Lyuban	64.7	35.9	56.8	67.9	5.2	4.6	4.1	3.9
Minsk	75.1	71.2	69.9	67.4	74.1	70.7	69.4	67.0
Molodechno	17.8	17.8	16.8	16.3	13.8	14.0	12.8	12.1
Myadel	5.9	4.5	4.4	4.1	2.9	2.6	2.6	2.2
Nesvizh	6.8	6.9	6.7	6.6	5.3	5.5	5.2	5.5
Pukhovichy	17.5	17.1	17.0	17.0	14.9	13.8	14.0	13.9
Slutsk	19.1	17.1	9.8	9.2	19.1	17.1	9.8	9.2
Smolevichy	24.2	23.4	22.4	21.3	21.0	21.0	20.2	18.6
Soligorsk	96.6	44.1	58.6	54.3	6.4	5.5	11.7	11.1
Staryie Dorogi	2.4	2.4	2.3	2.3	2.4	2.4	2.3	2.3
Stolbtsy	6.5	6.0	6.0	6.3	4.8	4.5	4.5	4.0
Uzda	2.8	3.0	3.2	2.9	2.8	3.0	3.2	2.9
Cherven	28.8	36.0	38.3	37.8	14.3	14.0	14.3	13.8

Continued

	Total				Of which from groundwater bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Mogilev region	157.2	135.5	144.7	143.3	106.5	97.9	109.6	109.2
Mogilev, city of	60.3	46.8	44.3	43.9	39.4	34.8	34.0	33.0
District:								
Belynichy	2.0	2.4	2.3	2.1	2.0	2.4	2.3	2.1
Bobruysk	36.3	27.4	23.0	22.6	23.8	19.0	16.7	17.4
Bykhov	2.9	2.6	2.8	2.9	2.7	2.5	2.8	2.9
Glusk	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.0
Gorki	4.2	4.1	4.1	3.7	4.2	4.1	4.1	3.7
Dribin	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.8
Kirovsk	2.8	3.0	3.9	2.9	1.9	2.0	2.1	2.1
Klimovichy	3.0	2.4	2.1	2.1	3.0	2.4	2.1	2.1
Klichev	1.2	1.1	0.9	0.9	1.2	1.1	0.9	0.9
Kostyukovichy	2.7	2.5	19.4	19.9	2.7	2.5	19.4	19.9
Krasnopolye	0.7	0.7	0.4	0.4	0.7	0.7	0.4	0.4
Krichev	3.4	1.9	1.5	1.6	2.1	1.7	1.5	1.6
Krugloye	1.3	1.3	1.1	1.3	1.3	1.3	1.1	1.3
Mogilev	3.8	6.4	6.1	6.6	3.7	5.2	4.7	5.0
Mstislavl	2.2	2.4	2.1	2.2	2.2	2.4	2.1	2.2
Osipovichy	16.9	16.7	16.7	16.6	3.9	4.0	3.7	3.7
Slavgorod	2.7	2.8	2.4	1.7	2.7	2.8	2.4	1.7
Khotimsk	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.6
Chausy	2.1	1.8	1.8	2.2	2.1	1.8	1.8	1.8
Cherikov	1.5	1.0	1.1	1.3	1.4	0.9	1.0	1.1
Shklov	4.8	5.3	5.8	6.0	3.1	3.5	3.7	3.8

7.8. Water abstraction from natural sources by economic activity

(million cubic metres)

	2016	Of which		2017	Of which	
		from ground-water bodies	from surface water bodies		from ground-water bodies	from surface water bodies
Republic of Belarus	1 450.8	818.5	632.3	1 396.4	810.2	586.2
of which:						
Agriculture, forestry and fishing	427.7	134.2	293.5	431.0	136.1	294.8
Mining	25.8	25.8	0.1	31.1	31.0	0.1
Manufacturing	193.7	87.9	105.7	188.8	89.1	99.7
of which:						
Manufacture of food products, beverages and tobacco products	49.8	43.5	6.3	51.3	45.6	5.7
Manufacture of textile articles, wearing apparel, articles of leather and fur	10.8	1.7	9.1	8.0	1.6	6.4
Manufacture of products of wood and paper; printing and reproduction of recorded media	14.7	1.8	12.9	14.2	1.9	12.3
Manufacture of coke and refined petroleum products	14.3	2.1	12.1	13.4	2.1	11.4
Manufacture of chemicals and chemical products	53.8	4.3	49.6	52.0	4.3	47.8
Manufacture of basic pharmaceuticals and medicinal products	0.6	0.6	–	0.5	0.5	–
Manufacture of rubber and plastics products, of other non-metallic mineral products	30.8	22.3	8.5	31.6	21.7	9.9
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	3.7	2.0	1.7	3.9	2.0	1.9
Manufacture of computer, electronic and optical products	2.8	2.4	0.4	2.8	2.5	0.3

Continued

	2016	Of which		2017	Of which	
		from ground-water bodies	from surface water bodies		from ground-water bodies	from surface water bodies
Manufacture of electrical equipment	1.3	0.5	0.7	1.1	0.4	0.7
Manufacture of machinery and equipment n.e.c.	7.7	3.9	3.8	6.3	3.7	2.7
Manufacture of transport vehicles and equipment	2.8	2.6	0.2	3.0	2.8	0.2
Other manufacturing; repair and installation of machinery and equipment	0.6	0.2	0.4	0.6	0.2	0.4
Electricity, gas, steam, hot water and air conditioning supply	223.4	151.3	72.1	209.0	145.0	64.0
Water supply; waste management and remediation activities	530.1	406.9	123.3	490.9	399.8	91.1
Construction	15.1	1.6	13.5	14.5	0.8	13.6
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.9	0.6	1.3	1.7	0.6	1.1
Transportation and storage, postal and courier activities	3.6	1.3	2.3	1.3	0.9	0.4
Accommodation and food service activities	17.8	1.0	16.8	17.0	0.2	16.8
Information and communication	0.0	0.0	–	0.0	0.0	–
Financial and insurance activities	0.0	0.0	–	0.0	0.0	–
Real estate activities	1.5	1.4	0.1	0.3	0.3	–
Professional, scientific and technical activities	1.8	0.3	1.5	2.0	0.2	1.8
Administrative and support service activities	0.1	0.1	0.0	0.1	0.1	0.1
Public administration	1.9	1.9	–	1.8	1.8	–
Education	0.2	0.2	–	0.2	0.2	–
Human health and social work activities	3.4	3.4	0.0	3.3	3.3	0.0
Arts, sports, entertainment and recreation	2.7	0.6	2.1	3.1	0.5	2.7
Other service activity	0.1	0.1	–	0.0	0.0	–

7.9. Water use by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	1 406	1 442	1 373	1 371	1 270	1 302	1 264
Regions and Minsk city:							
Brest	258	276	246	250	236	222	231
Vitebsk	184	188	187	184	181	172	158
Gomel	207	212	189	183	176	164	156
Grodno	129	129	129	148	146	143	145
Minsk city	188	184	180	180	174	169	161
Minsk	311	323	313	302	237	315	292
Mogilev	130	130	128	125	121	116	120
of which for:							
domestic and drinking, including curative, purposes							
Republic of Belarus	486	492	477	473	474	504	493
Regions and Minsk city:							
Brest	57	63	60	60	60	55	60
Vitebsk	54	55	55	53	53	54	52
Gomel	69	66	66	65	66	70	68
Grodno	54	53	50	49	50	47	51
Minsk city	132	126	126	127	126	127	123
Minsk	69	75	65	67	67	108	83
Mogilev	51	54	55	52	53	44	57

Continued

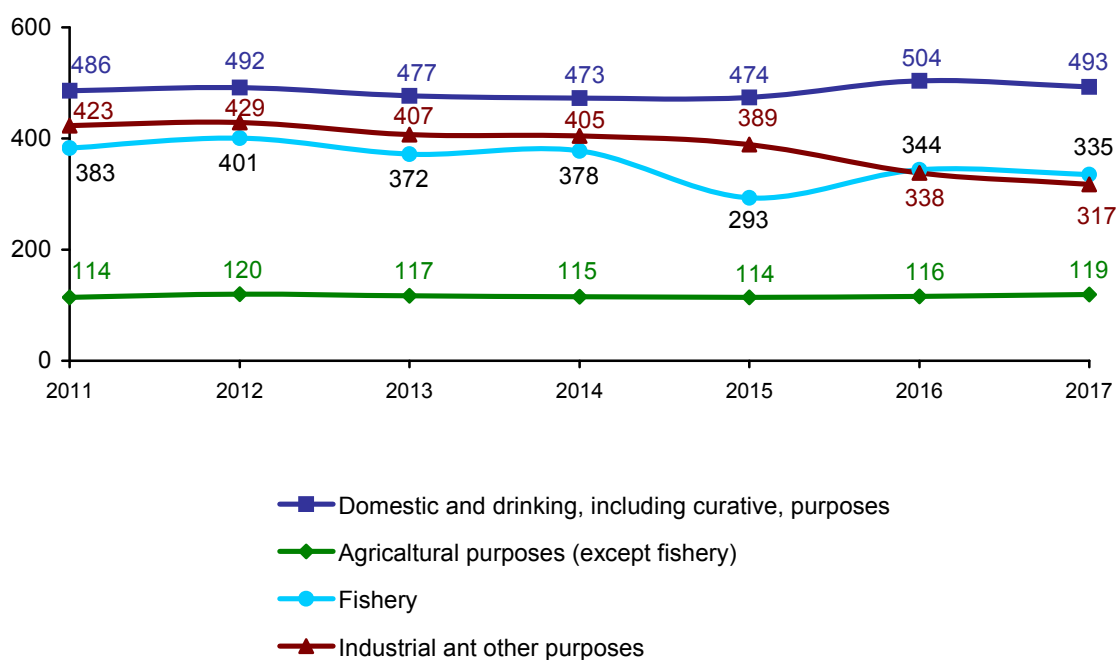
	2011	2012	2013	2014	2015	2016	2017
agricultural purposes (except fishery)							
Republic of Belarus	114	120	117	115	114	116	119
Regions and Minsk city:							
Brest	22	24	25	23	24	24	24
Vitebsk	16	16	17	16	15	15	15
Gomel	16	19	17	18	18	16	19
Grodno	15	15	14	14	16	17	17
Minsk	31	31	30	30	28	31	29
Mogilev	13	15	15	14	14	13	15
fishery							
Republic of Belarus	383	401	372	378	293	344	335
Regions and Minsk city:							
Brest	146	158	131	137	117	116	118
Vitebsk	19	19	19	16	16	16	15
Gomel	30	31	28	27	25	29	18
Grodno	8	9	9	29	26	34	32
Minsk	167	170	171	154	94	133	134
Mogilev	13	15	14	15	15	16	17

Continued

	2011	2012	2013	2014	2015	2016	2017
industrial and other purposes							
Republic of Belarus	423	429	407	405	389	338	317
Regions and Minsk city:							
Brest	33	31	30	30	35	27	29
Vitebsk	95	98	97	99	97	88	77
Gomel	91	96	79	72	68	49	51
Grodno	52	52	56	56	54	45	44
Minsk city	56	58	54	53	48	38	38
Minsk	44	47	47	51	48	46	46
Mogilev	52	47	44	44	40	42	32

7.10. Dynamics of water use

(million cubic metres)



7.11. Water use by selected cities

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	1 406	1 442	1 373	1 371	1 270	1 302	1 264
City:							
Baranovichy	10	12	12	12	12	12	12
Bobruysk	31	30	28	27	24	20	20
Borisov	14	13	13	13	13	11	10
Brest	20	24	24	24	25	25	25
Vitebsk	29	29	29	27	27	29	26
Gomel	44	45	45	42	40	40	38
Grodno	55	53	54	55	52	51	50
Zhodino	8	8	9	8	7	7	7
Minsk city	188	184	180	180	174	169	161
Mogilev	42	39	39	38	39	39	40
Orsha	12	11	12	12	11	12	11
Pinsk	8	10	10	9	10	10	9
Soligorsk	15	15	14	17	17	16	19

7.12. Water use for domestic and drinking, including curative, purposes per inhabitant by regions and Minsk city

(cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	51	52	50	50	50	53	52
Regions and Minsk city:							
Brest	41	45	43	43	43	40	43
Vitebsk	45	45	45	44	44	45	44
Gomel	48	46	46	46	46	49	48
Grodno	51	50	48	46	47	45	49
Minsk city	71	67	66	66	64	64	62
Minsk	49	53	47	47	47	76	58
Mogilev	47	50	51	49	49	42	53

7.13. Water use by regions, cities and districts

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	1 406.3	1 442.5	1 373.1	1 370.8	1 269.5	1 301.6	1 263.5
Brest region	257.8	275.8	246.3	250.1	235.6	222.0	230.6
Brest, city of	20.0	24.2	24.1	24.3	24.7	25.4	25.5
District:							
Baranovichy	17.1	19.8	19.2	20.9	20.8	18.6	19.0
Bereza	57.1	71.3	55.1	55.3	62.7	52.8	51.7
Brest	11.1	8.7	9.7	7.4	6.1	7.6	8.4
Gantsevichy	40.6	40.6	33.4	33.1	32.7	33.0	33.9
Drogichin	3.5	3.6	3.9	3.8	3.9	3.8	3.6
Zhabinka	6.8	6.8	6.0	7.7	6.2	6.7	6.2
Ivanovo	4.1	5.1	6.8	4.5	4.9	4.6	4.7
Ivatsevichy	7.7	7.6	5.7	6.2	6.0	6.0	6.3
Kamenets	4.0	4.3	4.4	7.2	5.7	3.9	3.8
Kobrin	5.8	5.9	5.9	5.8	5.9	5.7	6.1
Luninets	18.7	13.6	14.3	13.7	12.7	10.2	18.1
Lyakhovichy	2.2	2.5	2.4	2.3	2.2	2.4	2.1
Malorita	7.7	9.8	8.8	11.3	7.0	7.6	7.7
Pinsk	43.9	41.8	28.2	36.8	25.1	25.1	24.3
Pruzhan'y	4.0	4.6	5.1	5.0	5.0	4.6	4.9
Stolin	3.5	5.1	3.7	4.8	4.1	4.0	4.2

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	184.0	188.5	187.3	183.9	181.1	172.2	158.3
Vitebsk, city of	29.0	28.6	29.0	27.3	27.3	28.6	25.6
District:							
Beshenkovichy	0.8	0.8	0.9	0.9	0.9	0.8	1.0
Braslav	1.9	1.7	1.8	1.9	1.9	2.0	1.9
Verkhnedvinsk	2.0	2.1	2.1	2.1	2.3	2.4	2.3
Vitebsk	3.6	4.6	4.2	4.4	4.4	4.2	3.5
Glubokoye	3.5	3.7	3.7	3.8	3.6	3.4	3.6
Gorodok	2.2	2.3	2.3	2.1	2.1	1.9	1.8
Dokshitsy	1.8	1.7	1.9	2.1	1.8	1.7	1.7
Dubrovno	1.4	1.3	1.3	1.2	1.2	1.2	1.2
Lepel	1.6	2.1	2.3	2.1	2.5	2.8	2.0
Liozno	1.6	2.1	2.1	2.1	2.1	2.0	1.5
Miory	1.2	1.2	1.3	1.3	1.3	1.2	1.3
Orsha	14.9	14.2	14.6	14.6	14.2	13.6	13.2
Polotsk	72.8	77.2	74.8	79.8	78.1	71.4	67.8
Postavy	15.6	15.5	15.1	15.0	14.7	14.6	14.5
Rossony	0.6	0.6	0.8	0.6	0.7	0.6	0.6
Senno	2.6	3.2	3.0	3.0	2.8	1.9	2.2
Tolochin	2.5	2.6	2.8	2.5	3.2	2.2	1.9
Ushachy	0.8	0.9	0.8	0.7	0.9	0.8	0.7
Chashniki	20.9	18.7	19.4	13.6	12.9	12.4	7.1
Sharkovshchina	1.0	1.1	1.0	1.0	0.9	0.9	0.9
Shumilino	1.9	2.1	2.0	1.9	1.7	1.6	1.6

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	207.1	212.3	189.5	183.1	175.7	163.7	156.1
Gomel, city of	43.6	44.6	44.9	41.5	39.9	40.3	38.1
District:							
Bragin	1.0	0.9	1.1	1.2	0.9	0.9	0.9
Buda-Koshelyovo	2.6	2.6	2.7	2.6	2.4	2.4	2.9
Vetka	1.6	1.5	1.5	1.3	1.3	1.4	1.1
Gomel	5.4	6.0	5.2	6.3	7.4	6.2	7.2
Dobrush	5.0	6.5	5.9	4.9	4.1	4.3	4.3
Yelsk	1.2	1.3	1.3	1.2	1.3	1.3	1.3
Zhitkovichy	19.4	18.9	15.9	15.7	18.4	18.3	6.4
Zhlobin	11.4	11.0	10.1	9.6	10.6	9.0	10.4
Kalinkovichy	5.2	5.1	5.7	5.5	5.3	4.4	5.7
Korma	2.1	1.9	1.3	1.7	1.3	1.1	1.1
Lelchitsy	1.1	1.1	1.2	1.1	1.1	1.6	1.2
Loyev	1.0	1.1	1.2	1.1	1.0	1.0	0.9
Mozyr	23.9	24.3	24.4	23.8	22.5	22.8	24.5
Narovlya	1.1	1.2	1.2	1.2	0.9	1.4	1.6
Oktyabrsky	1.5	1.4	1.2	1.3	1.4	1.2	1.3
Petrikov	15.1	16.4	16.4	15.0	10.2	13.7	15.2
Rechitsa	13.8	14.0	14.2	14.6	15.2	8.4	9.4
Rogachev	5.1	6.4	5.6	5.9	5.9	5.0	5.9
Svetlogorsk	41.7	43.2	24.9	23.7	21.2	16.1	14.1
Khoyniki	3.0	1.9	2.8	2.7	2.5	1.8	1.7
Chechersk	1.2	1.1	0.9	1.1	1.1	1.1	1.0

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	128.7	128.6	129.4	147.7	145.7	143.2	145.1
Grodno, city of	54.7	53.3	54.1	54.6	52.2	50.8	50.4
District:							
Berestovitsa	1.9	1.9	1.8	2.2	2.3	2.0	2.0
Volkovysk	10.4	9.7	9.5	10.2	9.5	8.9	10.3
Voronovo	4.9	4.8	4.9	5.4	5.0	3.7	3.4
Grodno	8.1	8.0	8.3	8.1	8.6	24.5	24.4
Dyatlovo	3.2	3.1	3.4	2.9	2.7	2.8	2.7
Zelva	1.5	1.6	1.6	1.4	1.5	1.6	1.5
Ivye	1.3	2.1	1.4	1.4	1.7	1.4	1.3
Korelichy	2.1	2.2	2.1	16.1	13.3	1.9	2.3
Lida	12.5	11.7	13.0	12.3	13.7	11.3	11.9
Mosty	2.8	2.7	2.6	2.6	2.7	2.8	2.6
Novogrudok	3.1	3.2	3.1	3.2	3.5	3.2	3.3
Ostrovets	1.5	1.5	1.6	1.8	1.7	2.3	2.2
Oshmyany	2.0	2.0	2.1	2.2	2.2	2.3	2.1
Svisloch	1.2	1.6	1.6	1.3	1.4	1.6	1.5
Slonim	5.3	5.9	5.6	8.9	11.6	9.5	10.1
Smorgon	8.0	8.0	8.3	7.6	6.5	7.4	7.6
Shchuchin	4.3	5.5	4.5	5.3	5.7	5.4	5.4

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	188.4	184.5	179.9	179.5	173.8	169.3	161.1
Minsk region	310.8	322.6	312.6	301.5	236.5	315.5	291.9
District:							
Berezino	2.5	2.8	2.5	1.3	2.1	2.1	3.3
Borisov	16.4	16.0	16.8	16.4	16.8	17.1	15.7
Vileyka	3.8	3.8	4.6	3.8	3.7	3.8	3.7
Volozhin	3.5	3.3	3.6	3.2	2.8	2.9	2.8
Dzerzhinsk	4.9	5.4	5.4	6.1	5.9	5.9	5.8
Kletsk	3.9	3.9	3.9	4.3	3.8	3.7	4.1
Kopyl	3.1	3.2	3.2	3.2	3.0	3.0	2.7
Krupki	2.7	2.4	2.1	2.0	2.0	2.1	2.3
Logoysk	3.5	7.1	3.0	5.0	5.1	3.4	4.1
Lyuban	63.4	64.2	68.7	68.6	35.4	109.1	67.9
Minsk	13.7	18.5	14.0	15.4	14.8	15.1	20.3
Molodechno	15.2	17.3	14.2	15.2	15.1	13.5	15.5
Myadel	5.6	5.6	4.3	4.5	4.3	4.2	4.0
Nesvizh	6.5	6.8	6.8	6.9	6.5	6.3	6.3
Pukhovichy	8.4	10.2	9.0	10.9	9.1	8.4	8.9
Slutsk	12.1	9.2	9.7	9.6	9.5	8.7	8.1
Smolevichy	13.0	14.7	14.1	13.6	12.5	12.1	14.6
Soligorsk	101.2	100.7	99.5	84.5	49.4	57.3	55.5
Staryie Dorogi	2.2	2.1	2.1	2.0	2.2	2.2	2.1
Stolbtsy	6.1	6.3	6.1	5.9	5.6	5.5	6.2
Uzda	2.3	2.2	2.3	2.3	2.4	2.7	2.5
Cherven	16.7	16.8	16.8	16.9	24.5	26.4	35.4

Continued

	2011	2012	2013	2014	2015	2016	2017
Mogilev region	129.6	130.2	128.1	125.0	121.1	115.7	120.5
Mogilev. city of	42.5	38.6	39.2	38.4	38.6	38.5	39.9
District:							
Belynychy	1.8	1.9	1.7	1.9	2.2	2.2	2.0
Bobruysk	32.7	31.3	29.2	28.4	24.9	20.6	20.8
Bykhov	2.6	2.4	2.2	2.2	2.3	2.5	2.8
Glusk	0.9	0.9	0.9	0.9	1.0	1.0	1.5
Gorki	3.6	3.9	4.1	3.6	3.9	3.6	3.5
Dribin	0.8	0.7	0.8	0.8	0.8	0.8	0.8
Kirovsk	2.6	2.7	2.2	2.9	2.9	3.8	4.1
Klimovichy	2.8	3.1	3.1	3.0	2.2	1.9	1.9
Klichev	1.1	1.3	1.3	1.2	1.0	0.9	0.9
Kostyukovichy	2.4	2.1	2.2	2.3	2.3	2.0	2.5
Krasnopolye	0.7	0.8	0.9	0.7	0.7	0.4	0.3
Krichev	3.1	4.8	3.5	2.1	1.6	1.2	2.5
Krugloye	1.0	1.1	1.3	1.2	1.2	1.0	1.2
Mogilev	3.7	5.6	5.7	5.8	6.2	5.8	6.3
Mstislavl	1.8	1.8	2.0	2.5	2.3	1.9	2.0
Osipovichy	16.2	16.9	16.8	16.2	16.6	16.2	16.2
Slavgorod	2.2	2.4	2.4	2.6	2.4	2.4	1.6
Khotimsk	0.5	0.7	0.8	0.7	0.8	0.7	0.6
Chausy	1.9	1.5	1.4	1.6	1.7	1.6	2.1
Cherikov	1.1	1.3	1.4	1.1	0.9	1.0	1.2
Shklov	3.8	4.8	4.9	5.2	4.7	5.5	5.8

7.14. Water use by economic activity

(million cubic metres)

	2016	2017
Total	1 301.6	1 263.5
of which:		
Agriculture, forestry and fishing	480.2	443.8
Mining	1.5	6.8
Manufacturing	175.4	179.6
of which:		
Manufacture of food products, beverages and tobacco products	49.8	52.3
Manufacture of textile articles, wearing apparel, articles of leather and fur	10.8	8.8
Manufacture of products of wood and paper; printing and reproduction of recorded media	14.7	14.4
Manufacture of coke and refined petroleum products	14.3	14.7
Manufacture of chemicals and chemical products	53.8	55.0
Manufacture of basic pharmaceuticals and medicinal products	0.6	0.5
Manufacture of rubber and plastics products, of other non-metallic mineral products	12.5	14.5
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	3.7	5.1
Manufacture of computer, electronic and optical products	2.8	2.8
Manufacture of electrical equipment	1.3	1.1
Manufacture of machinery and equipment n.e.c.	7.7	6.6
Manufacture of transport vehicles and equipment	2.8	3.2
Other manufacturing; repair and installation of machinery and equipment	0.6	0.6
Electricity, gas, steam, hot water and air conditioning supply	200.1	192.4
Water supply; waste management and remediation activities	394.4	392.1
Construction	15.1	14.5
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.9	1.7
Transportation and storage, postal and courier activities	3.6	4.1
Accommodation and food service activities	17.8	17.0
Information and communication	0.0	0.0
Financial and insurance activities	0.0	0.0
Real estate activities	1.4	0.3
Professional, scientific and technical activities	1.8	2.1
Administrative and support service activities	0.1	0.1
Public administration	1.9	1.8
Education	0.2	0.2
Human health and social work activities	3.4	3.4
Arts, sports, entertainment and recreation	2.7	3.4
Other service activity	0.2	0.1

7.15. Water loss during transport by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	84	84	83	82	78	68	58
Regions and Minsk city:							
Brest	6	7	6	6	6	4	5
Vitebsk	11	11	8	8	8	7	7
Gomel	14	13	12	12	11	5	5
Grodno	6	6	7	7	5	4	4
Minsk city	20	20	25	25	24	20	25
Minsk	12	14	14	13	15	19	6
Mogilev	14	13	10	11	9	7	7

7.16. Water loss during transport by selected cities

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	84	84	83	82	78	68	58
City:							
Baranovichy	2	1	1	0.9	0.9	0.8	0.8
Bobruysk	3	3	2	2	2	1	1
Borisov	2	2	2	2	2	0.6	0.4
Brest	2	3	2	2	2	1	1
Vitebsk	3	3	3	3	2	2	3
Gomel	7	5	4	4	3	3	2
Grodno	3	3	3	3	2	2	2
Zhodino	0.4	0.4	0.4	0.4	0.4	0.3	0.2
Minsk city	20	20	25	25	24	20	25
Mogilev	9	8	5	6	4	4	4
Orsha	3	3	1	1	0.9	2	1
Pinsk	0.7	0.7	0.7	0.6	1	0.4	0.4
Soligorsk	0.8	0.4	0.5	0.4	0.3	0.5	0.3

7.17. Volume of water in recycling (successive) water supply systems by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	87	85	105	93	94	67	81
Regions and Minsk city:							
Brest	13	11	33	23	28	14	32
Vitebsk	12	13	12	11	7	10	13
Gomel	13	14	14	13	13	7	6
Grodno	17	14	13	13	13	12	11
Minsk city	8	10	10	11	10	12	3
Minsk	17	18	17	17	17	10	13
Mogilev	6	5	7	5	5	3	4

7.18. Water consumption in circulating water supply systems by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	5 886	5 530	5 574	5 711	5 320	4 921	5 210
Regions and Minsk city:							
Brest	491	374	280	552	593	536	539
Vitebsk	2 093	1 832	1 997	1 697	1 351	1 213	1 478
Gomel	1 054	1 121	1 079	1 113	1 154	1 044	1 080
Grodno	786	759	755	786	775	770	755
Minsk city	713	691	715	671	652	602	496
Minsk	343	370	397	567	504	453	508
Mogilev	407	384	351	326	292	304	354

7.19. Water discharge by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	1 087	1 099	1 058	1 034	948	1 153	1 170
Regions and Minsk city:							
Brest	203	210	190	195	163	204	218
Vitebsk	139	141	138	137	139	150	145
Gomel	163	167	144	139	128	158	154
Grodno	106	101	103	115	114	130	127
Minsk city	174	179	174	168	162	215	214
Minsk	198	198	202	185	146	171	176
Mogilev	104	103	106	96	95	125	137
of which wastewater into surface water bodies							
Republic of Belarus	1 000	1 015	974	954	870	1 048	1 054
Regions and Minsk city:							
Brest	188	196	176	181	149	167	171
Vitebsk	130	130	128	127	129	144	138
Gomel	143	147	124	119	110	147	142
Grodno	90	87	89	103	101	120	116
Minsk city	174	179	174	168	162	215	214
Minsk	178	179	183	166	128	155	159
Mogilev	97	97	99	90	90	101	114

7.20. Water discharge by selected cities

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	1 087	1 099	1 058	1 034	948	1 153	1 170
City:							
Baranovichy	11	12	13	13	13	14	14
Bobruysk	26	24	26	21	19	29	28
Borisov	14	13	14	14	13	14	16
Brest	32	29	30	28	27	31	31
Vitebsk	31	30	31	30	30	34	35
Gomel	50	49	48	48	46	82	82
Grodno	49	46	49	43	43	54	48
Zhodino	7	7	7	7	7	7	7
Minsk city	174	179	174	168	162	215	214
Mogilev	45	46	48	43	43	44	56
Orsha	11	12	9	11	12	12	12
Pinsk	11	11	11	10	10	11	11
Soligorsk	9	9	8	8	8	9	9
of which wastewater into surface water bodies							
Republic of Belarus	1 000	1 015	974	954	870	1 048	1 054
City:							
Baranovichy	11	12	13	13	13	14	14
Bobruysk	26	24	26	21	19	29	28
Borisov	14	13	14	14	13	14	16
Brest	32	29	30	28	27	31	31
Vitebsk	31	30	31	30	29	34	35
Gomel	50	49	47	48	46	82	82
Grodno	48	46	49	43	42	54	48
Zhodino	7	7	7	7	7	7	7
Minsk city	174	179	174	168	162	215	214
Mogilev	45	46	47	43	43	44	56
Orsha	11	12	9	11	12	12	12
Pinsk	11	11	11	10	10	11	11
Soligorsk	9	9	8	8	8	9	9

7.21. Water discharge by regions, cities and districts

(million cubic metres)

	Total				Of which wastewater into surface water bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Republic of Belarus	1 086.7	947.7	1 152.9	1 169.6	999.6	869.6	1 048.4	1 054.0
Brest region	203.1	163.4	204.0	218.0	188.0	149.1	167.0	171.4
Brest, city of	32.3	27.1	30.9	31.2	32.2	27.1	30.8	31.2
District:								
Baranovichy	14.5	17.9	18.1	18.4	12.5	16.0	15.6	15.7
Bereza	45.2	20.4	44.3	45.6	44.8	19.9	43.9	45.1
Brest	4.3	3.2	3.9	4.4	2.8	1.6	2.4	2.7
Gantsevichy	7.1	11.3	16.4	16.3	7.0	11.2	16.3	16.1
Drogichin	1.6	2.1	2.1	1.9	1.2	1.8	1.8	1.7
Zhabinka	5.5	4.9	5.3	5.3	4.0	3.4	3.7	3.7
Ivanovo	2.6	2.9	3.2	3.4	1.8	2.1	1.9	2.2
Ivatsevichy	3.9	3.7	4.1	4.2	3.1	2.8	3.4	3.5
Kamenets	2.9	1.8	2.2	2.6	1.0	0.4	0.8	0.6
Kobrin	4.1	3.3	4.6	4.1	2.9	2.6	3.6	3.4
Luninets	30.3	28.7	30.9	45.1	29.8	28.2	10.4	14.0
Lyakhovichy	1.0	1.1	0.9	0.7	0.7	0.6	0.6	0.6
Malorita	5.8	6.3	10.4	10.1	5.7	6.2	7.8	8.8
Pinsk	37.3	24.4	20.8	20.8	36.4	23.7	20.3	20.2
Pruzhany	2.9	2.6	4.2	2.4	1.8	1.6	3.3	1.8
Stolin	1.8	1.8	1.7	1.6	0.3	0.1	0.2	0.2

Continued

	Total				Of which wastewater into surface water bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Vitebsk region	139.0	139.0	149.9	144.9	130.0	128.8	143.5	137.8
Vitebsk, city of	30.9	29.5	33.6	35.2	30.8	29.5	33.6	35.2
District:								
Beshenkovichy	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2
Braslav	0.7	0.8	0.6	0.6	0.6	0.7	0.4	0.5
Verkhnedvinsk	0.8	0.9	0.9	0.9	0.3	0.3	0.3	0.3
Vitebsk	1.3	1.1	1.5	1.3	0.7	0.4	0.9	0.8
Glubokoye	2.1	2.0	1.3	1.3	0.9	0.7	0.5	0.1
Gorodok	1.4	1.3	1.5	1.7	0.9	0.8	1.1	1.3
Dokshitsy	0.9	0.6	0.4	0.5	0.3	0.2	0.2	0.2
Dubrovno	0.7	0.4	0.4	0.4	0.1	0.2	0.3	0.2
Lepel	1.3	1.5	1.7	1.8	1.1	1.1	1.5	1.5
Liozno	0.5	0.5	0.7	0.4	0.0	0.0	0.4	–
Miory	0.7	0.7	0.7	0.5	0.1	0.1	0.1	0.1
Orsha	12.8	13.0	12.9	13.1	11.9	12.1	12.4	12.2
Polotsk	60.5	65.0	69.2	62.7	59.9	62.6	68.7	62.3
Postavy	11.1	11.0	13.9	14.0	10.4	10.3	13.3	13.4
Rossony	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
Senno	1.2	1.3	1.3	1.0	1.1	1.3	1.3	1.0
Tolochin	1.2	1.3	1.0	0.9	0.9	0.9	0.8	0.6
Ushachy	0.5	0.4	0.4	0.5	0.3	0.3	0.4	0.4
Chashniki	8.7	6.2	6.5	6.2	8.5	6.0	6.4	6.1
Sharkovshchina	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Shumilino	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7

Continued

	Total				Of which wastewater into surface water bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Gomel region	163.1	128.3	157.6	153.6	142.9	110.0	147.3	141.7
Gome, city of	50.2	45.9	82.2	81.7	49.8	45.9	82.2	81.7
District:								
Bragin	0.3	0.3	0.3	0.2	0.0	0.0	0.0	–
Buda-Koshelyovo	1.2	0.9	1.1	1.0	0.7	0.7	0.9	0.9
Vetka	0.6	0.6	0.5	0.5	0.0	0.1	0.5	0.5
Gomel	1.6	3.1	1.5	2.0	0.0	0.8	0.1	0.1
Dobrush	2.5	1.5	1.8	1.8	0.1	0.1	0.2	0.2
Yelsk	0.2	0.3	0.3	0.3	0.0	0.0	–	–
Zhitkovichy	11.4	11.0	11.1	5.8	11.1	10.9	11.0	5.6
Zhlobin	9.9	7.3	5.9	7.2	9.4	7.1	5.6	6.8
Kalinkovichy	0.9	0.7	0.7	0.6	0.0	0.0	–	0.0
Korma	0.6	0.4	0.4	0.3	0.0	0.0	–	–
Lelchitsy	0.4	0.4	0.7	0.3	0.0	0.0	0.4	–
Loyev	0.5	0.2	0.3	0.2	0.0	0.1	0.0	–
Mozyr	18.7	17.4	19.6	17.8	17.9	16.8	18.7	17.0
Narovlya	0.6	0.4	1.0	1.0	0.0	0.0	0.5	0.5
Oktyabrsky	0.4	0.4	0.4	0.3	0.1	0.1	0.1	0.1
Petrikov	11.5	7.2	10.2	10.1	11.2	6.9	10.0	9.9
Rechitsa	10.0	11.0	3.9	6.4	3.4	3.5	3.3	4.7
Rogachev	3.4	3.3	2.6	3.0	2.5	2.4	2.3	2.3
Svetlogorsk	36.6	14.6	11.8	11.8	34.9	13.6	10.4	10.2
Khoyniki	1.3	1.1	1.0	1.0	1.1	0.9	0.9	0.8
Chechersk	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2

Continued

	Total				Of which wastewater into surface water bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Grodno region	106.0	113.9	130.5	127.0	89.5	101.4	119.7	115.7
Grodno, city of	48.6	42.7	54.1	48.4	48.4	42.4	53.6	48.3
District:								
Berestovitsa	1.0	1.3	0.6	0.6	0.3	0.8	0.4	0.3
Volkovysk	7.9	7.4	8.9	9.7	5.4	5.2	6.9	7.6
Voronovo	2.8	2.4	2.1	1.9	2.2	2.1	1.7	1.7
Grodno	5.0	4.7	21.2	21.1	1.6	2.1	18.8	18.6
Dyatlovo	1.9	1.5	1.4	1.6	0.6	0.8	0.7	0.8
Zelva	0.9	0.7	1.0	0.6	0.3	0.3	0.7	0.4
Ivye	0.5	0.3	0.3	0.3	0.2	0.3	0.3	0.3
Korelichy	1.3	12.3	1.0	0.9	0.6	11.7	0.6	0.5
Lida	13.5	13.8	14.2	15.2	12.6	13.1	13.5	14.3
Mosty	1.4	1.0	1.0	0.8	0.7	0.7	0.8	0.7
Novogrudok	2.6	2.5	2.3	2.5	1.9	2.1	2.1	2.2
Ostrovets	0.9	1.0	1.1	1.1	0.5	0.6	1.0	0.9
Oshmyany	1.4	1.2	1.2	1.1	0.9	0.9	0.9	0.9
Svisloch	0.8	0.7	0.8	0.4	0.0	0.0	0.1	0.0
Slonim	7.5	11.5	10.5	11.1	6.9	11.1	10.2	10.9
Smorgon	5.3	4.7	5.2	5.9	4.9	4.3	4.9	4.7
Shchuchin	2.9	4.0	3.5	3.6	1.6	2.9	2.6	2.6

Continued

	Total				Of which wastewater into surface water bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Minsk city	174.3	162.4	214.9	214.1	174.3	162.4	214.7	214.0
Minsk region	197.7	145.8	171.4	175.5	177.8	128.0	155.3	159.1
District:								
Berezino	0.8	1.3	0.6	1.0	0.0	0.0	0.6	–
Borisov	14.4	14.6	17.2	16.8	14.1	13.3	16.4	16.4
Vileyka	1.8	1.8	1.9	2.0	1.5	1.6	1.6	1.8
Volozhin	1.3	1.3	1.4	1.4	0.7	1.0	1.2	1.1
Dzerzhinsk	2.8	3.1	3.0	3.2	2.3	2.5	2.4	2.5
Kletsk	1.5	1.4	1.4	1.4	0.5	0.5	0.4	0.4
Kopyl	1.0	0.8	0.8	1.0	0.8	0.7	0.6	0.9
Krupki	1.1	0.8	0.8	0.8	0.4	0.4	0.6	0.6
Logoysk	1.3	1.3	1.3	1.3	0.9	1.0	1.1	1.2
Lyuban	27.7	16.5	26.5	32.6	27.0	16.0	26.1	32.2
Minsk	4.5	3.6	3.9	3.8	0.2	0.1	0.3	0.4
Molodechno	11.9	12.9	14.2	13.7	10.7	11.9	13.0	12.6
Myadel	4.5	3.4	3.4	3.4	3.9	3.0	3.1	3.1
Nesvizh	3.6	3.3	3.0	3.5	1.9	1.9	1.8	2.1
Pukhovichy	3.9	4.0	4.3	4.6	3.0	3.2	3.1	3.5
Slutsk	11.0	11.1	10.1	10.5	9.3	9.9	8.9	9.3
Smolevichy	10.6	10.3	10.0	10.7	9.9	9.7	9.2	9.8
Soligorsk	81.6	36.4	45.2	40.4	81.0	35.8	44.4	40.0
Saryie Dorogi	0.7	0.7	0.6	0.7	0.5	0.5	0.5	0.6
Stolbtsy	2.8	2.9	2.8	3.7	2.2	2.3	2.3	3.2
Uzda	1.2	1.1	1.2	1.2	0.1	0.0	0.0	0.1
Cherven	7.9	13.2	17.7	17.6	7.1	12.7	17.3	17.3

Continued

	Total				Of which wastewater into surface water bodies			
	2011	2015	2016	2017	2011	2015	2016	2017
Mogilev region	103.6	95.0	124.6	136.5	97.2	89.9	100.9	114.3
Mogilev, city of	45.5	43.2	43.7	55.9	45.4	43.1	43.7	55.8
District:								
Belynichy	0.7	0.7	1.0	0.8	0.0	0.0	0.3	0.1
Bobruysk	26.4	19.3	28.7	28.4	26.3	19.2	28.7	28.3
Bykhov	1.1	0.8	0.4	1.2	0.9	0.8	0.3	1.1
Glusk	0.9	0.4	0.0	0.3	0.0	0.3	–	0.2
Gorki	1.8	1.9	1.5	1.6	1.6	1.9	1.5	1.5
Dribin	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2
Kirovsk	0.6	0.9	2.8	2.1	0.5	0.8	2.1	1.9
Klimovichy	1.1	0.9	1.0	1.0	0.3	0.1	0.2	0.1
Klichev	0.2	0.3	0.7	0.3	0.0	0.0	–	–
Kostyukovichy	1.1	1.0	18.4	18.4	1.0	1.0	1.1	1.1
Krasnopolye	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Krichev	2.5	1.3	1.1	1.0	2.5	1.3	1.1	1.0
Krugloye	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0
Mogilev	0.8	1.2	1.0	3.2	0.3	0.7	0.8	2.7
Mstislavl	0.5	0.7	0.4	0.7	0.4	0.4	0.0	0.4
Osipovichy	13.7	16.0	16.2	15.7	13.4	15.8	16.0	15.4
Slavgorod	0.7	0.7	0.6	0.6	0.0	0.0	–	–
Khotimsk	0.2	0.1	0.1	0.2	0.2	0.1	–	0.1
Chausy	0.8	0.9	0.8	1.2	0.5	0.8	0.8	1.2
Cherikov	0.6	0.5	1.1	0.4	0.3	0.2	0.6	0.2
Shklov	3.5	3.4	4.2	2.9	3.4	3.1	3.5	2.7

7.22. Water discharge by economic activity

(million cubic metres)

	2016	2017	
		total	of which wastewater into surface water bodies
Total	1 152.9	1 169.6	1 054.0
of which:			
Agriculture, forestry and fishing	245.0	246.1	226.7
Mining	24.2	36.1	3.2
Manufacturing	121.5	119.0	89.2
of which:			
Manufacture of food products, beverages and tobacco products	16.0	16.1	6.7
Manufacture of textile articles, wearing apparel, articles of leather and fur	2.1	0.6	0.3
Manufacture of products of wood and paper; printing and reproduction of recorded media	5.1	6.1	5.0
Manufacture of coke and refined petroleum products	48.6	47.1	46.8
Manufacture of chemicals and chemical products	25.7	24.6	24.4
Manufacture of basic pharmaceuticals and medicinal products	0.1	0.0	0.0
Manufacture of rubber and plastics products, of other non-metallic mineral products	21.7	22.0	3.7
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	0.1	0.1	0.1
Manufacture of computer, electronic and optical products	0.0	0.0	0.0
Manufacture of electrical equipment	0.1	0.1	0.1

Continued

	2016	2017	
		total	of which wastewater into surface water bodies
Manufacture of machinery and equipment n.e.c.	1.5	1.4	1.2
Manufacture of transport vehicles and equipment	0.1	0.7	0.7
Other manufacturing; repair and installation of machinery and equipment	0.1	0.2	0.2
Electricity, gas, steam, hot water and air conditioning supply	149.0	150.1	127.5
Water supply; waste management and remediation activities	513.4	515.3	508.6
Construction	18.0	13.0	12.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.9	1.8	1.2
Transportation and storage, postal and courier activities	11.7	12.1	11.7
Accommodation and food service activities	16.9	17.0	17.0
Information and communication	–	–	–
Financial and insurance activities	0.0	0.0	0.0
Real estate activities	2.2	0.1	0.0
Professional, scientific and technical activities	2.3	2.6	2.5
Administrative and support service activities	40.3	51.3	51.3
Public administration	1.0	0.9	0.6
Education	0.1	0.1	0.0
Human health and social work activities	3.5	2.2	0.2
Arts, sports, entertainment and recreation	1.8	1.8	1.7
Other service activity	0.0	0.0	–

7.23. Wastewater discharge into surface water bodies by degree of treatment by regions and Minsk city

(million cubic metres)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	1 000	1 015	974	954	870	1 048	1 054
Regions and Minsk city:							
Brest	188	196	176	181	149	167	171
Vitebsk	130	130	128	127	129	144	138
Gomel	143	147	124	119	110	147	142
Grodno	90	87	89	103	101	120	116
Minsk city	174	179	174	168	162	215	214
Minsk	178	179	183	166	128	155	159
Mogilev	97	97	99	90	90	101	114
of which:							
without pre-treatment							
Republic of Belarus	332	345	317	316	246	339	354
Regions and Minsk city:							
Brest	118	128	104	112	82	92	100
Vitebsk	40	40	41	42	43	51	47
Gomel	41	42	27	22	20	56	49
Grodno	6	7	7	26	25	30	30
Minsk city	0.5	0.2	9	1	0.4	0.5	4.5
Minsk	114	115	118	100	62	86	89
Mogilev	12	12	12	12	13	23	34
treated according to standards							
Republic of Belarus	662	666	654	635	618	703	696
Regions and Minsk city:							
Brest	70	67	72	68	67	75	71
Vitebsk	89	90	88	85	86	92	90
Gomel	102	104	98	97	91	90	92
Grodno	82	79	82	76	76	89	85
Minsk city	172	179	165	167	162	214	209
Minsk	61	62	62	63	61	66	67
Mogilev	85	84	87	78	76	77	80

Continued

	2011	2012	2013	2014	2015	2016	2017
insufficiently treated							
Republic of Belarus	6	3	3	3	6	6	4
Regions and Minsk city:							
Brest	0.0	0.1	0.1	0.3	0.3	0.2	0.3
Vitebsk	0.5	0.1	0.1	0.1	0.1	0.8	0.4
Gomel	0.1	0.2	0.1	0.0	0.0	1.6	0.1
Grodno	1	1	0.1	0.0	0.0	0.0	0.1
Minsk city	1	0.0	0.0	0.0	0.0	0.5	0.0
Minsk	3	2	2	3	4	3.1	3.1
Mogilev	0.4	0.3	0.5	0.3	1	0.0	0.3

7.24. Proportion of wastewater discharge treated to standards at treatment facilities in total wastewater discharge treated to standards or insufficiently treated, by regions and Minsk city¹⁾

(percent)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	99.1	99.5	99.6	99.5	99.1	99.1	99.4
Regions and Minsk city:							
Brest	100	99.9	99.9	99.6	99.6	99.7	99.6
Vitebsk	99.5	99.9	99.9	99.9	99.9	99.1	99.5
Gomel	99.9	99.8	99.9	100	100	98.3	99.9
Grodno	98.9	98.9	99.9	99.9	100	99.9	99.9
Minsk city	99.2	100	100	100	100	99.8	100
Minsk	96.1	97.2	96.7	95.8	93.3	95.5	95.6
Mogilev	99.5	99.6	99.4	99.6	98.9	99.9	99.6

¹⁾ The indicator from the National list of SDG indicators (6.3.1.1).

7.25. Ingress of contaminants with wastewater discharge into surface water bodies

	2011	2012	2013	2014	2015	2016	2017
Wastewater discharge into surface water bodies, mln m ³	1 000	1 015	974	954	870	1 048	1 054
Contaminants discharged:							
biochemical oxygen demand (BOD ₅), thsd t	8	9	8	8	8	9	10
salinity	378	422	421	398	382	404	417
sulphate ions, thsd t	60	61	58	47	53	51	49
chloride ions, thsd t	71	75	72	73	66	69	69
ammonium ions, thsd t	6	6	5	5	6	6	6
suspended solids, thsd t	13	12	14	13	12	17	16
synthetic surface-active substances, t	137	125	101	106	107	105	110
ferrum, total, t	484	511	382	289	278	297	267
chromium, total, t	4	3	3	4	3	3	3
nickel, t	4	5	6	3	2	3	4
copper, t	6	7	6	5	5	6	4
zink, t	24	24	25	24	25	29	29
lead, t	1	1	2	2	1	0.7	0.5

7.26. Capacity of water treatment facilities by regions and Minsk city

(million cubic metres per year)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	1 773.3	1 830.0	1 834.0	1 871.7	1 872.9	2 074.3	2 098.2
Regions and Minsk city:							
Brest	253.7	302.0	305.9	313.7	318.2	325.7	325.8
Vitebsk	214.2	216.7	211.9	215.6	215.7	202.1	203.3
Gomel	236.0	237.2	238.2	240.0	239.5	346.4	496.9
Grodno	201.9	207.9	215.7	215.4	215.2	228.4	208.3
Minsk city	339.4	334.9	334.1	348.1	348.3	378.7	393.9
Minsk	278.5	278.1	271.4	273.5	271.4	260.3	210.1
Mogilev	249.6	253.4	256.8	265.4	264.6	332.6	259.8

7.27. Average annual biochemical oxygen demand in river water(milligrammes O₂ per cubic decimeter)

	2011	2012	2013	2014	2015	2016	2017
Berezina	1.82	2.31	2.44	2.48	2.80	2.48	2.53
Viliya	1.93	2.22	2.04	2.18	2.28	2.10	2.37
Dnieper	2.28	2.17	2.08	1.97	2.00	2.07	2.02
Western Dvina	2.09	2.02	2.10	2.04	2.17	2.14	2.11
Western Bug	3.51	4.08	3.52	3.10	4.06	3.77	3.13
Mukhovets	3.06	2.45	2.08	1.75	1.84	2.18	2.21
Neman	2.11	2.11	2.05	2.16	2.13	2.27	2.13
Pripyat	2.35	2.51	2.31	2.62	2.60	2.56	2.56
Svisloch	2.56	2.29	2.47	2.45	2.28	2.38	2.52
Sozh	1.81	1.98	1.73	1.92	1.99	1.97	1.96

7.28. Concentrations of contaminants in river water

	2011	2012	2013	2014	2015	2016	2017
Concentration of ammonium ions (in terms of nitrogen), milligrammes N per cubic decimetre							
Berezina	0.55	0.49	0.55	0.50	0.50	0.47	0.49
Viliya	0.30	0.17	0.17	0.23	0.18	0.21	0.12
Dnieper	0.32	0.35	0.35	0.37	0.31	0.31	0.27
Western Dvina	0.45	0.29	0.23	0.26	0.22	0.21	0.16
Western Bug	0.47	0.54	0.36	0.60	0.43	0.42	0.41
Mukhovets	0.56	0.47	0.37	0.47	0.22	0.22	0.31
Neman	0.36	0.24	0.23	0.24	0.19	0.16	0.23
Pripyat	0.43	0.44	0.37	0.33	0.35	0.35	0.26
Svisloch	0.68	0.29	0.31	0.40	0.43	0.44	0.42
Sozh	0.33	0.30	0.34	0.34	0.29	0.27	0.26

Continued

	2011	2012	2013	2014	2015	2016	2017
Concentration of phosphate ions (in terms of phosphorus), milligrammes P per cubic decimetre							
Berezina	0.08	0.10	0.10	0.08	0.09	0.09	0.08
Viliya	0.04	0.04	0.04	0.03	0.03	0.04	0.03
Dnieper	0.09	0.10	0.10	0.09	0.09	0.08	0.07
Western Dvina	0.03	0.04	0.05	0.04	0.04	0.06	0.06
Western Bug	0.15	0.19	0.14	0.16	0.16	0.15	0.12
Mukhovets	0.08	0.10	0.08	0.10	0.10	0.08	0.08
Neman	0.04	0.04	0.05	0.05	0.05	0.05	0.04
Pripyat	0.05	0.06	0.06	0.05	0.05	0.06	0.06
Svisloch	0.12	0.06	0.04	0.06	0.07	0.07	0.07
Sozh	0.07	0.07	0.08	0.08	0.08	0.07	0.06
Concentration of nitrates (nitrate ions), milligrammes NO ₃ per cubic decimetre							
Berezina	3.72	5.54	5.22	4.56	5.27	7.18	6.15
Viliya	3.45	5.54	5.88	4.65	4.25	5.00	4.93
Dnieper	4.60	4.21	4.42	4.65	4.79	4.41	4.29
Western Dvina	1.24	2.92	2.92	2.04	2.04	2.81	2.46
Western Bug	5.45	3.90	6.37	5.54	3.86	6.46	5.53
Mukhovets	4.07	2.26	5.35	3.63	2.84	6.13	5.05
Neman	5.40	4.34	4.91	5.76	4.56	4.99	5.92
Pripyat	1.55	2.04	2.52	3.10	2.53	2.49	2.97
Svisloch	6.86	4.25	4.12	4.87	5.27	6.38	7.05
Sozh	3.59	3.28	3.72	3.85	4.39	3.93	3.76

7.29. Concentrations of phosphate ions (in terms of phosphorus) in lakes

(milligrammes P per cubic decimetre)

	2011	2012	2013	2014	2015	2016	2017
Vygonoschanskoye	0.0170	0.027	0.025	0.016	0.019	–	0.022
Drivyaty	0.0060	0.035	0.009	0.012	0.014	–	0.017
Ezerishche	0.0113	0.005	0.007	0.006	0.008	–	0.0085
Lepelskoye	0.0394	0.009	0.020	0.025	–	0.027	–
Losvido	0.0144	0.013	0.010	0.011	0.024	–	0.0195
Lukomskoye	0.0355	0.014	0.030	0.015	–	0.017	–
Myadel	0.0061	0.005	0.016	0.008	–	0.009	–
Myastro	0.0108	0.011	0.017	0.004	0.006	–	0.0065
Naroch	0.0054	0.007	0.007	0.008	0.004	0.010	–
Nescherdo	0.0128	0.007	0.013	0.010	–	0.014	–
Osveyskoye	0.0122	0.012	0.008	0.016	0.005	–	0.008
Richy	0.0050	0.019	0.006	0.012	0.007	–	0.01
Svir	0.0063	0.011	0.013	0.008	0.005	–	0.005
Selyava	0.0115	0.012	0.006	0.007	0.014	–	0.0334
Snudy	0.0051	0.008	0.006	0.011	0.006	0.009	–
Strusto	0.0052	0.007	0.004	0.009	–	0.009	–
Chervonoye	0.0065	0.085	0.064	0.080	0.038	–	0.048
Chernoye	0.0375	0.003	0.007	0.021	0.019	0.036	0.019

7.30. Drinking water sample tests for compliance with sanitary hygienic safety standards¹⁾

	2016		2017	
	total samples taken	of which samples not compliant with hygienic standard	total samples taken	of which samples not compliant with hygienic standard
For microbiological parametres				
Centralised water supply sources (groundwater)	27 541	108	22 047	125
Public water supply	81 616	546	74 557	434
Corporate water supply	35 329	312	29 316	242
Decentralised water supply sources	17 830	1 937	17 956	2 241
For sanitary chemical parametres				
Centralised water supply sources (groundwater)	23 696	8 450	20 101	7 646
Public water supply	58 110	7 401	52 286	9 378
Corporate water supply	30 930	6 254	30 408	6 092
Decentralised water supply sources	17 086	4 581	17 739	4 850

¹⁾ Data of the Ministry of Health of the Republic of Belarus.

8. LAND RESOURCES AND LAND PROTECTION

Agricultural land is land regularly used for agricultural production. It includes arable land, fallow land, land under permanent crops, and meadow land.

Forest land is forest stock land covered with forest as well as not covered with forest but intended for its regeneration (cuttings, burned out areas, clearings, waste grounds, glades, lost timber stands, areas under nurseries, plantations and non-closed forest crops, etc.) allotted for forestry management.

Damaged land is land that has lost its natural and historical features, state and uses due to the hazardous anthropogenic impact, and is in a condition that makes its efficient initially designated use impossible.

Land withdrawn from productive turnover includes land removed for housing and industrial construction, construction of transport infrastructure, construction and maintenance of other facilities, forest management and other purposes.

The section was prepared on the basis of the data of the State Committee for Property of the Republic of Belarus.

8.1. Land area

(as of January 1; thousand hectares)

	2012	2014	2015	2016	2017	2018	
						total	as % of total
Total land area	20 760	20 760	20 760	20 760	20 760	20 760	100
of which:							
agricultural land	8 874	8 726	8 632	8 582	8 540	8 502	41.0
forest land	8 585	8 631	8 653	8 742	8 769	8 774	42.3
land under swamps and water bodies	1 338	1 328	1 309	1 286	1 271	1 273	6.1
other land	1 963	2 075	2 166	2 150	2 180	2 212	10.7

8.2. Area of agricultural land by region

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Total							
Republic of Belarus	8 874.0	8 817.3	8 726.4	8 632.3	8 581.9	8 540.2	8 501.6
Region:							
Brest	1 426.9	1 422.5	1 420.1	1 414.8	1 406.4	1 388.7	1 388.1
Vitebsk	1 561.5	1 534.4	1 502.4	1 490.0	1 474.3	1 467.2	1 454.8
Gomel	1 381.7	1 361.9	1 354.2	1 346.7	1 330.4	1 323.8	1 322.7
Grodno	1 248.5	1 246.2	1 243.0	1 236.5	1 233.0	1 230.8	1 218.2
Minsk	1 863.9	1 861.5	1 851.4	1 849.0	1 845.1	1 846.1	1 842.7
Mogilev	1 391.5	1 390.8	1 355.3	1 295.3	1 292.7	1 283.6	1 275.1
of which arable							
Republic of Belarus	5 506.4	5 521.6	5 559.7	5 662.1	5 677.4	5 683.8	5 727.3
Region:							
Brest	817.9	816.9	820.4	828.4	832.3	834.4	835.2
Vitebsk	907.5	919.7	962.1	961.1	956.4	914.4	913.0
Gomel	814.6	818.9	820.2	863.8	881.3	914.2	916.2
Grodno	844.2	844.4	841.6	840.9	843.2	844.2	845.1
Minsk	1 261.4	1 261.5	1 253.6	1 316.4	1 313.0	1 316.0	1 350.9
Mogilev	860.8	860.2	861.8	851.5	851.2	860.6	866.9

8.3. Area of damaged land by region

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Republic of Belarus	25.5	26.3	26.6	26.4	26.9	27.3	26.1
Region:							
Brest	3.8	4.1	4.4	4.3	4.6	4.8	4.8
Vitebsk	3.5	4.0	4.2	4.5	4.6	5.3	4.7
Gomel	3.8	3.3	3.4	3.4	3.3	3.4	3.4
Grodno	4.7	4.6	4.4	4.5	4.8	4.6	4.5
Minsk	6.9	7.3	7.4	6.9	6.8	6.4	5.9
Mogilev	2.8	3.0	2.8	2.8	2.8	2.8	2.8

8.4. Area of reclaimed land

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Total land reclaimed	3 444.9	3 434.1	3 436.1	3 440.1	3 442.5	3 445.4	3 446.6
of which:							
drained	3 414.3	3 403.6	3 406.5	3 410.4	3 412.3	3 415.1	3 416.3
irrigated	30.6	30.5	29.6	29.7	30.2	30.3	30.3
of which agricultural land	2 952.1	2 944.9	2 940.5	2 910.1	2 908.1	2 904.7	2 902.0
of which:							
drained	2 921.5	2 914.4	2 910.9	2 880.4	2 877.9	2 874.4	2 871.7
irrigated	30.6	30.5	29.6	29.7	30.2	30.3	30.3
Share of reclaimed land in total land area, %	16.6	16.5	16.6	16.6	16.6	16.6	16.6
of which:							
drained	16.4	16.4	16.4	16.4	16.4	16.5	16.5
irrigated	0.2	0.1	0.2	0.1	0.1	0.1	0.1

8.5. Area of drained land by region

(as of January 1; thousand hectares)

	2012	2014	2015	2016	2017	2018	
						total	of which agricultural land
Republic of Belarus	3 414.3	3 406.5	3 410.4	3 412.3	3 415.1	3 416.3	2 871.7
Region:							
Brest	755.3	758.1	758.5	758.6	759.0	759.2	697.9
Vitebsk	625.3	626.6	627.3	628.3	628.9	629.3	510.8
Gomel	651.4	651.3	651.3	652.0	652.0	652.0	500.5
Grodno	326.6	329.8	331.4	331.5	331.6	331.6	296.8
Minsk	724.9	707.9	707.9	707.9	707.9	707.9	598.3
Mogilev	330.8	332.8	334.0	334.0	335.7	336.3	267.4

8.6. Area of irrigated agricultural land by region

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Republic of Belarus	30.6	30.5	29.6	29.7	30.2	30.3	30.3
Region:							
Brest	4.4	4.4	4.4	4.4	4.9	4.9	4.9
Vitebsk	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Gomel	5.1	5.1	4.2	4.3	4.3	4.4	4.4
Grodno	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Minsk	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Mogilev	15.5	15.5	15.5	15.5	15.5	15.5	15.5

8.7. Area of land withdrawn from productive turnover

(as of January 1)

	2012	2013	2014	2015	2016	2017	2018
Land withdrawn from productive turnover:							
thsd ha	7.5	2.3	13.5	3.2	5.2	2.1	1.5
as % of total land area	0.04	0.01	0.07	0.02	0.03	0.01	0.01

9. APPLICATION OF FERTILIZERS AND PESTICIDES

Mineral fertilizers are fertilizers of industrial or fossil origin containing nutrients in the form of non-organic chemical compounds. The main nutrients of mineral fertilizers are nitrogen, phosphorus and potassium.

Excessive use of mineral and organic fertilizers as well as application of pesticides increase ecological hazards of water and soil contamination and have a negative impact on other components of the environment, disrupting the natural balance of soil microbial flora.

The analysis of time series on application of fertilizers and pesticides allows for control of their impact on the environment.

9.1. Application of mineral fertilizers in agricultural organisations per hectare of agricultural land by region

(in terms of 100% content of nutrients; kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Mineral fertilizers – total							
Republic of Belarus	220	197	188	162	148	112	110
Region:							
Brest	199	198	194	167	145	129	129
Vitebsk	213	173	177	131	104	59	57
Gomel	221	191	196	176	156	104	106
Grodno	232	218	215	201	187	134	156
Minsk	246	213	177	168	172	149	135
Mogilev	203	187	176	131	121	88	75

Continued

	2011	2012	2013	2014	2015	2016	2017
	of which:						
	nitrogenous						
Republic of Belarus	79	73	71	61	60	47	55
Region:							
Brest	65	73	66	63	61	53	60
Vitebsk	79	65	70	47	44	28	33
Gomel	75	68	73	63	66	43	55
Grodno	85	80	81	82	76	62	76
Minsk	91	79	67	63	65	58	63
Mogilev	73	73	69	48	45	34	41
	phosphorous						
Republic of Belarus	38	29	27	20	18	10	10
Region:							
Brest	28	22	26	20	15	11	12
Vitebsk	42	24	26	13	14	4	4
Gomel	34	32	32	24	23	11	11
Grodno	38	31	31	27	23	10	15
Minsk	51	35	26	22	22	15	14
Mogilev	31	29	24	18	10	8	6
	potassium						
Republic of Belarus	103	95	90	81	70	55	45
Region:							
Brest	106	102	101	84	69	65	57
Vitebsk	91	84	82	72	46	27	20
Gomel	112	91	91	89	67	50	40
Grodno	108	106	102	93	88	62	65
Minsk	104	99	85	84	84	75	57
Mogilev	98	85	83	64	66	46	28

9.2. Share of land treated with mineral fertilizers in total agricultural land by region

(percent)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	89.1	87.0	85.0	83.1	83.5	80.2	79.9
Region:							
Brest	90.9	92.2	88.9	88.2	87.4	86.5	85.7
Vitebsk	87.9	84.4	83.9	79.2	77.1	71.2	68.8
Gomel	86.1	84.7	83.5	85.0	84.8	81.7	82.6
Grodno	87.8	87.8	85.3	84.9	83.8	80.4	82.1
Minsk	94.1	89.6	85.8	85.5	88.4	86.4	84.4
Mogilev	86.1	82.9	82.0	74.8	78.3	73.4	75.1

9.3. Application of mineral fertilizers in agricultural organisations per hectare of arable land by region

(in terms of 100% content of nutrients; kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Mineral fertilizers – total							
Republic of Belarus	313	283	274	236	209	158	155
Region:							
Brest	306	297	301	266	230	200	197
Vitebsk	293	241	250	185	147	85	84
Gomel	350	319	321	280	237	155	152
Grodno	310	293	292	272	250	181	210
Minsk	327	286	243	232	223	192	177
Mogilev	289	269	257	192	169	126	105

Continued

	2011	2012	2013	2014	2015	2016	2017
	of which:						
	nitrogenous						
Republic of Belarus	111	105	101	87	83	65	76
Region:							
Brest	100	109	102	99	95	81	91
Vitebsk	103	88	93	64	60	39	48
Gomel	118	114	119	100	99	65	79
Grodno	115	109	110	108	100	82	101
Minsk	119	106	90	85	84	75	82
Mogilev	105	107	100	71	63	49	57
	phosphorous						
Republic of Belarus	60	46	44	32	27	15	16
Region:							
Brest	48	39	47	35	26	19	20
Vitebsk	66	38	41	20	21	6	6
Gomel	60	56	55	40	36	17	16
Grodno	57	46	45	39	33	15	21
Minsk	74	51	38	31	31	21	19
Mogilev	50	46	39	28	15	12	9
	potassium						
Republic of Belarus	142	132	129	117	99	77	63
Region:							
Brest	158	149	152	132	109	100	87
Vitebsk	124	115	115	101	66	40	30
Gomel	172	150	147	140	102	74	57
Grodno	138	138	136	125	117	84	88
Minsk	134	129	115	116	109	96	76
Mogilev	134	117	118	94	91	66	38

9.4. Application of organic fertilizers in agricultural organisations by region

(tonnes)

	2011	2012	2013	2014	2015	2016	2017
Per hectare of agricultural land							
Republic of Belarus	6.5	6.3	6.0	6.9	6.8	6.5	6.6
Region:							
Brest	8.3	8.3	8.7	9.3	9.4	8.6	9.0
Vitebsk	4.5	4.0	3.3	4.0	3.5	3.6	3.5
Gomel	5.5	5.0	4.8	6.7	6.0	5.9	5.5
Grodno	8.2	8.2	7.8	8.2	8.3	7.9	7.8
Minsk	7.0	6.9	6.4	7.4	7.5	7.2	8.0
Mogilev	5.6	5.3	5.6	6.2	6.4	5.9	5.7
Per hectare of arable land							
Republic of Belarus	10.3	10.0	9.6	10.7	10.3	9.7	9.8
Region:							
Brest	14.3	14.5	15.0	16.0	16.0	14.4	14.8
Vitebsk	7.1	6.3	5.2	6.1	5.3	5.4	5.5
Gomel	9.7	8.8	8.3	11.2	9.4	9.1	8.1
Grodno	12.2	12.2	11.6	12.0	12.1	11.4	11.4
Minsk	10.3	10.2	9.4	10.7	10.4	9.9	10.9
Mogilev	9.0	8.5	8.8	9.6	9.6	8.9	8.3

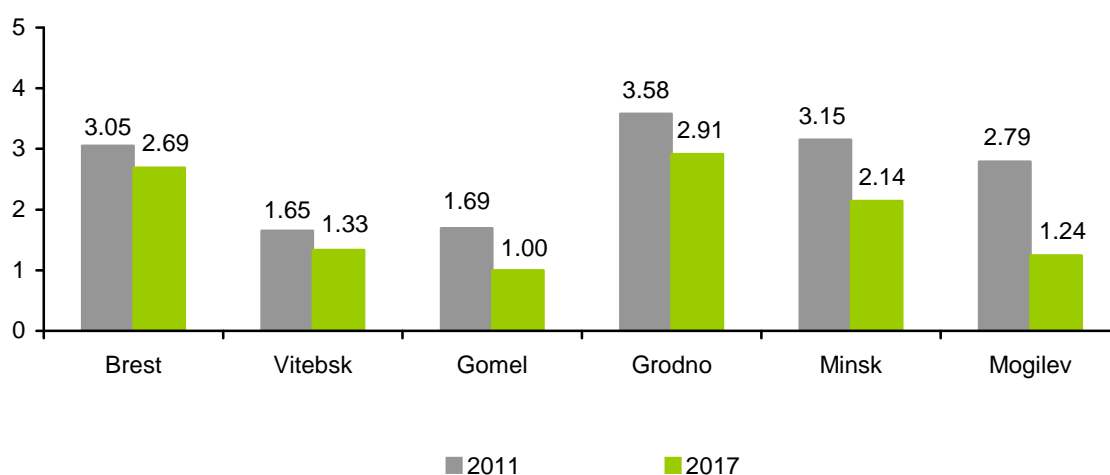
9.5. Application of pesticides per hectare of arable land by region

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	2.67	3.08	2.98	2.63	1.82	1.72	1.88
Region:							
Brest	3.05	3.51	3.57	3.55	2.48	2.40	2.69
Vitebsk	1.65	1.90	1.81	1.63	1.15	1.07	1.33
Gomel	1.69	2.79	2.23	1.71	1.21	0.84	1.00
Grodno	3.58	4.00	4.18	3.72	2.76	2.68	2.91
Minsk	3.15	3.38	3.41	3.16	2.18	2.24	2.14
Mogilev	2.79	2.95	2.60	1.95	1.15	0.95	1.24

9.6. Dynamics of pesticide application per hectare of arable land by region

(kilogrammes)



10. PROTECTION AND USE OF FOREST RESOURCES

Forest stock land is forest land and non-forest land within the boundaries of forest stock area allotted for forestry management.

Forest-covered land is land of the forest stock covered with tree vegetation, either naturally growing or planted, and shrubs.

Percent forest cover is a ratio of the forest-covered area to the total land area of the country (region, district).

Reforestation is restocking of forests in areas where forest was previously growing, through seeding and/or planting of forest plants (artificial reforestation) and natural forest regeneration.

Afforestation is the establishment of forests in areas where forest was not previously growing, through seeding and/or planting of forest plants.

Timber cut by all cutting types is timber procurement by final, intermediate and other cutting.

Timber cut by final cutting type is felling of ripe and overripe stands for timber procurement.

Forest pest and disease control is a set of measures designed to prevent forest damage by harmful organisms and to extinguish pest and disease foci, mostly using biological (a release of predaceous and parasitic insects (entomophages) in pest affected areas; application of fungous, bacterial and virus preparations) and chemical (involves application of pesticides (toxic chemicals)) methods.

10.1. Forest stock land by region¹⁾

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Total area of forest stock							
Republic of Belarus	9 455.1	9 468.6	9 477.1	9 499.5	9 549.2	9 565.8	9 582.0
Region:							
Brest	1 406.3	1 406.0	1 410.4	1 411.1	1 414.1	1 414.7	1 416.5
Vitebsk	1 855.0	1 854.7	1 855.1	1 866.4	1 885.6	1 889.3	1 892.7
Gomel	2 254.4	2 257.1	2 262.0	2 270.9	2 282.9	2 284.3	2 284.5
Grodno	988.1	987.9	989.2	989.1	989.3	990.1	996.1
Minsk	1 716.8	1 716.8	1 714.4	1 713.9	1 715.2	1 723.7	1 727.0
Mogilev	1 234.5	1 246.1	1 246.1	1 248.1	1 262.2	1 263.7	1 265.1
of which forested area							
Republic of Belarus	8 087.6	8 123.3	8 160.4	8 204.1	8 239.8	8 259.4	8 260.9
Region:							
Brest	1 171.2	1 173.6	1 184.1	1 186.7	1 188.6	1 187.4	1 185.7
Vitebsk	1 589.2	1 590.7	1 592.6	1 616.0	1 633.5	1 641.8	1 644.3
Gomel	1 856.1	1 861.1	1 880.5	1 892.3	1 896.3	1 902.4	1 890.4
Grodno	874.9	877.1	880.7	882.6	883.0	883.5	897.9
Minsk	1 529.4	1 530.7	1 528.2	1 527.0	1 532.7	1 535.9	1 533.1
Mogilev	1 066.9	1 090.1	1 094.3	1 099.5	1 105.6	1 108.6	1 109.5

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

10.2. Forest cover of the territory at the country, regional and district levels¹⁾

(as of January 1; percent)

	2012	2013	2014	2015	2016	2017	2018
Republic of Belarus	39.0	39.1	39.3	39.5	39.7	39.8	39.8
Brest region	35.7	35.8	36.1	36.2	36.3	36.3	36.2
District:							
Baranovichy	30.2	30.3	30.3	30.4	30.5	30.6	30.5
Bereza	25.9	25.8	25.8	25.7	25.6	25.6	25.5
Brest	32.8	32.8	33.4	33.5	33.5	33.4	33.7
Gantsevichy	53.6	53.4	53.4	53.3	53.4	53.4	53.5
Drogichin	24.8	24.9	25.9	26.2	26.1	26.1	26.0
Zhabinka	17.3	17.6	18.7	18.8	18.7	18.7	18.7
Ivanovo	27.4	27.4	27.6	27.9	28.1	28.1	28.2
Ivatsevichy	49.3	49.2	49.1	49.1	49.0	49.0	48.9
Kamenets	28.2	28.2	28.3	28.4	28.4	28.4	28.4
Kobrin	25.8	26.2	26.7	26.9	27.0	27.0	26.9
Luninets	43.4	43.4	43.7	43.6	43.7	43.7	43.7
Lyakhovichy	37.4	37.3	37.2	37.3	37.3	37.3	37.3
Malorita	45.3	45.8	46.9	47.3	47.4	47.3	47.4
Pinsk	30.6	30.6	30.6	30.7	30.7	30.7	30.4
Pruzhan'y	41.2	41.5	41.5	41.6	42.0	43.3	43.3
Stolin	35.8	35.8	36.9	36.9	36.9	36.9	36.7

Continued

	2012	2013	2014	2015	2016	2017	2018
Vitebsk region	39.7	39.7	39.8	40.3	40.8	40.8	41.0
District:							
Beshenkovichy	27.1	27.1	27.1	27.6	27.7	27.7	27.8
Braslav	35.5	35.5	35.4	35.3	35.3	35.3	35.3
Verkhnedvinsk	39.6	39.7	39.9	40.3	40.9	40.9	40.9
Vitebsk	36.7	36.9	36.9	37.2	37.6	37.6	37.5
Glubokoye	26.8	26.9	26.9	26.9	27.6	27.6	27.6
Gorodok	52.7	52.6	52.7	52.7	54.7	54.7	55.0
Dokshitsy	49.1	49.2	49.3	49.3	49.7	49.7	51.4
Dubrovno	25.3	25.2	25.4	25.4	26.4	26.4	26.6
Lepel	53.4	53.6	53.7	53.8	53.9	53.9	53.8
Liozno	42.5	42.7	42.6	44.8	44.8	44.8	44.8
Miory	26.0	26.1	26.1	26.3	26.3	26.3	26.3
Orsha	22.5	22.1	22.2	22.2	22.7	22.7	22.7
Polotsk	54.2	54.3	54.4	54.8	55.1	55.2	55.2
Postavy	34.0	34.0	34.0	34.0	34.0	34.0	34.6
Rossony	66.3	66.3	66.1	71.2	71.3	71.3	71.4
Senno	37.2	37.1	37.3	37.6	39.2	39.2	39.2
Tolochin	29.9	29.7	29.6	32.0	32.4	32.4	32.5
Ushachy	41.2	41.4	41.7	41.9	42.5	42.5	42.7
Chashniki	29.1	29.2	29.2	29.3	29.3	29.3	29.4
Sharkovshchina	24.1	24.1	24.2	24.2	24.2	24.2	25.0
Shumilino	42.4	42.4	42.5	42.8	42.8	42.8	42.7

Continued

	2012	2013	2014	2015	2016	2017	2018
Gomel region	46.0	46.1	46.6	46.9	47.0	46.9	47.1
District:							
Bragin	36.3	36.5	36.8	37.1	37.2	37.2	37.3
Buda-Koshelyovo	22.8	22.9	23.0	23.1	23.3	23.3	23.6
Vetka	42.4	43.1	43.9	44.5	45.0	45.0	46.4
Gomel	35.0	35.0	35.1	35.3	35.5	35.9	35.7
Dobrush	24.9	25.2	25.2	25.2	25.3	25.3	25.6
Yelsk	56.3	56.5	56.6	56.7	56.6	56.6	56.7
Zhitkovichy	53.3	53.4	54.5	54.6	54.6	54.6	54.7
Zhlobin	33.7	33.9	34.1	34.5	34.5	34.5	34.4
Kalinkovichy	48.5	48.7	50.0	50.1	50.1	50.1	50.2
Korma	29.2	29.3	30.2	30.5	33.2	33.2	33.3
Lelchitsy	66.8	66.9	69.0	69.1	69.2	69.2	69.1
Loyev	35.6	35.6	35.8	36.4	36.6	36.6	37.1
Mozyr	52.3	52.3	52.6	53.6	53.8	53.8	53.3
Narovlya	63.0	63.0	63.7	64.4	64.5	64.5	64.7
Oktyabrsky	56.7	56.7	56.7	56.7	56.7	56.7	56.6
Petrikov	53.4	53.5	53.8	55.0	55.2	55.2	55.3
Rechitsa	43.6	43.7	43.6	43.7	43.6	43.6	43.6
Rogachev	33.4	33.5	33.6	33.7	33.8	33.8	33.8
Svetlogorsk	51.1	51.1	51.0	50.9	50.9	50.9	51.5
Khoyniki	48.2	48.3	48.4	48.4	47.3	47.3	47.6
Chechersk	48.9	48.8	48.8	49.0	49.0	49.0	49.0

Continued

	2012	2013	2014	2015	2016	2017	2018
Grodno region	34.8	34.9	35.0	35.1	35.1	35.1	35.2
District:							
Berestovitsa	15.2	15.3	15.3	15.3	15.3	15.3	15.2
Volkovysk	23.0	23.0	23.1	23.0	22.9	22.9	22.9
Voronovo	26.8	26.8	26.9	26.9	27.0	27.0	27.0
Grodno	38.1	38.0	38.0	38.0	37.9	37.8	37.7
Dyatlovo	44.4	44.5	44.6	44.8	45.0	45.0	45.0
Zelva	15.7	15.9	16.4	16.6	16.5	16.5	17.3
Ivye	43.4	44.3	44.3	44.4	44.5	44.5	44.5
Korelichy	20.2	20.3	20.5	20.6	20.7	20.7	20.7
Lida	26.0	26.2	26.2	26.2	26.2	26.2	26.1
Mosty	34.5	34.6	34.6	34.7	34.7	34.7	34.7
Novogrudok	40.2	40.4	40.7	40.9	41.2	41.2	41.2
Ostrovets	48.0	48.1	48.7	48.7	48.7	48.7	48.7
Oshmyany	33.2	33.7	33.8	33.9	34.1	34.1	34.0
Svisloch	47.6	47.0	47.2	47.2	47.1	47.1	47.3
Slonim	35.9	36.0	36.3	36.6	36.5	36.5	36.6
Smorgon	36.8	36.8	37.1	37.3	37.4	37.4	37.4
Shchuchin	32.9	32.8	32.7	32.6	32.5	32.5	32.4

Continued

	2012	2013	2014	2015	2016	2017	2018
Minsk region	38.3	38.3	38.3	38.3	38.4	38.3	38.4
District:							
Berezino	48.8	48.8	48.7	49.2	49.6	49.6	50.8
Borisov	50.2	50.4	50.7	50.7	51.5	51.5	51.5
Vileyka	40.5	40.6	40.6	40.7	40.7	40.7	40.7
Volozhin	36.7	36.9	36.9	37.0	37.0	37.0	37.1
Dzerzhinsk	29.2	29.2	29.3	29.4	29.1	29.1	29.1
Kletsk	25.7	25.8	25.8	25.8	25.7	25.7	25.7
Kopyl	17.5	17.6	17.7	17.7	17.8	17.8	18.1
Krupki	48.5	48.4	48.4	48.2	48.2	50.7	50.7
Logoysk	51.1	51.0	49.9	48.8	48.8	48.8	49.4
Lyuban	37.3	37.3	37.2	37.3	37.5	37.5	37.9
Minsk	26.1	26.1	26.1	26.1	26.1	26.1	26.0
Molodechno	30.8	31.0	31.2	31.3	31.5	31.5	31.6
Myadel	42.3	42.2	42.2	42.2	42.2	42.2	42.2
Nesvizh	11.0	11.0	11.1	11.1	11.1	11.1	11.1
Pukhovichy	39.3	39.3	39.2	39.2	39.2	39.2	39.3
Slutsk	21.7	21.6	21.7	21.7	21.6	21.6	22.1
Smolevichy	33.3	33.4	33.3	33.3	33.0	33.0	28.9
Soligorsk	35.6	35.5	35.4	35.4	35.5	35.5	35.3
Staryie Dorogi	49.9	49.9	49.9	49.8	49.8	49.8	50.5
Stolbtsy	45.9	46.0	46.1	46.2	46.3	46.3	46.4
Uzda	39.7	39.7	39.5	39.4	39.4	39.4	39.4
Cherven	39.7	39.4	39.3	39.2	40.5	40.5	38.3

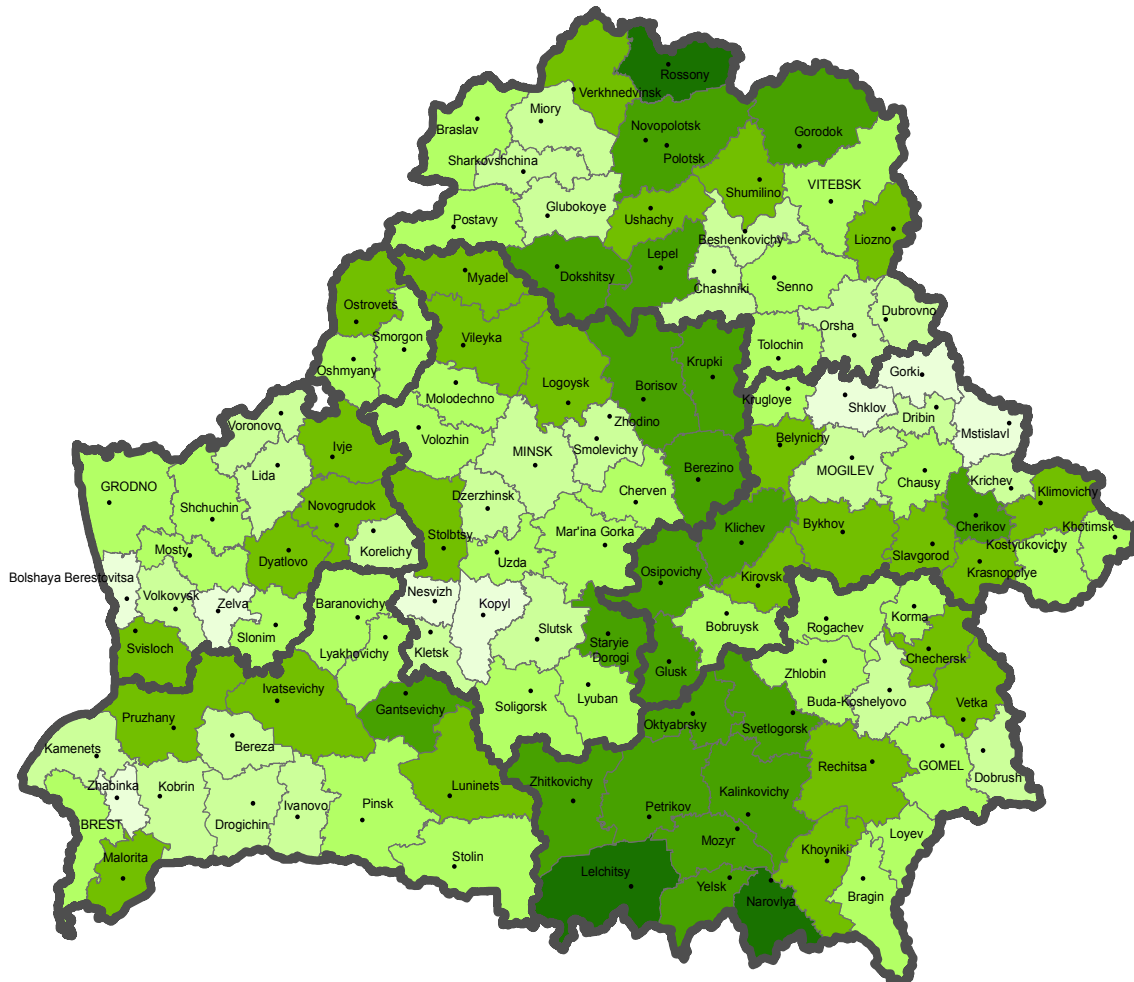
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	2012	2013	2014	2015	2016	2017	2018
Mogilev region	36.7	38.5	38.5	37.8	38.0	38.1	38.2
District:							
Belynychy	44.7	44.7	44.9	45.0	45.3	45.3	45.3
Bobruysk	36.9	37.3	37.3	37.4	37.4	37.5	37.5
Bykhov	42.9	43.7	44.0	44.1	44.3	44.3	44.5
Glusk	51.9	52.4	52.7	52.7	52.8	52.8	52.7
Gorki	15.9	16.0	16.2	16.4	16.5	16.5	16.6
Dribin	26.8	26.6	26.6	26.9	27.1	27.1	27.1
Kirovsk	39.5	40.0	40.4	40.4	40.4	40.4	40.5
Klimovichy	38.9	40.5	40.7	41.0	41.1	41.4	41.8
Klichev	56.8	57.3	57.5	57.7	58.5	58.6	58.9
Kostyukovichy	32.5	34.0	34.0	33.8	34.0	34.0	33.9
Krasnopolye	42.3	45.5	45.5	46.0	46.0	46.0	46.1
Krichev	23.8	24.7	24.8	25.0	25.2	25.2	25.1
Krugloye	30.5	30.5	30.6	30.6	31.0	32.0	30.6
Mogilev	24.1	24.4	24.4	24.9	25.1	25.2	25.4
Mstislavl	15.6	15.8	15.9	16.0	16.2	16.2	16.4
Osipovichy	56.3	56.7	56.9	57.0	56.7	56.7	56.5
Slavgorod	39.9	42.5	42.7	42.9	43.0	43.0	43.0
Khotimsk	31.5	33.5	33.4	33.3	33.3	33.3	33.3
Chausy	29.5	30.4	30.5	30.8	31.6	31.6	32.0
Cherikov	46.8	48.8	49.3	50.0	50.6	50.6	51.0
Shklov	18.5	18.0	17.9	18.1	18.3	18.3	18.2

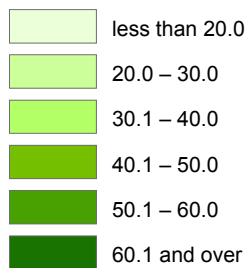
¹⁾ The indicator from the National list of SDG indicators (15.1.1, 15.2.1.1). Data of the Ministry of Forestry of the Republic of Belarus.

10.3. Forest cover of the territory by districts as of January 1, 2018¹⁾

(percent)



Percent forest cover of the territory



¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

10.4. Main activities in forestry

	2011	2012	2013	2014	2015	2016	2017
Reforestation and afforestation, ha:	30 555	31 172	30 284	32 374	33 094	37 179	40 408
assistance to natural forest regeneration and preservation of undergrowth	5 228	6 430	6 534	6 127	6 608	5 603	6 224
forest planting and seeding	25 327	24 742	23 750	26 247	26 486	31 576	34 184
Introduction of forest plantations in the category of valuable forest plantations, ha	51 655	52 284	58 369	59 237	54 039	44 553	39 961
Seed harvesting of wood and shrub species, t	67.5	184.9	174.5	86.1	162.1	27.6	44.7
Forest felling area ¹⁾ , thsd ha	578.3	545.0	535.3	523.9	466.9	487.5	451.0
Marketable timber harvested ¹⁾ , thsd m ³	17 670	18 059	18 521	19 550	18 473	21 071	23 801
Forest pest and disease control, ha:							
biological	22 765	23 673	35 103	23 904	22 458	21 640	23 528
chemical	1 693	664	556	356	357	1 367	1 052
Forest fire control with the aid of aviation, thsd ha	9 364	9 375	9 410	9 420	9 461	9 526	9 560

Continued

	2011	2012	2013	2014	2015	2016	2017
As % of previous year							
Reforestation and afforestation	92.6	102.0	97.2	106.9	102.2	112.3	108.7
Introduction of forest plantations in the category of valuable forest plantations	118.2	101.2	111.6	101.5	91.2	82.4	89.7
Seed harvesting of wood and bush species	29.2	273.9	94.4	49.3	188.3	17.0	162.2
Forest felling area	125.1	94.2	98.2	97.9	89.1	104.4	92.5
Marketable timber harvested	114.2	102.2	102.6	105.6	94.5	114.1	113.0
Forest pest and disease control							
biological	100.1	104.0	148.3	68.1	94.0	96.4	108.7
chemical	579	39.2	83.7	64.0	100.3	383	77.0
As % of 2010							
Reforestation and afforestation	92.6	94.5	91.8	98.2	100.3	112.7	122.5
Introduction of forest plantations in the category of valuable forest plantations	118.2	119.6	133.6	135.6	123.7	102.0	91.4
Seed harvesting of wood and bush species	29.2	80.0	75.5	37.3	70.2	11.9	19.4
Forest felling area	125.1	117.9	115.8	113.3	101.0	105.4	97.5
Marketable timber harvested	114.2	116.7	119.7	126.3	119.4	136.2	153.8
Forest pest and disease control							
biological	100.1	104.1	154.4	105.2	98.8	95.2	103.5
chemical	579	227.4	190.4	121.9	122.3	468	360

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

10.5. Reforestation and afforestation by region

	2011	2012	2013	2014	2015	2016	2017
Total, ha							
Republic of Belarus	30 555	31 172	30 284	32 374	33 094	37 179	40 408
Region:							
Brest	3 212	4 066	3 963	3 574	3 383	3 762	3 753
Vitebsk	6 210	6 029	5 825	6 144	6 048	6 122	5 922
Gomel	7 210	7 190	6 985	7 329	7 509	8 896	11 963
Grodno	3 936	3 917	3 775	4 214	3 810	3 476	2 651
Minsk	5 549	5 655	5 424	5 668	5 471	8 570	10 411
Mogilev	4 438	4 315	4 312	5 445	6 873	6 353	5 708
of which:							
assistance to natural forest regeneration and preservation of undergrowth							
Republic of Belarus	5 228	6 430	6 534	6 127	6 608	5 603	6 224
Region:							
Brest	608	989	1 127	834	662	642	853
Vitebsk	1 535	1 864	2 067	1 934	1 892	1 692	1 362
Gomel	770	1 210	1 093	971	1 117	1 179	1 377
Grodno	485	470	659	502	522	389	390
Minsk	912	974	653	936	1 103	764	1 117
Mogilev	918	923	935	950	1 312	937	1 125
forest planting and seeding							
Republic of Belarus	25 327	24 742	23 750	26 247	26 486	31 576	34 184
Region:							
Brest	2 604	3 077	2 836	2 740	2 721	3 120	2 900
Vitebsk	4 675	4 165	3 758	4 210	4 156	4 430	4 560
Gomel	6 440	5 980	5 892	6 358	6 392	7 717	10 586
Grodno	3 451	3 447	3 116	3 712	3 288	3 087	2 261
Minsk	4 637	4 681	4 771	4 732	4 368	7 806	9 294
Mogilev	3 520	3 392	3 377	4 495	5 561	5 416	4 583

Continued

	2011	2012	2013	2014	2015	2016	2017
of which using selected planting and improved seeding stock							
Republic of Belarus	8 084	8 827	9 161	9 915	10 611	12 908	15 512
Region:							
Brest	1 250	1 350	1 150	1 170	1 201	1 204	1 422
Vitebsk	1 316	1 373	1 504	1 572	1 510	1 890	2 381
Gomel	1 213	1 210	1 386	1 425	1 836	2 924	4 915
Grodno	1 696	1 707	1 713	2 037	1 705	1 630	1 318
Minsk	1 699	1 909	1 918	2 053	2 012	2 788	2 779
Mogilev	910	1 278	1 490	1 658	2 347	2 472	2 697
Proportion of established forest plantations based on genetic selection in total forest seeding and planting ¹⁾ , %							
Republic of Belarus	31.9	35.7	38.6	37.8	40.1	40.9	45.4
Region:							
Brest	48.0	43.9	40.6	42.7	44.1	38.6	49.0
Vitebsk	28.1	33.0	40.0	37.3	36.3	42.7	52.2
Gomel	18.8	20.2	23.5	22.4	28.7	37.9	46.4
Grodno	49.1	49.5	55.0	54.9	51.9	52.8	58.3
Minsk	36.6	40.8	40.2	43.4	46.1	35.7	29.9
Mogilev	25.9	37.7	44.1	36.9	42.2	45.6	58.8

¹⁾ The indicator from the National list of SDG indicators (15.2.1.3).

10.6. Introduction of forest plantations in the category of valuable forest plantations by region

(hectares)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	51 655	52 284	58 369	59 237	54 039	44 553	39 961
Region:							
Brest	6 252	6 113	6 429	7 246	5 715	3 748	3 461
Vitebsk	8 752	9 341	10 509	10 461	10 860	9 749	7 804
Gomel	12 904	13 639	15 122	14 644	13 110	11 355	10 154
Grodno	4 443	5 050	6 745	5 353	4 561	2 913	3 745
Minsk	12 553	9 975	8 283	8 720	8 687	7 878	7 847
Mogilev	6 751	8 166	11 281	12 813	11 106	8 910	6 950

10.7. Seed harvesting of wood and shrub species by region

(tonnes)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	67.5	184.9	174.5	86.1	162.1	27.6	44.7
Region:							
Brest	19.5	29.9	9.4	8.1	11.2	3.3	11.6
Vitebsk	3.4	5.8	5.7	7.0	13.2	3.9	3.0
Gomel	22.4	90.2	80.4	27.6	87.0	3.4	10.2
Grodno	5.4	10.0	11.7	6.2	6.5	4.4	7.0
Minsk	13.7	27.4	25.0	14.3	19.1	8.5	8.2
Mogilev	3.1	21.6	42.3	22.9	25.1	4.1	4.7
of which:							
Coniferous species							
Republic of Belarus	7.5	17.6	3.6	11.4	31.5	7.0	15.1
Region:							
Brest	1.0	2.4	0.9	1.5	1.5	0.6	1.4
Vitebsk	1.0	3.4	0.1	1.3	11.6	0.8	2.3
Gomel	2.2	2.1	1.1	2.7	2.9	1.9	3.6
Grodno	0.3	2.0	0.5	1.0	2.9	0.3	1.6
Minsk	1.5	4.0	0.6	2.5	7.3	1.5	3.0
Mogilev	1.4	3.7	0.4	2.3	5.3	2.0	3.1
of which:							
pine tree							
Republic of Belarus	7.0	5.1	3.3	10.9	7.2	6.2	11.2
Region:							
Brest	1.0	1.0	0.9	1.5	0.8	0.5	1.1
Vitebsk	0.7	0.3	0.1	1.3	0.4	0.4	0.7
Gomel	2.2	1.9	1.0	2.7	2.8	1.9	3.6
Grodno	0.3	0.2	0.4	1.0	0.4	0.3	0.9
Minsk	1.5	0.6	0.5	2.5	0.9	1.1	2.0
Mogilev	1.4	1.1	0.3	1.9	2.0	1.9	2.9

Continued

	2011	2012	2013	2014	2015	2016	2017
spruce							
Republic of Belarus	0.43	12.4	0.3	0.5	24.3	0.8	3.8
Region:							
Brest	0.0	1.3	–	–	0.6	0.1	0.2
Vitebsk	0.35	3.1	0.0	0.0	11.2	0.3	1.6
Gomel	0.02	0.2	0.0	0.0	0.1	0.0	0.1
Grodno	–	1.8	0.0	–	2.5	0.0	0.7
Minsk	0.03	3.4	0.1	0.0	6.5	0.4	1.0
Mogilev	0.03	2.6	0.1	0.5	3.3	0.0	0.2
Deciduous and shrub species (including industrial)							
Republic of Belarus	60.0	167.4	170.9	74.7	130.6	20.6	29.6
Region:							
Brest	18.5	27.5	8.5	6.6	9.8	2.8	10.2
Vitebsk	2.4	2.4	5.6	5.7	1.6	3.1	0.7
Gomel	20.2	88.2	79.4	24.9	84.1	1.5	6.5
Grodno	5.1	8.0	11.2	5.2	3.6	4.1	5.4
Minsk	12.2	23.4	24.3	11.9	11.8	7.0	5.1
Mogilev	1.7	17.9	41.8	20.5	19.8	2.2	1.7
of which oak							
Republic of Belarus	49.6	159.9	163.1	66.0	122.1	12.7	23.6
Region:							
Brest	16.3	25.6	7.1	5.2	8.2	1.2	9.5
Vitebsk	1.4	1.9	5.1	4.7	0.7	2.4	0.2
Gomel	18.5	87.2	78.1	23.4	83.1	0.6	5.7
Grodno	4.3	7.2	10.3	3.7	2.4	2.8	4.7
Minsk	8.3	20.8	21.1	9.0	8.6	4.4	3.4
Mogilev	0.8	17.2	41.4	19.9	19.0	1.3	0.1

10.8. Forest felling area by region¹⁾

(thousand hectares)

	2011	2012	2013	2014	2015	2016	2017
All cutting types							
Republic of Belarus	578.3	545.0	535.3	523.9	466.9	487.5	451.0
Region:							
Brest	114.1	111.5	107.8	99.8	91.0	91.9	89.4
Vitebsk	68.2	66.9	63.6	65.2	58.9	60.0	58.7
Gomel	125.8	112.1	117.5	100.4	86.3	87.5	80.5
Grodno	56.5	56.3	56.0	57.9	48.6	44.5	41.9
Minsk	131.6	123.2	119.4	125.0	112.3	128.7	115.5
Mogilev	82.2	75.1	70.9	75.5	69.9	74.9	65.1
of which final cutting							
Republic of Belarus	28.9	28.1	30.5	37.5	31.3	25.1	25.0
Region:							
Brest	4.3	4.3	4.2	6.7	4.2	3.3	3.0
Vitebsk	5.7	5.4	6.1	7.4	6.3	4.9	5.5
Gomel	7.1	6.6	7.8	8.3	6.8	6.9	6.0
Grodno	2.6	2.7	2.4	2.5	2.3	1.7	2.1
Minsk	5.7	6.3	6.4	6.9	5.8	3.8	4.2
Mogilev	3.3	2.9	3.5	5.7	6.0	4.5	4.2

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

10.9. Marketable timber harvest by region¹⁾

(thousand cubic metres)

	2011	2012	2013	2014	2015	2016	2017
All cutting types							
Republic of Belarus	17 670	18 059	18 521	19 550	18 473	21 071	23 801
Region:							
Brest	2 162	2 220	2 204	2 298	2 357	2 414	3 215
Vitebsk	3 089	3 210	3 336	3 406	3 339	2 987	3 208
Gomel	3 633	3 637	3 983	4 149	3 790	3 940	6 496
Grodno	2 003	1 965	1 989	2 184	1 976	1 953	2 070
Minsk	3 818	3 852	3 735	3 846	3 600	6 350	5 389
Mogilev	2 965	3 175	3 273	3 669	3 412	3 427	3 423
of which final cutting							
Republic of Belarus	6 523	6 522	7 143	7 786	7 480	6 062	6 293
Region:							
Brest	838	856	839	842	849	716	656
Vitebsk	1 357	1 238	1 415	1 489	1 495	1 130	1 335
Gomel	1 582	1 551	1 853	1 868	1 634	1 638	1 528
Grodno	627	653	637	666	603	492	600
Minsk	1 273	1 459	1 481	1 557	1 462	936	1 095
Mogilev	846	765	918	1 364	1 437	1 150	1 078

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

10.10. Forest pest and disease control by region
(hectares)

	2011	2012	2013	2014	2015	2016	2017
Biological control							
Republic of Belarus	22 765	23 673	35 103	23 904	22 458	21 640	23 528
Region:							
Brest	3 258	3 567	13 962	2 876	3 024	2 670	2 751
Vitebsk	3 043	3 032	3 017	3 161	2 767	2 584	2 944
Gomel	6 790	7 565	8 416	7 329	7 400	6 807	6 846
Grodno	3 082	2 722	2 937	3 730	2 719	2 712	3 507
Minsk	4 229	4 317	4 354	4 315	4 133	4 414	4 262
Mogilev	2 365	2 469	2 417	2 492	2 416	2 453	3 219
Chemical control							
Republic of Belarus	1 693	664	556	356	357	1 367	1 052
Region:							
Brest	38	49	40	34	31	479	675
Vitebsk	82	108	59	87	78	86	94
Gomel	1 370	26	249	27	28	505	46
Grodno	35	38	33	32	39	58	59
Minsk	104	140	109	112	99	131	97
Mogilev	64	303	66	64	83	108	82

10.11. Pest-affected forest area

(end of year; hectares)

	2011	2012	2013	2014	2015	2016	2017
Total pest-affected area	247 857	209 495	193 881	191 905	176 753	178 938	206 474
of which with:							
needle-eating pests	74 244	553	575	335	691	975	35 855
leaf-eating pests	8 426	23 047	11 007	8 526	2 668	1 377	867
other pests	1 900	1 872	1 883	2 511	2 383	4 060	9 975
forest diseases	163 287	184 023	180 416	180 533	171 011	172 526	159 777

10.12. Area of forest loss by region

(hectares)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	10 569	9 848	8 222	8 594	13 660	27 206	35 367
Region:							
Brest	1 459	736	686	764	1 978	2 913	6 394
Vitebsk	895	1 819	1 775	1 319	1 250	1 341	1 006
Gomel	1 623	1 212	704	1 578	6 369	4 012	16 075
Grodno	1 516	800	875	1 215	1 039	1 350	1 275
Minsk	2 318	1 542	972	1 145	983	14 440	7 188
Mogilev	2 758	3 739	3 210	2 572	2 041	3 150	3 429

10.13. Area of forest loss by cause

(hectares)

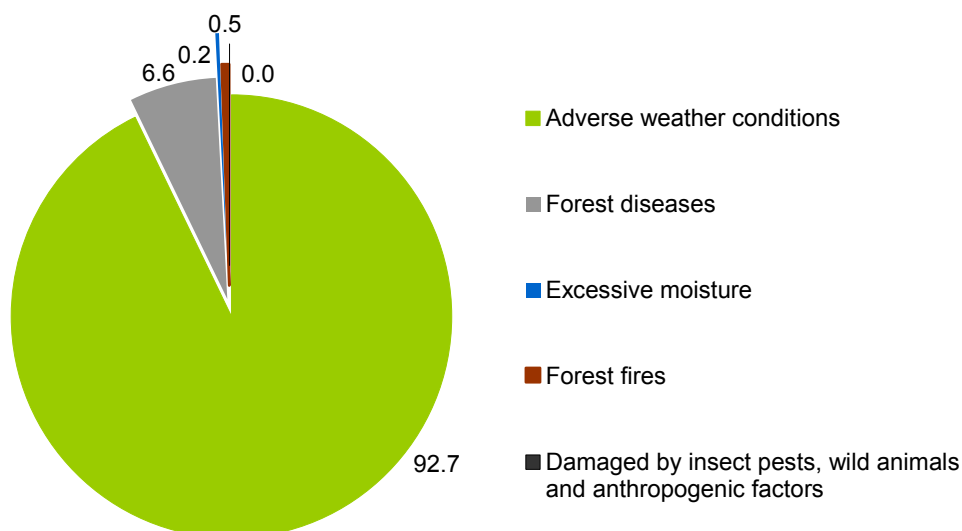
	2011	2012	2013	2014	2015	2016	2017
Total							
Total forest loss	10 569	9 848	8 222	8 594	13 660	27 206	35 367
of which by cause:							
damaged by insect pests	–	–	2	24	8	–	4
damaged by wild animals	–	2	–	2	–	5	1
forest diseases	708	760	541	697	985	1 554	2 336
anthropogenic factors	3	–	–	1	–	–	9
adverse weather conditions	9 345	8 274	7 145	7 455	6 446	24 540	32 769
excessive moisture	243	652	454	310	253	150	69
forest fires	269	160	79	105	5 968	957	179
of which: coniferous species							
Total forest loss	8 667	8 808	7 689	7 746	12 206	24 457	34 588
of which by cause:							
damaged by insect pests	–	–	2	24	8	–	4
damaged by wild animals	–	2	–	2	–	–	1
forest diseases	493	641	487	634	962	1 533	2 299
anthropogenic factors	3	–	–	1	–	–	9
adverse weather conditions	7 769	7 607	6 806	6 781	5 974	21 900	32 050
excessive moisture	162	405	315	199	201	103	48
forest fires	239	153	78	104	5 061	921	177

Continued

	2011	2012	2013	2014	2015	2016	2017
deciduous species							
Total forest loss	1 902	1 040	533	848	1 454	2 749	779
of which by cause:							
damaged by wild animals	–	–	–	–	–	5	–
forest diseases	215	119	54	63	23	21	37
adverse weather conditions	1 576	667	339	674	472	2 640	719
excessive moisture	81	247	139	111	52	47	21
forest fires	30	7	1	1	907	36	2

10.14. Structure of area of forest loss by cause in 2017

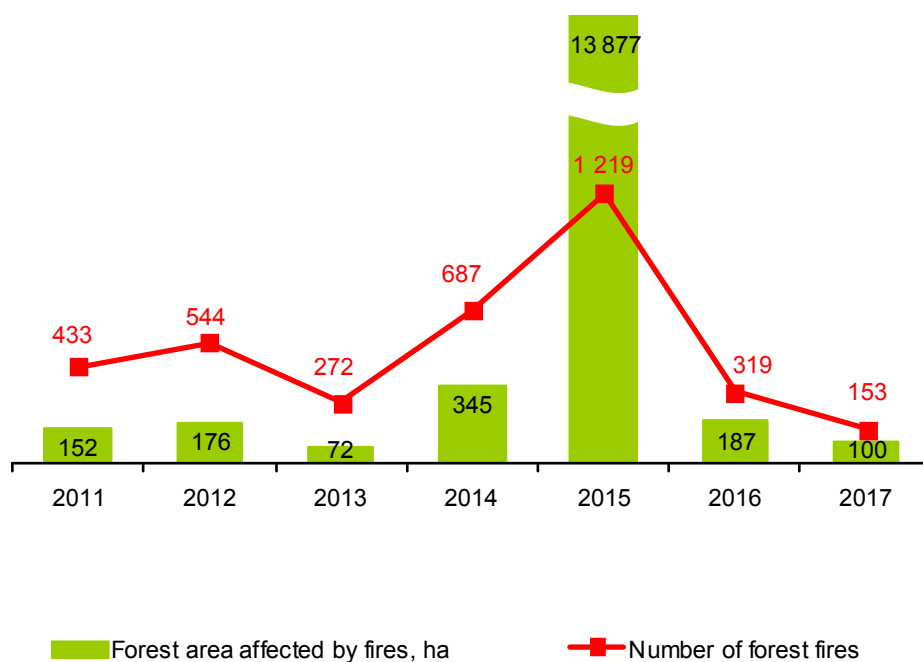
(percent)



10.15. Forest fires by region

	2011	2012	2013	2014	2015	2016	2017
Number of forest fires							
Republic of Belarus	433	544	272	687	1 219	319	153
Region:							
Brest	102	148	35	92	240	57	37
Vitebsk	35	26	32	30	60	29	8
Gomel	113	142	97	285	452	117	64
Grodno	65	61	36	47	63	22	5
Minsk	69	136	48	163	233	58	32
Mogilev	49	31	24	70	171	36	7
Forest area affected by fires, hectares							
Republic of Belarus	152	176	72	345	13 877	187	100
Region:							
Brest	27	53	6	30	1 360	52	16
Vitebsk	15	7	8	24	75	46	6
Gomel	41	54	21	157	11 991	51	56
Grodno	18	15	6	15	28	5	3
Minsk	22	29	9	75	75	11	8
Mogilev	30	18	22	45	349	23	11
Standing timber damaged, cubic metres							
Republic of Belarus	4 197	7 675	1 572	13 735	398 496	4 052	3 201
Region:							
Brest	1 023	2 092	75	2 411	81 409	3 327	2 328
Vitebsk	250	248	83	–	–	68	–
Gomel	1 132	4 653	1 341	6 774	296 686	–	873
Grodno	1 214	574	30	133	3 967	80	–
Minsk	578	80	43	3 500	1 239	338	–
Mogilev	–	28	–	917	15 196	240	–

10.16. Number of forest fires and forest area affected by fires



10.17. Forest fire control with the aid of aviation by region

(thousand hectares)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	9 364	9 375	9 410	9 420	9 461	9 526	9 560
Region:							
Brest	1 493	1 495	1 494	1 500	1 500	1 473	1 408
Vitebsk	1 871	1 854	1 873	1 873	1 883	1 903	1 906
Gomel	2 204	2 217	2 224	2 225	2 239	2 274	2 287
Grodno	903	910	922	924	924	927	992
Minsk	1 657	1 662	1 660	1 660	1 660	1 685	1 699
Mogilev	1 238	1 238	1 237	1 239	1 254	1 265	1 268

10.18. Procurement of wild-growing foods by region¹⁾

(tonnes)

	2011	2012	2013	2014	2015	2016	2017
Fruits and berries							
Republic of Belarus	18 171	23 253	16 614	5 614	4 313	18 066	6 766
Region:							
Brest	3 916	5 301	2 078	1 159	852	5 069	840
Vitebsk	1 773	1 848	1 889	558	242	766	229
Gomel	2 308	3 032	1 806	712	330	2 329	1 257
Grodno	2 818	2 756	2 939	956	598	3 403	682
Minsk	6 046	8 566	7 090	2 037	1 888	5 687	2 546
Mogilev	1 310	1 749	813	192	404	811	1 213
of which cranberry							
Republic of Belarus	2 694	2 128	1 394	391	327	725	896
Region:							
Brest	794	669	515	113	47	113	235
Vitebsk	389	271	167	68	59	195	100
Gomel	395	535	289	67	28	70	156
Grodno	114	138	188	13	66	76	139
Minsk	805	378	115	58	71	225	113
Mogilev	198	137	121	72	57	46	153
Mushrooms, fresh, dried or salted (in fresh equivalent)							
Republic of Belarus	7 597	9 906	6 454	4 854	1 338	5 304	6 366
Region:							
Brest	585	447	324	549	36	217	216
Vitebsk	312	241	387	193	84	222	184
Gomel	1 310	1 486	1 456	1 057	193	807	1 356
Grodno	2 621	2 269	2 117	1 685	172	2 438	2 642
Minsk	2 170	4 759	1 787	1 051	648	1 328	1 567
Mogilev	598	704	383	318	207	292	400

¹⁾ Data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus. Excluding procurements abroad.

11. GAME HUSBANDRY

Hunting area is the area serving as habitat for game animals and used for hunting purposes and game husbandry management.

Game husbandry expenditure comprises amounts of money spent on the reproduction and protection of wild animals; organisation of hunting of game animals; wages of employees engaged in game husbandry management; renting of service premises; maintenance costs of hunter's houses, hunting centres, service premises and production buildings (heating, lighting, current repairs), access roads, transport; rent for hunting area use; depreciation allowances for restoration of fixed assets; costs of hunting management, maintenance of hunting dogs, decoy and hunting birds, horses; repairs of hunting guns; purchase of low value implements; clerical and other expenditures on game husbandry activities irrespective of the source of financing.

Expenditure on biotechnical measures comprises amounts of money spent on the reproduction and protection of wild animals to enhance the productivity of hunting areas. These measures include purchase, procurement and laying out of fodder for complementary feeding of wild animals; establishing of feeding sites, feeding water, artificial nests, construction of biotechnical facilities (fodder storehouses, saline and pebble stone sites, feedboxes, etc.); implementation of measures to control diseases of wild animals; transport and other expenses related to biotechnical measures.

Earnings from game husbandry management are amounts of money from shooting and capture of wild animals, sales of hunt products (meat, hides, horns, fangs), provision of services to hunters (transport, accommodation, special clothing, etc.), operation of hunting centres and boat stations.

Wild animal population is the number of animals of wild hoofed, fur-bearing and bird species on hunting areas estimated on the basis of inventories carried out in the reporting year.

The section was prepared on the basis of data of the Ministry of Forestry of the Republic of Belarus, excluding biological (hunting) reserves and hunting-free zones.

11.1. Area of hunting grounds by region

(end of year; million hectares)

	2011	2012	2013	2014	2015	2016	2017
Total							
Republic of Belarus	16.7	16.8	16.7	16.6	16.7	16.5	16.6
Region:							
Brest	2.7	2.7	2.7	2.7	2.5	2.6	2.6
Vitebsk	3.5	3.4	3.5	3.5	3.5	3.4	3.4
Gomel	3.0	3.1	3.0	3.0	3.1	3.0	3.1
Grodno	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Minsk	3.2	3.2	3.2	3.2	3.3	3.2	3.2
Mogilev	2.4	2.5	2.5	2.4	2.4	2.4	2.4
of which under game husbandry management							
Republic of Belarus	9.9	12.9	14.8	15.1	16.1	15.6	15.9
Region:							
Brest	2.2	2.3	2.7	2.7	2.5	2.2	2.2
Vitebsk	1.5	2.6	3.0	3.5	3.5	3.4	3.4
Gomel	0.9	1.7	1.7	1.6	2.8	2.7	2.8
Grodno	0.9	1.2	1.9	1.8	1.8	1.7	1.9
Minsk	2.3	2.8	3.2	3.1	3.1	3.2	3.2
Mogilev	2.0	2.3	2.5	2.4	2.4	2.4	2.4

11.2. Expenditures on biotechnical activities designed for wildlife reproduction and protection by region(BYR million¹⁾; at current prices)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	9 894	28 859	30 445	33 776	43 958	3 529	3 551
Region:							
Brest	2 780	4 022	8 107	9 234	14 316	1 015	546
Vitebsk	1 198	12 721	9 610	13 048	13 768	1 060	1 613
Gomel	4 110	8 893	7 542	7 055	10 133	513	467
Grodno	451	948	1 771	1 041	1 600	308	278
Minsk	1 013	1 645	2 458	2 393	3 541	488	492
Mogilev	342	630	957	1 006	601	144	156

¹⁾ Since 2016 – BYN thousand (in terms of the new denomination; 1 BYN = 10 000 BYR).

11.3. Game husbandry earnings and expenditures

(BYR million¹⁾; at current prices)

	2011	2012	2013	2014	2015	2016	2017
Earnings from game husbandry maintenance	67 827	122 466	168 677	173 536	198 971	22 102	22 518
Expenditures on game husbandry maintenance	51 195	112 880	160 265	185 424	207 830	20 891	23 734
of which on biotechnical activities designed for wildlife reproduction and protection	9 894	28 859	30 445	33 776	43 958	3 529	3 551
of which:							
distribution (settlement) of game animals	49	9 233	4 830	7 194	9 802	571	1 018
purchase of supplementary feeds for wild animals	8 808	14 331	21 036	22 823	25 523	1 551	1 256

¹⁾ Since 2016 – BYN thousand (in terms of the new denomination; 1 BYN = 10 000 BYR).

11.4. Populations of major game species

(thousand animal units)

	2011	2012	2013	2014	2015	2016	2017
Elk	24.3	26.9	27.9	30.1	32.0	33.7	36.3
Red deer	10.0	11.3	12.2	13.6	15.2	16.7	21.5
Boar	74.0	77.8	80.4	8.6	8.0	2.6	2.8
Roe deer	69.5	73.3	74.0	71.5	74.7	82.1	92.8
Squirrel	113.7	126.7	111.1	102.4	118.4	110.3	111.8
Hare	169.4	161.3	154.1	152.8	159.1	157.7	167.5
Fox	42.7	37.0	33.8	29.7	27.5	25.5	25.2
Muskrat	32.3	35.1	27.6	24.4	29.9	27.4	25.8
American mink	21.6	23.7	22.3	22.5	23.0	23.3	24.1
Beaver	60.5	64.4	62.0	63.4	58.3	51.3	51.1
Wood grouse	9.3	8.9	9.1	8.2	8.4	9.0	7.9
Black grouse	37.9	36.1	34.6	39.9	37.3	38.5	40.6

11.5. Hunting of major game species

(thousand animal units)

	2011	2012	2013	2014	2015	2016	2017
Elk	1.9	2.4	2.5	3.3	3.8	4.2	4.6
Red deer	0.7	0.8	0.9	1.1	1.2	1.5	1.7
Boar	28.4	29.7	48.1	30.6	17.2	10.7	9.1
Roe deer	6.1	6.6	6.2	6.6	7.9	9.3	11.1
Squirrel	2.6	4.1	3.5	2.5	2.5	2.2	2.2
Hare	42.0	44.1	40.5	40.1	43.4	49.4	54.1
Fox	18.2	16.9	16.4	15.2	15.4	13.3	17.3
Muskrat	2.8	2.2	2.2	1.8	1.3	0.8	0.6
American mink	2.4	3.0	3.7	4.0	3.3	2.4	2.2
Beaver	14.3	6.0	6.3	6.0	8.9	7.9	8.3
Wood grouse	0.1	0.1	0.1	0.1	0.1	0.4	0.1
Black grouse	0.2	0.2	0.2	0.2	0.2	0.4	0.6

11.6. Population of mammals included in the Red Book of the Republic of Belarus in their habitats taken under protection by users of hunting reserves

(animal units)

	2014	2015	2016	2017
European bison (main gene pool)	...	...	1 092	1 423
Badger	1 416	728	695	681
Bear	119	20	76	68
European mink	351	225	260	101
Lynx	771	421	532	489

12. WASTE

Waste refers to substances or objects generated in the process of economic and vital activities of humans and having no definite function at the place of generation or having fully or partially lost their consumption properties.

Industrial waste is waste generated in the process of economic activity of businesses and individual entrepreneurs (manufacture of goods, electricity generation, performing of work, provision of services), by- and associated products of extraction and processing of minerals.

Waste utilization is the use of waste for manufacturing products, electricity generation, performing works and provision of services.

Waste disposal comprises activities of temporary waste storage and transportation of waste to storage, burial, detoxification and / or utilization facilities.

Utilized and disposed industrial waste is reflected taking into account partial utilization or disposal of previously accumulated waste.

Hazardous waste is waste containing substances with a hazardous property or properties, in such amounts and state, that this waste itself or when entering in contact with other substances, may pose a direct or potential danger to the environment, human health, or property due to its detrimental effect.

Hazardous waste is classified by hazard class: class 1 (extremely hazardous), class 2 (high-hazard), class 3 (hazardous), class 4 (low-hazard).

Municipal waste is consumption waste and industrial waste included in the *List of waste referred to municipal waste the disposal of which is organized by local executive and administrative bodies*. The List is approved by the Ministry of Housing and Utilities of the Republic of Belarus.

According to the List of municipal waste, such waste includes waste from human vital activities, sweepings; waste from research, education, sporting, cultural and religious activities; waste from trade, social service and transport activities; waste from administrative managerial and economic activities; waste of health care facilities.

The section was prepared on the basis of data of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus as relates to industrial waste, and the Ministry of Housing and Utilities of the Republic of Belarus as relates to municipal waste.

12.1. Generation, utilization and disposal of industrial waste in organisations by regions and Minsk city

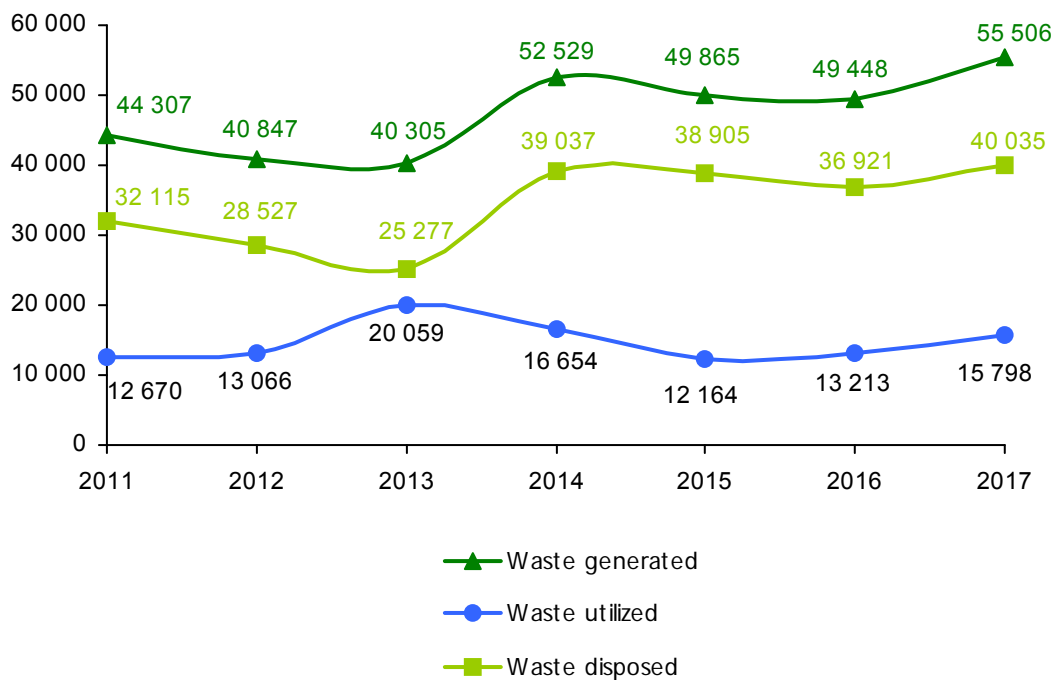
	2011	2012	2013	2014	2015	2016	2017
Waste generated, thousand tonnes							
Republic of Belarus	44 307	40 847	40 305	52 529	49 865	49 448	55 506
Regions and Minsk city:							
Brest	1 040	1 053	1 412	1 449	1 244	1 579	1 488
Vitebsk	885	862	843	836	552	510	769
Gomel	2 973	3 120	2 993	3 702	3 097	2 867	3 114
Grodno	1 704	1 781	2 196	1 864	1 786	2 072	2 349
Minsk city	1 858	1 617	2 397	2 072	1 980	2 858	3 139
Minsk	32 765	29 665	27 355	38 210	36 601	36 565	40 714
Mogilev	3 082	2 749	3 109	4 396	4 605	2 996	3 933
Waste utilized, thousand tonnes							
Republic of Belarus	12 670	13 066	20 059	16 654	12 164	13 213	15 798
Regions and Minsk city:							
Brest	934	902	1 221	1 244	1 039	1 450	1 343
Vitebsk	548	518	553	631	388	397	633
Gomel	1 633	2 244	7 020	5 032	2 632	1 730	1 748
Grodno	1 371	1 396	1 404	1 131	1 008	1 425	1 816
Minsk city	848	671	1 162	996	1 177	2 068	2 473
Minsk	4 388	4 652	5 871	5 772	3 362	4 016	4 304
Mogilev	2 948	2 683	2 828	1 848	2 557	2 128	3 481
As percentage of waste generated							
Republic of Belarus	28.6	32.0	49.8	31.7	24.4	26.7	28.5
Regions and Minsk city:							
Brest	89.8	85.7	86.5	85.9	83.5	91.8	90.3
Vitebsk	61.9	60.1	65.6	75.5	70.3	77.9	82.3
Gomel	54.9	71.9	234.5	135.9	85.0	60.3	56.1
Grodno	80.5	78.4	63.9	60.7	56.4	68.8	77.3
Minsk city	45.6	41.5	48.5	48.1	59.4	72.3	78.8
Minsk	13.4	15.7	21.5	15.1	9.2	11.0	10.6
Mogilev	95.7	97.6	91.0	42.0	55.5	71.0	88.5

Continued

	2011	2012	2013	2014	2015	2016	2017
Waste disposed, thousand tonnes							
Republic of Belarus	32 115	28 527	25 277	39 037	38 905	36 921	40 035
Regions and Minsk city:							
Brest	164	165	209	248	241	223	196
Vitebsk	352	348	301	224	173	148	162
Gomel	1 405	1 305	648	1 431	1 306	1 322	1 435
Grodno	435	475	856	824	827	694	619
Minsk city	1 030	949	1 240	1 091	820	887	705
Minsk	28 399	25 049	21 526	32 522	33 274	32 667	36 445
Mogilev	330	236	497	2 698	2 264	979	472

12.2. Dynamics of generation, utilization and disposal of industrial waste

(thousand tonnes)



12.3. Generation of industrial waste in organisations per inhabitant by regions and Minsk city

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	4 677	4 316	4 258	5 544	5 255	5 204	5 844
Regions and Minsk city:							
Brest	747	757	1 016	1 043	896	1 139	1 074
Vitebsk	727	712	700	696	461	428	649
Gomel	2 076	2 184	2 098	2 598	2 176	2 017	2 196
Grodno	1 602	1 680	2 078	1 769	1 699	1 976	2 246
Minsk city	991	854	1 254	1 074	1 016	1 453	1 586
Minsk	23 279	21 149	19 508	27 190	25 910	25 748	28 576
Mogilev	2 843	2 549	2 893	4 102	4 307	2 811	3 705

12.4. Utilization of industrial waste in organisations per inhabitant by regions and Minsk city

(kilogrammes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	1 338	1 381	2 119	1 758	1 282	1 391	1 663
Regions and Minsk city:							
Brest	670	648	879	896	749	1 046	969
Vitebsk	450	428	459	526	325	334	535
Gomel	1 140	1 571	4 921	3 532	1 849	1 217	1 232
Grodno	1 289	1 317	1 329	1 073	959	1 359	1 737
Minsk city	452	354	608	516	604	1 051	1 250
Minsk	3 118	3 317	4 187	4 107	2 380	2 828	3 021
Mogilev	2 719	2 488	2 632	1 724	2 392	1 996	3 279

12.5. Generation of industrial waste in organisations by regions, cities and districts

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	44 307.5	40 847.1	40 305.0	52 529.3	49 865.3	49 448.2	55 506.0
Brest region	1 040.3	1 053.0	1 411.9	1 449.1	1 244.0	1 579.4	1 487.7
Brest city of	314.0	265.0	764.9	762.7	497.5	889.9	688.3
District:							
Baranovichy	48.0	47.4	52.1	72.3	77.4	109.7	78.2
Bereza	98.5	91.3	96.8	87.4	84.2	108.9	52.3
Brest	3.2	2.2	4.1	1.7	54.6	7.2	52.3
Gantsevichy	9.2	7.2	38.2	35.0	77.0	13.5	21.1
Drogichin	12.1	11.9	13.2	14.4	17.1	16.3	12.4
Zhabinka	99.1	126.6	77.2	79.0	93.2	96.7	39.7
Ivanovo	97.7	72.6	69.1	90.1	25.9	20.5	23.9
Ivatsevichy	145.6	160.3	51.4	84.0	45.5	61.1	258.6
Kamenets	16.1	29.4	2.4	10.0	5.1	3.3	3.8
Kobrin	7.6	0.7	15.0	13.6	11.7	11.7	17.1
Luninets	33.4	33.4	45.3	43.9	14.4	12.8	12.3
Lyakhovichy	7.4	7.3	32.2	5.5	7.6	8.5	15.6
Malorita	4.4	4.3	4.5	7.2	6.5	7.7	8.0
Pinsk	120.9	171.3	129.0	91.7	209.4	198.4	183.9
Pruzhan'y	15.4	15.2	10.7	14.4	14.4	11.2	12.1
Stolin	6.8	8.1	6.1	38.6	2.3	2.2	8.3

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	885.4	862.3	843.0	835.8	551.6	509.9	769.0
Vitebsk city of	240.9	218.1	235.8	201.5	115.4	101.5	109.9
District:							
Beshenkovichy	1.2	1.2	1.2	0.9	0.5	0.4	0.4
Braslav	9.4	9.4	9.4	12.2	8.0	12.5	22.7
Verkhnedvinsk	7.9	7.4	7.4	13.8	14.2	11.1	16.2
Vitebsk	6.0	10.7	5.3	0.2	8.7	6.8	25.6
Glubokoye	11.8	11.8	16.6	13.6	11.9	11.7	21.2
Gorodok	2.4	2.4	2.4	4.1	1.8	7.2	9.2
Dokshitsy	3.2	3.2	3.2	1.6	1.6	1.8	5.0
Dubrovno	2.1	2.0	2.0	1.3	2.2	2.8	2.7
Lepel	12.4	6.8	6.7	9.6	16.0	12.1	16.3
Liozno	4.4	5.3	5.3	2.8	4.3	18.6	19.7
Miory	34.6	34.9	35.2	79.6	67.1	46.6	121.8
Orsha	106.7	104.9	104.5	93.8	70.5	63.2	98.0
Polotsk	9.3	7.3	7.3	4.9	4.2	4.4	4.4
Postavy	120.9	137.2	137.2	218.3	43.2	34.3	60.8
Rossony	9.3	4.6	4.6	3.8	3.6	3.8	1.9
Senno	172.8	162.2	162.2	80.3	58.0	71.5	83.6
Tolochin	17.0	16.7	16.7	10.9	51.6	28.4	44.5
Ushachy	4.0	4.8	5.7	5.2	6.2	6.5	6.5
Chashniki	103.3	108.9	68.9	70.8	58.8	57.8	94.4
Sharkovshchina	2.0	1.3	1.5	2.5	1.7	4.3	1.8
Shumilino	3.5	3.8	3.7	4.2	2.4	2.6	2.5

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	2 973.0	3 120.0	2 993.5	3 702.1	3 097.4	2 867.1	3 114.3
Gomel city of	977.1	1 128.4	1 011.8	983.1	1 016.2	1 047.7	1 115.2
District:							
Bragin	1.2	0.1	1.5	0.0	0.2	0.1	0.1
Buda-Koshelyovo	14.0	12.3	15.6	11.0	9.1	12.5	14.1
Vetka	4.4	8.7	8.1	3.0	4.7	4.4	3.2
Gomel	51.5	41.7	89.9	80.5	12.5	47.2	181.9
Dobrush	177.7	135.2	95.9	81.1	53.0	34.7	22.2
Yelsk	8.9	8.6	0.6	2.6	4.5	3.8	3.3
Zhitkovichy	25.1	23.8	22.2	12.3	29.4	25.8	27.6
Zhlobin	1 058.7	1 157.6	968.3	1 907.6	1 385.1	1 221.5	1 184.1
Kalinkovichy	23.4	12.9	18.6	14.7	21.6	23.2	24.7
Korma	2.4	5.6	2.9	1.4	4.0	6.0	4.8
Lelchitsy	4.3	3.9	9.4	3.6	10.6	7.3	17.5
Loyev	2.9	1.7	1.5	1.8	1.5	2.1	1.2
Mozyr	78.7	177.3	236.5	124.4	87.7	121.9	113.8
Narovlya	1.1	2.1	4.1	3.1	2.5	3.0	0.9
Oktyabrsky	5.8	6.4	5.6	5.7	12.1	5.0	4.6
Petrikov	92.1	79.9	68.2	69.3	37.8	82.1	119.8
Rechitsa	196.5	84.7	247.5	222.3	260.1	107.9	118.5
Rogachev	52.1	45.9	7.3	7.8	14.4	15.3	20.7
Svetlogorsk	185.4	170.1	151.8	140.5	108.4	67.5	114.3
Khoyniki	7.2	12.3	18.1	11.5	12.8	17.8	13.9
Chechersk	2.7	4.9	8.1	14.8	9.3	10.5	8.0

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	1 703.7	1 780.9	2 196.1	1 863.7	1 785.8	2 072.4	2 348.5
Grodno city of	564.2	627.0	751.5	823.5	821.3	1 040.3	985.9
District:							
Berestovitsa	3.5	5.0	2.4	3.2	2.8	17.0	15.9
Volkovysk	327.2	335.1	274.2	330.8	275.8	224.6	238.2
Voronovo	1.6	2.7	7.0	3.3	3.3	5.0	3.3
Grodno	457.8	465.4	585.2	172.0	100.4	100.4	160.6
Dyatlovo	9.2	7.7	4.2	4.2	6.8	3.3	9.4
Zelva	4.4	7.9	2.8	3.0	1.7	2.2	1.8
Ivye	16.6	11.5	21.5	7.5	2.6	5.6	7.2
Korelichy	5.2	4.9	5.0	5.2	6.9	6.5	5.2
Lida	99.3	136.9	97.0	81.5	72.3	84.5	116.3
Mosty	6.2	10.6	3.8	5.5	6.2	5.0	85.7
Novogrudok	5.2	6.4	8.9	8.0	13.2	4.5	11.0
Ostrovets	8.1	11.0	10.0	9.7	6.6	12.6	18.4
Oshmyany	26.9	10.5	8.7	26.0	21.4	39.6	35.7
Svisloch	5.3	3.9	8.0	7.4	4.6	5.3	4.7
Slonim	109.8	100.3	202.7	200.3	184.5	198.7	214.7
Smorgon	26.5	4.1	182.2	152.1	247.3	310.2	413.8
Shchuchin	26.6	30.0	21.3	20.8	8.2	7.5	20.8

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	1 858.1	1 616.6	2 397.0	2 072.3	1 980.4	2 857.9	3 138.9
Minsk region	32 764.9	29 665.1	27 355.0	38 210.1	36 600.9	36 565.3	40 714.1
District:							
Berezino	103.0	117.5	52.9	33.5	42.6	31.9	89.4
Borisov	121.1	114.6	201.4	230.6	212.8	174.3	214.4
Vileyka	37.7	70.7	67.9	39.7	42.9	28.7	24.5
Volozhin	20.0	19.4	5.7	8.8	8.2	6.3	7.9
Dzerzhinsk	3.9	12.5	16.8	14.4	11.4	12.5	19.8
Kletsk	11.3	14.1	15.4	19.7	13.9	16.5	10.2
Kopyl	64.6	60.2	40.9	48.1	15.8	12.0	20.7
Krupki	25.8	25.0	44.3	54.1	55.0	60.8	73.7
Logoyisk	782.8	1 222.9	1 615.8	1 334.2	420.0	1 046.2	1 019.9
Lyuban	48.3	39.2	31.5	73.1	41.2	73.1	110.8
Minsk	393.2	341.7	791.3	707.9	171.1	126.1	118.2
Molodechno	281.6	240.3	194.3	221.5	167.3	171.0	274.1
Myadel	27.3	13.4	29.2	1 164.2	5.3	34.0	44.9
Nesvizh	769.8	773.1	821.8	649.9	865.8	649.0	731.7
Pukhovichy	523.9	501.3	533.6	254.5	381.7	334.7	77.4
Slutsk	418.6	249.0	430.4	190.5	196.7	186.9	221.3
Smolevichy	35.4	47.0	43.1	50.4	50.8	63.5	81.8
Soligorsk	29 038.6	25 613.3	22 260.1	32 970.9	33 804.7	33 439.4	37 428.6
Staryie Dorogi	10.4	36.3	15.5	19.0	14.1	16.8	22.8
Stolbtsy	3.7	106.5	112.2	89.3	51.5	56.4	88.9
Uzda	29.1	31.1	17.0	21.8	15.7	14.9	21.0
Cherven	14.7	16.8	13.9	13.7	12.3	10.4	12.0

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Mogilev region	3 082.3	2 749.3	3 108.5	4 396.5	4 605.3	2 996.2	3 933.5
Mogilev city of	240.6	153.3	316.7	327.2	398.8	400.5	1 058.9
District:							
Belynichy	5.6	6.7	9.7	10.0	8.1	7.3	9.6
Bobruysk	227.8	291.3	551.6	416.8	401.9	455.5	516.6
Bykhov	13.6	8.1	5.5	8.5	12.7	8.4	4.5
Glusk	16.4	11.2	11.7	21.1	18.8	19.9	21.1
Gorki	22.4	19.4	15.4	29.5	1.3	12.9	15.0
Dribin	1.4	1.2	1.4	0.6	1.0	0.9	5.6
Kirovsk	4.3	3.5	5.9	6.0	6.3	6.7	4.5
Klimovichy	8.2	34.2	33.8	15.2	9.0	6.8	8.7
Klichev	6.1	4.2	7.4	5.0	1.8	2.8	3.0
Kostyukovichy	2 334.6	2 045.3	1 968.7	3 371.7	3 612.3	1 913.5	2 050.4
Krasnopolye	7.1	9.7	0.1	0.0	0.0	0.2	0.0
Krichev	3.1	2.7	3.0	2.1	2.9	2.1	3.7
Krugloye	14.2	7.8	4.7	9.9	10.3	14.3	15.7
Mogilev	28.7	1.8	8.6	0.8	1.9	33.1	59.8
Mstislavl	1.1	3.1	3.5	4.9	2.9	3.4	4.8
Osipovichy	60.0	56.8	59.3	57.7	53.2	54.1	78.2
Slavgorod	1.7	1.7	1.9	1.7	1.3	0.5	1.3
Khotimsk	3.0	3.0	9.2	42.6	2.5	0.3	2.0
Chausy	1.7	5.5	5.3	1.2	7.1	6.6	9.3
Cherikov	10.0	11.1	12.7	3.9	3.3	1.7	0.7
Shklov	70.8	69.0	72.5	60.0	48.2	44.6	60.1

12.6. Generation of industrial waste by economic activity

(thousand tonnes)

	2016	2017
Republic of Belarus	49 448.2	55 506.0
of which:		
Agriculture, forestry and fishing	563.9	621.0
Mining	1 253.4	1 011.9
Manufacturing	42 900.1	47 855.3
of which:		
Manufacture of food products, beverages and tobacco products	1 858.5	2 055.2
Manufacture of textile articles, wearing apparel, articles of leather and fur	111.9	126.6
Manufacture of products of wood and paper; printing and reproduction of recorded media	756.7	1 244.1
Manufacture of coke and refined petroleum products	46.1	75.8
Manufacture of chemicals and chemical products	34 595.2	39 128.8
Manufacture of basic pharmaceuticals and medicinal products	6.6	7.7
Manufacture of rubber and plastics products, of other non-metallic mineral products	3 026.3	3 397.7
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	771.6	762.5
Manufacture of computer, electronic and optical products	5.1	5.7
Manufacture of electrical equipment	12.4	13.1
Manufacture of machinery and equipment n.e.c.	300.7	298.3
Manufacture of transport vehicles and equipment	19.8	135.0
Other manufacturing; repair and installation of machinery and equipment	1 389.2	604.8
Electricity, gas, steam, hot water and air conditioning supply	276.5	447.5
Water supply; waste management and remediation activities	2 141.5	2 688.6
Construction	1 172.3	1 446.8
Wholesale and retail trade; repair of motor vehicles and motorcycles	485.2	498.6
Transportation and storage, postal and courier activities	135.1	112.7
Accommodation and food service activities	8.3	63.1
Information and communication	5.2	8.1
Financial and insurance activities	7.5	3.6
Real estate activities	168.6	23.7
Professional, scientific and technical activities	14.6	23.2
Administrative and support service activities	1.8	189.6
Public administration	103.0	36.7
Education	24.7	104.3
Human health and social work activities	68.2	138.9
Arts, sports, entertainment and recreation	116.5	43.9
Other service activity	1.9	1.7

12.7. Utilization of industrial waste in organisations by regions, cities and districts

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	12 670.2	13 066.4	20 058.7	16 653.9	12 163.8	13 213.0	15 798.3
Brest region	933.9	901.9	1 221.3	1 244.2	1 039.0	1 449.8	1 343.0
Brest city of	295.3	228.0	692.5	705.0	466.0	909.7	648.0
District:							
Baranovichy	25.8	27.5	27.0	50.7	69.7	77.3	53.2
Bereza	89.4	54.1	57.8	40.6	27.5	53.2	48.8
Brest	1.4	1.6	3.6	1.6	27.7	6.1	38.8
Gantsevichy	7.8	5.9	37.4	34.7	75.9	12.9	20.4
Drogichin	9.5	10.2	11.2	12.2	14.9	15.2	11.3
Zhabinka	96.6	113.1	75.0	82.5	86.9	101.4	4.3
Ivanovo	89.6	69.2	65.3	87.9	21.6	17.5	23.1
Ivatsevichy	141.3	157.0	46.0	79.9	42.7	58.4	288.0
Kamenets	12.8	28.9	0.2	8.3	1.5	1.7	2.3
Kobrin	3.7	0.5	8.4	7.3	7.7	11.1	13.4
Luninets	28.7	28.5	36.9	38.8	9.9	10.6	7.5
Lyakhovichy	1.9	5.0	27.0	5.4	3.4	4.2	6.1
Malorita	1.9	1.8	2.0	4.4	4.2	6.4	7.2
Pinsk	116.3	158.9	119.3	72.3	169.9	156.2	161.2
Pruzhan'y	5.9	6.6	7.3	8.3	8.9	7.5	8.1
Stolin	5.0	5.7	4.6	4.4	1.0	0.6	1.3

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	547.7	518.5	552.9	631.1	388.3	397.2	633.1
Vitebsk city of	146.6	119.0	150.2	129.4	76.1	75.8	66.8
District:							
Beshenkovichy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Braslav	7.2	7.1	7.1	10.0	6.1	9.9	21.3
Verkhnedvinsk	3.9	3.8	3.8	12.3	13.2	9.8	15.2
Vitebsk	2.5	6.5	3.4	0.0	4.5	2.2	17.8
Glubokoye	3.3	3.3	5.7	6.9	5.8	7.0	14.4
Gorodok	0.3	0.3	0.3	2.1	0.6	5.7	8.1
Dokshitsy	0.1	0.1	0.1	0.6	0.1	0.2	3.4
Dubrovno	0.6	0.5	0.5	0.3	1.0	0.5	0.5
Lepel	9.4	3.3	3.3	6.9	11.3	12.1	14.7
Liozno	2.5	3.7	3.7	1.7	2.8	17.1	18.2
Miory	2.7	2.5	2.5	2.2	2.0	2.3	2.4
Orsha	17.6	16.8	16.9	58.5	38.9	32.4	113.3
Polotsk	39.5	37.5	37.4	37.3	28.7	26.9	57.0
Postavy	116.7	130.8	130.8	215.9	37.1	28.9	56.1
Rossony	7.8	3.0	3.0	2.3	2.1	3.0	1.0
Senno	162.3	158.6	158.6	79.7	61.5	68.6	87.7
Tolochin	13.5	15.9	15.9	7.4	43.5	32.2	42.6
Ushachy	3.1	3.8	4.0	4.6	5.2	5.3	5.3
Chashniki	6.2	2.0	3.1	51.4	47.2	53.8	86.5
Sharkovshchina	0.1	0.0	0.1	0.2	0.1	2.7	0.3
Shumilino	1.8	2.5	2.5	1.7	0.5	0.8	0.7

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	1 633.4	2 244.4	7 019.6	5 032.0	2 632.3	1 729.7	1 747.6
Gomel city of	243.9	243.9	4 746.1	268.7	317.9	354.9	338.9
District:							
Bragin	0.5	0.0	0.2	0.0	0.1	0.0	0.0
Buda-Koshelyovo	10.6	9.4	9.1	9.1	6.6	7.8	11.8
Vetka	3.9	4.4	5.0	2.6	4.0	2.9	2.5
Gomel	48.8	29.3	92.5	74.8	6.0	38.8	152.0
Dobrush	37.7	42.5	25.3	23.1	23.9	26.9	18.4
Yelsk	7.1	6.8	0.3	2.9	3.8	3.9	2.8
Zhitkovichy	14.0	14.7	14.3	6.4	18.8	21.3	19.8
Zhlobin	723.9	1 171.0	1 209.9	3 941.2	1 514.9	775.0	714.3
Kalinkovichy	18.3	7.3	12.4	9.5	15.9	18.1	20.2
Korma	0.1	0.2	0.5	0.1	2.4	4.2	3.8
Lelchitsy	3.0	2.0	7.9	1.8	7.9	6.1	15.6
Loyev	2.1	0.9	0.7	1.0	0.6	1.1	0.7
Mozyr	67.1	150.7	200.0	89.9	104.6	141.9	101.0
Narovlya	0.6	1.2	1.3	0.2	1.9	2.7	0.6
Oktyabrsky	3.1	4.9	4.0	3.5	10.0	4.3	4.3
Petrikov	86.5	79.0	64.7	60.6	42.0	76.8	115.8
Rechitsa	154.7	270.8	477.8	384.8	427.9	162.7	100.9
Rogachev	47.5	42.8	3.9	5.1	8.2	5.3	19.6
Svetlogorsk	152.7	155.1	130.6	125.4	101.2	52.4	81.7
Khoyniki	6.0	6.8	6.7	9.8	5.7	13.7	15.9
Chechersk	1.3	3.5	6.6	11.7	8.2	8.9	7.1

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	1 370.6	1 396.3	1 404.0	1 130.9	1 008.2	1 425.2	1 816.4
Grodno city of	362.7	409.3	169.0	262.4	280.9	595.0	623.5
District:							
Berestovitsa	1.3	3.0	0.7	1.1	0.8	14.6	14.5
Volkovysk	367.2	276.8	267.1	305.6	268.2	212.1	230.7
Voronovo	0.4	0.2	3.9	1.3	2.0	2.1	2.4
Grodno	384.7	435.7	576.5	233.6	48.7	93.2	172.7
Dyatlovo	6.4	3.9	0.3	0.3	2.5	0.6	5.5
Zelva	0.7	0.8	0.7	0.8	0.8	0.6	0.9
Ivye	16.8	9.5	18.0	6.5	1.4	4.5	4.4
Korelichy	3.4	3.1	2.9	3.2	2.7	4.4	8.0
Lida	66.6	109.2	67.4	52.9	51.0	59.6	97.2
Mosty	3.8	6.4	0.4	0.7	1.2	2.3	87.4
Novogrudok	2.3	2.3	3.2	2.2	4.6	2.0	5.2
Ostrovets	6.4	9.7	8.1	7.9	3.4	8.0	9.6
Oshmyany	3.3	2.6	2.7	9.0	20.4	35.6	33.1
Svisloch	3.1	2.3	4.7	5.5	3.2	3.0	2.8
Slonim	98.7	90.5	95.8	86.7	79.7	80.9	99.3
Smorgon	21.0	12.5	171.3	139.3	234.0	303.6	403.5
Shchuchin	21.9	22.7	11.4	12.2	2.9	3.3	15.8

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	848.5	670.6	1 162.1	995.8	1 177.0	2 067.5	2 473.3
Minsk region	4 387.6	4 652.2	5 871.2	5 772.1	3 361.9	4 015.5	4 303.9
District:							
Berezino	101.0	114.7	50.4	33.0	40.8	30.9	87.9
Borisov	90.0	78.6	174.8	198.9	184.9	150.2	196.1
Vileyka	31.9	63.7	60.5	33.5	37.2	24.1	20.0
Volozhin	17.9	17.2	3.7	7.3	5.9	3.4	3.9
Dzerzhinsk	0.4	7.7	11.0	7.2	5.0	4.5	14.1
Kletsk	7.2	9.7	12.3	15.7	10.0	13.8	7.7
Kopyl	59.1	56.6	37.4	43.3	11.9	8.9	7.5
Krupki	22.7	22.2	40.3	45.8	50.4	60.6	73.9
Logoyisk	780.3	1 219.8	1 613.2	1 330.8	416.8	1 043.1	1 018.3
Lyuban	44.3	34.1	27.1	67.8	37.8	71.4	113.9
Minsk	358.0	288.7	745.0	659.5	117.1	84.3	81.5
Molodechno	252.9	203.7	185.0	210.5	158.0	161.0	251.5
Myadel	21.5	8.8	23.3	1 151.9	1.5	30.2	42.4
Nesvizh	730.6	783.4	825.2	652.1	871.6	630.0	706.1
Pukhovichy	510.4	477.7	505.0	240.2	363.9	320.6	61.7
Slutsk	414.2	233.5	421.1	166.0	176.4	167.8	197.8
Smolevichy	20.5	28.3	23.0	29.4	26.7	40.1	52.8
Soligorsk	882.5	828.8	967.8	718.4	763.0	1 080.3	1 236.6
Saryie Dorogi	6.4	34.3	13.2	15.1	12.7	14.2	20.3
Stolbtsy	2.1	101.9	107.8	86.2	47.6	55.7	85.2
Uzda	24.9	29.4	15.1	19.5	13.6	12.3	15.7
Cherven	8.8	11.2	9.3	40.1	9.2	8.2	8.9

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Mogilev region	2 948.4	2 682.5	2 827.7	1 847.7	2 557.1	2 128.1	3 481.0
Mogilev city of	88.0	113.3	223.2	224.3	411.4	296.8	981.7
District:							
Belynichy	3.0	4.4	7.0	6.6	5.8	5.5	7.7
Bobruysk	311.9	368.4	357.8	291.8	235.7	305.8	241.8
Bykhov	10.9	2.7	2.4	3.5	10.6	4.8	2.0
Glusk	14.4	10.8	9.9	14.3	9.2	17.6	20.2
Gorki	14.1	15.1	10.4	20.2	11.8	7.8	11.3
Dribin	0.2	0.2	0.4	0.2	0.3	0.5	0.3
Kirovsk	2.1	1.5	4.0	5.3	1.3	1.5	2.9
Klimovichy	5.1	32.3	25.1	13.6	6.0	7.0	5.8
Klichev	3.2	3.0	6.3	4.3	1.3	2.2	2.6
Kostyukovichy	2 321.2	1 993.5	2 039.0	1 111.1	1 756.6	1 351.8	2 030.2
Krasnopolye	5.7	6.9	0.0	0.0	0.0	0.1	0.0
Krichev	2.4	1.9	1.8	1.3	1.0	1.1	1.5
Krugloye	13.0	3.5	4.7	15.5	9.8	13.2	14.3
Mogilev	11.6	0.9	6.7	0.1	0.4	27.3	41.8
Mstislavl	0.3	2.5	2.9	3.4	2.4	2.4	3.1
Osipovichy	56.0	51.6	53.3	53.6	48.9	50.7	76.1
Slavgorod	0.1	0.5	0.6	0.5	0.1	0.0	0.2
Khotimsk	2.3	2.2	3.4	37.8	2.2	0.1	1.8
Chausy	0.6	4.1	4.2	0.1	6.4	6.2	8.4
Cherikov	9.6	9.1	8.4	2.0	0.7	1.3	0.4
Shklov	72.8	56.0	56.5	38.2	35.6	24.4	27.0

12.8. Disposal of industrial waste in organisations by regions, cities and districts

(thousand tonnes)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	32 115.0	28 527.4	25 276.7	39 037.4	38 905.3	36 920.9	40 034.8
Brest region	164.3	165.4	208.9	248.1	241.3	223.2	196.2
Brest city of	45.8	42.0	74.2	77.2	46.2	36.8	42.9
District:							
Baranovichy	25.7	21.6	27.5	26.0	24.3	36.4	25.3
Bereza	10.5	39.3	39.2	49.6	56.8	56.9	4.0
Brest	1.8	0.7	0.6	0.1	27.0	1.2	15.1
Gantsevichy	1.4	1.4	0.9	0.4	1.2	0.8	0.7
Drogichin	2.7	1.8	2.0	2.2	2.3	1.7	1.3
Zhabinka	12.5	14.9	3.9	2.8	6.4	4.1	35.5
Ivanovo	8.6	3.7	3.9	2.8	4.6	3.9	2.6
Ivatsevichy	4.5	3.7	5.8	4.5	4.3	5.3	4.0
Kamenets	3.8	0.4	2.2	1.7	3.8	1.9	1.6
Kobrin	5.4	0.2	7.3	7.3	4.1	2.7	4.0
Luninets	5.2	5.4	8.9	6.0	4.8	3.5	5.0
Lyakhovichy	5.6	2.5	5.2	2.1	4.4	4.4	10.1
Malorita	2.7	2.7	2.7	2.8	2.4	2.0	1.5
Pinsk	16.7	14.2	19.7	24.3	41.5	56.1	31.6
Pruzhany	9.7	8.7	3.5	6.2	5.7	4.0	4.2
Stolin	1.9	2.4	1.5	34.3	1.8	1.7	7.0

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Vitebsk region	352.1	347.8	300.5	223.6	173.0	148.3	161.5
Vitebsk city of	100.6	99.5	91.9	75.0	40.3	40.0	44.2
District:							
Beshenkovichy	1.2	1.2	1.2	0.9	0.4	0.4	0.4
Braslav	2.3	2.3	2.3	2.4	2.0	2.7	2.0
Verkhnedvinsk	4.1	3.7	3.7	1.6	1.2	1.3	1.1
Vitebsk	3.6	4.4	2.3	0.1	4.2	4.8	8.2
Glubokoye	8.6	8.5	11.1	6.9	6.1	4.8	6.9
Gorodok	2.1	2.1	2.1	2.1	1.2	1.7	1.3
Dokshitsy	3.2	3.1	3.1	1.0	1.5	1.7	1.8
Dubrovno	1.6	1.6	1.6	1.1	1.2	2.2	2.2
Lepel	3.5	3.5	3.4	3.0	4.7	2.5	2.4
Liozno	2.0	1.7	1.7	1.4	1.5	1.7	1.5
Miory	6.7	4.8	4.8	2.8	2.2	2.3	2.1
Orsha	17.9	18.3	18.5	24.4	28.7	17.0	22.8
Polotsk	70.3	70.2	70.1	63.9	42.3	44.9	42.8
Postavy	4.4	6.5	6.5	5.2	6.6	6.3	5.6
Rossony	1.5	1.6	1.6	1.5	1.4	0.9	1.0
Senno	10.6	3.6	3.6	1.4	1.5	2.9	1.0
Tolochin	3.4	0.8	0.8	4.0	8.4	1.5	2.0
Ushachy	1.0	1.1	1.8	0.6	0.9	1.1	1.1
Chashniki	100.0	107.0	65.9	19.4	13.2	4.0	8.0
Sharkovshchina	2.0	1.3	1.5	2.4	1.6	1.7	1.6
Shumilino	1.7	1.3	1.3	2.5	1.9	1.8	1.9

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Gomel region	1 404.5	1 304.8	648.4	1 431.2	1 306.0	1 322.2	1 435.4
Gomel city of	766.2	897.6	160.0	764.1	731.0	713.0	792.5
District:							
Bragin	0.7	0.1	1.3	0.0	0.1	0.1	0.1
Buda-Koshelyovo	4.1	3.8	6.6	3.4	2.8	4.9	2.5
Vetka	0.5	4.3	3.2	0.4	0.7	1.5	0.7
Gomel	4.4	12.9	7.7	5.8	7.2	8.8	31.1
Dobrush	140.9	95.4	71.0	58.0	33.0	8.2	5.5
Yelsk	1.8	1.9	0.4	0.3	0.6	0.8	0.5
Zhitkovichy	12.1	9.3	8.2	7.3	10.6	6.4	7.8
Zhlobin	343.9	164.4	235.5	442.0	392.5	454.0	474.8
Kalinkovichy	5.2	5.8	6.3	5.3	6.1	5.8	4.7
Korma	2.3	5.5	2.4	1.3	1.6	1.7	1.3
Lelchitsy	1.8	1.9	1.9	1.8	2.7	1.2	1.9
Loyev	0.8	0.9	0.9	0.9	0.9	1.1	0.6
Mozyr	22.4	28.9	39.2	37.6	19.8	26.8	20.6
Narovlya	0.5	1.0	2.8	2.9	0.6	0.4	0.4
Oktyabrsky	2.7	1.8	2.2	2.9	2.3	1.0	1.3
Petrikov	8.4	6.0	4.6	8.7	6.5	5.9	5.6
Rechitsa	44.0	25.6	47.2	52.3	48.4	47.9	40.8
Rogachev	4.9	3.5	3.5	2.8	6.6	10.3	4.7
Svetlogorsk	32.6	29.5	30.0	26.2	22.4	16.2	35.3
Khoyniki	1.9	6.0	12.0	3.7	7.8	4.7	1.7
Chechersk	1.5	1.5	1.5	3.3	1.8	1.6	1.2

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Grodno region	435.1	475.0	855.9	823.5	827.2	694.1	619.1
Grodno city of	204.4	221.4	583.5	563.8	543.5	449.3	366.7
District:							
Berestovitsa	2.2	2.1	1.9	2.2	2.1	2.5	1.4
Volkovysk	33.3	63.4	31.0	35.7	35.7	29.1	30.2
Voronovo	1.3	2.6	3.1	2.1	1.5	3.1	2.0
Grodno	95.1	100.4	40.8	11.9	52.6	23.3	29.1
Dyatlovo	3.7	3.7	3.9	4.0	4.3	4.9	4.1
Zelva	3.8	7.1	2.1	2.2	1.0	1.6	0.9
Ivye	1.7	2.1	3.8	1.1	1.7	1.3	2.9
Korelichy	1.8	1.8	2.1	2.0	4.2	2.1	1.4
Lida	32.5	31.3	32.5	29.7	27.1	25.8	23.4
Mosty	2.6	4.3	3.4	4.9	5.1	2.7	3.4
Novogrudok	3.0	4.2	5.7	5.9	8.6	2.6	5.9
Ostrovets	1.8	1.5	1.9	2.3	3.3	4.7	9.2
Oshmyany	23.7	8.0	6.0	17.2	5.8	4.9	3.4
Svisloch	2.3	1.7	3.3	2.1	1.5	2.3	2.0
Slonim	11.4	11.2	108.6	113.9	107.9	118.3	115.9
Smorgon	5.7	0.1	12.0	14.1	16.0	11.3	12.0
Shchuchin	4.9	7.3	10.2	8.8	5.4	4.3	5.3

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Minsk city	1 029.9	949.2	1 239.6	1 090.8	820.5	886.6	705.4
Minsk region	28 398.9	25 048.9	21 526.3	32 521.6	33 273.8	32 667.3	36 445.0
District:							
Berezino	2.3	2.8	2.7	2.0	2.2	1.7	1.7
Borisov	32.2	36.6	33.1	32.1	29.0	94.7	19.3
Vileyka	6.1	7.7	8.5	6.8	6.4	5.7	5.1
Volozhin	2.1	2.2	2.0	1.5	2.3	4.3	4.1
Dzerzhinsk	3.5	4.8	6.0	7.4	6.7	8.2	6.3
Kletsk	4.1	4.5	3.6	4.1	3.9	3.6	3.3
Kopyl	5.7	3.7	3.9	5.0	4.3	3.5	13.5
Krupki	3.1	2.9	4.1	8.3	4.9	2.8	1.5
Logoyisk	2.6	3.3	3.1	3.6	3.4	3.4	2.3
Lyuban	4.2	5.2	4.7	5.5	3.9	1.8	2.1
Minsk	36.8	53.0	49.1	52.4	58.1	45.3	38.5
Molodechno	33.5	39.4	23.6	19.4	15.8	20.3	27.3
Myadel	5.9	4.8	5.9	18.5	4.0	3.9	3.1
Nesvizh	40.8	10.2	7.5	15.5	8.6	22.6	30.8
Pukhovichy	16.6	25.2	10.5	15.4	18.4	14.9	18.7
Slutsk	10.0	18.0	20.3	26.4	23.1	21.4	24.0
Smolevichy	15.9	18.7	31.1	21.4	25.4	23.9	29.6
Soligorsk	28 156.9	24 790.3	21 292.9	32 261.9	33 042.0	32 374.5	36 198.5
Saryie Dorogi	4.0	3.0	2.4	3.9	2.0	3.3	2.6
Stolbtsy	1.7	4.7	4.5	3.9	4.0	2.6	4.0
Uzda	4.7	2.3	2.0	2.4	2.1	2.6	5.6
Cherven	6.1	5.9	5.1	4.3	3.4	2.4	3.2

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Mogilev region	330.2	236.3	497.1	2 698.5	2 263.5	979.2	472.3
Mogilev city of	155.3	49.7	97.7	110.8	85.6	110.0	80.5
District:							
Belynichy	2.6	2.7	2.8	3.5	2.3	1.9	2.1
Bobruysk	91.9	71.9	326.2	244.1	259.3	245.0	283.5
Bykhov	3.4	5.4	3.2	6.2	3.0	4.4	2.5
Glusk	2.1	0.8	1.8	7.0	9.6	2.3	1.5
Gorki	8.4	4.3	6.3	18.1	0.7	5.3	3.7
Dribin	1.2	1.0	1.1	0.4	0.7	0.4	5.3
Kirovsk	2.2	2.0	2.0	0.7	5.0	5.2	1.7
Klimovichy	3.1	1.9	8.7	1.6	3.0	1.5	3.0
Klichev	2.9	1.2	1.2	0.9	0.5	0.6	0.4
Kostyukovichy	16.0	57.4	2.8	2 260.9	1 862.1	565.5	22.1
Krasnopolye	1.4	2.8	0.1	0.0	0.0	0.1	0.0
Krichev	1.1	0.8	1.3	0.8	1.8	1.0	2.3
Krugloye	1.4	4.3	0.3	2.3	2.8	1.1	1.4
Mogilev	17.4	1.6	2.0	0.7	1.5	6.7	18.6
Mstislavl	0.8	0.7	0.6	1.6	0.5	1.0	1.7
Osipovichy	4.3	5.4	6.4	4.6	5.1	4.4	5.0
Slavgorod	1.5	1.2	1.3	1.2	1.2	0.5	1.1
Khotimsk	0.7	0.9	5.9	4.9	0.4	0.2	0.2
Chausy	1.1	1.4	1.1	1.1	0.9	0.5	1.7
Cherikov	0.5	2.3	4.3	2.2	2.6	0.4	0.3
Shklov	10.8	17.0	20.2	25.1	14.9	21.3	33.7

12.9. Industrial waste by hazard class in 2017

	Genera- tion	Utiliza- tion	Disposal	Of which			
				storage facilities	burial sites	onsite storage	neutrali- sation
Thousand tonnes							
Total	55 506.0	15 798.3	40 034.8	38 217.5	1 107.1	551.7	158.5
of which:							
Non-hazardous	8 933.8	8 187.7	917.4	1.9	659.6	251.3	4.6
Class 1 (extremely hazardous)	59.9	41.5	19.9	–	0.0	2.1	17.9
Class 2 (high-hazard)	15.5	9.1	6.5	–	–	0.1	6.4
Class 3 (hazardous)	1 592.7	997.3	657.2	469.9	110.7	51.0	25.5
Class 4 (low-hazard)	44 904.2	6 562.7	38 433.8	37 745.7	336.8	247.3	104.1
As % of total							
Total	100	100	100	100	100	100	100
of which:							
Non-hazardous	16.1	51.8	2.3	0.0	59.6	45.6	2.9
Class 1 (extremely hazardous)	0.1	0.3	0.0	–	0.0	0.4	11.3
Class 2 (high-hazard)	0.0	0.1	0.0	–	–	0.0	4.0
Class 3 (hazardous)	2.9	6.3	1.6	1.2	10.0	9.2	16.1
Class 4 (low-hazard)	80.9	41.5	96.0	98.8	30.4	44.8	65.7

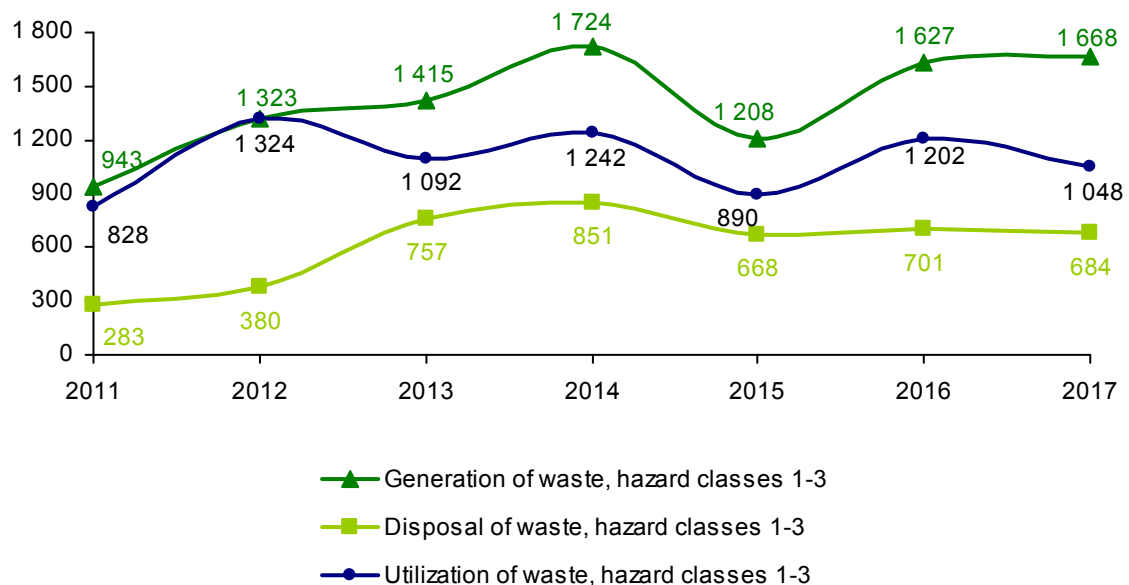
12.10. Generation, utilization and disposal of industrial waste hazard classes 1-3

	2011	2012	2013	2014	2015	2016	2017
Generation, thsd t	943.2	1 322.8	1 415.4	1 724.0	1 207.8	1 626.6	1 668.1
Utilization, thsd t	827.6	1 324.3	1 091.7	1 242.2	889.8	1 201.6	1 047.9
Disposal – total, thsd t	283.0	379.8	757.0	851.4	668.1	701.0	683.6
of which:							
storage facilities	102.2	89.0	563.0	581.0	496.5	472.5	469.9
burial sites	83.7	123.7	124.7	153.6	99.3	116.0	110.7
onsite storage	39.9	138.0	48.0	57.5	47.8	78.8	53.2
neutralisation	57.1	29.1	21.3	59.3	24.5	33.8	49.8
Per capita generation of industrial waste, hazard classes 1-3, kg	99.6	139.8	149.5	182.0	127.3	171.2	175.6

¹⁾ The indicator from the National list of SDG indicators (12.4.2.1).

12.11. Dynamics of generation, utilization and disposal of industrial waste hazard classes 1-3

(thousand tonnes)



**12.12. Generation, utilization and disposal
of industrial waste hazard classes 1-3
by regions and Minsk city in 2017**

(thousand tonnes)

	Genera- tion	Utiliza- tion	Disposal	Of which			
				storage facilities	burial sites	onsite storage	neutrali- sation
Total							
Republic of Belarus	55 506.0	15 798.3	40 034.8	38 217.5	1 107.1	551.7	158.5
Regions and Minsk city:							
Brest	1 487.7	1 343.0	196.2	27.1	68.8	95.2	5.1
Vitebsk	769.0	633.1	161.5	27.8	115.1	14.0	4.7
Gomel	3 114.3	1 747.6	1 435.4	1 115.3	152.5	165.2	2.4
Grodno	2 348.5	1 816.4	619.1	326.3	144.7	38.5	109.5
Minsk city	3 138.9	2 473.3	705.4	224.7	315.3	151.2	14.3
Minsk	40 714.1	4 303.9	36 445.0	36 229.3	160.1	37.8	17.8
Mogilev	3 933.5	3 481.0	472.3	267.1	150.7	49.8	4.8
of which:							
hazard classes 1-3							
Republic of Belarus	1 668.1	1 047.9	683.6	469.9	110.7	53.2	49.8
Regions and Minsk city:							
Brest	169.1	116.1	55.1	27.0	12.6	10.6	4.9
Vitebsk	57.8	43.8	24.5	7.6	11.7	2.2	2.9
Gomel	146.6	154.7	20.1	2.9	12.2	4.8	0.2
Grodno	426.9	283.3	154.2	108.6	16.4	13.3	15.8
Minsk city	311.1	60.3	255.3	224.6	20.8	3.7	6.2
Minsk	131.2	78.6	56.3	21.9	14.4	4.0	16.0
Mogilev	425.3	311.2	118.1	77.2	22.8	14.5	3.6

12.13. Management of industrial waste hazard classes 1-3 by regions and Minsk city in 2017

(percent)

	Proportion of re-used industrial waste, hazard classes 1-3, in total industrial waste generated in hazard classes 1-3 ¹⁾	Proportion of treated industrial waste, hazard classes 1-3, in total industrial waste generated in hazard classes 1-3 ²⁾	Proportion of landfilled industrial waste, hazard classes 1-3, in total industrial waste generated in hazard classes 1-3 ³⁾	Proportion of industrial waste, hazard classes 1-3, sent to storage facilities in total industrial waste generated in hazard classes 1-3 ⁴⁾
Republic of Belarus	62.8	3.0	6.6	31.4
Regions and Minsk city:				
Brest	68.6	2.9	7.4	22.2
Vitebsk	75.8	5.1	20.2	17.1
Gomel	105.5	0.2	8.3	5.2
Grodno	66.4	3.7	3.8	28.6
Minsk city	19.4	2.0	6.7	73.4
Minsk	59.9	12.2	10.9	19.7
Mogilev	73.2	0.9	5.3	21.6

¹⁾ The indicator from the National list of SDG indicators (12.4.2.2).

²⁾ The indicator from the National list of SDG indicators (12.4.2.3).

³⁾ The indicator from the National list of SDG indicators (12.4.2.4).

⁴⁾ The indicator from the National list of SDG indicators (12.4.2.5).

12.14. Removal of solid and liquid municipal waste from settlements by special purpose motor road vehicles by regions and Minsk city

	2011	2012	2013	2014	2015	2016	2017
Solid municipal waste, thousand cubic metres							
Republic of Belarus	18 380	18 299	19 434	19 967	21 402	21 574	21 479
Regions and Minsk city:							
Brest	2 540	2 558	2 509	2 550	2 885	2 980	2 969
Vitebsk	1 984	1 930	2 085	2 294	2 432	2 305	2 367
Gomel	2 560	2 604	2 679	2 588	2 814	2 739	2 808
Grodno	1 782	1 825	1 898	1 994	2 083	2 202	2 324
Minsk city	4 887	4 622	5 078	5 338	5 597	5 757	5 427
Minsk	2 717	2 717	3 103	3 057	3 277	3 273	3 262
Mogilev	1 910	2 044	2 082	2 146	2 315	2 318	2 322

WASTE

Continued

	2011	2012	2013	2014	2015	2016	2017
Solid municipal waste per inhabitant, cubic metres							
Republic of Belarus	1.9	1.9	2.1	2.1	2.3	2.3	2.3
Regions and Minsk city:							
Brest	1.8	1.8	1.8	1.8	2.1	2.1	2.1
Vitebsk	1.6	1.6	1.7	1.9	2.0	1.9	2.0
Gomel	1.8	1.8	1.9	1.8	2.0	1.9	2.0
Grodno	1.7	1.7	1.8	1.9	2.0	2.1	2.2
Minsk city	2.6	2.4	2.7	2.8	2.9	2.9	2.7
Minsk	1.9	1.9	2.2	2.2	2.3	2.3	2.3
Mogilev	1.8	1.9	1.9	2.0	2.2	2.2	2.2
Liquid municipal waste, thousand cubic metres							
Republic of Belarus	1 579	1 426	1 640	1 422	1 301	1 317	1 320
Regions and Minsk city:							
Brest	316	272	236	262	247	231	200
Vitebsk	115	128	191	64	81	106	175
Gomel	341	252	279	260	224	179	166
Grodno	267	244	240	216	200	193	190
Minsk city	62	49	53	47	37	16	8
Minsk	440	440	434	470	403	465	456
Mogilev	38	41	206	103	110	125	125

13. SELECTED DATA ON THE CHERNOBYL CATASTROPHE CONSEQUENCES

The catastrophe at the Chernobyl Nuclear Power Plant occurred on 26 April 1986. Radioactive contamination covered an area of more than 125 thsd sq. km, affecting the territory of Belarus, Russia and Ukraine.

The most widely spread radionuclide is caesium-137 (radioactive caesium) with half-life period of 30 years. However, before the radionuclide becomes non-hazardous for human or animal live, 6-10 half-life periods must pass.

Radioactive contamination with caesium-137, with its content in soil over 1 Ku/km², affected the territory of Belarus, covering an area of 46 thsd km² (22% of the total area), of which 19 thsd km² of agricultural land, 20 thsd km² of forest stock land.

13.1. Area of agricultural land contaminated with Caesium-137 in use of agricultural organisations by region¹⁾

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Republic of Belarus	988.9	981.9	970.7	941.3	927.7	903.1	877.2
Region:							
Brest	63.7	62.0	57.7	52.6	52.1	50.7	45.7
Vitebsk	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Gomel	572.6	570.2	567.6	561.7	552.0	533.3	516.7
Grodno	25.3	22.9	22.9	20.8	19.8	18.3	18.3
Minsk	53.1	51.9	51.2	50.0	48.7	46.9	44.7
Mogilev	273.9	274.6	271.0	255.9	254.9	253.7	251.6

¹⁾ Data of the Ministry of Agriculture and Food of the Republic of Belarus.

13.2. Area of agricultural land contaminated with Caesium-137 in use of agricultural organisations by region as of January 1, 2018¹⁾

	Total agricultural land contaminated		Of which by soil contamination density, thsd ha			
	thsd ha	% of total agricultural land	1-5 Ci/km ²	5-15 Ci/km ²	15-40 Ci/km ²	40 Ci/km ²
Republic of Belarus	877.2	11.8	695.9	161.4	19.8	0.1
Region:						
Brest	45.7	3.8	44.3	1.3	0.0	–
Vitebsk	0.2	0.0	0.2	–	–	–
Gomel	516.7	43.0	385.0	116.3	15.4	0.1
Grodno	18.3	1.7	18.0	0.3	–	–
Minsk	44.7	2.8	44.5	0.2	–	–
Mogilev	251.6	22.9	203.9	43.3	4.4	–

¹⁾ Data of the Ministry of Agriculture and Food of the Republic of Belarus.

13.3. Area of forest stock of the Ministry of Forestry of the Republic of Belarus contaminated with Caesium-137 by region¹⁾

(as of January 1; thousand hectares)

	2012	2013	2014	2015	2016	2017	2018
Republic of Belarus	1 544.0	1 504.6	1 457.4	1 424.8	1 395.4	1 375.9	1 356.3
Region:							
Brest	110.0	105.4	100.2	94.2	89.7	85.7	83.6
Vitebsk	0.3	0.3	0.1	0.1	0.1	0.1	0.1
Gomel	901.2	884.7	863.5	846.5	831.4	824.8	816.1
Grodno	41.4	40.3	33.8	31.4	30.0	26.0	25.6
Minsk	46.2	41.3	33.9	32.9	31.7	31.4	30.9
Mogilev	444.9	432.6	425.9	419.7	412.5	407.9	400.0

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

13.4. Area of forest stock contaminated with Caesium-137, by region as of January 1, 2018¹⁾

	Total area of forest fund contaminated		Of which by soil contamination density, thsd ha			
	thsd ha	% of total forest stock	1-5 Ci/km ²	5-15 Ci/km ²	15-40 Ci/km ²	40 Ci/km ²
Total						
Republic of Belarus	1 632.0	17.1	1 051.5	385.0	168.5	27.0
Region:						
Brest	83.6	5.9	81.2	2.4	–	–
Vitebsk	0.1	0.0	0.1	–	–	–
Gomel	1 088.6	47.2	647.7	291.8	122.5	26.6
Grodno	25.6	2.6	25.5	0.1	–	–
Minsk	34.1	2.0	33.9	0.2	–	–
Mogilev	400.0	31.8	263.1	90.5	46.0	0.4
of which area of forest stock of the Ministry of Forestry of the Republic of Belarus						
Republic of Belarus	1 356.3	14.1	948.7	290.0	116.6	1.0
Region:						
Brest	83.6	5.9	81.2	2.4	–	–
Vitebsk	0.1	0.0	0.1	–	–	–
Gomel	816.1	35.4	548.1	196.8	70.6	0.6
Grodno	25.6	2.6	25.5	0.1	–	–
Minsk	30.9	1.8	30.7	0.2	–	–
Mogilev	400.0	31.8	263.1	90.5	46.0	0.4

¹⁾ Data of the Ministry of Forestry of the Republic of Belarus.

13.5. Forest seeding and planting on areas contaminated with Caesium-137, by region

(hectares)

	2011	2012	2013	2014	2015	2016	2017
Republic of Belarus	5 491	4 924	4 818	5 767	5 541	6 037	7 359
Region:							
Brest	77	149	154	118	188	290	280
Gomel	3 596	3 397	3 232	3 702	3 403	4 052	5 543
Grodno	162	131	96	102	104	38	34
Minsk	19	16	108	83	87	73	70
Mogilev	1 637	1 231	1 228	1 762	1 759	1 584	1 432

13.6. Forest seeding and planting on areas contaminated with Caesium-137, by region in 2017

(hectares)

	Forest seeding and planting – total	Of which by soil contamination density		
		1-5 Ci/km ²	5-15 Ci/km ²	15-40 Ci/km ²
Total				
Republic of Belarus	7 359	5 359	1 414	586
Region:				
Brest	280	277	3	–
Gomel	5 543	4 098	1 013	432
Grodno	34	34	–	–
Minsk	70	69	1	–
Mogilev	1 432	881	397	154
of which on land excluded from agricultural use				
Republic of Belarus	801	270	157	374
Region:				
Gomel	504	243	–	261
Grodno	2	2	–	–
Mogilev	295	25	157	113

**13.7. Fixed capital investment in post-catastrophe remedial actions
by regions and Minsk city**
(at current prices)

	2011	2012	2013	2014	2015	2016	2017
BYR billion ¹⁾							
Republic of Belarus	292.5	619.7	1 029.1	607.3	789.9	72.6	67.4
Regions and Minsk city:							
Brest	41.0	56.2	133.4	73.8	75.2	9.8	9.9
Vitebsk	0.1	5.9	0.8	2.3	3.0	1.5	–
Gomel	179.1	443.1	770.8	435.8	535.1	33.1	36.7
Grodno	3.0	4.3	14.9	3.3	–	–	–
Minsk city	0.7	1.2	–	–	2.0	0.3	0.0
Minsk	5.7	5.1	8.7	3.9	2.7	–	–
Mogilev	62.9	103.9	100.6	88.1	171.9	27.9	20.7
As % of total investment							
Republic of Belarus	0.3	0.4	0.5	0.3	0.4	0.4	0.3
Regions and Minsk city:							
Brest	0.3	0.3	0.6	0.3	0.4	0.5	0.4
Vitebsk	0.0	0.04	0.0	0.01	0.02	0.09	–
Gomel	1.3	2.1	2.3	1.1	1.3	1.3	1.2
Grodno	0.03	0.02	0.1	0.01	–	–	–
Minsk city	0.0	0.0	–	–	0.0	0.0	0.0
Minsk	0.03	0.02	0.02	0.01	0.01	–	–
Mogilev	0.6	0.6	0.6	0.5	0.9	2.0	1.7

¹⁾ Since 2016 – BYN million (in terms of the denomination 1 BYN = 10 000 BYR).

14. PROFESSIONAL TRAINING IN THE FIELD OF ENVIRONMENTAL PROTECTION AND USE OF NATURAL RESOURCES¹⁾

14.1. Graduates in the field of environmental protection and use of natural resources by specialty

(persons)

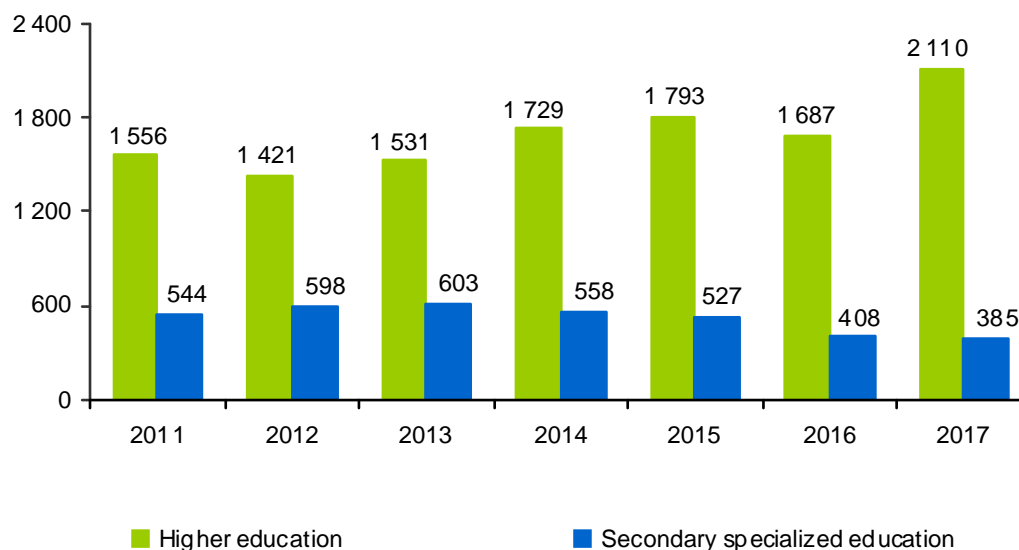
	2011	2012	2013	2014	2015	2016	2017
Higher education graduates							
Bioecology (biologist-ecologist, teacher of biology and ecology)	250	246	277	293	321	307	424
Geoecology	63	64	76	88	83	104	178
Radioecology	18	19	–	–	–	10	–
Ecological monitoring, management and audit	56	39	21	22	–	–	–
Medical ecology	73	61	107	114	96	86	170
Agricultural ecology	95	75	82	138	82	72	57
Nature conservation activities	–	–	–	–	44	42	66
Geology and mineral exploration	48	48	45	98	107	65	182
Environmental protection and rational use of natural resources	89	76	78	78	71	51	50
Ecological management and audit in industry	40	37	47	44	41	39	48
Bioecology (ecological engineer)	22	22	17	13	16	10	16
Heat and gas supply, ventilation and air protection	256	263	284	351	356	345	328
Water supply, water disposal and protection of water resources	254	241	275	267	297	312	316
Forestry	292	230	222	223	279	244	275

Continued

	2011	2012	2013	2014	2015	2016	2017
Secondary specialized education graduates							
Heat and gas supply, ventilation and air protection	–	51	61	88	81	55	53
Water supply, water disposal and protection of water resources	129	134	133	117	108	67	60
Forestry	415	413	409	353	338	286	272

14.2. Higher and secondary specialized education graduates in the field of environmental protection and use of natural resources

(persons)



¹⁾ Data of the Ministry of Education of the Republic of Belarus.

15. INTERNATIONAL COMPARISONS

15.1. Belarus and CIS countries¹⁾

15.1.1. Water abstraction from natural sources for use (excluding transit water)

(million cubic metres)

	2011	2012	2013	2014	2015	2016
Azerbaijan	11 779	12 484	12 509	12 123	12 285	12 504
Armenia	2 438	2 941	2 955	2 860	3 272	3 182
Belarus	1 638	1 642	1 571	1 571	1 448	1 451
Kazakhstan	21 948	21 389	22 530	23 266	22 852	...
Kyrgyzstan	8 634	9 942	8 327	7 658	7 659	...
Moldova	847	850	839	837	840	843
Russia	68 376	64 037	60 988	63 164	60 774	61 276
Ukraine ²⁾	14 651	14 651	13 625	11 505	9 699	...

¹⁾ Source: CISSTAT. In tables 15.1.1-15.1.3 data for Moldova include the territory of the left bank of the Dniester River and the city of Bendery, in tables 15.1.4-15.1.8 data do not include the territory of the left bank of the Dniester River and the city of Bendery.

²⁾ Total water abstraction.

15.1.2. Water use

(million cubic metres)

	2011	2012	2013	2014	2015	2016
Total						
Azerbaijan	8 012	8 249	8 229	8 115	8 567	8 824
Armenia	1 738	2 187	2 089	2 113	2 533	2 470
Belarus	1 406	1 442	1 373	1 371	1 270	1 302
Kazakhstan	19 232	18 403	20 063	20 411	20 352	...
Kyrgyzstan	4 865	4 863	4 400	4 768	5 225	...
Moldova	785	786	782	777	777	776
Russia	59 542	56 864	53 551	55 973	54 576	54 693
Ukraine	10 086	10 507	10 092	8 710	7 125	...

INTERNATIONAL COMPARISONS

Continued

	2011	2012	2013	2014	2015	2016
	of which:					
	industrial water use					
Azerbaijan	1 760	2 098	2 056	2 144	2 117	2 108
Armenia	166	180	160	181	153	145
Belarus	423	429	407	405	389	338
Kazakhstan	5 173	5 240	5 477	5 592	5 385	...
Kyrgyzstan	78	82	40	81	87	...
Moldova	580	580	580	579	579	579
Russia	35 856	33 915	31 478	32 389	31 421	31 066
Ukraine	5 514	5 681	5 363	4 871	4 491	...
	irrigation and agricultural water supply					
Azerbaijan	5 746	5 771	5 746	5 572	6 057	6 342
Armenia	1 445	1 932	1 846	1 810	2 283	2 217
Belarus	114	120	117	115	114	116
Kazakhstan	9 373	10 671	9 774	9 985	10 446	...
Kyrgyzstan	4 634	4 483	4 544	4 531	4 922	...
Moldova	83	84	80	80	82	81
Russia	8 140	7 735	6 956	7 480	7 113	7 026
Ukraine	1 818	1 920	...	...	...	...
	domestic and drinking purposes					
Azerbaijan	397	279	311	313	323	308
Armenia	69	75	84	122	97	108
Belarus	486	492	477	473	474	504
Kazakhstan	790	724	711	731	730	...
Kyrgyzstan	106	233	207	143	194	...
Moldova	119	118	118	113	114	115
Russia	9 421	9 037	8 675	8 516	8 237	7 875
Ukraine	1 860	1 848	1 765	1 500	1 267	...

15.1.3. Contaminated wastewater discharge into surface water bodies

(million cubic metres)

	2011	2012	2013	2014	2015	2016
Azerbaijan	223	220	248	265	306	319
Armenia	362	407	139	235	251	236
Belarus	6	3	3	3	6	6
Kazakhstan	215	190	174	153	197	...
Kyrgyzstan	4	4	3	3	2	...
Moldova	8	9	9	10	8	28
Russia	15 966	15 678	15 189	14 768	14 418	14 719
Ukraine	1 612	1 521	1 717	923	875	...

15.1.4. Air polluting emissions from stationary sources

(thousand tonnes)

	2011	2012	2013	2014	2015	2016
Total						
Azerbaijan	224	227	197	189	178	188
Armenia	115	117	120	128	129	132
Belarus	371	433	445	463	458	453
Kazakhstan	2 346	2 384	2 283	2 257	2 180	...
Kyrgyzstan	36	37	39	61	61	...
Moldova	15	15	16	15	16	15
Russia	19 197	19 630	18 447	17 452	17 296	17 349
Tajikistan	41	39	...	...	...	...
Ukraine	4 375	4 335	4 295	3 190	2 857	3 078

Continued

	2011	2012	2013	2014	2015	2016
of which:						
solid						
Azerbaijan	18	10	12	9	7	6
Armenia	3	4	4	4	5	4
Belarus	40	37	36	35	30	27
Kazakhstan	631	694	551	494	466	...
Kyrgyzstan	18	18	16	23	23	...
Moldova	4	4	3	3	3	3
Russia	2 283	2 249	2 009	1 922	1 820	1 724
Tajikistan	13	13	...	...	...	...
Ukraine	607	574	517	...	...	...
gaseous and liquid						
Azerbaijan	206	217	186	180	171	182
Armenia	112	113	116	124	124	128
Belarus	331	396	409	428	428	426
Kazakhstan	1 715	1 790	1 732	1 763	1 714	...
Kyrgyzstan	18	19	23	38	38	...
Moldova	11	11	12	12	13	12
Russia	16 914	17 381	16 438	15 530	15 476	15 625
Tajikistan	28	26	...	...	...	...
Ukraine	...	...	...	...	...	...
of which:						
sulphur dioxide						
Azerbaijan	3	3	6	2	4	23
Armenia	29	29	32	32	34	39
Belarus	44	64	49	50	57	53
Kazakhstan	774	770	730	729	711	...
Kyrgyzstan	8	4	12	18	18	...
Moldova	1	1	1	1	1	1
Russia	4 343	4 341	4 173	4 036	4 099	4 011
Tajikistan	2	2	...	...	...	...
Ukraine	1 333	1 399	1 382	1 133	830	1 076

Continued

	2011	2012	2013	2014	2015	2016
nitrogen dioxide						
Azerbaijan	21	24	34	20	19	18
Armenia	1	1	2	2	1	2
Belarus	53	53	56	54	49	51
Kazakhstan	233	249	250	257	243	...
Kyrgyzstan	3	3	3	4	4	...
Moldova	2	2	2	2	2	2
Russia	1 881	1 938	1 874	1 805	1 787	4 907
Tajikistan	1	1	...	...	...	...
Ukraine	333	333	333	288	234	240
carbon monoxide						
Azerbaijan	34	35	35	32	28	24
Armenia	2	3	3	3	3	2
Belarus	74	79	82	81	75	73
Kazakhstan	445	446	458	479	451	...
Kyrgyzstan	5	5	6	12	12	...
Moldova	5	4	5	5	5	5
Russia	5 781	6 002	5 351	4 938	4 800	4 907
Tajikistan	22	22	...	...	...	...
Ukraine	1 066	1 005	1 007	828	764	802

15.1.5. Air polluting emissions from stationary sources per inhabitant

(kilogrammes)

	2011	2012	2013	2014	2015	2016
Azerbaijan	24	24	21	20	18	19
Armenia	39	39	40	43	44	45
Belarus	39	46	47	49	48	48
Kazakhstan	142	142	134	131	124	...
Kyrgyzstan	7	7	7	10	10	...
Moldova	4	4	4	4	5	4
Russia	134	137	129	121	120	120
Tajikistan	5	5	...	...	...	...
Ukraine	96	95	94	70	63	68

15.1.6. Air polluting emissions from stationary sources per area unit

(kilogrammes / square kilometre)

	2011	2012	2013	2014	2015	2016
Azerbaijan	2 587	2 621	2 275	2 182	2 055	2 171
Armenia	3 867	3 934	4 035	4 304	4 338	4 438
Belarus	1 788	2 087	2 145	2 229	2 206	2 182
Kazakhstan	861	875	838	828	800	...
Kyrgyzstan	180	185	195	305	305	...
Moldova	443	443	473	443	473	443
Russia	1 123	1 148	1 079	1 021	1 012	1 015
Tajikistan	290	276	...	...	...	...
Ukraine	7 249	7 183	7 116	5 285	4 734	5 100

15.1.7. Captured and detoxified air pollutants from stationary sources

	2011	2012	2013	2014	2015	2016
Thousand tonnes						
Azerbaijan	255	90	84	83	307	244
Armenia	115	152	195	118	97	67
Belarus	2 800	2 691	2 887	3 646	3 187	2 921
Kazakhstan	28 036	31 012	33 379	29 674	27 950	...
Kyrgyzstan	288	271	369	451	419	...
Moldova	117	115	195	133	140	96
Russia	59 224	56 834	54 384	54 099	51 993	49 237
Tajikistan	48	130	...	...	...	...

Continued

	2011	2012	2013	2014	2015	2016
As % of total pollutants						
Azerbaijan	53	28	30	31	63	57
Armenia	53	56	62	48	43	34
Belarus	88	86	87	89	87	87
Kazakhstan	92	93	94	93	93	...
Kyrgyzstan	89	88	90	94	87	...
Moldova	97	89	93	90	90	86
Russia	76	74	75	76	75	74
Tajikistan	54	92	...	...	...	...

15.1.8. Air polluting emissions from motor road transport

(thousand tonnes)

	2011	2012	2013	2014	2015	2016
Azerbaijan	779	849	922	966	978	982
Armenia	155	142	142	143	140	145
Belarus	944 ¹⁾	695	684	644	580	578
Moldova	175	140	213	179	179	179
Russia	13 325	12 679	13 424	13 622	13 819	14 105
Tajikistan	...	260	...	...	...	...
Ukraine	2 255	2 249	2 196	1 797	1 475	...

¹⁾ From mobile sources.

15.2. Belarus and countries of the world¹⁾

15.2.1. Area of forest land

	Km ²		As % of total area	
	2010	2015	2010	2015
Austria	38 600	38 690	46.8	46.9
Belarus	80 460	82 398	38.8	39.7
Belgium	6 812	6 834	22.5	22.6
Canada	3 473 020	3 470 690	38.2	38.2
Czech Republic	26 570	26 670	34.4	34.5
Estonia	22 340	22 320	52.7	52.7
Finland	222 180	222 180	73.1	73.1
France	164 240	169 890	30.0	31.0
Japan	249 660	249 580	68.5	68.5
Germany	114 090	114 190	32.7	32.8
Greece	39 030	40 540	30.3	31.5
Denmark	5 871	6 122	13.8	14.4
Hungary	20 460	20 690	22.6	22.9
Ireland	7 256	7 540	10.5	10.9
Italy	90 280	92 970	30.7	31.6
Netherlands	3 730	3 760	11.1	11.2
Norway	121 020	121 120	33.1	33.2
Poland	93 290	94 350	30.5	30.8
Portugal	32 390	31 820	35.4	34.7
Slovakia	19 390	19 400	40.3	40.3
Slovenia	12 470	12 480	61.9	62.0
Spain	182 472	184 178	36.5	36.8
Sweden	280 730	280 730	68.4	68.9
Switzerland	12 350	12 540	31.3	31.7
Turkey	112 030	117 150	14.6	15.2
United Kingdom	30 590	31 440	12.6	13.0
United States	3 087 200	3 100 950	33.7	33.9

¹⁾ Data of the OECD and Eurostat.

15.2.2. Biodiversity conservation areas

(as percentage of total country's area)

	2010	2015
Austria	11	15
Belarus	8	9
Belgium	10	13
Bulgaria	30	34
Cyprus	13	29
Czech Republic	10	14
Denmark	7	8
Estonia	17	18
Finland	13	14
France	9	13
Germany	10	15
Greece	16	27
Hungary	15	21
Ireland	11	13
Italy	14	19
Latvia	11	12
Lithuania	14	12
Luxembourg	15	27
Malta	13	13
Netherlands	8	13
Poland	11	20
Portugal	17	21
Romania	13	23
Slovakia	12	30
Slovenia	31	38
Spain	24	27
Sweden	14	13
United Kingdom	7	9

15.2.3. Air polluting emissions from stationary and mobile sources by selected ingredients

(thousand tonnes)

	2011	2012	2013	2014	2015
Sulphur oxides					
Austria	15.6	15.1	14.9	14.8	14.9
Belarus¹⁾	47.1	66.4	48.8	50.5	56.9
Belgium	52.9	47.3	44.7	42.4	42.6
Bulgaria	516.2	330.0	195.8	188.9	142.1
Croatia	29.5	25.4	17.1	14.0	15.1
Cyprus	20.9	16.2	13.8	16.9	13.2
Czech Republic	160.4	155.0	139.0	126.8	123.2
Denmark	14.5	12.6	13.0	11.3	10.8
Estonia	72.8	40.6	36.5	40.8	31.8
Finland	61.1	51.4	47.4	43.2	42.1
France	242.0	227.8	200.4	160.2	152.6
Germany	399.1	381.0	372.8	356.9	351.8
Greece	190.1	150.9	140.8	138.1	119.7
Hungary	34.6	31.8	31.3	27.5	24.1
Iceland	73.0	83.7	70.9	64.4	56.3
Ireland	26.7	25.3	25.4	19.4	17.6
Italy	195.2	176.9	145.5	130.8	123.1
Latvia	4.3	4.5	3.9	3.9	3.7
Lithuania	24.2	20.6	18.8	16.9	18.2
Luxembourg	1.3	1.5	1.5	1.5	1.3
Malta	7.9	7.7	5.0	4.6	3.3
Netherlands	33.5	33.7	29.5	29.1	30.3
Norway	18.8	17.3	16.7	16.5	16.3
Poland	827.5	794.0	759.2	714.6	690.3
Portugal	64.5	59.5	54.3	48.2	49.7
Romania	320.1	257.7	202.8	175.8	151.9
Slovakia	72.2	61.8	57.0	48.6	71.4
Slovenia	11.9	10.8	11.6	8.8	5.5
Spain	461.4	409.3	261.4	257.3	273.3
Sweden	26.2	25.2	23.2	20.7	19.2
Switzerland	8.7	9.0	8.7	7.9	6.8
Turkey	2 641.0	2 716.0	1 944.0	2 148.0	1 939.0
United Kingdom	392.7	439.0	379.5	305.4	236.1

¹⁾ Sulphur dioxide.

Continued

	2011	2012	2013	2014	2015
Nitrogen oxides					
Austria	171.4	164.5	164.3	153.1	149.1
Belarus¹⁾	157.7	158.5	157.4	149.4	134.4
Belgium	228.7	214.9	207.1	200.3	197.2
Bulgaria	156.8	142.1	127.3	133.3	131.6
Croatia	63.5	58.4	57.1	52.9	53.1
Cyprus	21.4	21.6	16.4	17.5	15.3
Czech Republic	205.9	192.4	178.5	169.7	164.6
Denmark	139.3	128.6	123.9	115.2	114.5
Estonia	40.4	37.1	34.5	34.1	30.7
Finland	174.8	166.7	158.9	152.7	139.7
France	1 013.8	977.7	954.4	869.3	835.5
Germany	1 313.9	1 271.6	1 267.8	1 220.9	1 187.4
Greece	303.4	243.2	249.9	248.0	240.9
Hungary	131.9	122.6	120.5	118.7	123.2
Iceland	21.6	21.3	21.3	20.6	21.1
Ireland	77.1	79.2	77.7	76.8	79.5
Italy	915.2	851.9	798.5	786.6	763.0
Latvia	36.4	36.5	36.3	36.4	36.5
Lithuania	53.5	55.6	54.6	54.4	55.0
Luxembourg	33.6	30.6	27.1	24.9	21.7
Malta	7.9	8.7	4.9	3.3	2.9
Netherlands	286.2	271.6	259.0	234.1	228.2
Norway	183.4	177.6	166.9	157.0	151.3
Poland	832.6	804.1	769.1	720.4	713.8
Portugal	182.8	176.2	174.2	172.7	179.7
Romania	244.1	242.4	220.2	217.6	213.5
Slovakia	90.6	86.7	87.4	89.0	86.2
Slovenia	47.6	46.5	43.9	39.4	35.2
Spain	1 042.4	1 009.6	895.7	881.1	904.8
Sweden	147.1	139.7	137.0	134.2	129.6
Switzerland	73.4	73.4	72.8	68.5	64.5
Turkey	880.0	833.0	801.0	787.0	883.0
United Kingdom	1 061.2	1 088.6	1 034.9	956.7	918.3

¹⁾ Nitrogen dioxide.