NATIONAL STATISTICAL COMMITTEE
OF THE REPUBLIC OF BELARUS

ENVIRONMENTAL PROTECTION IN THE REPUBLIC OF BELARUS

Statistical book

MINSK
2021

The statistical book presents data on the state of the natural environment and environmental impact of economic activities for the years 2014 – 2020.

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 2014 – 2020 on the state of the environment, availability and use of natural resources, and environmental expenditure. It also presents green growth indicators and selected environmental indicators of the national list of Sustainable Development Goals indicators, information on areas of radioactive contamination as a result of the Chernobyl Nuclear Power Plant catastrophe.

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 activity.

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 (the Ministry of Natural Resources and Environmental Protection, the Ministry of Forestry, the Ministry of Housing and Utilities, the Ministry of Finance, the Ministry of Health, the Ministry of Agriculture and Food, the National Academy of Sciences of Belarus, the State Committee for Property).

The information on types of economic activity is given in accordance with the National Classifier of the Republic of Belarus OKRB 005-2011 "Types of economic activity". Data on types of industrial waste are formed in accordance with the National Classifier of the Republic of Belarus OKRB 021-2019 "Classifier of Wastes Occurring in Belarus".

Data in value terms are provided at current prices; data from 2016 are shown in terms of the new denomination (1 BYN = 10 000 BYR).

Population data have been revised according to the 2019 population census. The average annual population, revised according to the 2019 population census, was used to calculate the relative indicators.

In certain cases data for 2020 are provisional and will be revised in further issues.

The publication is annual.

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.

CONTENTS

Pg.

1. Geographic characteristics of the Republic of Belarus

1.1. Main geographic characteristics …… 11

1.2. Main characteristics of large and medium-sized rivers …… 12

1.3. Main characteristics of largest reservoirs …… 12

1.4. Main characteristics of largest lakes …… 14

2. Indicators from the national list of Sustainable Development Goal indicators

2.1. Selected indicators SDG 6. Ensure availability and sustainable management of water and sanitation for all…… 15

2.1.1. Proportion of domestic and industrial wastewater flows safely treated by regions and Minsk city (indicator 6.3.1)…… 15

2.1.2. Proportion of surface water bodies classified as having “good” and higher ecological (hydrobiological) water quality status (indicator 6.3.2.1)…… 15

2.1.3. Water use efficiency by regions and Minsk city (indicator 6.4.1)…… 16

2.1.4. Proportion of land under swamps and water bodies in the total area of the republic (indicator 6.6.1) (chart)…… 16

2.2. Selected indicators SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation…… 17

2.2.1. CO_2 emission per unit of value added (indicator 9.4.1) (chart)…… 17

2.3. Selected indicators SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable…… 17

2.3.1. Proportion of the population using service of disposal of solid municipal waste regularly by regions and Minsk city (indicator 11.6.1.1)…… 17

2.3.2. Average annual concentrations of air pollutants by selected cities (indicator 11.6.2.1)…… 18

2.4. Selected indicators SDG 12. Ensure sustainable consumption and production patterns…… 19

2.4.1. Industrial waste of hazard classes 1 – 3 generated per capita by regions and Minsk city (indicator 12.4.2.1)…… 19

2.4.2. Proportion of recovered industrial waste of hazard classes 1 – 3 in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.2)…… 19

2.4.3. Proportion of detoxified industrial waste of hazard classes 1 – 3 in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.3)…… 20

2.4.4. Proportion of landfilled industrial waste of hazard classes 1 – 3 in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.4)…… 20

2.4.5. Proportion of industrial waste of hazard classes 1 – 3 sent for storage in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.5)…… 21

2.4.6. Proportion of solid municipal waste recovered in total solid municipal waste generated by regions and Minsk city (indicator 12.5.1.1)…… 21

Pg.

2.5. Selected indicators SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss……. 22

2.5.1. Proportion of specially protected natural areas in the total area of the country, regions and Minsk city (indicator 15.1.2.1)……. 22

2.5.2. Forest coverage of the territory at the country and regional level (indicators 15.1.1, 15.2.1.1)….. 22

2.5.3. Average stock of forest vegetation by region (indicator 15.2.1.2)…… 23

2.5.4. Proportion of established forest plantations based on genetic selection in total forest planting and seeding by region (indicator 15.2.1.3)..…….... 23

2.5.5. Average volume of timber harvesting from one hectare of forest land by region (indicator 15.2.1.4)……..... 24

2.5.6. Progress towards sustainable forest management (indicator 15.2.1)…….. 24

2.5.7. Rare and endangered wildlife animal species by taxonomic group (indicator 15.5.1.1)…….. 25

2.5.8. Rare and endangered wildlife plant species by taxonomic group (indicator 15.5.1.2)…….. 25

3. Green Growth Indicators

3.1. Socio-economic indicators ……..……..……..…… 27

3.2. Environmental and resource productivity of the economy ……..……..... 28

3.3. Natural assets ……..……..... 28

3.3.1. Freshwater resources ..…….. 28

3.3.2. Land resources ……..……..... 29

3.3.3. Forest resources ……..... 29

3.3.4. Fisheries and fish farming……..… 30

3.3.5. Wildlife resources ……..…… 31

3.4. Environmental quality of life ……..……..…….. 33

3.4.1. Average annual concentrations of selected pollutants in the atmosphere of selected cities …….. 33

3.4.2. Wastewater discharge into surface water bodies by degree of treatment……..... 34

3.4.3. Access to water supply and sewerage facilities ……..…… 34

3.5. Economic opportunities ……..……..... 34

4. Environmental protection expenditure

4.1. Total environmental protection expenditure (at current prices) …….. 35

4.2. Total environmental protection expenditure (at constant prices) …… 37

4.3. Current environmental protection expenditure……. 38

4.4. Fixed capital investment spent on environmental protection and rational use of natural resources by regions and Minsk city ……..……..... 39

Pg.

5. Air protection

5.1. Main indicators of air polluting emissions ……..……. 41

5.2. Air polluting emissions by regions and Minsk city ……..... 43

5.3. Dynamics of air polluting emissions from stationary and mobile sources (chart)..... 44

5.4. Share of air polluting emissions from mobile sources by regions and Minsk city…..... 44

5.5. Air polluting emissions from mobile sources per capita by regions and Minsk city …..…… 45

5.6. Air polluting emissions from mobile sources per square kilometre by regions and Minsk city ….. 45

5.7. Air polluting emissions from mobile sources by selected ingredients by regions and Minsk city… 46

5.8. Air polluting emissions from stationary sources per capita by regions and Minsk city …… 48

5.9. Air polluting emissions from stationary sources per square kilometre by regions and Minsk city.. 48

5.10. Air polluting emissions from stationary sources by selected ingredients by regions and Minsk city ..…… 49

5.11. Air polluting emissions from stationary sources from fuel combustion by selected ingredients by regions and Minsk city ……. 52

5.12. Air polluting emissions from stationary sources from waste recovery and neutralisation, technological and other processes by selected ingredients by regions and Minsk city ……..…. 54

5.13. Air polluting emissions from stationary sources by economic activity .....……..... 56

5.14. Air polluting emissions from stationary sources by regions, cities and districts……. 58

5.15. Air pollutants from stationary sources by regions and Minsk city…… 64

5.16. Air pollutants from stationary sources (chart)…… 64

5.17. Captured and detoxified air pollutants from stationary sources by regions and Minsk city…… 65

5.18. Captured and detoxified air pollutants from stationary sources by regions, cities and districts… 66

5.19. Recovery of pollutants captured by gas treatment plants by regions and Minsk city …… 72

5.20. Number of stationary sources of air polluting emissions by regions and Minsk city…… 73

5.21. Number of days with maximum single allowable concentration of pollutants exceeded by selected cities …..……... 75

5.22. Average annual concentrations of air pollutants by selected cities ..…….. 78

5.23. Consumption of ozone depleting substances ……. 81

5.24. Air quality monitoring by regions and Minsk city …… 81

6. Climate change

6.1. Average annual air temperatures by regions and Minsk city……..…….. 84

6.2. Average monthly air temperatures by regions and Minsk city……..... 85

Pg.

6.3. Average annual precipitation by regions and Minsk city……..... 86

6.4. Average monthly precipitation by regions and Minsk city……..… 87

6.5. Greenhouse gas emissions……..... 88

6.6 Structure of greenhouse gas emissions ……..... 88

6.7. Greenhouse gas emissions in energy sector……..……..….. 89

6.8. Greenhouse gas emissions from industrial processes and product use ……..……. 89

6.9. Emissions of carbon dioxide (CO_2)……..…….. 90

6.10. Emissions of carbon dioxide (CO_2) per capita of the Republic of Belarus (chart)……..…….. 90

7. Protection and use of water resources

7.1. Key indicators of protection and use of water resources……..…..... 92

7.2. Water abstraction from natural sources (chart)……... 94

7.3. Water abstraction from natural sources per capita by regions and Minsk city ….…… 94

7.4. Water abstraction from natural sources by regions and Minsk city……..... 95

7.5. Water abstraction from natural sources by river basin…… 96

7.6. Water abstraction from natural sources by regions, cities and districts……..… 97

7.7. Water abstraction from natural sources by economic activity ……..... 103

7.8. Water use by regions and Minsk city ……..…… 105

7.9. Dynamics of water use (chart)…….. 107

7.10. Water use for domestic and drinking, including curative, purposes per capita by regions and Minsk city ….…… 108

7.11. Water use by economic activity ……... 108

7.12. Water loss during transport by regions and Minsk city……..... 109

7.13. Water discharge by regions and Minsk city……..... 110

7.14. Water discharge by regions, cities and districts……. 111

7.15. Water discharge by economic activity ……..... 117

7.16. Wastewater discharge into surface water bodies by degree of treatment by regions and Minsk city ……..…… 119

7.17. Ingress of contaminants with wastewater discharge into surface water bodies……... 120

7.18. Capacity of water treatment facilities by regions and Minsk city ……..…….. 121

7.19. Average annual biochemical oxygen demand in river water ……..…….. 121

7.20. Concentrations of contaminants in river water ……...…. 122

7.21. Concentrations of phosphate ions (in terms of phosphorus) in lakes ….……..….... 124

7.22. Drinking water sample tests for compliance with sanitary hygienic safety standards ..……. 125

Pg.

8. Land resources and land protection

8.1. Land area…… 126
8.2. Area of agricultural land by region…… 127
8.3. Area of damaged land by region…… 128
8.4. Area of reclaimed land…… 128
8.5. Area of drained land by region…… 129
8.6. Area of irrigated agricultural land by region…… 129
8.7. Area of agricultural land withdrawn from productive turnover …..…… 129

9. Application of fertilizers and pesticides

9.1. Application of mineral fertilizers in agricultural organisations per hectare of agricultural land by region…… 130
9.2. Share of land treated with mineral fertilizers in total agricultural land by region…… 132
9.3. Application of mineral fertilizers in agricultural organisations per hectare of arable land by region…… 132
9.4. Application of organic fertilizers in agricultural organisations by region…… 134
9.5. Application of pesticides per hectare of arable land by region…… 135
9.6. Dynamics of pesticide application per hectare of arable land by region (chart)…… 135

10. Specially protected natural areas

10.1. Specially protected natural areas in the Republic of Belarus …….. 136
10.2. Specially protected natural areas by regions and Minsk city as of January 1, 2021 …..…….... 137
10.3. Proportion of specially protected natural areas in the total area of the country, regions and Minsk city…… 138
10.4. Proportion of specially protected natural areas in the area of the country, regions and Minsk city as of January 1, 2021 (chart) ……..…… 138
10.5. Main characteristics of nature reserves and national parks ……..…… 139
10.6. Rare and endangered wildlife species listed in the Red Book of the Republic of Belarus..…… 141

11. Protection and use of forest resources

11.1. Forest fund land by region ……..…….. 143
11.2. Forest cover of the territory at the country, regional and district levels ……..…… 144
11.3. Forest cover of the territory by districts as of January 1, 2021 (map)……..... 150
11.4. Main activities in forestry……... 151
11.5. Reforestation and afforestation by region……..…. 153
11.6. Introduction of forest plantations in the category of valuable forest plantations by region ……. 154

Pg.

11.7. Seed harvesting of wood and shrub species by region……..... 155

11.8. Forest felling area by region…….……..... 157

11.9. Marketable timber harvested by region …….. 158

11.10. Forest pest and disease control by region……..……..... 159

11.11. Pest-affected forest area …….…..... 160

11.12. Area of forest loss by region…….……..... 160

11.13. Area of forest loss by cause……..…… 161

11.14. Structure of area of forest loss by cause (chart)……...……...……. 162

11.15. Forest fires by region…….. 163

11.16. Number of forest fires and forest area affected by fires (chart)……... 164

11.17. Forest fire control with the aid of aviation by region…….……... 164

12. Game husbandry

12.1. Area of hunting grounds by region……..…… 166

12.2. Game husbandry expenditures and earnings ……..…….. 166

12.3. Expenditures on biotechnical activities designed for wildlife reproduction and protection by region ……..…..…… 167

12.4. Populations of major game species……..…… 167

12.5. Hunting of major game species…….…..... 168

12.6. Population of mammals included in the Red Book of the Republic of Belarus in their habitats taken under protection by users of hunting reserves ……..... 168

13. Waste

13.1. Generation, recovery and disposal of industrial waste by regions and Minsk city…… 170

13.2. Dynamics of generation, recovery and disposal of industrial waste (chart)…….. 171

13.3. Generation, recovery and disposal of industrial waste by waste types …….…….. 172

13.4. Generation of industrial waste per capita by regions and Minsk city ……..… 174

13.5. Recovery of industrial waste per capita by regions and Minsk city ……..…… 174

13.6. Generation of industrial waste by regions, cities and districts ……..... 175

13.7. Generation of industrial waste by economic activity ……..….... 181

13.8. Recovery of industrial waste by regions, cities and districts ……... 182

13.9. Industrial waste by hazard class in 2020 ……..... 188

13.10. Generation, recovery and disposal of industrial waste hazard classes 1 – 3…… 189

Pg.

13.11. Dynamics of generation, recovery and disposal of industrial waste hazard classes 1 – 3 (chart)…….. 189

13.12. Generation, recovery and disposal of industrial waste hazard classes 1 – 3 by regions and Minsk city in 2020 ……. 190

13.13. Generation, recovery and landfilling of solid municipal waste by regions and Minsk city …..…….. 191

13.14. Collection of secondary raw materials by selected materials by regions and Minsk city …..…….. 192

13.15. Removal of liquid municipal waste from settlements by special purpose motor road vehicles by regions and Minsk city ……..……..... 194

14. Selected data on the Chernobyl catastrophe consequences

14.1. Area of agricultural land contaminated with cesium-137 in use of agricultural organisations by region ...…..... 195

14.2. Area of agricultural land contaminated with cesium-137 in use of agricultural organisations by region as of January 1, 2021 ……..…….... 196

14.3. Area of forest fund contaminated with cesium-137 by region....…….... 196

14.4. Area of forest fund contaminated with cesium-137 by region as of January 1, 2021…….. 197

14.5. Forest seeding and planting on areas contaminated with cesium-137 by region……..….. 198

14.6. Forest seeding and planting on areas contaminated with cesium-137 by region in 2020...…..…. 198

14.7. Fixed capital investment in post-catastrophe remedial actions by regions and Minsk city …… 199

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, 2020:
9 380 thsd

Area: 207.6 thsd sq km

(forest land 42.7%; agricultural land 39.9%; land under swamps and water bodies 6%; other land 11.4%).

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

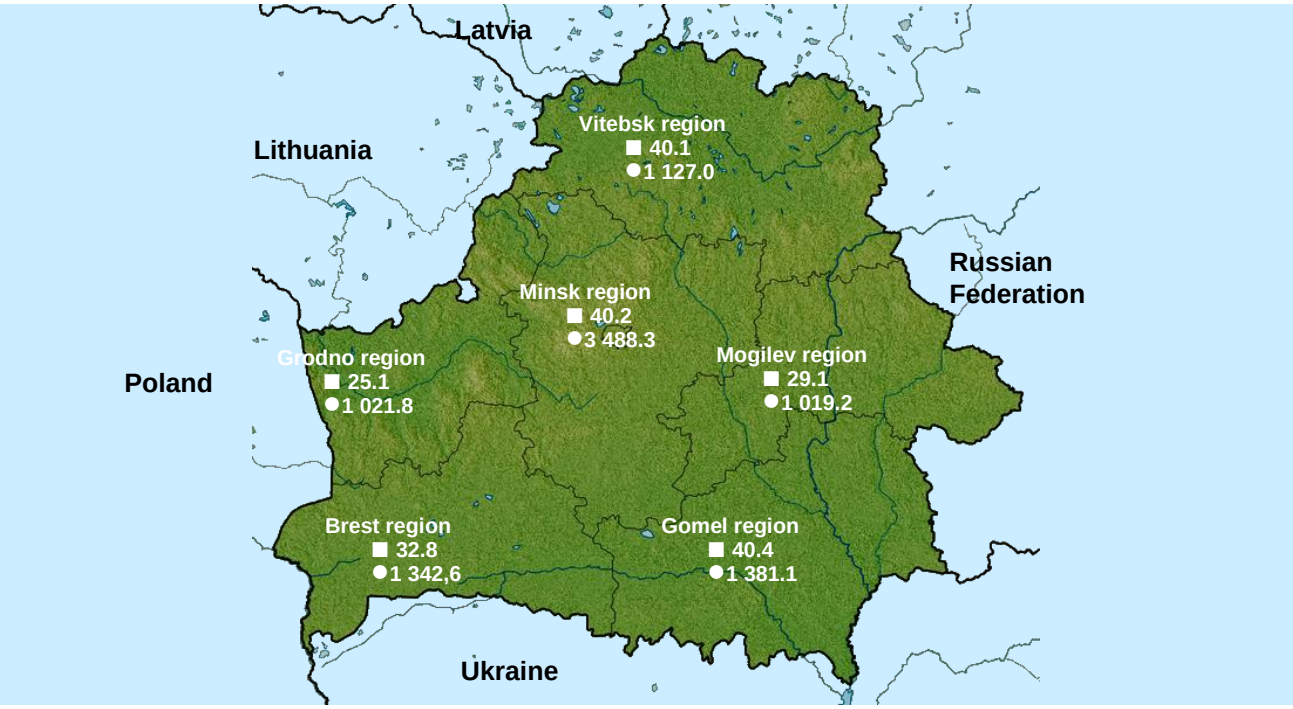
345 metres (Dzerzhinskaya mountain, Dzerzhinsk district of Minsk region).

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 2020, thsd

1.2. Main characteristics of large and medium-sized rivers[1)]

	Length, km		Catchment area, km^2	
	total	within country's territory	total	within country's territory
Large rivers				
Berezina	613	613	24 500	24 500
Goryn'	659	83	27 700	1 200
Dnieper	2 145	689	504 000	67 460
Western Dvina	1 020	345	87 900	33 150
Western Bug	831	169	73 470	9 990
Neman	914	431	98 200	34 610
Pripyat	761	495	121 000	50 900
Sozh	648	493	42 140	21 700
Medium-sized rivers				
Besed'	261	185	5 460	3 110
Viliya	510	276	25 100	10 920
Drut'	266	266	5 020	5 020
Western Berezina	226	226	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	327	327	5 160	5 160
Ubort'	292	126	5 820	1 910
Shchara	325	325	6 990	6 990
Yaselda	221	221	5 590	5 590

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

1.3. Main characteristics of largest reservoirs[1)]

	Surface area, km^2	Mode of formation	Purpose of use	Year of creation	Location (region, district)
Neman basin					
Vileyskoye	77.0	in-channel	domestic and drinking needs; other needs	1974	Minsk, Vileyka
Zelvenskoye	11.9	in-channel	recreation, sport and tourism; agriculture; other needs	1983	Grodno, Zelva

Continued

	Surface area, km^2	Mode of formation	Purpose of use	Year of creation	Location (region, district)
Western Dvina basin					
Khorobruvka	32.0	lake-type	recreation, sport and tourism; agriculture; other needs	1967	Vitebsk, Miory
Yezerishchenskoye	17.1	lake-type	recreation, sport and tourism; other needs	1959	Vitebsk, Gorodok
Western Bug basin					
Belovezhskaya Pushcha	3.3	in-channel	for the needs of the National Park «Belovezhskaya Pushcha»	1964	Brest, Kamenets
Lukovskoye	5.4	lake-type	recreation, sport and tourism; agriculture; other needs	1980	Brest, Malorita
Dnieper basin					
Zaslavskoye	31.1	in-channel	energy; recreation, sport and tourism; agriculture; other needs	1955	Minsk, Minsk
Osipovichskoye	11.9	in-channel	recreation, sport and tourism; agriculture; other needs	1953	Mogilev, Osipovichy
Svetlogorskoye	14.1	off-channel	recreation, sport and tourism; agriculture; other needs	1986	Gomel, Svetlogorsk
Chighirinskoye	23.4	in-channel	recreation, sport and tourism; agriculture; other needs	1960	Mogilev, Kirovsk
Pripyat basin					
Krasnoslobodskoye	23.6	in-channel	recreation, sport and tourism; agriculture; other needs	1973	Minsk, Kletsk
Lyubanskoye	22.5	in-channel	recreation, sport and tourism; agriculture; other needs	1966	Minsk, Lyuban
Pogost	16.2	lake-type	recreation, sport and tourism; agriculture; other needs	1978	Brest, Pinsk
Selets	20.7	in-channel	agriculture; other needs	1986	Brest, Bereza
Soligorskoye	23.1	in-channel	recreation, sport and tourism; agriculture; other needs	1967	Minsk, Soligorsk

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

1.4. Main characteristics of largest lakes[1)]

	Area, km^2	Depth, m		Location (region, district)
		maximum	average	
Naroch	79.6	24.8	8.9	Minsk, Myadel
Osveyskoye	57.1	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
Vygonovskoye	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	17.9	3.0	1.3	Brest, Bereza
Ezerishche	17.2	11.5	4.4	Vitebsk, Gorodok
Myadel	16.2	24.6	6.3	Minsk, Myadel
Lisno	16.0	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
Losvida	11.4	20.2	7.2	Vitebsk, Gorodok
Lepelskoye	10.8	33.7	7.3	Vitebsk, Lepel

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2. INDICATORS FROM THE NATIONAL LIST OF SUSTAINABLE DEVELOPMENT GOAL INDICATORS

On September 2015, the United Nations member states adopted the 2030 Agenda for Sustainable Development. The Agenda contains a number of Goals aimed at liquidation of poverty, preservation of the planet resources and ensuring prosperity for all.

The majority of goals include targets and indicators involving environmental issues in the field of sustainable water resources management, making human settlements sustainable, ensure sustainable consumption and production patterns, combating climate change, protection and restoration of terrestrial ecosystems and others.

2.1. Selected indicators SDG 6. Ensure availability and sustainable management of water and sanitation for all

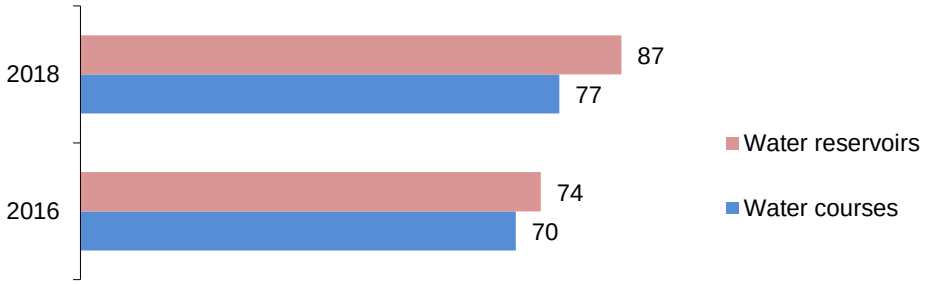
2.1.1. Proportion of domestic and industrial wastewater flows safely treated by regions and Minsk city (indicator 6.3.1)[1)]

(percent)

	2014	2015	2016	2017	2018	2019
Republic of Belarus	99.6	99.3	99.4	99.6	99.6	99.6
Regions and Minsk city:						
Brest	99.9	99.8	99.9	99.8	99.9	99.9
Vitebsk	99.9	99.9	99.4	99.7	100	100
Gomel	100	100	98.9	99.9	99.7	99.9
Grodno	100	100	100	99.9	99.9	99.8
Minsk city	100	100	99.8	100	100	100
Minsk	98.3	96.5	98.0	98.1	98.3	97.8
Mogilev	99.7	99.1	100	99.7	99.6	99.9

2.1.2. Proportion of surface water bodies classified as having “good” and higher ecological (hydrobiological) water quality status (indicator 6.3.2.1)[1)]

(percent)



[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2.1.3. Water use efficiency by regions and Minsk city (indicator 6.4.1)[1)]

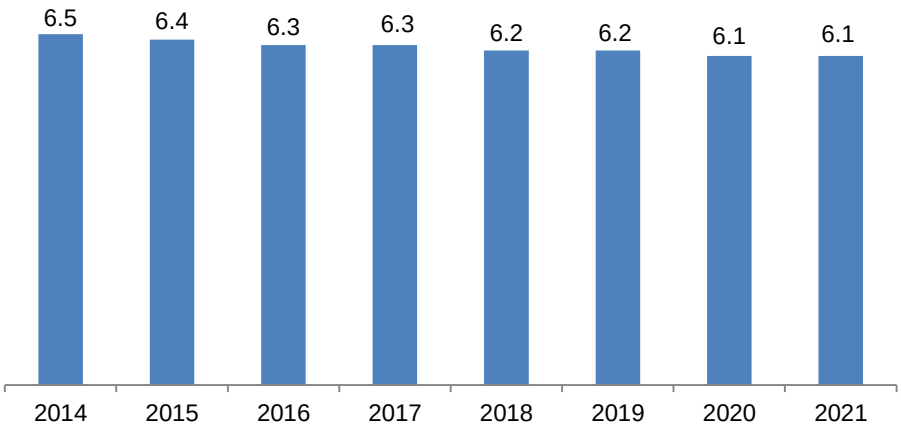
(BYN per cubic meter; GVA at constant prices 2015, for 2015 taking into account the retrospective denomination of 2016)

	2015	2016	2017	2018	2019
Republic of Belarus	57.5	56.5	57.3	60.3	60.0
Regions and Minsk city:					
Brest	30.5	33.1	32.0	34.2	39.8
Vitebsk	36.4	36.8	39.8	40.2	41.1
Gomel	48.6	51.7	53.3	52.2	50.2
Grodno	42.4	45.3	42.8	47.4	47.5
Minsk city	134.7	123.4	145.2	151.9	124.7
Minsk	52.7	44.2	44.6	48.5	54.5
Mogilev	46.7	48.1	45.3	48.0	50.0

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2.1.4. Proportion of land under swamps and water bodies in the total area of the republic (indicator 6.6.1)[1)]

(percent)

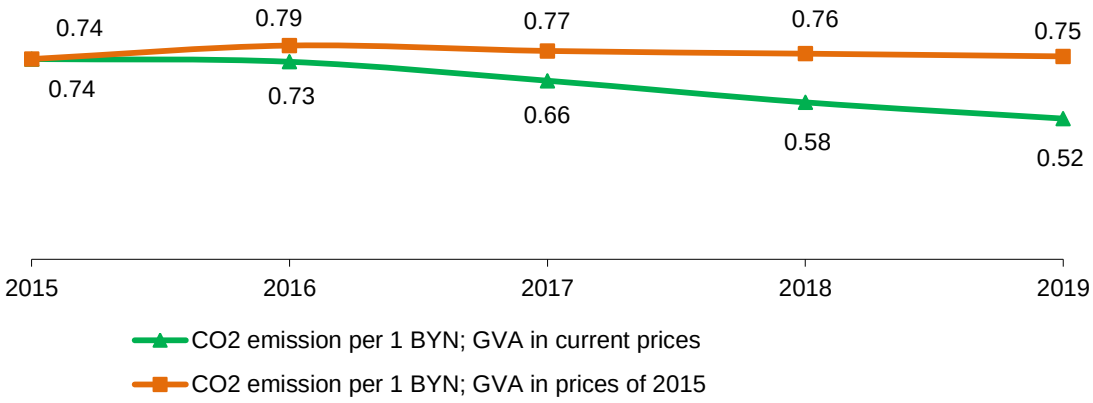


[1)] Data of the State Committee for Property as of January 1 for calculation are used.

2.2. Selected indicators SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

2.2.1. CO_2 emission per unit of value added (indicator 9.4.1)

(kilogrammes per 1 BYN; GVA for 2015 taking into account the retrospective denomination of 2016)



2.3. Selected indicators SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable

2.3.1. Proportion of the population using service of disposal of solid municipal waste regularly by regions and Minsk city (indicator 11.6.1.1)[1)]

(percent)

	2016	2017	2018	2019	2020
Republic of Belarus	75.3	89.5	90.1	95.5	100
Regions and Minsk city:					
Brest	70.9	92.5	92.9	99.7	100
Vitebsk	70.3	82.0	82.3	91.2	100
Gomel	71.9	95.2	95.6	99.5	100
Grodno	73.5	89.5	89.8	98.1	100
Minsk city	83.6	87.0	87.6	88.2	100
Minsk	71.0	87.0	87.4	99.2	100
Mogilev	83.0	94.8	95.2	95.5	100

[1)] Data of the Ministry of Housing and Utilities.

2.3.2. Average annual concentrations of air pollutants by selected cities (indicator 11.6.2.1)[1)]

(microgrammes per cubic metre of air)

	2014	2015	2016	2017	2018	2019	2020
Average annual concentrations of fine particulate matter (class PM_{10})							
Brest	22	15	11	10	20	16	…
Vitebsk	18	16	15	…	…	23	20
Gomel	38	53	…	32	29	29	45
Grodno	21	…	20	19	23	20	19
Minsk city							
residential area	20	15	12	10	…	13	18
industrial area	40	35	24	13	12	…	16
Mogilev							
residential area	22	14	15	13	19	20	19
industrial area	34	29	22	22	28	33	29
Novopolotsk	22	17	18	17	20	…	…
Polotsk	16	12	…	11	12	…	…
Average annual concentrations of fine particulate matter (class $PM_{2,5}$)							
Minsk city							
residential area	…	…	17	14	15	15	13
Zhlobin	…	…	12	15	19	25	47

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2.4. Selected indicators SDG 12. Ensure sustainable consumption and production patterns

2.4.1. Industrial waste of hazard classes 1 – 3 generated per capita by regions and Minsk city (indicator 12.4.2.1)

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	182.5	127.7	171.8	176.3	233.0	219.3	243.8
Regions and Minsk city:							
Brest	263.6	105.0	252.1	124.3	451.6	497.2	561.3
Vitebsk	50.2	38.2	38.2	49.9	38.2	68.8	39.2
Gomel	65.0	65.2	83.6	104.4	115.4	108.8	145.8
Grodno	273.7	267.8	311.6	411.7	381.1	394.9	404.4
Minsk city	233.8	146.4	168.8	155.8	69.1	66.1	36.9
Minsk	76.5	54.6	67.0	89.9	237.5	209.7	214.5
Mogilev	340.8	267.0	346.6	408.4	486.5	309.1	474.5

2.4.2. Proportion of recovered industrial waste of hazard classes 1 – 3 in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.2)[1)]

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	72.1	73.7	73.9	62.8	92.8	72.9	77.0
Regions and Minsk city:							
Brest	75.5	60.1	97.0	68.6	148.0	95.8	97.0
Vitebsk	44.0	44.8	57.6	75.8	46.0	31.8	56.3
Gomel	293.2	324.6	167.9	105.5	95.1	92.0	113.7
Grodno	49.0	51.6	60.0	66.4	66.4	78.3	75.8
Minsk city	26.3	10.4	17.2	19.4	75.3	78.4	64.0
Minsk	53.9	47.9	59.2	59.9	25.3	22.3	27.9
Mogilev	98.1	96.7	92.0	73.2	101.4	65.4	67.3

[1)] Recovered industrial waste is reflected taking into account partial recovery of previously accumulated waste. Data of the Ministry of Natural Resources and Environmental Protection.

2.4.3. Proportion of detoxified industrial waste of hazard classes 1 – 3 in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.3)[1)]

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	3.4	2.0	2.1	3.0	1.3	1.5	0.8
Regions and Minsk city:							
Brest	0.2	1.0	0.4	2.9	0.2	0.0	0.3
Vitebsk	1.2	2.6	2.5	5.1	7.0	0.2	0.2
Gomel	0.5	0.3	0.2	0.2	0.1	0.0	0.0
Grodno	3.6	4.8	4.7	3.7	3.5	3.3	2.7
Minsk city	10.0	1.9	1.4	2.0	4.5	1.9	3.7
Minsk	1.6	2.7	2.4	12.2	1.0	4.1	0.2
Mogilev	0.0	0.2	2.5	0.9	0.2	0.4	0.1

2.4.4. Proportion of landfilled industrial waste of hazard classes 1 – 3 in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.4)[1)]

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	8.9	8.2	7.1	6.6	5.6	8.6	5.9
Regions and Minsk city:							
Brest	11.3	7.1	7.0	7.4	2.3	3.1	1.8
Vitebsk	34.5	21.5	24.4	20.2	24.4	55.9	19.2
Gomel	26.1	18.7	13.7	8.3	16.0	20.6	13.5
Grodno	3.9	4.5	4.5	3.8	3.9	4.1	4.2
Minsk city	4.8	7.9	7.0	6.7	18.2	22.5	44.3
Minsk	16.9	16.2	11.6	10.9	4.5	5.2	5.3
Mogilev	4.6	5.1	4.2	5.3	3.4	5.9	3.7

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2.4.5. Proportion of industrial waste of hazard classes 1 – 3 sent for storage in total industrial waste of hazard classes 1 – 3 generated by regions and Minsk city (indicator 12.4.2.5)[1)]

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	37.0	45.1	33.9	31.4	21.9	21.1	21.1
Regions and Minsk city:							
Brest	14.2	33.6	11.1	22.2	1.6	1.5	1.3
Vitebsk	29.6	34.9	22.7	17.1	24.9	13.5	26.9
Gomel	14.8	11.8	11.5	5.2	4.7	7.1	6.6
Grodno	47.4	46.4	32.3	28.6	27.2	22.4	19.7
Minsk city	59.9	80.2	75.1	73.4	4.1	1.9	4.9
Minsk	35.9	40.9	35.7	19.7	71.7	70.7	69.0
Mogilev	30.1	27.3	27.1	21.6	18.1	29.4	29.9

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2.4.6. Proportion of solid municipal waste recovered in total solid municipal waste generated by regions and Minsk city (indicator 12.5.1.1)[1)]

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	14.5	15.6	15.8	17.2	18.8	22.5	25.0
Regions and Minsk city:							
Brest	14.9	16.9	16.1	16.2	19.3	30.5	31.4
Vitebsk	11.8	15.3	17.2	16.5	17.6	18.5	29.2
Gomel	14.7	15.0	15.7	16.6	18.1	21.0	22.8
Grodno	14.2	15.1	13.3	17.7	18.3	20.1	22.0
Minsk city	15.6	16.0	16.7	18.7	20.3	26.0	26.3
Minsk	11.2	12.4	12.4	13.7	14.3	17.3	20.4
Mogilev	18.2	18.9	18.8	20.5	24.6	20.8	21.5

[1)] Data of the Ministry of Housing and Utilities.

2.5. Selected indicators SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

2.5.1. Proportion of specially protected natural areas in the total area of the country, regions and Minsk city (indicator 15.1.2.1)

(as of January 1; percent)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	8.2	8.8	8.7	8.7	8.9	9.0	9.0
Regions and Minsk city:							
Brest	14.1	14.2	14.4	14.4	14.7	15.0	15.0
Vitebsk	8.8	9.5	9.5	9.5	9.7	9.8	10.0
Gomel	6.8	7.4	7.4	7.4	7.4	7.4	7.4
Grodno	9.8	9.9	10.1	10.1	10.1	10.1	10.1
Minsk city	0.4	1.7	1.7	1.7	1.7	1.7	1.7
Minsk	6.9	7.6	7.6	7.6	7.6	7.5	7.5
Mogilev	3.8	4.4	3.0	3.5	4.6	4.6	4.6

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

2.5.2. Forest coverage of the territory at the country and regional level (indicators 15.1.1, 15.2.1.1)

(as of January 1; percent)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	39.5	39.7	39.8	39.8	39.8	39.9	40.1
Region:							
Brest	36.2	36.3	36.3	36.2	36.4	36.4	36.4
Vitebsk	40.3	40.8	40.8	41.0	41.1	41.3	42.1
Gomel	46.9	47.0	46.9	47.1	46.4	46.6	46.9
Grodno	35.1	35.1	35.1	35.2	35.7	35.7	36.0
Minsk	38.3	38.4	38.3	38.4	38.2	38.4	38.4
Mogilev	37.8	38.0	38.1	38.2	38.0	38.4	38.6

[1)] Data of the Ministry of Forestry.

2.5.3. Average stock of forest vegetation by region (indicator 15.2.1.2)[1)]

(cubic metres per 1 hectare)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	197.7	200.1	203.5	205.9	206.7	208.2	209.1
Region:							
Brest	186.9	188.6	191.8	194.6	198.4	199.3	200.2
Vitebsk	186.5	190.2	194.0	196.4	197.6	199.2	199.1
Gomel	189.2	190.1	192.9	192.0	190.8	191.8	193.6
Grodno	216.9	220.0	226.4	237.4	239.7	240.1	241.3
Minsk	209.8	214.0	216.5	217.2	218.5	221.8	223.1
Mogilev	207.9	209.3	212.0	214.6	214.6	215.0	215.5

[1)] Data of the Ministry of Forestry.

2.5.4. Proportion of established forest plantations based on genetic selection in total forest planting and seeding by region (indicator 15.2.1.3)

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	37.8	40.1	40.9	45.4	52.0	56.7	54.1
Region:							
Brest	42.7	44.1	38.6	49.0	47.3	58.4	51.4
Vitebsk	37.3	36.3	42.7	52.2	61.8	68.3	56.3
Gomel	22.4	28.7	37.9	46.4	52.1	56.1	53.2
Grodno	54.9	51.9	52.8	58.3	54.5	57.5	54.4
Minsk	43.4	46.1	35.7	29.9	46.8	52.6	55.5
Mogilev	36.9	42.2	45.6	58.8	55.9	54.5	55.1

2.5.5. Average volume of timber harvesting from one hectare of forest land by region (indicator 15.2.1.4)[1)]

(cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	2.3	2.1	2.4	2.7	3.3	3.1	3.0
Region:							
Brest	1.9	1.9	1.9	2.6	2.9	2.8	2.8
Vitebsk	2.0	2.0	1.7	1.9	2.2	2.3	2.2
Gomel	2.0	1.9	1.9	3.2	4.2	3.2	3.2
Grodno	2.4	2.1	2.1	2.2	2.6	3.1	3.1
Minsk	2.4	2.2	3.9	3.3	3.5	3.4	3.3
Mogilev	3.1	2.9	2.9	2.9	3.7	3.8	3.7

2.5.6. Progress towards sustainable forest management (indicator 15.2.1)[1)]

	2015	2016	2017	2018	2019	2020
Above-ground biomass stock in forest, tonnes per 1 ha	146.8	148.8	150.8	152.3	153.5	155.8
Forest area under an independently verified forest management certification scheme (as of December 31), thsd ha:						
PEFC	8 090.3	7 981.4	8 010.5	8 023.2	8 101.2	8 296.0
FSC	6 587.7	7 672.0	7 941.7	8 306.0	7 560.4	8 433.2
Proportion of forest area under a long term forest management plan in the total area of forest fund, %	100	100	100	100	100	100
Proportion of forest area located within legally established protect areas in the total area of forest fund, %	15.2	15.4	15.3	15.7	15.9	16.6

[1)] Data of the Ministry of Forestry.

2.5.7. Rare and endangered wildlife animal species by taxonomic group (indicator 15.5.1.1)[1)]

	2014	2015	2016	2017	2018	2019	2020
Total number of rare and endangered species relative, unit							
Mammals	20	20	20	20	20	20	20
Birds	70	70	70	70	70	70	70
Reptiles	2	2	2	2	2	2	2
Amphibians	2	2	2	2	2	2	2
Fish and fish-shaped	9	9	9	9	9	9	9
Proportion of rare and endangered wildlife species relative to total species, percent							
Mammals	25.3	24.7	24.7	25.0	24.1	24.1	24.1
Birds	21.7	21.5	21.3	21.3	21.1	21.1	21.1
Reptiles	28.6	28.6	28.6	28.6	28.6	28.6	28.6
Amphibians	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Fish and fish-shaped	13.2	13.2	13.2	13.2	13.2	13.2	13.2

2.5.8. Rare and endangered wildlife plant species by taxonomic group (indicator 15.5.1.2)[1)]

	2014	2015	2016	2017	2018	2019	2020
Total number of rare and endangered species relative, unit							
Vascular	189	189	189	189	189	189	189
Mosses	34	34	34	34	34	34	34
Lichens	25	25	25	25	25	25	25
Algae	21	21	21	21	21	21	21
Fungi	34	34	34	34	34	34	34
Proportion of rare and endangered wildlife species relative to total species, percent							
Vascular	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Mosses	7.9	7.9	7.8	7.8	7.8	7.8	7.8
Lichens	4.3	4.0	3.7	3.7	3.7	3.7	3.7
Algae	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Fungi	0.8	0.8	0.8	0.8	0.8	0.8	0.8

[1)] Data of National Academy of Sciences of Belarus.

3. GREEN GROWTH INDICATORS

Green Growth Indicators (GGIs) characterize the processes of greening the economy through the conservation and rational use of natural resources and the impact of these processes on the development of the social sphere.

GGIs 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).

GGIs are divided into five groups:

- Socio-economic indicators;
- Environmental and resource productivity of the economy;
- Natural assets;
- Environmental quality of life;
- Economic opportunities.

The indicators of the environmental and resource productivity of the economy characterise environmental and resource efficiency of production and consumption and help to track trends related to the elimination of the dependence between resource consumption and economic growth.

Production-based carbon productivity represents the GDP generated per unit of CO_2 emitted in production.

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

Industrial 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 availability of stocks of renewable and non-renewable resources necessary for economic activity.

The environmental quality of life indicators characterise environmental conditions affecting quality of life of the population through air and water pollution, climate change

The indicators of the 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

	2014	2015	2016	2017	2018	2019	2020
Socio-demographic patterns							
Average annual population, thsd	9 449	9 461	9 469	9 459	9 439	9 420	9 380
Population density, inhabitants per 1 km^2	46	46	46	46	45	45	45
Ageing ratio, k	0.879	0.873	0.873	0.881	0.891	0.913	0.930
Labour force participation rate, %	71.7	71.8	70.8	71.3	70.9	70.7	70.3
Actual unemployment rate (ILO methodology), %	5.1	5.2	5.8	5.6	4.8	4.2	4.0
Average annual registered unemployment rate, %	0.5	0.9	1.0	0.8	0.4	0.3	0.2
Access to education:							
gross graduation ratio from higher education, %	64.4	66.9	69.0	80.4	69.8	65.8	63.7
gross graduation ratio from secondary education, %	44.3	44.7	42.6	42.2	38.5	36.1	35.8
Gini coefficient, k	0.275	0.276	0.279	0.269	0.275	0.272	0.266
Economic patterns							
Gross domestic product							
BYN bn (2014 – 2015 – BYR bn), at current prices	805 793	899 098	94.9	105.7	122.3	134.7	147.0
% of previous year, at constant prices	101.7	96.2	97.5	102.5	103.1	101.4	99.1
Gross domestic product at PPP[1)], USD bn	179.6	171.2	168.4	173.7	183.5	189.5	190.0
Net national income, BYN bn (2014 – 2015 – BYR bn), at current prices	699 247	773 481	80.8	90.2	104.6	115.1	124.4
Labour productivity based on GDP, BYN thsd (2014 – 2015 – BYR thsd), at current prices	177 078	199 977	21.6	24.3	28.2	31.1	34.0
Volume of foreign trade in goods and services to GDP (relative importance of trade)[2)], %	110.7	115.9	125.2	133.4	139.4	130.9	120.7
Consumer price index, % of previous year	118.1	113.5	111.8	106.0	104.9	105.6	105.5

[1)] 2018 – 2020 – the estimates of Belstat.

[2)] Balance of Payments data at the moment of GDP estimation.

3.2. Environmental and resource productivity of the economy

	2014	2015	2016	2017	2018	2019	2020
Production-based carbon productivity, BYN per kg	1.3	1.5	1.6	1.8	2.0	2.2	…
Demand-based carbon productivity, BYN per kg	1.2	1.5	1.5	1.7	1.9	2.1	…
Energy productivity, BYR thsd per kg of fuel equivalent (GDP at constant prices (2005))	2.6	2.7	2.7	2.7	2.6	2.7	2.7
Energy intensity of GDP, kg of fuel equivalent / BYR mln (GDP at constant prices (2005))	387.7	369.9	374.5	376.1	380.2	371.0	365.0
Share of electricity generation from renewable energy sources in total electricity generation, percent	0.7	0.9	1.1	2.2	1.8	2.5	3.4
Industrial waste generation intensity per unit of GDP, kg per BYN	0.65	0.55	0.52	0.52	0.50	0.45	0.42
Industrial waste generation intensity, tonnes per capita	5.6	5.3	5.2	5.9	6.4	6.5	6.5
Industrial waste recovery rate, k	0.3	0.2	0.3	0.3	0.3	0.3	0.4
Solid municipal waste generation intensity, kg per capita	394.0	394.7	400.7	401.9	402.1	401.8	433.9
Water productivity, BYN per m^3	51.9	61.4	63.0	72.6	84.0	97.0	108.7

3.3. Natural assets

3.3.1. Freshwater resources

	2014	2015	2016	2017	2018	2019	2020
Renewable freshwater resources							
mln m^3 per year[1)]	40 900	29 800	42 400	60 400	55 000	37 300	…
m^3 per capita	4 329	3 150	4 478	6 385	5 827	3 960	…
Water abstraction from groundwater bodies							
mln m^3 per year[1)]	867	845	818	811	809	802	797
m^3 per capita	92	89	86	86	86	85	85
Water abstraction from surface water bodies							
mln m^3 per year[1)]	704	603	632	586	581	556	529
m^3 per capita	75	64	67	62	62	59	56
Water resources exploitation index (by annual flow), %	3.8	4.9	3.4	2.3	2.5	3.6	…

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

3.3.2. Land resources[1)]

(at 1 January)

	2015	2016	2017	2018	2019	2020	2021
Total, thousand hectares							
Land area	20 760	20 760	20 760	20 760	20 760	20 760	20 761
of which:							
agricultural land	8 632	8 582	8 540	8 502	8 460	8 391	8 284
forest land	8 653	8 742	8 769	8 774	8 791	8 814	8 865
land under swamps and water bodies	1 309	1 286	1 271	1 273	1 274	1 265	1 246
other land	2 166	2 150	2 180	2 212	2 235	2 291	2 366
Percent of total							
Land area	100	100	100	100	100	100	100
of which:							
agricultural land	41.6	41.3	41.1	41.0	40.8	40.4	39.9
forest land	41.7	42.1	42.2	42.3	42.3	42.5	42.7
land under swamps and water bodies	6.3	6.2	6.1	6.1	6.1	6.1	6.0
other land	10.4	10.4	10.5	10.7	10.8	11.0	11.4

[1)] Data of the State Committee for Property.

3.3.3. Forest resources[1)]

	2014	2015	2016	2017	2018	2019	2020
Forest-covered land:							
thsd ha	8 204.1	8 239.8	8 259.4	8 260.9	8 256.9	8 280.3	8 334.4
ha per capita	0.87	0.87	0.87	0.87	0.87	0.88	0.89
% of total land area of the country	39.5	39.7	39.8	39.8	39.8	39.9	40.1
Stock of forest vegetation, mln m^3	1 714.3	1 739.9	1 772.5	1 796.0	1 807.9	1 831.8	1 857.6
Marketable timber harvested, mln m^3	19.6	18.5	21.1	23.8	28.6	27.0	27.0
of which final cutting	7.8	7.5	6.1	6.3	7.1	9.4	11.2
Area of forest felling, thsd ha	523.9	466.9	487.5	451.0	499.1	489.1	504.2
of which final cutting	37.5	31.3	25.1	25.0	27.1	37.8	44.1

[1)] Data of the Ministry of Forestry.

3.3.4. Fisheries and fish farming

	2014	2015	2016	2017	2018	2019	2020
Yield of fisheries, tonnes							
Total	19 910.4	18 118.1	18 994.1	18 111.4	19 659.1	17 614.1	15 180.2
of which:							
commercial	11 923.6	10 410.9	11 251.3	10 370.2	11 717.9	10 962.1	9 586.4
of which:							
in natural reservoirs	760.6	870.7	639.8	725.6	731.0	668.1	669.6
in artificial reservoirs	11 163.0	9 540.2	10 611.5	9 644.6	10 986.9	10 294.0	8 916.8
of which by species:							
carp	7 210.9	6 454.8	7 888.4	7 343.1	8 164.0	7 559.9	6 393.9
silver carp	1 876.9	1 271.0	541.0	329.3	476.3	727.0	840.6
salmon fishes	78.6	79.1	338.6	284.4	459.5	372.5	240.6
amateur	7 986.8	7 707.2	7 742.8	7 741.2	7 941.2	6 652.0	5 593.8
Fish sales, tonnes							
Total	10 507.4	9 448.8	9 006.1	9 595.1	8 981.2	9 771.4	8 709.4
of which caught fish:							
in natural reservoirs	762.2	857.9	635.1	717.5	683.5	614.5	628.6
in artificial reservoirs	9 745.2	8 590.9	8 371.0	8 877.6	8 297.7	9 156.9	8 080.8
of which by species:							
carp	7 185.3	5 857.0	6 025.0	7 040.8	6 560.4	7 316.5	6 420.7
silver carp	1 171.3	1 433.1	758.3	415.4	345.5	459.8	625.2
salmon fishes	49.7	76.4	337.4	282.2	459.7	373.1	241.5
Fish sales, BYN million (2014 – 2015 – BYR billion)							
Total	257.9	276.1	31.9	34.5	33.2	35.9	34.5
of which caught fish:							
in natural reservoirs	12.2	14.8	1.4	1.7	1.7	1.6	1.7
in artificial reservoirs	245.7	261.3	30.6	32.8	31.5	34.3	32.8
of which by species:							
carp	183.5	187.3	21.7	24.7	23.5	26.2	24.6
silver carp	23.7	34.2	2.1	1.1	1.0	1.3	2.0
salmon fishes	3.6	6.5	2.7	2.3	3.7	3.0	2.2

3.3.5. Wildlife resources[1)]

	2014	2015	2016	2017	2018	2019	2020
Animals							
Mammals, species	79	81	81	80	83	83	83
of which rare and endangered species	20	20	20	20	20	20	20
as % of total species	25.3	24.7	24.7	25.0	24.1	24.1	24.1
Birds, species	323	325	329	329	332	332	332
of which rare and endangered species	70	70	70	70	70	70	70
as % of total species	21.7	21.5	21.3	21.3	21.1	21.1	21.1
Reptiles, species	7	7	7	7	7	7	7
of which rare and endangered species	2	2	2	2	2	2	2
as % of total species	28.6	28.6	28.6	28.6	28.6	28.6	28.6
Amphibians, species	13	13	13	13	13	13	13
of which rare and endangered species	2	2	2	2	2	2	2
as % of total species	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Fish and fish-shaped species, species	68	68	68	68	68	68	68
of which rare and endangered species	9	9	9	9	9	9	9
as % of total species	13.2	13.2	13.2	13.2	13.2	13.2	13.2

Continued

	2014	2015	2016	2017	2018	2019	2020
				Plants			
Vascular plants, species	4 000	4 003	4 010	4 027	4 029	4 032	4 033
of which rare and endangered species	189	189	189	189	189	189	189
as % of total species	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Mosses, species	433	433	435	437	437	437	437
of which rare and endangered species	34	34	34	34	34	34	34
as % of total species	7.9	7.9	7.8	7.8	7.8	7.8	7.8
Lichens, species	586	630	669	669	670	671	671
of which rare and endangered species	25	25	25	25	25	25	25
as % of total species	4.3	4.0	3.7	3.7	3.7	3.7	3.7
Algae, species	2 338	2 338	2 338	2 338	2 232	2 232	2 232
of which rare and endangered species	21	21	21	21	21	21	21
as % of total species	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Fungi, species	4 125	4 143	4 150	4 150	4 150	4 152	4 152
of which rare and endangered species	34	34	34	34	34	34	34
as % of total species	0.8	0.8	0.8	0.8	0.8	0.8	0.8

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

3.4. Environmental quality of life

3.4.1. Average annual concentrations of selected pollutants in the atmosphere of selected cities[1)]

(microgrammes per cubic metre of air)

	2014	2015	2016	2017	2018	2019	2020
Average annual concentrations of fine particulate matter (class PM_{10})							
Brest	22	15	11	10	20	16	…
Vitebsk	18	16	15	…	…	23	20
Gomel	38	53	…	32	29	29	45
Grodno	21	…	20	19	23	20	19
Minsk							
residential area	20	15	12	10	…	13	18
industrial area	40	35	24	13	12	…	16
Mogilev							
residential area	22	14	15	13	19	20	19
industrial area	34	29	22	22	28	33	29
Novopolotsk	22	17	18	17	20	…	…
Polotsk	16	12	…	11	12	…	…
Average annual maximum permissible concentration	40	40	40	40	40	40	40
Average annual concentrations of fine particulate matter (class $PM_{2.5}$)							
Minsk							
residential area	…	…	17	14	15	15	13
Zhlobin	…	…	12	15	19	25	47
Average annual maximum permissible concentration	15	15	15	15	15	15	15
Average annual concentrations of ground-level ozone							
Brest	54	61	58	58	62	61	50
Vitebsk	…	…	…	…	24	35	42
Gomel	44	45	45	47	40	42	47
Grodno	62	57	43	60	45	64	55
Minsk	32	44	40	34 – 44[2)]	37 – 38[2)]	33 – 39[2)]	31 – 45[2)]
Mogilev							
residential area	64	62	71	67	60	61	57
industrial area	…	…	46	44	52	54	39
Novopolotsk	48	55	47	39	34	29	…
Polotsk	47	56	48	44	45	48	34
Average daily maximum permissible concentration	90	90	90	90	90	90	90

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

[2)] Observations were made in two or more zones.

3.4.2. Wastewater discharge into surface water bodies by degree of treatment[1)]

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Wastewater discharge into surface water bodies	954	870	1 048	1 053	1 034	1 019	1 035
of which:							
without pre-treatment	316	246	339	354	341	326	339
treated according to standards	635	618	703	694	689	689	693
insufficiently treated	3	6	6	4	4	4	3

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

3.4.3. Access to water supply and sewerage facilities

(based on data of sample household living standards survey; beginning of year; % of total households)

	2015	2016	2017	2018	2019	2020	2021
Share of households living in apartments/ houses equipped with:							
piped water	90.5	92.6	93.7	94.7	95.5	96.1	96.6
hot water supply	83.6	85.1	86.1	88.6	89.7	90.9	93.0
sewerage	88.5	91.1	91.9	93.4	93.9	94.8	95.6

3.5. Economic opportunities

	2015[1)]	2016	2017	2018	2019	2020
Total environmental protection expenditure, BYN mln	8 877.1	1 012.2	1 047.3	820.4	920.0	1 015.5
of which fixed capital investment spent on environmental protection and rational use of natural resources, BYN mln	2 158.7	290.8	251.6	112.6	157.3	204.5
Total environmental protection expenditure as % of GDP	1.0	1.1	1.0	0.7	0.7	0.7
Environmental tax[2)], BYN mln	1 291.6	137.6	172.6	193.7	215.4	266.2
% of GDP	0.1	0.1	0.2	0.2	0.2	0.2
% of total tax revenue[2)]	0.6	0.6	0.7	0.6	0.7	0.8

[1)] Data in value terms are provided at BYR billion.

[2)] Data of the Ministry of Finance.

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, by areas of environmental protection activities.

Since 2018 for calculation of total environmental protection expenditure data on the current expenditure on environmental protection without value added tax and depreciation of fixed assets intended for environmental protection are used.

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

The volume of fixed capital investment aimed at environmental protection and rational use of natural resources includes data on funds for the purchase, reproduction and creation of new fixed assets (construction, reconstruction and modernization, which lead to an increase in the initial value of fixed assets, as well as for the purchase of machinery, equipment, vehicles, tools, inventory and others) aimed at the protection and rational use of water resources, the protection of air, protection and rational use of land and so on.

4.1. Total environmental protection expenditure

(at current prices; BYN million (2015 – BYR billion))

	2015	2016	2017	2018	2019	2020
Total environmental protection expenditure	8 877.1	1 012.2	1 047.3	820.4	920.0	1 015.5
of which on:						
expenditure on protection of ambient air and climate	2 222.6	303.0	276.7	173.9	223.2	219.4
of which:						
current expenditure on protection of ambient air and climate	1 088.5	118.9	131.8	128.7	145.9	151.6
fixed capital investment spent on air protection	1 134.1	184.1	144.9	45.2	77.4	67.9
expenditure on wastewater management	4 453.2	469.2	509.6	375.3	389.5	423.4
of which:						
current expenditure on wastewater management	3 871.1	411.8	449.6	335.8	341.5	369.3
fixed capital investment spent on protection and rational use of water resources	582.0	57.3	60.1	39.6	48.1	54.0

Continued

	2015	2016	2017	2018	2019	2020
expenditure on waste management	1 284.3	151.5	165.0	185.6	232.3	252.4
of which:						
current expenditure on waste management	1 207.0	131.1	145.6	180.9	208.8	215.7
fixed capital investment spent on building constructions, landfills, facilities for industrial waste disposal, utilization, neutralization	77.3	20.4	19.3	4.7	23.5	36.6
expenditure on protection and remediation of soil, groundwater and surface water	428.5	37.0	30.4	32.1	17.2	53.9
of which:						
current expenditure on protection and remediation of soil, groundwater and surface water	70.7	8.7	7.8	9.2	8.9	8.2
fixed capital investment spent on protection and remediation of soil, groundwater and surface water	357.8	28.3	22.6	22.9	8.3	45.7
expenditure on noise and vibration abatement (excluding workplace protection)	–	–	–	0.5	0.3	0.5
expenditure on protection of biodiversity and landscapes	136.9	12.3	17.5	16.7	17.9	22.4
of which:						
current expenditure on protection of biodiversity and landscapes	129.4	11.6	12.8	16.5	17.8	22.2
fixed capital investment spent on protection of biodiversity and landscapes	7.6	0.7	4.6	0.2	0.1	0.2
expenditure on protection against radiation (excluding external safety)	–	–	–	0.6	0.6	0.6
expenditure on research and development	4.3	0.4	0.9	0.9	1.5	1.5
expenditure on other environmental protection activities	347.3	38.9	47.2	34.8	37.5	41.3
Total environmental expenditure as % of GDP	1.0	1.1	1.0	0.7	0.7	0.7

4.2. Total environmental protection expenditure

(at constant prices; % of previous year)

	2016	2017	2018	2019	2020
Total environmental protection expenditure	102.4	94.9	73.2	104.8	103.8
of which on:					
expenditure on protection of ambient air and climate	123.5	84.7	58.4	119.9	91.9
of which:					
current expenditure on protection of ambient air and climate	97.4	101.1	91.7	106.8	98.3
fixed capital investment spent on air protection	148.6	74.2	28.1	157.0	79.9
expenditure on wastewater management	94.3	99.3	69.1	97.6	102.4
of which:					
current expenditure on wastewater management	94.9	99.4	70.4	96.0	102.4
fixed capital investment spent on protection and rational use of water resources	90.2	98.7	59.4	111.5	102.4
expenditure on waste management	105.6	99.6	106.1	117.8	102.3
of which:					
current expenditure on waste management	96.9	101.2	117.2	108.9	97.9
fixed capital investment spent on building constructions, landfills, facilities for industrial waste disposal, utilization, neutralization	241.1	89.5	22.0	455.8	142.1
expenditure on protection and remediation of soil, groundwater and surface water	78.5	76.9	96.3	49.9	287.5
of which:					
current expenditure on protection and remediation of soil, groundwater and surface water	109.5	82.3	110.3	91.5	87.6
fixed capital investment spent on protection and remediation of soil, groundwater and surface water	72.4	75.2	91.4	33.2	501.8

Continued

	2016	2017	2018	2019	2020
expenditure on noise and vibration abatement (excluding workplace protection)	–	–	–	67.5	150.1
expenditure on protection of biodiversity and landscapes	75.2	124.1	89.4	87.1	123.1
of which:					
current expenditure on protection of biodiversity and landscapes	74.6	94.0	120.4	87.6	122.7
fixed capital investment spent on protection of biodiversity and landscapes	86.2	614.1	3.6	48.4	199.9
expenditure on protection against radiation (excluding external safety)	–	–	–	94.1	89.9
expenditure on research and development	77.1	199.9	91.3	160.0	70.4
expenditure on other environmental protection activities	101.4	109.5	65.9	97.3	105.3

4.3. Current environmental protection expenditure

(at current prices; BYN million)

	2018	2019	2020	
			total	as % of total
Republic of Belarus	657.8	713.5	759.3	100
Regions and Minsk city:				
Brest	77.7	76.8	78.7	10.4
Vitebsk	108.5	113.7	104.8	13.8
Gomel	145.6	155.1	186.5	24.6
Grodno	57.5	68.2	73.3	9.6
Minsk city	107.3	112.0	110.2	14.5
Minsk	88.8	108.2	123.5	16.3
Mogilev	72.5	79.6	82.4	10.9

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

(at current prices)

	2014	2015	2016	2017	2018	2019	2020
BYN million (2014 – 2015 – BYR billion)							
Republic of Belarus	1 261.4	2 158.7	290.8	251.6	112.6	157.3	204.5
Regions and Minsk city:							
Brest	114.2	107.9	6.2	18.9	13.9	20.0	4.3
Vitebsk	681.9	1 286.8	73.3	71.4	52.9	107.0	117.0
Gomel	111.5	264.0	130.3	95.6	5.3	7.7	12.7
Grodno	83.8	3.7	13.6	10.2	5.0	4.0	13.1
Minsk city	49.3	86.4	37.2	15.1	2.9	2.8	7.6
Minsk	188.1	390.3	26.7	28.1	27.5	10.9	46.6
Mogilev	32.7	19.7	3.4	12.3	5.1	4.9	3.2
As % of total							
Republic of Belarus	100	100	100	100	100	100	100
Regions and Minsk city:							
Brest	9.1	5.0	2.1	7.5	12.4	12.7	2.1
Vitebsk	54.1	59.6	25.2	28.4	47.0	68.0	57.2
Gomel	8.8	12.2	44.8	38.0	4.7	4.9	6.2
Grodno	6.6	0.2	4.7	4.0	4.4	2.6	6.4
Minsk city	3.9	4.0	12.8	6.0	2.6	1.8	3.7
Minsk	14.9	18.1	9.2	11.2	24.4	6.9	22.8
Mogilev	2.6	0.9	1.2	4.9	4.5	3.1	1.5

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.

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.

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 recovered air pollutants is the amount of captured pollutants returned to production and used to produce industrial products or sold to other organisations and the population.

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

5.1. Main indicators of air polluting emissions

	2014	2015	2016	2017	2018	2019	2020
Air polluting emissions – total, thsd t	1 343.6	1 258.9	1 244.8	1 240.6	1 235.3	1 201.9	1 171.8
of which:							
from mobile sources	880.8	800.6	791.7	787.2	782.0	775.8	721.0
from stationary sources	462.8	458.3	453.1	453.4	453.3	426.1	450.8
Air pollutants from stationary sources, thsd t	4 108.5	3 645.4	3 374.4	3 072.6	3 027.4	2 617.5	2 569.6
Captured and detoxified air pollutants from stationary sources, thsd t	3 645.7	3 187.1	2 921.4	2 619.2	2 574.1	2 191.5	2 118.8
Share of captured and detoxified air pollutants in total air polluting emissions from stationary sources, %	88.7	87.4	86.6	85.2	85.0	83.7	82.5
Reduction of air polluting emissions after emission-reducing activities, thsd t	14.2	5.8	19.3	4.9	4.8	1.4	2.0

Continued

	2014	2015	2016	2017	2018	2019	2020
As percentage of the previous year							
Air polluting emissions – total	97.8	93.7	98.9	99.7	99.6	97.3	97.5
of which:							
from mobile sources	94.9	90.9	98.9	99.4	99.3	99.2	92.9
from stationary sources	103.9	99.0	98.9	100.1	100.0	94.0	105.8
Air pollutants from stationary sources	123.3	88.7	92.6	91.1	98.5	86.5	98.2
Captured and detoxified air pollutants from stationary sources	126.3	87.4	91.7	89.7	98.3	85.1	96.7
As percentage of 2015							
Air polluting emissions – total	–	100	98.9	98.5	98.1	95.5	93.1
of which:							
from mobile sources	–	100	98.9	98.3	97.7	96.9	90.1
from stationary sources	–	100	98.9	98.9	98.9	93.0	98.4
Air pollutants from stationary sources	–	100	92.6	84.3	83.0	71.8	70.5
Captured and detoxified air pollutants from stationary sources	–	100	91.7	82.2	80.8	68.8	66.5

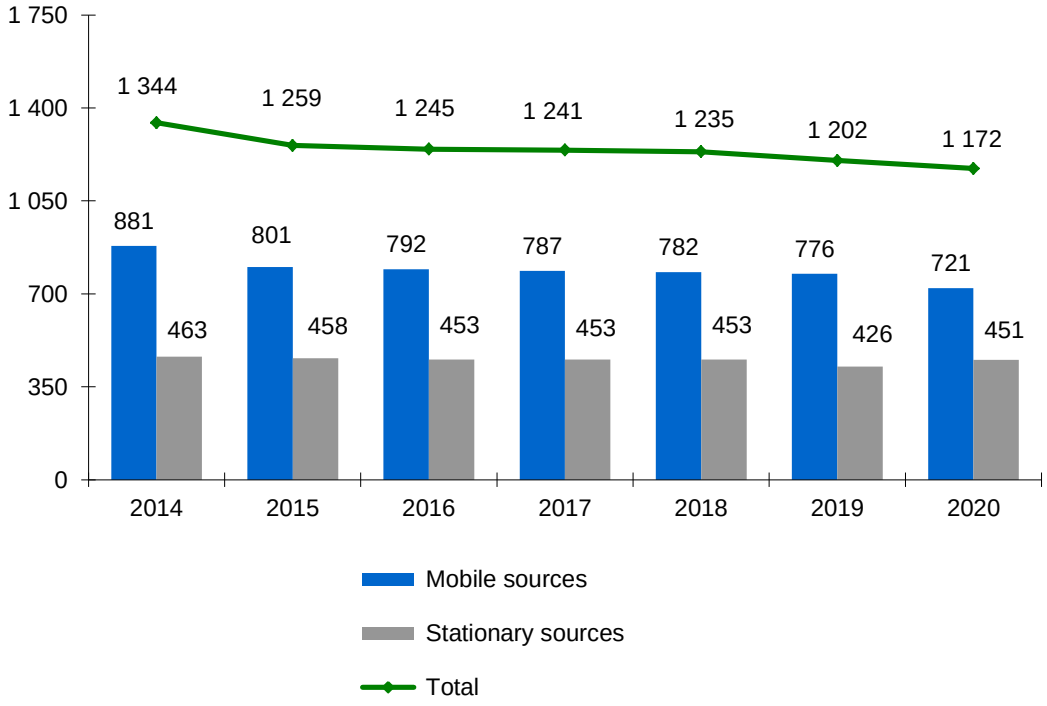
5.2. Air polluting emissions by regions and Minsk city

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Air polluting emissions – total							
Republic of Belarus	1 343.6	1 258.9	1 244.8	1 240.6	1 235.3	1 201.9	1 171.8
Regions and Minsk city:							
Brest	179.6	166.6	169.0	166.7	171.3	177.5	188.3
Vitebsk	212.5	208.4	201.4	190.6	195.7	197.3	184.0
Gomel	215.3	205.6	207.7	203.4	197.0	183.6	175.4
Grodno	166.2	154.3	148.9	154.5	152.6	144.5	139.3
Minsk city	181.2	146.4	140.0	155.1	153.9	148.7	134.6
Minsk	256.3	255.6	258.8	247.2	247.6	238.7	237.1
Mogilev	132.5	122.1	118.9	123.1	117.2	111.5	113.0
of which:							
from mobile sources							
Republic of Belarus	880.8	800.6	791.7	787.2	782.0	775.8	721.0
Regions and Minsk city:							
Brest	127.8	116.3	117.5	116.1	118.2	122.8	111.8
Vitebsk	110.0	96.4	93.5	88.3	88.2	88.0	79.5
Gomel	113.7	106.0	103.1	97.8	96.6	96.5	90.3
Grodno	107.4	97.8	95.1	94.2	93.8	94.1	86.3
Minsk city	157.7	126.1	121.9	136.8	135.6	130.1	113.8
Minsk	181.8	179.7	183.9	178.6	177.0	174.4	169.9
Mogilev	82.4	78.3	76.7	75.4	72.6	69.9	69.4
from stationary sources							
Republic of Belarus	462.8	458.3	453.1	453.4	453.3	426.1	450.8
Regions and Minsk city:							
Brest	51.8	50.3	51.5	50.6	53.1	54.7	76.5
Vitebsk	102.5	112.0	107.9	102.3	107.5	109.3	104.5
Gomel	101.6	99.6	104.6	105.6	100.4	87.1	85.1
Grodno	58.8	56.5	53.8	60.3	58.8	50.4	53.0
Minsk city	23.5	20.3	18.1	18.3	18.3	18.6	20.8
Minsk	74.5	75.9	74.9	68.6	70.6	64.3	67.2
Mogilev	50.1	43.8	42.2	47.7	44.6	41.6	43.6

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)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	65.6	63.6	63.6	63.5	63.3	64.5	61.5
Regions and Minsk city:							
Brest	71.2	69.8	69.5	69.6	69.0	69.2	59.4
Vitebsk	51.8	46.3	46.4	46.3	45.1	44.6	43.2
Gomel	52.8	51.6	49.6	48.1	49.0	52.6	51.5
Grodno	64.6	63.4	63.9	61.0	61.5	65.1	61.9
Minsk city	87.0	86.1	87.1	88.2	88.1	87.5	84.5
Minsk	70.9	70.3	71.1	72.2	71.5	73.1	71.7
Mogilev	62.2	64.1	64.5	61.3	61.9	62.7	61.4

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

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	93	85	84	83	83	82	77
Regions and Minsk city:							
Brest	93	85	86	85	87	91	83
Vitebsk	93	82	80	76	77	77	71
Gomel	80	75	73	70	69	69	65
Grodno	102	94	91	91	91	92	84
Minsk city	81	64	61	69	68	65	56
Minsk	127	125	127	122	121	119	115
Mogilev	78	74	73	72	70	68	68

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

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	4 243	3 856	3 814	3 792	3 767	3 737	3 473
Regions and Minsk city:							
Brest	3 898	3 547	3 584	3 541	3 605	3 745	3 411
Vitebsk	2 747	2 407	2 335	2 205	2 202	2 197	1 984
Gomel	2 816	2 626	2 554	2 422	2 393	2 390	2 236
Grodno	4 274	3 892	3 785	3 749	3 733	3 745	3 434
Minsk city	453 161	362 356	350 287	393 103	387 429	368 555	322 380
Minsk	4 562	4 510	4 615	4 482	4 442	4 377	4 265
Mogilev	2 835	2 694	2 639	2 594	2 498	2 405	2 388

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Total air polluting emissions							
Republic of Belarus	880.8	800.6	791.7	787.2	782.0	775.8	721.0
Regions and Minsk city:							
Brest	127.8	116.3	117.5	116.1	118.2	122.8	111.8
Vitebsk	110.0	96.4	93.5	88.3	88.2	88.0	79.5
Gomel	113.7	106.0	103.1	97.8	96.6	96.5	90.3
Grodno	107.4	97.8	95.1	94.2	93.8	94.1	86.3
Minsk city	157.7	126.1	121.9	136.8	135.6	130.1	113.8
Minsk	181.8	179.7	183.9	178.6	177.0	174.4	169.9
Mogilev	82.4	78.3	76.7	75.4	72.6	69.9	69.4
of which: carbon monoxide							
Republic of Belarus	576.5	526.9	521.3	514.0	508.5	505.5	467.1
Regions and Minsk city:							
Brest	81.2	74.3	74.9	73.6	74.6	77.4	69.9
Vitebsk	70.7	62.3	60.6	56.5	55.9	55.9	50.4
Gomel	71.7	67.6	65.8	61.5	60.5	60.3	56.0
Grodno	69.4	63.6	61.8	60.6	60.0	60.2	55.0
Minsk city	108.4	86.0	83.5	93.3	91.6	89.3	77.3
Minsk	121.3	121.4	124.2	119.2	118.6	116.9	113.4
Mogilev	53.8	51.7	50.5	49.3	47.3	45.5	45.1
nitrogen dioxide							
Republic of Belarus	95.1	85.1	84.0	85.4	85.6	84.2	79.9
Regions and Minsk city:							
Brest	14.8	13.3	13.5	13.5	13.9	14.5	13.5
Vitebsk	12.4	10.7	10.3	10.0	10.2	10.1	9.2
Gomel	13.4	12.1	11.8	11.6	11.6	11.6	11.0
Grodno	12.0	10.7	10.4	10.6	10.7	10.6	10.0
Minsk city	15.0	12.3	11.7	13.3	13.5	12.3	11.2
Minsk	18.6	17.7	18.2	18.3	17.8	17.5	17.4
Mogilev	8.9	8.3	8.1	8.1	7.9	7.6	7.6

Continued

	2014	2015	2016	2017	2018	2019	2020
				sulphur dioxide			
Republic of Belarus	0.2	0.1	0.0	0.1	0.1	0.1	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	0.0	0.0	0.0	0.0	0.0
Gomel	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grodno	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minsk city	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Minsk	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Mogilev	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				hydrocarbons			
Republic of Belarus	182.0	164.5	163.1	164.0	164.2	162.8	151.7
Regions and Minsk city:							
Brest	27.3	24.7	25.1	25.0	25.6	26.7	24.4
Vitebsk	23.1	20.1	19.5	18.7	18.9	18.8	17.0
Gomel	24.4	22.5	21.9	21.1	21.0	21.1	19.8
Grodno	22.5	20.4	19.9	19.9	20.0	20.1	18.4
Minsk city	30.9	25.0	24.1	27.3	27.5	25.9	22.9
Minsk	36.7	35.9	36.8	36.3	36.0	35.5	34.6
Mogilev	17.1	16.0	15.8	15.7	15.2	14.7	14.6
				soot			
Republic of Belarus	27.0	23.9	23.3	23.7	23.6	23.2	22.2
Regions and Minsk city:							
Brest	4.5	4.0	4.0	4.0	4.1	4.3	4.0
Vitebsk	3.8	3.3	3.1	3.1	3.2	3.1	2.9
Gomel	4.2	3.8	3.6	3.6	3.5	3.6	3.5
Grodno	3.5	3.1	3.0	3.1	3.1	3.1	2.9
Minsk city	3.3	2.8	2.6	2.9	3.0	2.6	2.4
Minsk	5.1	4.6	4.7	4.7	4.5	4.4	4.4
Mogilev	2.6	2.3	2.3	2.3	2.2	2.1	2.1

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

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	49	48	48	48	48	45	48
Regions and Minsk city:							
Brest	38	37	38	37	39	41	57
Vitebsk	86	95	92	88	94	96	93
Gomel	72	70	74	75	72	63	62
Grodno	56	54	52	58	57	49	52
Minsk city	12	10	9	9	9	9	10
Minsk	52	53	52	47	48	44	46
Mogilev	47	42	40	46	43	41	43

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

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	2 229	2 208	2 182	2 184	2 184	2 052	2 171
Regions and Minsk city:							
Brest	1 580	1 533	1 571	1 545	1 621	1 668	2 335
Vitebsk	2 560	2 796	2 695	2 553	2 685	2 728	2 609
Gomel	2 517	2 467	2 591	2 617	2 486	2 158	2 107
Grodno	2 340	2 248	2 142	2 400	2 339	2 007	2 111
Minsk city	67 517	58 351	51 928	52 618	52 154	52 694	58 946
Minsk	1 870	1 905	1 879	1 723	1 773	1 615	1 686
Mogilev	1 722	1 506	1 453	1 639	1 534	1 432	1 500

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
				Total			
Republic of Belarus	462.8	458.3	453.1	453.4	453.3	426.1	450.8
Regions and Minsk city:							
Brest	51.8	50.3	51.5	50.6	53.1	54.7	76.5
Vitebsk	102.5	112.0	107.9	102.3	107.5	109.3	104.5
Gomel	101.6	99.6	104.6	105.6	100.4	87.1	85.1
Grodno	58.8	56.5	53.8	60.3	58.8	50.4	53.0
Minsk city	23.5	20.3	18.1	18.3	18.3	18.6	20.8
Minsk	74.5	75.9	74.9	68.6	70.6	64.3	67.2
Mogilev	50.1	43.8	42.2	47.7	44.6	41.6	43.6
				of which: solids			
Republic of Belarus	34.9	30.1	27.4	27.0	26.1	24.2	24.2
Regions and Minsk city:							
Brest	4.3	3.3	3.2	3.2	2.6	2.6	2.6
Vitebsk	6.2	5.6	5.1	4.9	4.9	4.5	4.6
Gomel	5.4	4.4	4.3	4.7	4.3	3.9	3.7
Grodno	5.2	5.0	4.4	4.3	4.0	3.7	3.6
Minsk city	2.0	1.6	1.4	1.4	1.4	1.4	1.4
Minsk	6.4	6.1	5.1	5.0	5.2	4.7	5.0
Mogilev	5.5	4.1	3.9	3.6	3.8	3.5	3.3
				sulphur dioxide			
Republic of Belarus	50.3	56.8	53.3	47.6	47.0	47.1	56.3
Regions and Minsk city:							
Brest	1.3	1.3	1.2	0.9	1.1	1.3	6.8
Vitebsk	23.0	27.5	25.4	22.2	23.6	25.4	23.0
Gomel	19.8	21.8	20.6	19.6	17.3	15.5	16.0
Grodno	0.9	1.0	1.7	1.2	1.0	0.9	1.0
Minsk city	1.0	0.8	0.6	0.4	0.7	0.7	3.2
Minsk	2.4	3.1	2.7	2.3	2.2	2.1	2.8
Mogilev	1.9	1.3	1.3	1.1	1.0	1.2	3.5

Continued

	2014	2015	2016	2017	2018	2019	2020
carbon monoxide							
Republic of Belarus	80.9	75.4	73.1	75.1	76.9	72.0	83.4
Regions and Minsk city:							
Brest	6.2	5.5	5.5	6.0	5.7	6.1	16.2
Vitebsk	14.4	14.6	14.4	13.9	14.1	13.6	13.9
Gomel	15.9	12.9	15.1	15.7	15.9	14.3	14.2
Grodno	8.8	9.9	7.8	9.7	10.1	8.9	10.2
Minsk city	10.3	8.5	7.0	7.0	7.0	7.1	7.4
Minsk	17.1	17.4	16.5	15.4	16.2	14.6	13.6
Mogilev	8.2	6.6	6.8	7.3	7.9	7.4	7.9
nitrogen dioxide							
Republic of Belarus	54.3	49.3	50.8	48.8	45.8	44.2	44.9
Regions and Minsk city:							
Brest	3.8	4.0	3.7	3.6	2.9	3.6	5.0
Vitebsk	9.4	9.6	10.3	10.1	10.6	10.6	10.5
Gomel	9.1	8.7	9.5	9.6	7.9	7.3	6.6
Grodno	9.8	8.5	9.3	8.1	6.5	5.7	5.8
Minsk city	5.4	5.0	5.2	5.1	5.6	5.7	5.3
Minsk	6.4	5.6	5.2	5.1	5.3	4.9	5.1
Mogilev	10.5	8.0	7.6	7.2	7.1	6.5	6.5
non-methane volatile organic compounds							
Republic of Belarus	55.5	54.0	54.0	53.8	54.8	55.0	48.2
Regions and Minsk city:							
Brest	2.4	1.9	1.5	1.9	1.9	2.1	2.1
Vitebsk	25.3	25.8	25.2	26.2	27.9	29.6	24.3
Gomel	13.6	13.8	14.0	13.1	12.6	11.3	10.7
Grodno	3.5	3.0	3.2	3.3	3.3	3.0	3.4
Minsk city	3.3	2.8	2.3	3.0	2.2	2.2	2.2
Minsk	3.5	2.9	3.5	2.9	3.2	2.8	2.2
Mogilev	3.9	3.9	4.3	3.4	3.7	4.0	3.4

Continued

	2014	2015	2016	2017	2018	2019	2020
				hydrocarbons			
Republic of Belarus	149.1	157.7	158.8	166.1	166.9	150.3	154.3
Regions and Minsk city:							
Brest	28.0	28.8	30.7	29.6	31.7	31.5	33.9
Vitebsk	18.7	23.2	21.5	19.6	21.4	20.5	22.4
Gomel	30.7	31.8	34.3	36.3	36.2	29.7	28.7
Grodno	23.8	22.5	21.2	26.5	26.4	21.9	22.0
Minsk city	0.5	0.6	0.5	0.5	0.5	0.5	0.2
Minsk	30.7	33.7	34.8	30.9	31.8	29.1	31.6
Mogilev	16.6	17.2	15.7	22.5	18.9	17.1	15.6
				nitrogen oxide			
Republic of Belarus	6.0	5.7	5.9	5.8	5.7	5.7	6.2
Regions and Minsk city:							
Brest	0.6	0.7	0.6	0.6	0.5	0.6	0.9
Vitebsk	1.1	1.1	1.4	1.4	1.6	1.6	1.6
Gomel	0.9	0.8	0.9	0.9	0.6	0.6	0.6
Grodno	0.6	0.7	0.7	0.8	0.8	0.7	0.7
Minsk city	0.8	0.8	0.8	0.8	0.9	0.9	0.8
Minsk	1.2	1.1	1.0	1.0	1.0	0.9	1.1
Mogilev	0.8	0.5	0.4	0.4	0.4	0.4	0.5
				other			
Republic of Belarus	31.7	29.2	29.7	29.2	30.1	27.4	33.3
Regions and Minsk city:							
Brest	5.3	4.8	5.1	4.9	6.7	6.8	9.2
Vitebsk	4.4	4.7	4.7	3.9	3.6	3.5	4.3
Gomel	6.1	5.5	5.9	5.8	5.6	4.6	4.5
Grodno	6.1	5.9	5.5	6.4	6.6	5.6	6.4
Minsk city	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Minsk	6.9	6.0	6.1	6.0	5.7	5.3	5.8
Mogilev	2.7	2.1	2.3	2.1	1.8	1.5	2.9

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	83.0	83.1	89.9	87.2	89.3	85.0	123.3
Regions and Minsk city:							
Brest	9.7	9.4	8.7	8.2	7.8	8.8	29.1
Vitebsk	20.6	20.8	26.6	22.8	24.2	23.7	34.7
Gomel	11.3	9.5	12.0	12.9	12.7	11.2	10.7
Grodno	7.3	7.3	7.7	8.7	8.1	7.3	8.9
Minsk city	7.9	7.1	7.3	7.1	8.0	8.1	11.3
Minsk	16.4	20.7	19.6	18.7	20.0	17.8	17.8
Mogilev	9.9	8.4	8.2	8.8	8.4	8.2	10.8
of which: solids							
Republic of Belarus	10.9	9.6	9.2	8.5	8.8	7.9	7.9
Regions and Minsk city:							
Brest	1.7	1.3	1.2	1.1	1.0	0.9	0.9
Vitebsk	2.3	2.2	2.1	1.9	2.0	1.8	2.1
Gomel	1.7	1.0	1.0	1.2	1.1	0.9	0.8
Grodno	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Minsk city	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Minsk	2.4	2.5	2.3	2.2	2.4	2.2	2.0
Mogilev	1.9	1.7	1.8	1.4	1.5	1.3	1.1
sulphur dioxide							
Republic of Belarus	8.5	8.6	12.5	7.9	8.1	8.0	29.6
Regions and Minsk city:							
Brest	0.9	1.0	0.9	0.6	0.8	1.0	6.6
Vitebsk	3.0	2.3	5.0	1.8	2.1	2.0	11.9
Gomel	0.9	0.9	2.1	2.0	1.7	1.5	2.2
Grodno	0.5	0.4	0.8	0.5	0.4	0.4	0.5
Minsk city	0.8	0.6	0.4	0.2	0.5	0.5	3.1
Minsk	1.9	2.8	2.4	2.0	1.8	1.7	2.5
Mogilev	0.6	0.6	0.9	0.8	0.7	0.8	2.9

Continued

	2014	2015	2016	2017	2018	2019	2020
carbon monoxide							
Republic of Belarus	28.8	32.3	32.9	34.6	35.3	32.7	44.3
Regions and Minsk city:							
Brest	2.9	2.6	2.7	2.8	2.8	2.9	14.1
Vitebsk	7.9	8.4	9.3	9.0	8.7	8.7	9.0
Gomel	4.3	3.6	4.2	4.5	5.1	4.3	3.9
Grodno	2.8	3.0	3.0	4.0	3.3	2.9	4.1
Minsk city	1.7	1.5	1.3	1.5	1.5	1.5	2.3
Minsk	5.8	10.3	9.6	9.2	10.3	9.0	7.8
Mogilev	3.4	2.8	2.9	3.5	3.7	3.4	3.2
nitrogen dioxide							
Republic of Belarus	27.1	25.6	26.4	27.0	26.5	26.5	28.5
Regions and Minsk city:							
Brest	3.2	3.4	3.2	3.1	2.4	3.1	4.6
Vitebsk	6.3	6.3	7.1	7.2	7.7	7.6	7.9
Gomel	3.3	3.0	3.6	4.0	3.4	3.2	2.7
Grodno	2.1	1.9	1.9	2.2	2.1	1.9	2.0
Minsk city	4.7	4.3	4.7	4.6	5.1	5.2	4.8
Minsk	4.5	4.0	3.7	3.7	3.8	3.5	3.8
Mogilev	3.0	2.6	2.2	2.3	2.1	2.1	2.7

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	379.8	375.2	363.1	366.2	364.0	341.1	327.5
Regions and Minsk city:							
Brest	42.1	40.9	42.8	42.4	45.4	45.9	47.4
Vitebsk	82.0	91.2	81.4	79.4	83.3	85.6	69.8
Gomel	90.3	90.1	92.6	92.8	87.7	75.9	74.4
Grodno	51.5	49.2	46.2	51.6	50.6	43.2	44.1
Minsk city	15.6	13.2	10.8	11.2	10.3	10.5	9.5
Minsk	58.1	55.2	55.3	49.9	50.6	46.5	49.4
Mogilev	40.2	35.4	34.1	38.8	36.2	33.5	32.8
of which: solids							
Republic of Belarus	24.0	20.5	18.2	18.5	17.3	16.3	16.3
Regions and Minsk city:							
Brest	2.6	2.0	2.0	2.1	1.7	1.7	1.6
Vitebsk	3.9	3.4	3.0	3.0	2.9	2.7	2.5
Gomel	3.7	3.4	3.3	3.5	3.2	3.0	2.9
Grodno	4.3	4.1	3.5	3.4	3.1	2.8	2.7
Minsk city	2.0	1.6	1.4	1.4	1.3	1.4	1.3
Minsk	4.0	3.6	2.8	2.9	2.8	2.5	3.0
Mogilev	3.5	2.4	2.1	2.1	2.3	2.2	2.3
sulphur dioxide							
Republic of Belarus	41.8	48.2	40.8	39.7	38.9	39.1	26.7
Regions and Minsk city:							
Brest	0.4	0.3	0.3	0.2	0.3	0.3	0.1
Vitebsk	19.9	25.2	20.4	20.5	21.5	23.4	11.1
Gomel	18.9	20.9	18.5	17.6	15.6	14.0	13.9
Grodno	0.5	0.6	0.9	0.6	0.6	0.5	0.5
Minsk city	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Minsk	0.5	0.3	0.3	0.3	0.4	0.3	0.4
Mogilev	1.4	0.7	0.4	0.3	0.4	0.3	0.5

Continued

	2014	2015	2016	2017	2018	2019	2020
carbon monoxide							
Republic of Belarus	52.1	43.1	40.2	40.5	41.6	39.3	38.7
Regions and Minsk city:							
Brest	3.2	2.9	2.8	3.3	3.0	3.3	2.1
Vitebsk	6.5	6.2	5.2	4.9	5.3	4.9	5.0
Gomel	11.6	9.2	10.9	11.2	10.8	9.9	9.9
Grodno	6.0	6.8	4.8	5.7	6.8	6.0	6.1
Minsk city	8.7	7.1	5.7	5.5	5.5	5.6	5.1
Minsk	11.3	7.1	6.9	6.2	6.0	5.6	5.8
Mogilev	4.8	3.8	3.9	3.7	4.2	4.0	4.7
nitrogen dioxide							
Republic of Belarus	27.2	23.8	24.4	21.9	19.3	17.7	16.4
Regions and Minsk city:							
Brest	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Vitebsk	3.1	3.3	3.2	2.9	2.9	3.0	2.6
Gomel	5.8	5.7	5.9	5.6	4.5	4.2	3.9
Grodno	7.7	6.6	7.4	6.0	4.4	3.8	3.9
Minsk city	0.7	0.7	0.5	0.5	0.5	0.5	0.5
Minsk	1.9	1.6	1.5	1.4	1.5	1.3	1.3
Mogilev	7.5	5.5	5.4	4.9	5.0	4.4	3.8

5.13. Air polluting emissions from stationary sources by economic activity

(thousand tonnes)

	2016	2017	2018	2019	2020
Republic of Belarus	453.1	453.4	453.3	426.1	450.8
of which:					
Agriculture, forestry and fishing	163.2	165.3	168.6	146.9	154.2
Mining	5.0	4.6	4.7	4.2	3.7
Manufacturing	176.8	175.2	173.5	168.5	152.3
of which:					
Manufacture of food products, beverages and tobacco products	15.8	15.9	16.0	16.7	16.7
Manufacture of textile articles, wearing apparel, articles of leather and fur	3.5	3.6	3.5	1.8	1.7
Manufacture of products of wood and paper; printing and reproduction of recorded media	7.5	8.8	8.5	9.6	10.9
Manufacture of coke and refined petroleum products	84.0	83.9	84.1	83.5	65.5
Manufacture of chemicals and chemical products	13.9	13.1	14.0	13.9	13.9
Manufacture of basic pharmaceuticals and medicinal products	0.1	0.1	0.1	0.1	0.1
Manufacture of rubber and plastics products, of other non-metallic mineral products	26.5	23.5	21.7	18.7	18.3
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	11.4	11.7	10.6	9.7	9.5
Manufacture of computer, electronic and optical products	0.3	0.4	0.4	0.6	0.5
Manufacture of electrical equipment	0.6	0.5	0.5	0.6	0.4
Manufacture of machinery and equipment n.e.c.	8.9	8.9	8.9	8.8	9.3
Manufacture of transport vehicles and equipment	2.1	2.7	3.1	3.1	3.0
Other manufacturing; repair and installation of machinery and equipment	2.2	2.0	2.3	1.6	2.4

Continued

	2016	2017	2018	2019	2020
Electricity, gas, steam, hot water and air conditioning supply	67.7	61.8	62.1	63.8	96.4
Water supply; waste management and remediation activities	8.6	8.8	9.8	10.1	9.8
Construction	4.3	4.6	4.4	4.3	3.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	2.5	2.2	2.9	2.2	2.3
Transportation and storage, postal and courier activities	23.0	29.2	25.5	24.8	27.7
Real estate activities	0.4	0.5	0.4	0.3	0.2
Administrative and support service activities	0.5	0.1	0.5	0.2	0.1
Public administration	0.4	0.4	0.4	0.3	0.5

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	462.8	458.3	453.1	453.4	453.3	426.1	450.8
Brest region	51.8	50.3	51.5	50.6	53.1	54.7	76.5
Brest, city of	3.3	3.3	3.1	2.8	2.6	3.2	2.7
District:							
Baranovichy	4.8	3.0	3.5	4.0	4.1	4.8	4.2
Bereza	4.9	4.8	5.0	4.3	3.8	5.8	23.5
Brest	2.3	2.0	2.2	2.5	2.0	1.8	2.9
Gantsevichy	0.7	0.6	0.6	0.8	1.3	0.7	1.1
Drogichin	2.5	2.7	2.7	1.0	1.4	1.5	1.9
Zhabinka	3.0	3.4	3.2	3.9	3.7	4.0	3.4
Ivanovo	3.3	2.8	2.8	3.0	2.6	2.9	3.0
Ivatsevichy	3.1	2.6	2.3	2.4	1.9	1.9	2.9
Kamenets	3.9	4.0	4.3	5.3	4.9	4.2	5.8
Kobrin	3.1	3.4	2.8	3.4	3.3	4.4	2.8
Luninets	3.3	2.9	3.3	3.2	2.8	1.9	2.9
Lyakhovichy	2.2	2.7	2.2	2.6	2.8	2.3	2.1
Malorita	1.6	1.9	1.8	0.6	1.5	1.3	1.5
Pinsk	3.9	4.9	6.2	4.7	6.3	5.5	6.8
Pruzhany	4.0	3.9	3.9	3.6	4.6	5.9	5.8
Stolin	1.8	1.5	1.6	2.8	3.4	2.4	3.5

Continued

	2014	2015	2016	2017	2018	2019	2020
Vitebsk region	102.5	112.0	107.9	102.3	107.5	109.3	104.5
Vitebsk, city of	3.6	3.5	3.1	3.1	3.5	3.1	3.9
District:							
Beshenkovichy	0.5	0.6	0.5	0.6	0.7	0.7	0.7
Braslav	1.6	2.0	1.5	1.1	1.3	1.5	1.2
Verkhnedvinsk	2.1	2.5	2.3	2.4	1.7	1.5	2.0
Vitebsk	3.9	3.2	3.1	3.3	1.6	2.8	2.4
Glubokoye	2.1	3.3	3.4	3.2	3.2	3.0	2.7
Gorodok	1.7	1.6	1.8	1.1	1.0	1.6	1.1
Dokshitsy	1.3	1.5	0.9	0.9	1.0	0.7	0.7
Dubrovno	1.8	1.9	1.7	1.8	2.1	1.8	1.7
Lepel	1.3	1.3	1.7	1.4	1.1	1.0	0.9
Liozno	1.5	1.9	1.8	1.4	1.6	2.2	1.4
Miory	1.6	2.3	2.2	1.8	1.9	1.9	1.3
Orsha	7.5	8.7	8.2	7.4	9.0	7.3	7.3
Polotsk	56.1	61.3	55.0	55.2	57.8	62.1	45.3
Postavy	1.3	1.4	1.3	1.2	1.6	1.7	2.4
Rossony	0.5	0.7	0.7	0.4	0.5	0.3	0.4
Senno	1.0	1.0	0.9	0.4	0.7	0.7	0.6
Tolochin	1.6	1.3	1.7	1.9	1.8	1.2	2.6
Ushachy	0.8	0.8	0.8	0.8	0.7	0.5	1.5
Chashniki	8.4	9.0	13.4	10.8	12.6	12.5	22.8
Sharkovshchina	0.7	0.7	0.7	0.6	0.8	0.4	0.4
Shumilino	1.9	1.5	1.3	1.5	1.5	0.6	1.4

Continued

	2014	2015	2016	2017	2018	2019	2020
Gomel region	101.6	99.6	104.6	105.6	100.4	87.1	85.1
Gomel, city of	8.6	7.1	8.9	8.6	6.8	7.2	7.0
District:							
Bragin	0.9	0.1	0.2	0.6	0.7	0.1	1.2
Buda-Koshelyovo	3.6	4.0	3.2	3.8	3.9	2.6	3.6
Vetka	1.8	1.6	2.4	2.2	2.0	2.0	1.4
Gomel	5.4	5.2	5.2	5.1	5.0	4.8	4.3
Dobrush	2.1	2.1	3.2	2.6	2.6	2.1	2.3
Yelsk	0.8	0.2	1.0	0.9	1.4	1.6	1.0
Zhitkovichy	2.5	2.2	2.3	2.6	2.3	1.7	2.0
Zhlobin	11.5	10.9	13.5	14.7	13.6	12.6	12.8
Kalinkovichy	1.9	2.1	2.8	2.8	2.6	2.5	2.7
Korma	1.6	1.4	1.8	1.8	1.7	0.7	0.5
Lelchitsy	1.8	1.8	1.3	1.8	1.8	1.2	1.1
Loyev	0.9	0.7	0.1	0.2	0.6	0.2	0.6
Mozyr	38.2	40.8	38.2	37.6	33.7	29.6	29.0
Narovlya	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Oktyabrsky	1.3	1.5	1.7	1.6	1.2	0.8	0.6
Petrikov	1.3	1.9	2.0	2.9	2.2	2.0	1.0
Rechitsa	6.0	5.8	6.4	6.3	6.9	5.3	4.1
Rogachev	3.7	3.4	3.8	3.2	4.2	2.3	2.1
Svetlogorsk	5.0	4.3	3.7	3.3	4.1	5.5	5.3
Khoyniki	0.8	1.1	1.5	1.6	1.7	1.0	0.9
Chechersk	1.3	1.3	1.2	1.2	1.5	0.8	1.4

Continued

	2014	2015	2016	2017	2018	2019	2020
Grodno region	58.8	56.5	53.8	60.3	58.8	50.4	53.0
Grodno, city of	10.0	9.7	9.6	9.4	9.8	8.5	8.1
District:							
Berestovitsa	1.2	1.7	2.0	2.1	1.6	2.1	1.5
Volkovysk	10.9	10.6	11.4	9.4	7.8	6.3	6.6
Voronovo	1.4	1.8	1.4	2.1	2.0	1.6	1.9
Grodno	6.9	6.7	5.8	6.7	6.8	5.2	5.7
Dyatlovo	0.5	1.0	1.1	1.7	1.6	1.1	1.4
Zelva	1.1	0.4	1.2	1.7	2.5	1.5	1.0
Ivye	0.6	0.6	0.7	1.3	1.3	0.8	0.8
Korelichy	2.0	2.1	2.0	2.0	1.6	2.0	2.2
Lida	5.1	3.8	3.6	4.5	4.6	3.2	3.8
Mosty	2.4	1.2	1.2	1.6	0.9	1.3	1.1
Novogrudok	1.2	1.5	1.8	1.9	1.9	1.8	2.0
Ostrovets	0.4	0.8	0.4	0.5	0.4	0.3	0.3
Oshmyany	0.9	0.4	0.4	1.1	1.0	0.7	0.5
Svisloch	1.3	1.4	1.5	1.3	1.3	1.4	1.3
Slonim	5.9	5.6	3.2	5.8	6.2	5.2	4.8
Smorgon	3.6	4.2	3.2	3.0	3.6	5.1	6.1
Shchuchin	3.5	3.1	3.3	4.2	4.0	2.3	3.8

Continued

	2014	2015	2016	2017	2018	2019	2020
Minsk city	23.5	20.3	18.1	18.3	18.3	18.6	20.8
Minsk region	74.5	75.9	74.9	68.6	70.6	64.3	67.2
District:							
Berezino	1.9	2.1	0.9	0.8	1.8	1.0	0.7
Borisov	4.7	4.0	4.4	4.2	6.4	4.5	4.7
Vileyka	1.5	1.4	1.1	1.3	1.4	1.2	1.4
Volozhin	1.1	1.4	1.4	1.1	1.2	2.8	1.0
Dzerzhinsk	1.6	1.6	2.3	1.8	2.2	2.1	2.7
Kletsk	3.0	3.3	3.0	2.2	2.9	2.7	3.2
Kopyl	2.0	2.4	2.4	2.1	1.6	1.7	1.9
Krupki	3.2	2.5	2.2	3.0	1.9	1.5	2.2
Logoysk	1.6	2.0	1.9	1.4	1.9	1.2	1.7
Lyuban	4.9	4.5	4.0	4.7	4.0	3.3	4.1
Minsk	9.9	9.2	10.7	10.7	8.6	7.8	8.6
Molodechno	2.8	3.0	2.6	2.3	2.7	2.5	2.3
Myadel	0.6	0.9	1.2	1.0	1.0	0.9	0.7
Nesvizh	9.1	9.4	9.3	7.1	8.5	8.3	7.3
Pukhovichy	4.4	4.9	4.2	4.0	3.4	3.5	3.1
Slutsk	5.4	5.6	5.6	5.7	5.4	5.2	5.7
Smolevichy	3.4	3.1	4.1	3.9	3.5	4.0	3.6
Soligorsk	7.3	6.9	6.3	5.0	5.3	4.1	5.1
Staryie Dorogi	1.7	1.9	1.7	1.7	1.3	1.7	1.9
Stolbtsy	2.7	2.7	2.6	2.6	2.2	2.1	1.9
Uzda	0.8	1.7	1.7	1.1	1.8	1.3	2.3
Cherven	0.9	1.3	1.3	0.9	1.6	1.0	1.2

Continued

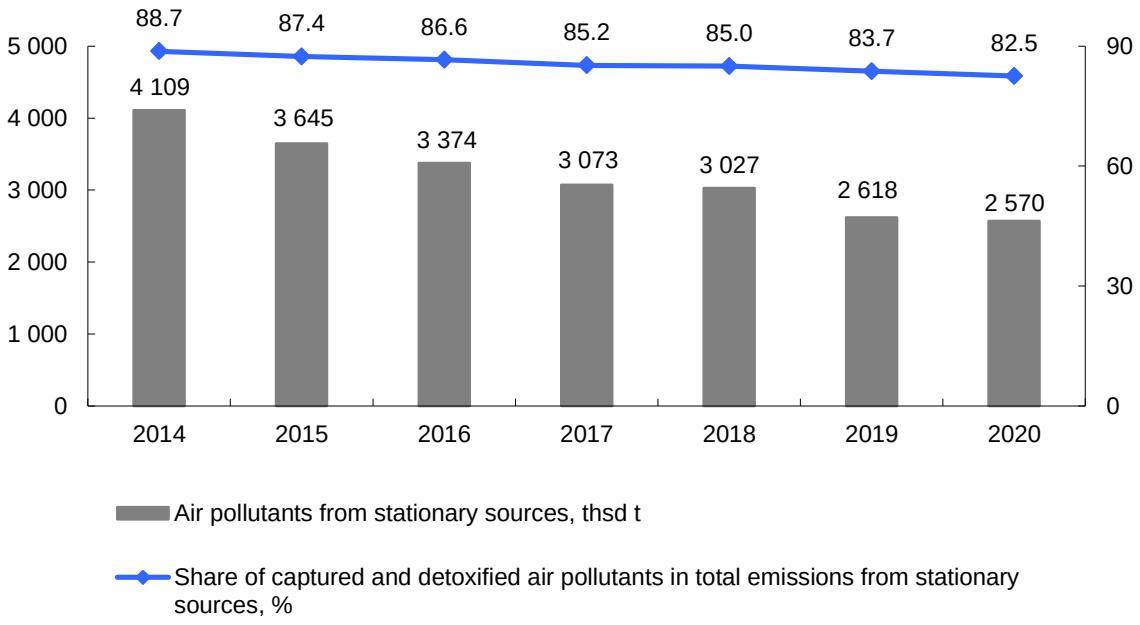
	2014	2015	2016	2017	2018	2019	2020
Mogilev region	50.1	43.8	42.2	47.7	44.6	41.6	43.6
Mogilev, city of	5.6	6.4	5.9	4.7	5.7	6.0	7.1
District:							
Belynichy	1.2	2.1	1.3	1.5	0.8	1.1	1.1
Bobruysk	5.7	4.9	4.4	4.1	3.5	3.8	4.7
Bykhov	1.1	0.8	1.2	1.3	0.9	1.5	1.4
Glusk	0.7	0.9	0.4	0.2	0.4	0.2	0.0
Gorki	1.2	1.4	1.2	1.4	1.5	1.5	1.1
Dribin	0.6	0.5	0.8	0.5	0.8	0.6	0.4
Kirovsk	1.5	0.3	2.0	1.7	2.3	1.8	1.8
Klimovichy	0.6	0.8	0.9	0.6	1.1	1.9	1.0
Klichev	1.6	1.6	1.5	1.7	1.6	1.3	1.6
Kostyukovichy	6.3	5.5	5.0	4.4	4.9	4.2	4.0
Krasnopolye	0.9	0.0	0.0	0.1	0.0	0.0	0.0
Krichev	7.6	4.6	4.3	4.4	4.2	3.7	3.3
Krugloye	0.5	0.5	0.4	0.6	0.6	0.8	0.6
Mogilev	3.1	1.7	1.4	3.5	2.6	1.7	3.7
Mstislavl	0.4	0.6	0.5	1.1	0.7	0.1	0.1
Osipovichy	5.1	4.9	5.1	8.7	6.3	5.6	6.1
Slavgorod	0.4	0.0	0.2	0.4	0.9	0.5	0.5
Khotimsk	0.2	0.0	0.1	0.2	0.2	0.1	0.1
Chausy	0.5	0.2	0.3	0.3	0.2	0.2	0.2
Cherikov	0.5	1.1	0.3	0.3	0.0	0.3	0.3
Shklov	4.7	5.1	5.3	5.9	5.4	5.0	4.6

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	4 108.5	3 645.4	3 374.4	3 072.6	3 027.4	2 617.5	2 569.6
Regions and Minsk city:							
Brest	153.9	129.2	139.8	148.0	146.9	143.4	170.0
Vitebsk	214.5	222.3	204.5	204.2	214.5	210.3	194.6
Gomel	332.1	311.1	332.4	328.8	389.9	379.3	355.6
Grodno	831.4	631.1	608.1	386.1	369.4	308.8	180.9
Minsk city	76.2	139.7	106.2	85.9	74.7	76.2	88.7
Minsk	1 514.6	1 442.0	1 448.7	1 462.2	1 362.4	1 080.1	1 110.2
Mogilev	985.9	770.1	534.8	457.4	469.6	419.4	469.6

5.16. Air pollutants from stationary sources



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

	2014	2015	2016	2017	2018	2019	
			Thousand tonnes				
Republic of Belarus	3 645.7	3 187.1	2 921.4	2 619.2	2 574.1	2 191.5	2 118.8
Regions and Minsk city:							
Brest	102.1	78.9	88.3	97.3	93.8	88.7	93.5
Vitebsk	112.0	110.3	96.5	102.0	106.9	101.1	90.0
Gomel	230.5	211.4	227.8	223.2	289.5	292.2	270.5
Grodno	772.6	574.6	554.2	325.8	310.6	258.3	127.8
Minsk city	52.7	119.4	88.1	67.6	56.5	57.6	67.9
Minsk	1 440.1	1 366.1	1 373.8	1 393.5	1 291.8	1 015.8	1 043.0
Mogilev	935.8	726.3	492.6	409.7	425.0	377.8	426.0
			As % of total air pollutants from stationary sources				
Republic of Belarus	88.7	87.4	86.6	85.2	85.0	83.7	82.5
Regions and Minsk city:							
Brest	66.3	61.1	63.1	65.8	63.8	61.9	55.0
Vitebsk	52.2	49.6	47.2	49.9	49.9	48.0	46.3
Gomel	69.4	68.0	68.5	67.9	74.3	77.0	76.1
Grodno	92.9	91.0	91.2	84.4	84.1	83.7	70.7
Minsk city	69.2	85.5	83.0	78.7	75.6	75.6	76.6
Minsk	95.1	94.7	94.8	95.3	94.8	94.0	93.9
Mogilev	94.9	94.3	92.1	89.6	90.5	90.1	90.7

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

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	3 645.7	3 187.1	2 921.4	2 619.2	2 574.1	2 191.5	2 118.8
Brest region	102.1	78.9	88.3	97.3	93.8	88.7	93.5
Brest, city of	1.5	2.7	3.3	2.0	9.6	11.6	11.5
District:							
Baranovichy	11.6	9.7	9.9	8.7	4.4	5.7	5.0
Bereza	10.7	4.5	2.9	3.0	1.5	2.2	1.0
Brest	0.2	0.1	0.1	0.2	0.2	0.2	0.1
Gantsevichy	0.1	0.1	0.1	0.1	0.1	0.0	0.1
Drogichin	1.0	0.6	0.6	0.3	0.3	0.4	0.0
Zhabinka	1.9	1.4	1.0	1.2	1.6	1.7	1.6
Ivanovo	1.6	1.0	1.0	1.1	1.1	1.3	4.3
Ivatsevichy	24.2	15.3	13.2	13.4	15.0	15.5	18.7
Kamenets	2.5	2.8	1.5	2.3	0.8	0.6	0.8
Kobrin	2.3	0.7	0.4	0.4	0.2	0.3	0.9
Luninets	6.3	5.6	7.5	7.5	5.7	4.0	5.1
Lyakhovichy	25.3	21.5	31.8	36.3	42.8	35.3	28.6
Malorita	1.2	1.5	1.4	1.4	0.6	0.5	3.6
Pinsk	10.5	10.4	12.7	12.8	8.9	8.5	11.2
Pruzhany	0.7	0.7	0.6	6.1	0.4	0.5	0.8
Stolin	0.5	0.4	0.3	0.5	0.7	0.5	0.0

Continued

	2014	2015	2016	2017	2018	2019	2020
Vitebsk region	112.0	110.3	96.5	102.0	106.9	101.1	90.0
Vitebsk, city of	54.7	56.0	53.3	53.3	54.3	48.5	55.1
District:							
Beshenkovichy	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Braslav	0.5	0.5	0.5	0.4	0.4	0.4	0.3
Verkhnedvinsk	0.7	1.7	0.2	1.8	0.5	0.5	0.3
Vitebsk	2.1	0.0	0.0	0.1	0.1	0.2	1.0
Glubokoye	7.5	5.9	0.8	0.3	6.7	6.4	8.8
Gorodok	0.4	0.1	0.1	0.1	0.2	0.4	0.1
Dokshitsy	0.3	0.3	0.3	0.2	0.3	0.2	0.3
Dubrovno	0.2	0.2	0.2	1.1	0.2	0.2	0.1
Lepel	0.8	0.6	0.3	0.3	0.3	0.3	0.1
Liozno	0.9	2.3	1.6	1.2	1.2	1.6	0.8
Miory	0.3	0.6	0.6	0.1	0.4	0.4	0.5
Orsha	10.6	7.9	8.9	6.8	5.8	4.7	5.6
Polotsk	16.8	22.1	19.8	21.6	21.4	22.3	14.8
Postavy	4.4	3.7	3.0	3.0	3.1	3.4	0.8
Rossony	0.3	0.2	0.1	–	–	–	–
Senno	0.2	0.3	0.1	0.0	0.3	0.3	0.1
Tolochin	1.1	1.6	0.7	3.8	0.1	0.1	0.3
Ushachy	0.1	0.1	0.1	0.1	0.2	0.1	–
Chashniki	9.7	5.8	5.6	7.7	11.0	10.8	0.8
Sharkovshchina	0.1	0.0	0.0	–	0.1	0.1	0.2
Shumilino	0.2	0.4	0.3	0.1	0.3	0.1	0.0

Continued

	2014	2015	2016	2017	2018	2019	2020
Gomel region	230.5	211.4	227.8	223.2	289.5	292.2	270.5
Gomel, city of	90.9	85.5	95.0	95.1	97.2	103.4	86.8
District:							
Bragin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buda-Koshelyovo	1.4	1.0	1.0	0.6	0.9	0.6	0.8
Vetka	0.4	0.6	0.5	0.4	0.2	0.2	0.1
Gomel	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Dobrush	0.7	0.6	0.0	0.6	0.6	0.5	0.6
Yelsk	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Zhitkovichy	5.3	0.8	4.1	4.8	4.3	3.3	3.7
Zhlobin	34.2	39.6	40.8	38.6	45.5	42.0	42.9
Kalinkovichy	2.6	0.3	2.7	2.3	2.1	2.1	2.2
Korma	0.3	1.0	0.6	0.6	1.0	0.4	0.3
Lelchitsy	0.5	0.4	0.2	0.2	0.3	0.2	0.2
Loyev	0.0	0.0	–	–	0.6	0.3	0.6
Mozyr	64.3	64.3	63.3	62.2	71.9	63.3	62.0
Oktyabrsky	0.1	0.3	0.2	0.2	0.2	0.2	0.1
Petrikov	0.6	0.4	0.2	0.3	0.2	0.2	0.1
Rechitsa	13.3	3.7	16.0	15.9	17.4	13.4	10.4
Rogachev	0.6	1.7	1.0	0.4	0.2	0.1	0.1
Svetlogorsk	14.5	11.0	1.8	0.6	45.3	61.0	58.5
Khoyniki	0.3	0.1	0.2	0.2	1.3	0.8	0.7
Chechersk	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Continued

	2014	2015	2016	2017	2018	2019	2020
Grodno region	772.6	574.6	554.2	325.8	310.6	258.3	127.8
Grodno, city of	70.5	60.6	38.8	37.4	44.1	38.6	42.4
District:							
Berestovitsa	0.2	0.2	0.0	0.0	0.0	0.0	–
Volkovysk	628.9	458.0	461.3	210.9	191.7	153.7	25.6
Voronovo	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Grodno	7.6	5.2	2.0	7.1	7.4	5.7	3.2
Dyatlovo	1.6	1.6	0.1	0.2	0.2	0.1	0.2
Zelva	0.2	0.3	0.1	0.1	0.2	0.1	0.1
Ivye	0.2	0.1	0.1	0.3	0.5	0.3	0.0
Korelichy	0.4	0.4	0.3	2.2	0.2	0.3	0.7
Lida	33.8	22.9	28.3	35.6	39.8	27.8	34.4
Mosty	7.8	4.8	5.4	14.2	7.5	11.0	4.8
Novogrudok	1.1	1.2	0.2	0.6	0.6	0.6	1.2
Ostrovets	0.0	0.2	0.6	0.7	0.6	0.4	0.3
Oshmyany	10.1	8.8	6.1	5.3	5.4	4.1	0.1
Svisloch	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slonim	3.1	3.3	3.0	3.1	2.9	2.5	0.4
Smorgon	6.6	6.8	7.6	7.8	9.0	12.9	14.1
Shchuchin	0.2	0.1	0.1	0.1	0.1	0.1	0.2

Continued

	2014	2015	2016	2017	2018	2019	2020
Minsk city	52.7	119.4	88.1	67.6	56.5	57.6	67.9
Minsk region	1 440.1	1 366.1	1 373.8	1 393.5	1 291.8	1 015.8	1 043.0
District:							
Berezino	0.5	5.5	15.3	0.4	28.1	15.8	20.0
Borisov	9.5	9.6	1.7	2.7	8.1	5.7	6.7
Vileyka	2.5	2.0	1.6	0.2	1.8	1.5	1.8
Volozhin	0.8	0.8	0.1	0.2	3.4	7.8	0.2
Dzerzhinsk	5.3	2.9	2.9	5.0	3.1	3.0	3.8
Kletsk	1.2	–	–	–	–	–	0.0
Kopyl	0.1	0.1	0.1	0.1	0.0	0.0	0.7
Krupki	3.6	2.2	1.8	2.2	2.8	2.2	1.6
Logoysk	1.0	0.2	0.4	0.4	0.0	0.0	1.0
Lyuban	123.4	102.7	85.2	107.5	120.2	99.8	127.0
Minsk	2.8	13.2	14.8	13.9	3.7	3.3	20.5
Molodechno	10.4	8.4	8.7	13.5	13.5	12.4	4.9
Myadel	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Nesvizh	1.1	0.9	1.0	2.4	2.3	2.3	2.9
Pukhovichy	4.8	15.0	4.7	1.4	0.4	0.4	1.1
Slutsk	5.5	4.1	2.5	4.3	4.2	4.0	5.1
Smolevichy	4.9	8.9	19.2	21.6	22.7	27.9	4.3
Soligorsk	1 260.0	1 187.3	1 209.5	1 215.8	1 073.1	825.8	839.0
Staryie Dorogi	0.4	0.3	0.2	0.3	0.3	0.4	0.0
Stolbtsy	1.0	1.0	3.2	0.7	2.6	2.4	1.0
Uzda	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Cherven	1.2	1.0	0.6	1.1	1.1	0.7	1.1

Continued

	2014	2015	2016	2017	2018	2019	2020
Mogilev region	935.8	726.3	492.6	409.7	425.0	377.8	426.0
Mogilev, city of	8.8	19.9	25.1	8.2	10.6	11.3	2.8
District:							
Belynichy	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Bobruysk	3.1	3.5	2.1	2.7	3.5	4.1	2.8
Bykhov	2.0	0.4	1.7	1.5	1.6	2.7	1.4
Glusk	0.0	–	–	–	–	–	–
Gorki	0.7	0.4	0.3	0.4	0.4	0.4	0.1
Dribin	0.1	–	0.1	–	–	–	–
Kirovsk	0.3	1.5	0.3	0.0	0.0	0.0	0.0
Klimovichy	11.0	10.9	11.3	11.2	11.0	19.3	9.9
Klichev	0.0	–	0.0	0.0	0.0	0.0	0.0
Kostyukovichy	513.0	494.9	276.8	197.1	198.7	168.7	180.7
Krasnopolye	0.0	–	–	0.0	0.0	0.0	0.0
Krichev	395.1	193.2	173.2	174.7	179.4	157.8	208.5
Krugloye	0.0	–	–	0.0	0.0	0.0	0.0
Mogilev	0.2	0.1	0.7	11.3	17.8	11.9	17.4
Mstislavl	0.1	0.0	0.2	0.0	0.0	0.0	0.0
Osipovichy	1.1	0.9	0.9	1.5	1.0	0.9	1.6
Slavgorod	0.1	0.0	0.0	–	–	–	0.0
Khotimsk	0.0	–	0.0	0.3	0.3	0.2	0.2
Chausy	0.0	–	–	0.3	–	–	–
Cherikov	0.0	0.0	0.0	–	–	–	–
Shklov	0.1	0.3	0.3	0.4	0.4	0.4	0.4

5.19. Recovery of pollutants captured by gas treatment plants by regions and Minsk city

	2014	2015	2016	2017	2018	2019	
Thousand tonnes							
Republic of Belarus	3 386.0	2 850.8	2 553.9	2 294.2	2 159.1	1 802.4	1 763.2
Regions and Minsk city:							
Brest	84.3	63.2	68.6	65.6	61.5	54.4	66.0
Vitebsk	88.1	76.3	73.6	75.8	75.4	66.5	63.8
Gomel	128.4	116.7	72.2	97.3	145.3	161.8	151.5
Grodno	744.0	547.6	531.1	315.7	267.6	220.9	77.3
Minsk city	8.8	12.2	15.3	14.1	11.7	12.0	9.3
Minsk	1 407.8	1 317.7	1 313.8	1 330.1	1 205.3	939.4	985.3
Mogilev	924.6	717.1	479.2	395.7	392.3	347.4	410.0
As % of total pollutants captured and detoxified							
Republic of Belarus	92.9	89.5	87.4	87.6	83.9	82.2	83.2
Regions and Minsk city:							
Brest	82.6	80.0	77.7	67.4	65.6	61.3	70.6
Vitebsk	78.7	69.2	76.2	74.3	70.5	65.8	70.9
Gomel	55.7	55.2	31.7	43.6	50.2	55.4	56.0
Grodno	96.3	95.3	95.8	96.9	86.2	85.5	60.5
Minsk city	16.6	10.2	17.4	20.9	20.8	20.8	13.7
Minsk	97.8	96.5	95.6	95.4	93.3	92.5	94.5
Mogilev	98.8	98.7	97.3	96.6	92.3	92.0	96.2

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

	2014	2015	2016	2017	2018	2019	
Total							
Republic of Belarus	132 282	133 012	135 987	137 484	137 213	135 608	131 691
Regions and Minsk city:							
Brest	18 366	16 408	20 234	20 492	20 843	20 172	19 418
Vitebsk	15 762	16 801	16 641	15 376	15 720	15 740	14 433
Gomel	18 548	19 673	21 457	22 812	22 897	22 918	21 347
Grodno	22 408	22 180	19 471	22 510	22 443	22 166	22 092
Minsk city	13 605	13 702	14 660	14 252	11 126	10 457	9 981
Minsk	26 808	26 924	25 967	25 808	26 694	26 622	26 620
Mogilev	16 785	17 324	17 557	16 234	17 490	17 533	17 800
of which organised sources of emission							
Republic of Belarus	110 270	107 272	108 900	110 426	110 381	108 962	104 055
Regions and Minsk city:							
Brest	15 486	12 643	16 229	16 696	16 867	16 450	14 078
Vitebsk	12 748	13 184	12 435	11 570	12 003	12 003	11 574
Gomel	15 818	16 269	17 463	18 521	18 367	18 367	17 310
Grodno	17 312	16 956	14 454	16 596	16 647	16 332	15 916
Minsk city	13 071	12 599	13 458	13 164	10 658	10 026	9 555
Minsk	21 319	21 162	20 174	20 876	21 454	21 399	20 938
Mogilev	14 516	14 459	14 687	13 003	14 385	14 385	14 684

Continued

	2014	2015	2016	2017	2018	2019	
of which equipped with gas treatment plants							
Republic of Belarus	14 023	13 641	13 148	12 852	12 767	12 399	11 938
Regions and Minsk city:							
Brest	1 585	1 655	1 725	1 473	1 603	1 479	1 550
Vitebsk	1 584	1 518	1 408	1 380	1 278	1 282	1 186
Gomel	2 941	2 667	2 670	2 766	2 564	2 576	2 342
Grodno	1 603	1 623	1 424	1 595	1 568	1 563	1 455
Minsk city	2 139	2 101	2 145	1 998	1 757	1 493	1 459
Minsk	2 001	2 025	1 805	1 855	2 094	2 090	2 180
Mogilev	2 170	2 052	1 971	1 785	1 903	1 916	1 766
As % of total organised sources of emission							
Republic of Belarus	12.7	12.7	12.1	11.6	11.6	11.4	11.5
Regions and Minsk city:							
Brest	10.2	13.1	10.6	8.8	9.5	9.0	11.0
Vitebsk	12.4	11.5	11.3	11.9	10.6	10.7	10.2
Gomel	18.6	16.4	15.3	14.9	14.0	14.0	13.5
Grodno	9.3	9.6	9.9	9.6	9.4	9.6	9.1
Minsk city	16.4	16.7	15.9	15.2	16.5	14.9	15.3
Minsk	9.4	9.6	8.9	8.9	9.8	9.8	10.4
Mogilev	14.9	14.2	13.4	13.7	13.2	13.3	12.0

5.21. Number of days with maximum single allowable concentration of pollutants exceeded by selected cities[1)]

City, pollutant monitored	Maximum single allowable concentration, microgrammes per m^3	Number of days with prescribed maximum single allowable concentration exceeded						
		2014	2015	2016	2017	2018	2019	2020
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	0	0	0	0	0
Phenol	10	2	0	0	0	0	0	0
Brest								
Solid particles	300	1	0	1	0	0	0	0
Sulphur dioxide	500	…	…	0	0	0	0	0
Carbon monoxide	5 000	1	4	0	0	0	0	0
Nitrogen dioxide	250	14	1	2	3	9	13	1
Vitebsk								
Solid particles	300	0	0	0	0	2	11	0
Sulphur dioxide	500	…	…	…	…	0	0	0
Carbon monoxide	5 000	0	0	0	0	0	1	1
Nitrogen dioxide	250	0	0	2	0	2	2	1
Phenol	10	0	0	0	…	…	0	0
Ammonia	200	0	2	1	1	0	0	0
Gomel								
Solid particles	300	10	4	0	1	6	0	12
Carbon monoxide	5 000	…	…	35	40	16	20	37
Nitrogen dioxide	250	1	0	0	0	0	0	1
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, micrograms per m^3	Number of days with prescribed maximum single allowable concentration exceeded						
		2014	2015	2016	2017	2018	2019	2020
Grodno								
Solid particles	300	0	0	0	0	0	0	1
Sulphur dioxide	500	0	0	…	0	…	0	…
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	0	0	0	1	0	0	0
Ammonia	200	0	0	0	0	0	0	0
Minsk city								
Solid particles	300	3	0	9	1	10	6	3
Sulphur dioxide	500	0	0	0	0	0	0	0
Carbon monoxide	5 000	1	0	6	3	2	8	9
Nitrogen dioxide	250	2	1	5	18	15	11	5
Phenol	10	0	0	0	0	0	0	0
Ammonia	200	0	0	0	0	1	0	0
Mogilev								
Solid particles	300	0	0	0	0	0	0	0
Sulphur dioxide	500	…	0	…	…	…	0	0
Carbon monoxide	5 000	0	0	1	0	0	2	3
Nitrogen dioxide	250	2	22	3	2	18	15	17
Phenol	10	72	42	33	15	5	4	0
Hydrogen sulphide	8	0	1	0	0	0	0	0
Methyl alcohol	1 000	0	0	0	0	0	0	1
Ammonia	200	9	21	16	1	14	11	7
Orsha								
Solid particles	300	0	0	0	0	0	0	0
Carbon monoxide	5 000	0	0	1	0	0	0	0
Nitrogen dioxide	250	0	0	1	0	0	4	0

Continued

City, pollutant monitored	Maximum single allowable concentration, micrograms per m^3	Number of days with prescribed maximum single allowable concentration exceeded						
		2014	2015	2016	2017	2018	2019	2020
Novopolotsk								
Solid particles	300	3	10	8	4	3	12	16
Sulphur dioxide	500	15	35	13	19	15	15	3
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	15	17	5	1	1	7	9
Phenol	10	3	5	7	6	4	2	0
Hydrogen sulphide	8	0	0	0	0	0	0	0
Ammonia	200	0	0	0	0	0	0	0
Pinsk								
Solid particles	300	12	7	2	2	2	2	1
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	1	0	0	0	0	1	3
Polotsk								
Solid particles	300	3	9	5	5	10	4	6
Sulphur dioxide	500	12	…	…	0	0	0	0
Carbon monoxide	5 000	0	0	1	1	0	0	0
Nitrogen dioxide	250	6	3	1	1	0	5	2
Phenol	10	1	2	1	3	0	0	0
Ammonia	200	0	0	0	0	0	0	0
Hydrogen sulphide	8	0	0	0	0	0	0	0
Svetlogorsk								
Solid particles	300	2	1	0	0	0	0	0
Carbon monoxide	5 000	0	0	0	0	0	0	0
Nitrogen dioxide	250	0	0	0	0	0	0	1

[1)] Data of the Ministry of Natural Resources and Environmental Protection. 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.

5.22. Average annual concentrations of air pollutants by selected cities[1)]

(microgrammes per cubic metre)

City, pollutant monitored	2014	2015	2016	2017	2018	2019	2020
Bobruysk							
Solid particles	<15	<15	<15	<15	<15	<15	<15
Carbon monoxide	879	1 129	1 263	1 507	1 467	1 427	1 230
Nitrogen dioxide	37	46	49	45	52	63	29
Phenol	3.0	3.1	3.2	3.1	2.8	3.6	3.5
Brest							
Solid particles	35	35	43	48	44	71	66
Sulphur dioxide	…	…	21	12	26	38	24
Carbon monoxide	938	924	859	904	730	1 345	1 350
Nitrogen dioxide	39	36	24	28	34	45	31
Vitebsk							
Solid particles	52	42	37	<15	<15	<15	<15
Sulphur dioxide	…	…	…	31	23	24	17
Carbon monoxide	530	519	586	696	690	548	709
Nitrogen dioxide	41	37	38	43	35	34	29
Phenol	1.6	1.2	0.4	…	…	0.2	0.1
Ammonia	28	29	13	17	13	17	22
Gomel							
Solid particles	33	37	31	31	18	31	36
Carbon monoxide	500	530	588	549	589	576	587
Nitrogen dioxide	26	27	27	39	24	27	29
Phenol	0.9	0.9	1.1	0.7	0.5	0.2	0.3
Ammonia	11	14	18	24	16	16	13

Continued

City, pollutant monitored	2014	2015	2016	2017	2018	2019	2020
Grodno							
Solid particles	31	26	<15	<15	<15	<15	<15
Sulphur dioxide	15	26	…	26	…	44	…
Carbon monoxide	509	567	417	348	337	364	364
Nitrogen dioxide	26	30	25	27	28	24	34
Ammonia	19	14	15	16	15	19	25
Minsk city							
Solid particles	21	25	<15	<15	<15	<15	<15
Sulphur dioxide	8	15	15	17	22	41	15
Carbon monoxide	470	430	401	413	477	410	432
Nitrogen dioxide	37	35	32	30	30	29	28
Phenol	0.6	0.5	0.6	0.5	0.5	0.2	0
Ammonia	11	8	7	6	5	4	4
Mogilev							
Solid particles	<15	<15	<15	<15	<15	<15	<15
Sulphur dioxide	…	43	…	…	…	56	35
Carbon monoxide	495	479	483	429	382	362	363
Nitrogen dioxide	51	57	41	41	47	47	52
Phenol	1.7	1.7	1.4	1.2	0.7	0.7	0.3
Carbon bisulphide	4	1.2	0.8	1.1	2.4	1.3	0.5
Methyl alcohol	68	117	68	48	39	33	25
Novopolotsk							
Solid particles	<15	<15	21	19	16	<15	<15
Sulphur dioxide	32	64	50	47	80	52	22
Carbon monoxide	916	602	604	569	467	435	327
Nitrogen dioxide	46	34	28	30	22	19	19
Phenol	1.2	1.3	2.5	2.3	1.1	0.8	0.5
Ammonia	11	15	13	13	22	22	18
Hydrogen sulphide	1.1	0.8	0.9	1.1	0.7	0.6	0.5

Continued

City, pollutant monitored	2014	2015	2016	2017	2018	2019	2020
Orsha							
Solid particles	<15	<15	<15	<15	<15	<15	<15
Carbon monoxide	1 100	1 058	1 090	1 106	1 057	1 061	1 029
Nitrogen dioxide	23	28	29	27	26	30	25
Pinsk							
Solid particles	43	67	30	<15	<15	<15	<15
Carbon monoxide	517	584	577	683	1 124	1 089	1 241
Nitrogen dioxide	22	26	28	24	22	26	29
Polotsk							
Solid particles	<15	<15	27	24	29	18	<15
Sulphur dioxide	46	…	…	39	49	48	23
Carbon monoxide	1 256	957	646	535	405	445	397
Nitrogen dioxide	58	42	26	32	25	23	11
Phenol	1.3	1.2	2.4	2.2	1.1	0.8	0.2
Ammonia	12	17	13	13	22	22	18
Hydrogen sulphide	1.0	0.6	0.9	1.2	0.6	0.5	0.4
Hydrogen fluoride	0.8	1.2	0.8	1.2	0.7	0.7	0.5
Svetlogorsk							
Solid particles	50	45	30	31	40	30	<15
Carbon monoxide	751	637	397	538	665	536	604
Nitrogen dioxide	32	31	31	37	36	45	37

[1)] Data of the Ministry of Natural Resources and Environmental Protection. 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.

5.23. Consumption of ozone depleting substances[1)]

	2014	2015	2016	2017	2018	2019	2020
Total, metric tonnes	115.1	63.3	51.5	41.2	20.1	13.3	0
Total, metric tonnes in terms of ozone-depleting potential	5.8	4.5	3.5	2.6	1.5	0.7	0
Assigned for Belarus maximum amount of consumption, metric tonnes in terms of ozone-depleting potential	12.7	5.1	5.1	5.1	5.1	5.1	0.0

[1)] Data of the Ministry of Natural Resources and Environmental Protection.

5.24. Air quality monitoring by regions and Minsk city[1)]

	2014	2015	2016	2017	2018	2019	2020
Number of tested air samples – total, thousand							
Republic of Belarus	78.3	78.2	81.9	73.3	101.5	124.2	158.6
Regions and Minsk city:							
Brest	4.8	5.2	6.5	3.7	8.5	24.2	35.5
Vitebsk	0.6	0.5	0.5	0.4	0.7	1.1	0.5
Gomel	21.4	23.8	23.0	23.1	32.9	37.0	38.6
Grodno	4.7	5.1	6.5	3.8	4.3	6.3	10.0
Minsk city	21.1	20.4	24.5	23.0	26.3	25.2	24.2
Minsk	8.9	7.3	6.6	6.6	10.9	9.7	27.1
Mogilev	16.8	15.9	14.2	12.8	18.0	20.7	22.6

Continued

	2014	2015	2016	2017	2018	2019	2020
	of which air samples with maximum single allowable concentration exceeded, thousand						
Republic of Belarus	0.7	0.6	0.3	0.1	0.3	0.2	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	0.1	0.0	0.0	0.1	0.1	0.1
Grodno	0.0	0.0	0.0	–	–	–	–
Minsk city	0.5	0.5	0.2	0.1	0.1	0.0	0.0
Minsk	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Mogilev	0.1	0.0	0.0	–	0.0	0.1	0.0
	As % of total air samples tested						
Republic of Belarus	0.9	0.8	0.4	0.2	0.3	0.2	0.1
Regions and Minsk city:							
Brest	0.0	0.1	0.0	0.2	0.0	0.1	0.1
Vitebsk	–	0.0	0.0	–	–	–	–
Gomel	0.1	0.4	0.0	0.1	0.2	0.2	0.2
Grodno	0.0	0.0	0.0	–	–	–	–
Minsk city	2.4	2.5	0.8	0.5	0.5	0.2	0.0
Minsk	0.2	0.1	1.5	0.1	0.3	0.2	0.0
Mogilev	0.6	0.2	0.0	–	0.2	0.3	0.1

[1)] Data of the Ministry of Health.

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 (CO_2) equivalent.

Carbon dioxide (CO_2) is one of the main greenhouse gases enhancing natural greenhouse effect and underlying temperature changes and other consequences for the Earth's climate. CO_2 accounts for more than 80% of global greenhouse gas emissions.

Greenhouse gas emissions are estimated by the Ministry of Natural Resources and Environmental Protection 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.

6.1. Average annual air temperatures by regions and Minsk city

	2014	2015	2016	2017	2018	2019	2020
Average annual temperature, °C							
Republic of Belarus	7.8	8.5	7.7	7.6	7.9	8.8	9.1
Regions and Minsk city:							
Brest	8.5	9.3	8.5	8.3	8.9	9.6	9.6
Vitebsk	7.1	7.8	6.9	6.7	7.1	8.0	8.5
Gomel	8.3	9.2	8.3	8.2	8.3	9.4	9.7
Grodno	7.8	8.6	7.7	7.6	8.3	8.9	9.1
Minsk city	7.8	8.7	7.8	7.6	8.0	8.4	8.6
Minsk	7.7	8.4	7.4	7.3	7.8	8.6	8.8
Mogilev	7.2	8.1	7.2	7.2	7.1	8.2	8.6
Divergence from the norm (1981 – 2010), °C							
Republic of Belarus	1.1	1.8	1.0	0.9	1.2	2.1	2.4
Regions and Minsk city:							
Brest	1.0	1.8	1.0	0.8	1.4	2.1	2.1
Vitebsk	1.1	1.8	0.9	0.7	1.1	2.0	2.5
Gomel	1.1	2.0	1.1	1.0	1.1	2.2	2.5
Grodno	1.0	1.8	0.9	0.8	1.5	2.1	2.3
Minsk city	1.1	2.0	1.1	0.9	1.3	1.7	1.9
Minsk	1.2	1.9	0.9	0.8	1.3	2.1	2.3
Mogilev	1.0	1.9	1.0	1.0	0.9	2.0	2.4

6.2. Average monthly air temperatures by regions and Minsk city

	2014	2015	2016	2017	2018	2019	2020
January, °C							
Republic of Belarus	-7.0	-1.1	-7.3	-5.5	-2.7	-5.0	1.1
Regions and Minsk city:							
Brest	-5.3	0.1	-5.3	-5.2	-1.8	-4.0	1.3
Vitebsk	-8.0	-1.6	-8.8	-5.8	-2.9	-5.6	1.3
Gomel	-6.6	-1.0	-7.0	-5.4	-2.8	-4.9	0.7
Grodno	-6.4	-0.7	-6.5	-5.0	-2.2	-4.6	1.5
Minsk city	-7.4	-1.3	-7.4	-5.7	-2.8	-5.0	1.2
Minsk	-7.3	-1.2	-7.8	-5.9	-2.8	-5.1	1.1
Mogilev	-8.3	-1.9	-8.3	-6.2	-3.4	-6.0	0.5
Divergence from the norm (1981 – 2010), °C							
Republic of Belarus	-2.6	3.3	-2.9	-1.1	1.7	-0.6	5.5
Regions and Minsk city:							
Brest	-1.8	3.6	-1.8	-1.7	1.7	-0.5	4.8
Vitebsk	-3.0	3.4	-3.8	-0.8	2.1	-0.6	6.3
Gomel	-2.4	3.2	-2.8	-1.2	1.4	-0.7	4.9
Grodno	-2.4	3.3	-2.5	-1.0	1.8	-0.6	5.5
Minsk city	-2.9	3.2	-2.9	-1.2	1.7	-0.5	5.7
Minsk	-2.7	3.4	-3.2	-1.3	1.8	-0.5	5.7
Mogilev	-3.0	3.4	-3.0	-0.9	1.9	-0.7	5.8
July, °C							
Republic of Belarus	20.6	18.4	19.4	17.4	19.6	17.0	18.3
Regions and Minsk city:							
Brest	21.1	19.3	19.7	18.2	20.0	18.1	18.9
Vitebsk	20.1	17.3	18.8	16.6	19.2	16.1	17.2
Gomel	21.3	19.7	20.8	18.1	19.8	17.6	19.4
Grodno	20.2	17.9	18.4	17.1	19.6	17.1	18.1
Minsk city	20.8	18.6	19.5	17.6	19.6	16.5	17.4
Minsk	20.6	18.0	19.2	17.2	19.5	16.7	17.9
Mogilev	20.1	18.3	19.7	17.3	19.1	16.4	18.0
Divergence from the norm (1981 – 2010), °C							
Republic of Belarus	2.2	0.0	1.0	-1.0	1.2	-1.4	-0.1
Regions and Minsk city:							
Brest	2.4	0.6	1.0	-0.5	1.3	-0.6	0.2
Vitebsk	2.2	-0.6	0.9	-1.3	1.3	-1.8	-0.7
Gomel	2.1	0.5	1.6	-1.1	0.6	-1.6	0.2
Grodno	2.2	-0.1	0.4	-0.9	1.6	-0.9	0.1
Minsk city	2.3	0.1	1.0	-0.9	1.1	-2.0	-1.1
Minsk	2.4	-0.2	1.0	-1.0	1.3	-1.5	-0.3
Mogilev	1.8	0.0	1.4	-1.0	0.8	-1.9	-0.3

6.3. Average annual precipitation by regions and Minsk city

	2014	2015	2016	2017	2018	2019	2020
Average annual precipitation, millimetre							
Republic of Belarus	567	540	742	761	581	574	589
Regions and Minsk city:							
Brest	548	518	743	714	532	558	537
Vitebsk	624	571	743	823	588	687	664
Gomel	533	520	719	712	599	522	563
Grodno	588	566	785	796	558	506	515
Minsk city	605	563	756	787	649	658	614
Minsk	581	574	780	807	596	621	596
Mogilev	523	499	671	723	613	552	661
As % of the norm (1981 – 2010)							
Republic of Belarus	88	84	115	118	90	89	91
Regions and Minsk city:							
Brest	90	85	122	117	87	91	88
Vitebsk	90	83	108	119	85	100	96
Gomel	84	82	113	112	94	82	88
Grodno	89	86	119	121	85	77	78
Minsk city	87	81	109	114	94	95	89
Minsk	89	88	119	124	91	95	91
Mogilev	84	80	108	116	98	88	106

6.4. Average monthly precipitation by regions and Minsk city

	2014	2015	2016	2017	2018	2019	2020
Average for January, millimetre							
Republic of Belarus	48	54	50	38	40	48	37
Regions and Minsk city:							
Brest	46	46	51	27	32	34	27
Vitebsk	42	60	55	43	53	51	42
Gomel	49	49	49	40	40	55	31
Grodno	53	49	42	36	37	46	41
Minsk city	51	63	55	36	39	48	44
Minsk	46	56	50	40	42	47	40
Mogilev	50	63	53	39	37	53	39
As % of the norm (1981 – 2010)							
Republic of Belarus	120	135	125	95	100	120	93
Regions and Minsk city:							
Brest	124	124	138	73	86	92	73
Vitebsk	93	133	122	96	118	113	93
Gomel	136	136	136	111	111	153	86
Grodno	120	111	95	82	84	105	93
Minsk city	113	140	122	80	87	107	98
Minsk	110	133	119	95	100	112	95
Mogilev	139	175	147	108	103	147	108
Average for July, millimetre							
Republic of Belarus	63	74	133	113	147	90	67
Regions and Minsk city:							
Brest	50	54	125	121	127	74	54
Vitebsk	59	77	144	122	140	127	78
Gomel	81	99	89	109	152	93	79
Grodno	66	68	171	111	134	60	40
Minsk city	55	53	135	150	169	119	69
Minsk	55	75	153	121	148	98	79
Mogilev	69	72	113	94	179	89	70
As % of the norm (1981 – 2010)							
Republic of Belarus	74	87	156	133	173	106	79
Regions and Minsk city:							
Brest	59	64	147	142	149	87	64
Vitebsk	72	94	176	149	171	155	95
Gomel	86	105	95	116	162	99	84
Grodno	77	79	199	129	156	70	47
Minsk city	62	60	152	169	190	134	78
Minsk	67	91	187	148	180	120	96
Mogilev	84	88	138	115	218	109	85

6.5. Greenhouse gas emissions

	2014	2015	2016	2017	2018	2019
Total, without land use, land-use change and forestry						
mln tonnes in terms of CO_2 per year	91.0	86.0	87.7	88.5	89.1	90.1
of which:						
energy	57.5	53.5	55.7	56.1	57.2	56.7
industrial processes and product use	6.3	5.7	5.4	5.2	5.2	5.8
agriculture	21.6	21.1	21.2	21.6	20.9	21.7
waste	5.7	5.6	5.5	5.6	5.8	5.9
as % of 1990	65.4	61.8	63.1	63.6	64.0	64.8
Absorption of greenhouse gases in land use, land-use change and forestry sector, mln tonnes in terms of CO_2 per year	-47.1	-45.3	-41.1	-37.1	-39.3	-31.8
Total, with land use, land-use change and forestry						
mln tonnes in terms of CO_2 per year	43.9	40.6	46.7	51.5	49.7	58.3
as % of 1990	40.5	37.5	43.0	47.5	45.8	53.8

6.6. Structure of greenhouse gas emissions

(as percentage of total)

	2014	2015	2016	2017	2018	2019
Total, without land use, land-use change and forestry	100	100	100	100	100	100
of which:						
energy	63.1	62.3	63.4	63.4	64.2	62.9
industrial processes and product use	6.9	6.7	6.1	5.9	5.8	6.4
agriculture	23.7	24.5	24.2	24.4	23.5	24.1
waste	6.2	6.5	6.3	6.3	6.5	6.5

6.7. Greenhouse gas emissions in energy sector

	2014	2015	2016	2017	2018	2019
Total, million tonnes in terms of CO_2 per year						
Greenhouse gas emissions in energy sector	57.5	53.5	55.7	56.1	57.2	56.7
of which:						
carbon dioxide	55.9	52.0	54.2	54.6	55.6	55.2
methane	1.3	1.2	1.2	1.3	1.2	1.2
dinitrogen monoxide	0.3	0.3	0.3	0.3	0.3	0.3
As % of total						
Greenhouse gas emissions in energy sector	100	100	100	100	100	100
of which:						
carbon dioxide	97.2	97.2	97.4	97.2	97.4	97.3
methane	2.2	2.3	2.1	2.3	2.2	2.2
dinitrogen monoxide	0.5	0.5	0.5	0.5	0.5	0.5

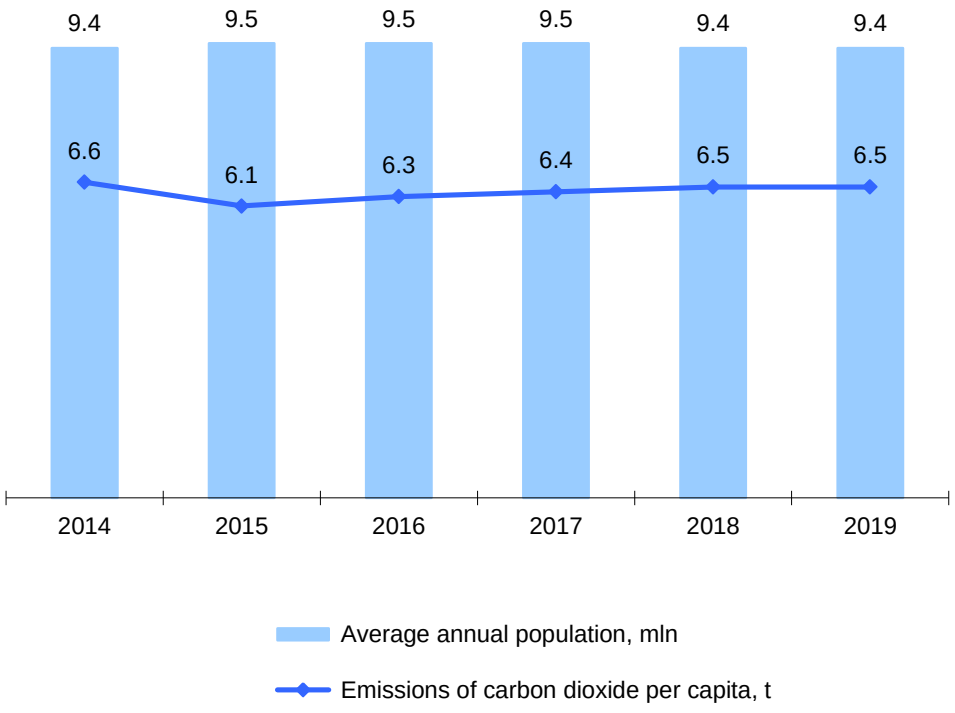
6.8. Greenhouse gas emissions from industrial processes and product use

	2014	2015	2016	2017	2018	2019
Total, million tonnes in terms of CO_2 per year						
Greenhouse gas emissions from industrial processes and product use	6.3	5.7	5.4	5.2	5.2	5.8
of which:						
carbon dioxide	5.5	5.0	4.6	4.4	4.3	4.9
methane	0.1	0.1	0.1	0.1	0.1	0.1
dinitrogen monoxide	0.7	0.7	0.7	0.7	0.8	0.9
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	87.8	86.3	86.5	85.0	84.0	83.8
methane	1.2	1.3	1.2	1.3	1.3	1.3
dinitrogen monoxide	11.0	12.4	12.2	13.7	14.6	14.8
fluorine-containing gases	0.0	0.0	0.1	0.1	0.1	0.1

6.9. Emissions of carbon dioxide (CO_2)

	2014	2015	2016	2017	2018	2019
Total, million tonnes						
Emissions of carbon dioxide (CO_2) without land use, land-use change and forestry	62.6	58.0	59.9	60.1	61.0	61.0
of which by sector:						
energy	55.9	52.0	54.2	54.6	55.6	55.2
industrial processes and product use	5.5	5.0	4.6	4.4	4.3	4.9
As percentage of total						
Emissions of carbon dioxide (CO_2) without land use, land-use change and forestry	100	100	100	100	100	100
of which by sector:						
energy	89.2	89.7	90.6	90.8	91.3	90.5
industrial processes and product use	8.9	8.5	7.7	7.3	7.1	8.0

6.10. Emissions of carbon dioxide (CO_2) per capita of the Republic of Belarus



7. PROTECTION AND USE OF WATER RESOURCES

Water abstraction from natural sources is the volume of water extracted from groundwater bodies and withdrawn from surface water bodies.

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. The volume of water use does not include the volume of water in circulating and recycling (successive) water supply systems, transit water as well as reusable wastewater.

Water use for domestic and drinking, including curative, purposes is the volume of water used for domestic and drinking water supply to the population, as well as organisations and facilities of health care, tourism, physical culture and sports, social services, education, culture and art that meet the social and domestic needs of the population.

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 its transportation from point of water abstraction to point of use and/or transfer.

Circulating water supply system is a water supply system with multiple uses of water for the same purpose and/or with intermediate cooling of water and/or treatment.

Recycling (successive) water supply system is a water supply system with repeated (successive) use of water in several production processes with or without additional clean-up activities and/or treatment.

Water discharge is the deliberate release of wastewater and technical water into the environment through the use of hydraulic structures and facilities.

Wastewater discharge into surface water bodies is a specially organised inflow of wastewater into natural or artificial water bodies, watercourses, a permanent or temporary concentration of water that has certain boundaries and signs of hydrological regime. Since 2016 the volume of water discharge includes discharge of surface wastewater.

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

7.1. Key indicators of protection and use of water resources

(million cubic metres)

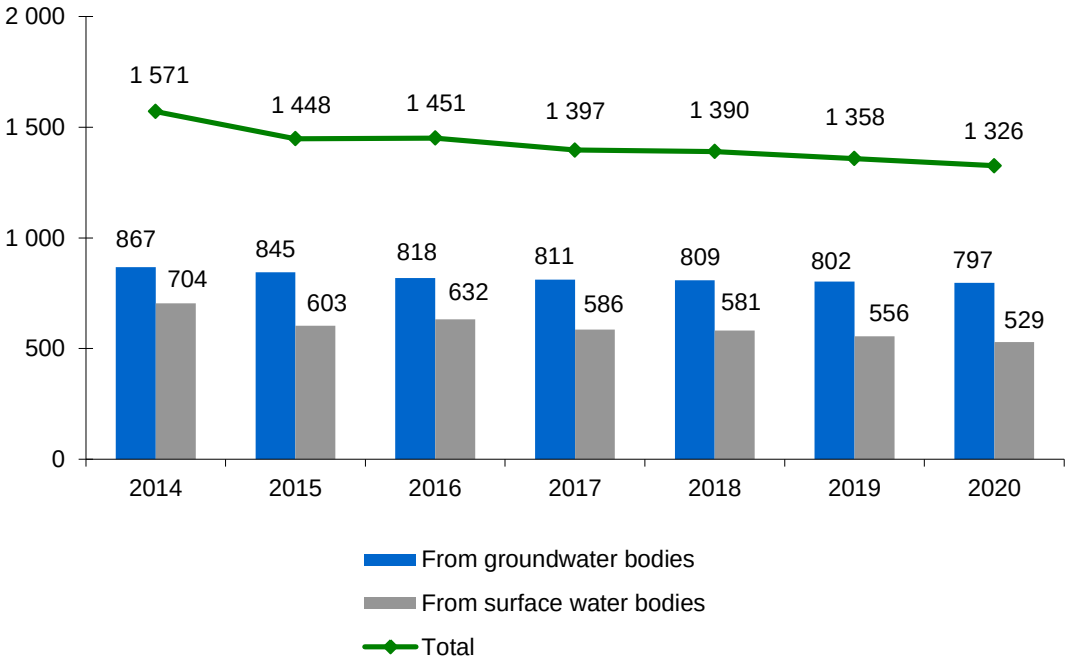
	2014	2015	2016	2017	2018	2019	2020
Water abstraction from natural sources – total	1 571	1 448	1 451	1 397	1 390	1 358	1 326
of which from groundwater bodies	867	845	818	811	809	802	797
Water use – total	1 371	1 270	1 302	1 264	1 247	1 208	1 180
of which for:							
domestic and drinking, including curative, purposes	473	474	504	493	490	498	474
agricultural purposes (except fishery)	115	114	116	119	120	120	120
fishery	378	293	344	335	307	261	259
industrial and other purposes	405	389	338	317	331	328	326
Water loss during transport	82	78	68	58	58	42	45
Circulating water supply	5 711	5 320	4 921	5 226	5 728	5 940	8 693
Recycling (successive) water supply	93	94	67	81	77	69	86
Water discharge – total	1 034	948	1 153	1 163	1 152	1 142	1 152
of which wastewater into surface water bodies	954	870	1 048	1 053	1 034	1 019	1 035

Continued

	2014	2015	2016	2017	2018	2019	2020
As % of the previous year							
Water abstraction from natural sources – total	100.0	92.2	100.2	96.3	99.5	97.7	97.6
of which from groundwater bodies	99.1	97.5	96.9	99.1	99.7	99.1	99.4
Water use	99.8	92.6	102.5	97.1	98.6	96.9	97.6
Water loss during transport	99.0	95.5	86.6	85.6	99.5	72.1	107.6
Circulating water supply	102.5	93.2	92.5	106.2	109.6	103.7	146.3
Recycling (successive) water supply	89.4	101.9	71.1	121.0	95.4	89.9	123.8
Water discharge – total	97.8	91.7	121.7	100.9	99.0	99.1	100.9
of which wastewater into surface water bodies	98.0	91.1	120.6	100.4	98.2	98.6	101.5
As % of 2015							
Water abstraction from natural sources – total	–	100	100.2	96.5	96.0	93.8	91.6
of which from groundwater bodies	–	100	96.9	96.1	95.8	95.0	94.4
Water use	–	100	102.5	99.6	98.2	95.2	92.9
Water loss during transport	–	100	86.6	74.1	73.7	53.2	57.2
Circulating water supply	–	100	92.5	98.2	107.7	111.7	163.4
Recycling (successive) water supply	–	100	71.1	86.0	82.0	73.7	91.3
Water discharge – total	–	100	121.7	122.7	121.5	120.5	121.6
of which wastewater into surface water bodies	–	100	120.6	121.1	118.9	117.2	119.0

7.2. Water abstraction from natural sources

(million cubic metres)



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

(cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	166	153	153	148	147	144	141
Regions and Minsk city:							
Brest	207	194	187	193	195	175	173
Vitebsk	169	166	158	146	148	148	145
Gomel	144	137	124	117	124	129	130
Grodno	152	149	147	143	143	137	139
Minsk city	23	21	21	23	23	22	22
Minsk	375	319	341	317	310	304	285
Mogilev	134	129	138	138	131	139	142

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

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
				Total			
Republic of Belarus	1 571	1 448	1 451	1 397	1 390	1 358	1 326
Regions and Minsk city:							
Brest	284	266	256	263	264	236	232
Vitebsk	200	195	185	169	170	168	164
Gomel	204	193	175	164	173	179	179
Grodno	160	156	153	148	147	141	142
Minsk city	45	42	42	46	47	44	44
Minsk	535	459	495	463	455	448	420
Mogilev	142	136	145	144	135	143	145
				of which from groundwater bodies			
Republic of Belarus	867	845	818	811	809	802	797
Regions and Minsk city:							
Brest	141	139	134	139	147	142	139
Vitebsk	104	102	98	92	93	92	90
Gomel	134	128	114	117	114	113	113
Grodno	95	97	91	87	89	87	87
Minsk city	45	42	40	44	46	43	43
Minsk	248	239	232	223	219	215	213
Mogilev	100	98	110	109	101	110	112

7.5. Water abstraction from natural sources by river basin

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Total from natural sources							
Total	1 571	1 448	1 451	1 397	1 390	1 358	1 326
Baltic Sea basin	625	600	596	546	542	543	520
of which river basin:							
Neman	376	364	366	329	328	335	313
Western Dvina	176	172	164	150	151	152	148
Western Bug	73	65	66	67	63	56	60
Black Sea basin	946	847	855	851	849	815	805
of which river basin							
Dnieper	516	498	483	468	483	485	480
Pripyat	430	349	372	383	366	330	325
of which:							
from groundwater bodies							
Total	867	845	818	811	809	802	797
Baltic Sea basin	315	312	296	289	285	284	284
of which river basin:							
Neman	181	178	168	164	159	157	158
Western Dvina	83	81	79	75	76	76	75
Western Bug	50	53	50	50	51	51	51
Black Sea basin	552	532	522	522	524	518	514
of which river basin							
Dnieper	417	402	391	378	388	386	382
Pripyat	135	131	131	144	136	132	132
from surface water bodies							
Total	704	603	632	586	581	556	529
Baltic Sea basin	311	288	300	257	256	259	237
of which river basin:							
Neman	195	185	198	166	169	178	155
Western Dvina	93	90	85	75	75	76	73
Western Bug	22	13	17	17	12	5	9
Black Sea basin	394	315	333	329	325	297	292
of which river basin							
Dnieper	99	97	92	90	94	99	98
Pripyat	295	218	241	239	230	198	194

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

(million cubic metres)

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Republic of Belarus	1 397.5	1 390.2	1 358.0	1 325.6	811.3	809.2	802.1	797.1
Brest region	262.9	264.3	235.7	232.5	139.3	147.0	142.4	139.3
Brest, city of	28.4	28.7	28.1	28.5	27.3	27.4	27.1	27.6
District:								
Baranovichy	20.7	19.4	16.2	19.0	17.1	15.7	13.9	15.7
Bereza	52.0	50.7	46.6	49.8	6.4	6.4	6.3	6.2
Brest	8.4	8.9	4.8	7.0	3.7	3.9	3.9	4.0
Gantsevichy	34.1	34.1	24.0	19.1	2.1	2.1	1.9	2.0
Drogichin	3.6	3.7	3.6	3.7	2.5	2.5	2.5	2.5
Zhabinka	6.4	6.1	3.6	4.8	2.3	2.4	2.3	2.2
Ivanovo	4.6	4.3	4.3	3.9	3.9	4.0	3.8	3.3
Ivatsevichy	6.7	6.6	6.5	6.5	4.7	4.7	4.6	4.5
Kamenets	3.8	4.3	4.4	4.5	3.8	4.2	4.4	4.5
Kobrin	6.4	5.8	5.9	6.1	6.1	5.6	5.8	6.1
Luninets	42.9	50.5	43.2	39.1	33.8	41.5	37.0	33.5
Lyakhovichy	2.3	2.3	5.1	2.2	2.2	2.3	3.9	2.1
Malorita	8.4	4.1	4.5	3.7	2.8	3.4	3.8	3.1
Pinsk	25.1	25.3	22.7	22.1	11.5	11.6	11.9	12.3
Pruzhany	4.9	5.0	5.1	5.2	4.9	5.0	5.1	5.2
Stolin	4.0	4.4	7.0	7.3	4.0	4.4	4.2	4.5

Continued

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Vitebsk region	169.4	170.1	168.2	163.7	92.3	92.7	91.6	89.9
Vitebsk, city of	30.7	29.8	29.7	29.2	26.7	26.1	26.2	25.4
District:								
Beshenkovichy	1.1	0.9	1.1	1.0	1.1	0.9	1.1	1.0
Braslav	2.1	2.0	1.8	1.7	1.8	1.8	1.7	1.6
Verkhnedvinsk	2.4	2.5	2.5	2.5	2.3	2.5	2.5	2.5
Vitebsk	5.1	4.9	6.6	6.9	5.1	4.9	4.8	4.6
Glubokoye	3.7	3.9	3.9	3.9	3.7	3.9	3.8	3.9
Gorodok	2.0	2.1	2.3	2.1	2.0	2.1	2.3	2.1
Dokshitsy	1.8	1.7	1.7	1.5	1.8	1.7	1.7	1.5
Dubrovno	1.2	1.2	1.0	1.3	1.2	1.2	1.0	1.3
Lepel	2.5	2.5	2.4	2.2	2.4	2.3	2.3	2.1
Liozno	1.6	1.9	1.7	1.6	1.6	1.9	1.7	1.6
Miory	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.2
Orsha	14.9	15.4	15.0	14.7	12.5	13.3	12.9	12.6
Polotsk	68.4	71.4	71.3	65.6	15.9	15.7	15.5	15.5
Postavy	14.7	14.6	12.0	14.5	2.4	2.4	2.2	2.3
Rossony	0.7	0.7	0.8	0.6	0.7	0.7	0.8	0.6
Senno	2.2	2.2	2.6	2.9	1.8	1.7	1.8	2.1
Tolochin	2.1	2.5	2.4	2.2	2.0	2.5	2.3	2.1
Ushachy	0.8	0.9	0.8	1.0	0.8	0.9	0.8	1.0
Chashniki	7.2	5.0	4.8	4.7	2.4	2.4	2.4	2.6
Sharkovshchina	1.0	0.9	0.9	0.8	1.0	0.9	0.9	0.8
Shumilino	1.9	1.6	1.6	1.7	1.9	1.6	1.6	1.7

Continued

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Gomel region	164.5	172.6	178.9	179.3	116.6	114.2	112.7	113.1
Gomel, city of	46.3	45.1	44.3	44.9	40.3	38.8	38.4	38.8
District:								
Bragin	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0
Buda-Koshelyovo	3.0	3.2	3.3	3.1	3.0	3.2	3.3	3.1
Vetka	1.4	2.0	1.4	1.4	1.3	2.0	1.4	1.4
Gomel	6.7	6.0	6.0	5.8	5.7	5.0	5.0	4.9
Dobrush	4.5	4.8	4.6	4.5	3.5	3.6	3.5	3.4
Yelsk	1.2	1.5	1.4	1.2	1.2	1.5	1.4	1.2
Zhitkovichy	7.6	11.0	14.1	12.3	2.0	2.3	2.5	2.5
Zhlobin	9.8	10.6	9.7	9.3	7.8	8.2	7.8	7.8
Kalinkovichy	6.1	6.2	6.3	6.0	6.1	6.2	6.3	6.0
Korma	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.3
Lelchitsy	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Loyev	1.0	0.9	0.9	0.9	1.0	0.9	0.9	0.9
Mozyr	21.9	23.5	22.3	24.4	10.7	9.9	9.4	10.7
Narovlya	1.7	1.1	1.8	1.0	1.2	1.1	1.6	1.0
Oktyabrsky	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Petrikov	15.3	15.5	15.2	15.0	2.2	2.3	2.1	2.2
Rechitsa	9.8	9.3	9.3	9.1	9.5	9.0	9.0	8.8
Rogachev	6.5	5.6	5.4	5.7	6.0	5.2	5.1	5.4
Svetlogorsk	14.5	19.0	25.3	26.7	7.7	7.7	7.4	7.2
Khoyniki	1.8	1.6	1.7	1.8	1.8	1.6	1.7	1.8
Chechersk	0.9	1.2	1.3	1.3	0.9	1.2	1.3	1.3

Continued

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Grodno region	148.2	147.2	141.1	141.8	87.3	88.6	87.3	86.6
Grodno, city of	53.1	53.9	52.5	50.3	27.2	27.1	27.0	27.3
District:								
Berestovitsa	2.1	2.0	2.0	2.0	2.1	1.9	2.0	2.0
Volkovysk	9.2	11.1	10.7	10.2	7.2	7.7	7.5	7.2
Voronovo	3.7	3.5	3.7	3.0	2.0	2.0	2.0	1.8
Grodno	24.4	18.9	19.3	18.8	5.9	6.0	6.0	6.1
Dyatlovo	2.8	2.9	2.8	2.7	2.4	2.5	2.3	2.1
Zelva	1.6	2.0	1.6	1.5	1.0	0.9	1.4	1.5
Ivye	1.3	1.3	1.4	1.3	1.3	1.3	1.4	1.3
Korelichy	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.8
Lida	12.2	12.1	11.6	11.1	11.2	11.6	11.3	10.8
Mosty	2.8	2.8	3.1	2.8	2.4	2.4	2.3	2.2
Novogrudok	3.4	3.4	3.4	3.6	3.3	3.3	3.4	3.6
Ostrovets	2.2	2.8	2.7	7.5	1.7	2.1	2.2	2.1
Oshmyany	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.4
Svisloch	1.6	1.6	1.5	1.3	1.5	1.5	1.5	1.3
Slonim	10.1	10.7	7.1	8.4	5.2	5.3	4.6	4.6
Smorgon	8.3	8.3	6.6	7.2	4.3	4.6	4.3	4.3
Shchuchin	4.9	5.5	7.0	5.7	4.1	4.3	4.1	4.3

Continued

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Minsk city	45.8	46.5	43.5	44.0	43.7	46.1	43.0	43.3
Minsk region	463.1	454.6	447.8	419.5	222.7	219.0	214.7	213.0
District:								
Berezino	2.7	2.7	2.5	2.5	2.1	2.0	1.8	1.9
Borisov	18.8	18.0	17.0	18.0	16.7	16.2	15.4	14.8
Vileyka	93.1	99.4	114.8	91.0	3.7	3.7	3.6	3.7
Volozhin	3.0	2.8	2.9	3.0	2.7	2.8	2.9	3.0
Dzerzhinsk	18.0	16.2	16.1	16.7	18.0	16.2	16.1	16.7
Kletsk	3.9	3.9	3.8	3.9	3.9	3.9	3.8	3.9
Kopyl	3.1	2.6	2.3	2.8	3.1	2.6	2.3	2.8
Krupki	2.4	2.3	2.3	2.0	2.4	2.2	2.3	2.0
Logoysk	4.5	4.9	4.9	5.0	3.4	3.6	3.6	3.7
Lyuban	67.9	59.1	42.6	41.2	3.9	4.2	4.9	4.6
Minsk	67.4	69.4	66.1	63.9	67.0	68.9	65.7	63.6
Molodechno	16.3	15.0	15.3	15.6	12.1	11.2	11.5	11.8
Myadel	4.1	4.3	4.1	4.1	2.2	2.4	2.2	2.2
Nesvizh	6.6	6.8	6.9	7.1	5.5	5.7	5.8	6.1
Pukhovichy	17.0	16.5	16.6	14.5	13.9	12.7	11.8	11.8
Slutsk	15.2	15.0	14.9	14.8	15.2	15.0	14.9	14.8
Smolevichy	21.3	21.9	21.6	29.1	18.6	18.6	18.8	19.7
Soligorsk	48.4	45.6	44.7	45.4	5.1	5.1	4.9	4.6
Staryie Dorogi	2.3	2.2	2.4	2.3	2.3	2.2	2.4	2.3
Stolbtsy	6.3	6.7	6.4	5.8	4.0	4.3	4.1	3.4
Uzda	2.9	2.9	2.7	3.1	2.9	2.9	2.7	3.1
Cherven	37.8	36.3	37.1	27.6	13.8	12.3	13.2	12.4

Continued

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Mogilev region	143.5	134.9	142.8	144.8	109.4	101.5	110.4	111.9
Mogilev, city of	43.9	43.5	43.1	43.3	33.0	32.6	32.6	32.1
District:								
Belynichy	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2
Bobruysk	18.4	18.5	17.7	21.4	13.3	13.4	13.2	17.0
Bykhov	2.9	3.2	2.9	2.8	2.9	3.2	2.9	2.8
Glusk	1.0	1.1	0.8	1.2	1.0	1.1	0.8	1.2
Gorki	3.7	3.7	3.5	4.1	3.7	3.7	3.5	4.1
Dribin	0.8	0.9	0.8	0.9	0.8	0.9	0.8	0.9
Kirovsk	7.3	6.8	6.4	3.0	6.4	6.2	5.9	2.1
Klimovichy	2.1	2.0	1.9	1.8	2.1	2.0	1.9	1.8
Klichev	0.9	1.0	1.0	1.3	0.9	1.0	1.0	1.3
Kostyukovichy	19.9	12.9	21.5	20.5	19.9	12.9	21.5	20.5
Krasnopolye	0.4	0.7	0.6	0.4	0.4	0.7	0.6	0.4
Krichev	1.6	1.6	3.5	5.6	1.6	1.6	3.5	5.6
Krugloye	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.3
Mogilev	6.6	6.2	6.4	6.0	5.0	5.0	5.0	4.8
Mstislavl	2.2	1.6	1.9	1.8	2.2	1.5	1.9	1.8
Osipovichy	16.6	16.4	16.7	16.6	3.7	3.6	3.9	3.9
Slavgorod	1.7	1.2	0.9	1.4	1.7	1.2	0.9	1.4
Khotimsk	0.6	0.8	0.8	0.6	0.6	0.8	0.8	0.5
Chausy	2.2	2.3	1.8	1.6	1.8	1.9	1.7	1.6
Cherikov	1.3	1.2	0.9	1.0	1.1	1.1	0.9	1.0
Shklov	6.0	6.1	6.4	6.0	3.8	3.6	3.7	3.6

7.7. Water abstraction from natural sources by economic activity

(million cubic metres)

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Republic of Belarus	1 397.5	1 390.2	1 358.0	1 325.6	811.3	809.2	802.1	797.1
of which:								
Agriculture, forestry and fishing	431.2	415.5	367.3	365.5	136.4	135.3	134.0	131.3
Mining	31.1	39.1	34.1	30.9	31.0	38.9	34.1	30.9
Manufacturing	188.8	188.1	197.6	198.9	89.1	83.8	91.1	94.0
of which:								
Manufacture of food products, beverages and tobacco products	51.3	50.5	48.5	50.8	45.6	44.8	44.1	47.1
Manufacture of textile articles, wearing apparel, articles of leather and fur	8.0	7.7	7.5	7.0	1.6	1.7	1.7	1.6
Manufacture of products of wood and paper; printing and reproduction of recorded media	14.2	17.9	24.8	25.8	1.9	2.0	1.8	1.8
Manufacture of coke and refined petroleum products	13.4	14.1	13.4	13.6	2.1	2.0	1.7	1.4
Manufacture of chemicals and chemical products	52.0	53.1	51.1	50.7	4.3	4.4	4.0	4.6
Manufacture of basic pharmaceuticals and medicinal products	0.5	0.6	0.7	0.6	0.5	0.6	0.7	0.6
Manufacture of rubber and plastics products, of other non-metallic mineral products	31.6	25.7	35.1	35.7	21.7	17.0	26.4	27.0
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	3.9	4.4	3.8	3.3	2.0	2.1	1.9	1.8
Manufacture of computer, electronic and optical products	2.8	2.7	2.4	2.5	2.5	2.4	2.1	2.2

Continued

	Total				Of which from groundwater bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Manufacture of electrical equipment	1.1	1.1	1.1	0.8	0.4	0.4	0.6	0.4
Manufacture of machinery and equipment n.e.c.	6.3	7.0	6.3	5.4	3.7	3.8	3.8	3.3
Manufacture of transport vehicles and equipment	3.0	2.8	2.5	2.2	2.8	2.5	2.2	2.0
Other manufacturing; repair and installation of machinery and equipment	0.6	0.4	0.5	0.5	0.2	0.2	0.1	0.3
Electricity, gas, steam, hot water and air conditioning supply	209.0	202.8	194.3	161.5	145.0	133.7	120.8	93.4
Water supply; waste management and remediation activities	491.8	504.7	525.1	523.2	400.7	407.3	412.6	434.6
Construction	14.5	11.8	11.7	20.0	0.8	0.8	0.9	5.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.7	1.5	2.0	1.3	0.6	0.6	0.8	0.8
Transportation and storage, postal and courier activities	1.3	3.5	3.0	3.4	0.9	1.3	0.9	0.9
Accommodation and food service activities	17.0	11.9	11.9	11.6	0.2	0.3	0.3	0.3
Information and communication	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial and insurance activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real estate activities	0.3	0.5	0.4	0.8	0.3	0.5	0.4	0.6
Professional, scientific and technical activities	2.0	1.8	1.8	1.6	0.2	0.2	0.2	0.5
Administrative and support service activities	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.0
Public administration	1.8	2.0	1.8	1.5	1.8	2.0	1.8	1.5
Education	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1
Human health and social work activities	3.3	3.4	3.4	2.7	3.3	3.4	3.4	2.7
Arts, sports, entertainment and recreation	3.1	3.4	3.2	2.5	0.5	0.5	0.5	0.5
Other service activity	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1

7.8. Water use by regions and Minsk city

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	1 371	1 270	1 302	1 264	1 247	1 208	1 180
Regions and Minsk city:							
Brest	250	236	222	231	224	197	196
Vitebsk	184	181	172	159	162	158	154
Gomel	183	176	164	156	165	173	174
Grodno	148	146	143	145	139	136	135
Minsk city	180	174	169	161	161	171	169
Minsk	302	237	315	292	278	259	237
Mogilev	125	121	116	120	117	113	113
of which for:							
domestic and drinking, including curative, purposes							
Republic of Belarus	473	474	504	493	490	498	474
Regions and Minsk city:							
Brest	60	60	55	60	58	56	54
Vitebsk	53	53	54	52	54	52	50
Gomel	65	66	70	67	69	69	71
Grodno	49	50	47	51	48	53	54
Minsk city	127	126	127	123	125	139	133
Minsk	67	67	108	83	81	76	62
Mogilev	52	53	44	57	54	54	51

Continued

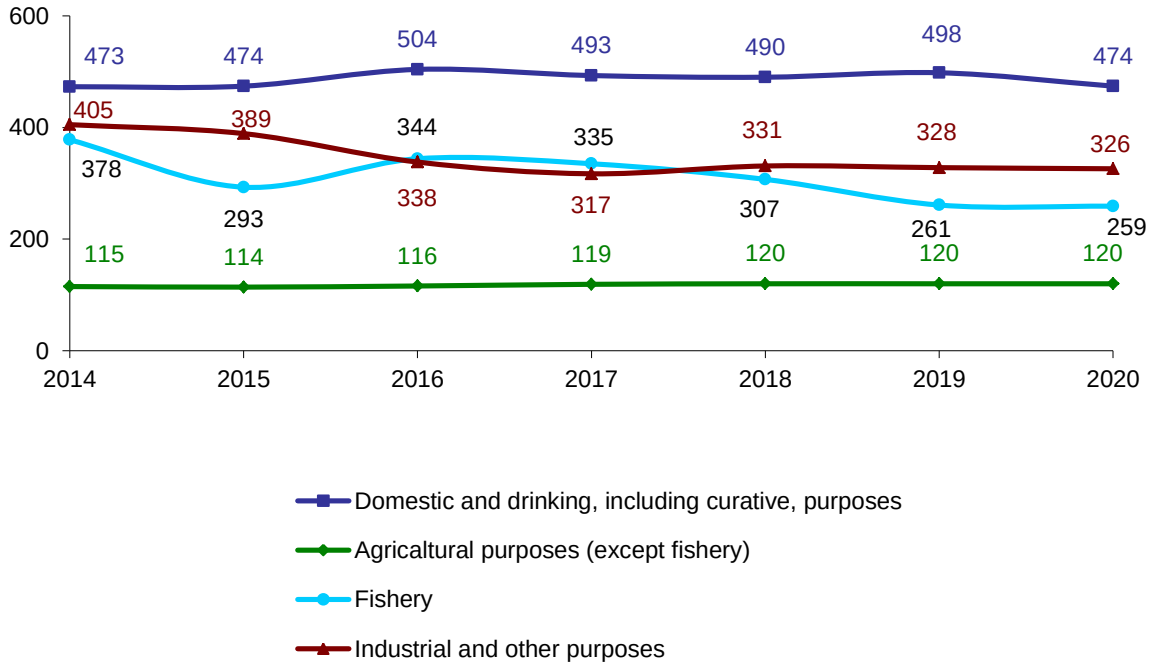
	2014	2015	2016	2017	2018	2019	2020
agricultural purposes (except fishery)							
Republic of Belarus	115	114	116	119	120	120	120
Regions and Minsk city:							
Brest	23	24	24	24	24	24	25
Vitebsk	16	15	15	15	13	14	15
Gomel	18	18	16	19	20	19	19
Grodno	14	16	17	17	18	18	18
Minsk	30	28	31	29	29	29	28
Mogilev	14	14	13	15	15	15	15
fishery							
Republic of Belarus	378	293	344	335	307	261	259
Regions and Minsk city:							
Brest	137	117	116	118	109	83	82
Vitebsk	16	16	16	15	13	10	13
Gomel	27	25	29	18	20	25	23
Grodno	29	26	34	32	26	23	22
Minsk	154	94	133	134	121	104	103
Mogilev	15	15	16	17	17	16	16

Continued

	2014	2015	2016	2017	2018	2019	2020
				industrial and other purposes			
Republic of Belarus	405	389	338	317	331	328	326
Regions and Minsk city:							
Brest	30	35	27	29	33	34	36
Vitebsk	99	97	88	77	82	82	76
Gomel	72	68	49	51	55	60	62
Grodno	56	54	45	44	46	42	42
Minsk city	53	48	38	38	37	32	36
Minsk	51	48	46	46	48	50	44
Mogilev	44	40	42	32	31	28	31

7.9. Dynamics of water use

(million cubic metres)



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

(cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	50	50	53	52	52	53	51
Regions and Minsk city:							
Brest	44	44	40	44	43	41	40
Vitebsk	44	45	46	45	47	46	44
Gomel	46	46	50	48	50	49	51
Grodno	47	47	45	49	47	51	52
Minsk city	65	64	64	62	62	69	66
Minsk	47	46	74	57	55	52	42
Mogilev	49	50	42	54	53	53	50

7.11. Water use by economic activity

(million cubic metres)

	2016	2017	2018	2019	2020
Total	1 301.6	1 264.2	1 246.9	1 208.4	1 179.5
of which:					
Agriculture, forestry and fishing	480.2	443.9	423.8	378.1	367.0
Mining	1.5	6.8	8.7	8.1	8.3
Manufacturing	175.4	179.6	187.0	181.9	177.2
of which:					
Manufacture of food products, beverages and tobacco products	49.8	52.3	50.5	49.0	50.3
Manufacture of textile articles, wearing apparel, articles of leather and fur	10.8	8.8	7.8	7.6	5.8
Manufacture of products of wood and paper; printing and reproduction of recorded media	14.7	14.4	18.4	25.1	26.3
Manufacture of coke and refined petroleum products	14.3	14.7	18.6	15.7	12.7
Manufacture of chemicals and chemical products	53.8	55.0	57.0	53.0	52.1
Manufacture of basic pharmaceuticals and medicinal products	0.6	0.5	0.6	0.7	0.6
Manufacture of rubber and plastics products, of other non-metallic mineral products	12.5	14.5	14.5	13.3	13.5
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	3.7	5.1	5.4	4.3	3.8
Manufacture of computer, electronic and optical products	2.8	2.8	2.7	2.5	2.9
Manufacture of electrical equipment	1.3	1.1	1.1	1.1	0.9

Continued

	2016	2017	2018	2019	2020
Manufacture of machinery and equipment n.e.c.	7.7	6.6	7.2	6.4	5.5
Manufacture of transport vehicles and equipment	2.8	3.2	2.8	2.7	2.3
Other manufacturing; repair and installation of machinery and equipment	0.6	0.6	0.4	0.6	0.5
Electricity, gas, steam, hot water and air conditioning supply	200.1	192.4	184.3	181.5	174.4
Water supply; waste management and remediation activities	394.4	392.8	402.0	419.1	407.2
Construction	15.1	14.5	12.0	11.7	19.8
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.9	1.7	1.5	2.1	1.3
Transportation and storage, postal and courier activities	3.6	4.1	3.9	3.1	3.4
Accommodation and food service activities	17.8	17.0	11.9	11.9	11.6
Information and communication	0.0	0.0	0.0	0.0	0.0
Financial and insurance activities	0.0	0.0	0.0	0.0	0.0
Real estate activities	1.4	0.3	0.5	0.4	0.7
Professional, scientific and technical activities	1.8	2.1	1.8	1.8	1.6
Administrative and support service activities	0.1	0.1	0.2	0.2	0.2
Public administration	1.9	1.8	2.0	1.8	1.5
Education	0.2	0.2	0.2	0.1	0.1
Human health and social work activities	3.4	3.4	3.3	3.4	2.7
Arts, sports, entertainment and recreation	2.7	3.4	3.5	3.2	2.4
Other service activity	0.2	0.1	0.2	0.1	0.1

7.12. Water loss during transport by regions and Minsk city

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	81.8	78.1	67.6	57.9	57.6	41.5	44.7
Regions and Minsk city:							
Brest	5.9	5.6	4.4	4.6	4.5	3.9	3.7
Vitebsk	8.4	8.3	7.4	7.0	6.9	4.9	4.7
Gomel	11.8	11.0	5.2	4.6	4.1	4.4	5.0
Grodno	6.7	5.0	4.4	4.3	3.8	3.5	3.6
Minsk city	25.0	24.5	19.7	24.6	27.1	13.9	14.3
Minsk	13.1	15.2	19.4	6.1	4.7	4.8	5.2
Mogilev	11.0	8.6	7.1	6.7	6.5	6.1	8.1

7.13. Water discharge by regions and Minsk city

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	1 034	948	1 153	1 163	1 152	1 142	1 152
Regions and Minsk city:							
Brest	195	163	204	215	206	194	197
Vitebsk	137	139	150	144	148	148	154
Gomel	139	128	158	153	150	155	158
Grodno	115	114	130	127	119	124	123
Minsk city	168	162	215	211	214	209	213
Minsk	185	146	171	176	182	171	167
Mogilev	96	95	125	137	134	139	140
of which wastewater into surface water bodies							
Republic of Belarus	954	870	1 048	1 053	1 034	1 019	1 035
Regions and Minsk city:							
Brest	181	149	167	171	157	147	158
Vitebsk	127	129	144	138	140	141	148
Gomel	119	110	147	142	137	143	144
Grodno	103	101	120	116	105	112	111
Minsk city	168	162	215	211	213	209	213
Minsk	166	128	155	159	163	154	149
Mogilev	90	90	101	115	117	112	110

7.14. Water discharge by regions, cities and districts

(million cubic metres)

	Total				Of which wastewater into surface water bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Republic of Belarus	1 162.9	1 151.8	1 141.6	1 152.1	1 052.7	1 034.0	1 019.1	1 034.5
Brest region	215.2	206.2	194.0	197.2	171.4	157.4	147.5	157.8
Brest, city of	31.2	30.6	30.8	38.2	31.2	30.6	30.8	38.2
District:								
Baranovichy	18.4	17.5	16.1	15.5	15.7	14.3	13.1	13.0
Bereza	45.6	37.3	33.3	40.4	45.1	36.6	32.6	39.8
Brest	3.6	4.1	2.6	2.8	2.7	2.9	0.6	1.5
Gantsevichy	16.3	19.2	17.4	13.3	16.1	19.0	17.1	13.1
Drogichin	1.9	2.0	1.9	1.9	1.7	1.7	1.7	1.7
Zhabinka	5.3	4.9	1.6	1.6	3.7	3.3	0.1	0.1
Ivanovo	3.1	2.9	3.2	2.8	2.2	1.8	2.1	1.8
Ivatsevichy	4.2	4.2	4.1	4.1	3.5	3.3	3.2	3.1
Kamenets	1.1	1.9	2.7	1.9	0.6	1.0	1.0	1.0
Kobrin	4.1	4.4	4.3	4.6	3.4	3.5	3.4	3.6
Luninets	45.1	46.5	39.3	35.1	14.0	13.7	10.9	10.6
Lyakhovichy	0.7	0.9	1.1	1.0	0.6	0.6	0.7	0.7
Malorita	10.1	4.2	4.8	4.0	8.8	3.2	2.9	3.2
Pinsk	20.8	20.7	23.7	22.7	20.2	19.8	22.8	21.9
Pruzhany	2.3	3.0	2.8	2.8	1.8	1.9	1.8	1.9
Stolin	1.6	1.9	4.3	4.4	0.2	0.2	2.6	2.7

Continued

	Total				Of which wastewater into surface water bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Vitebsk region	144.1	148.0	148.5	154.2	138.1	140.3	140.8	148.4
Vitebsk, city of	35.2	37.1	38.4	50.9	35.2	37.0	38.3	50.8
District:								
Beshenkovichy	0.3	0.3	0.6	0.4	0.2	0.3	0.4	0.4
Braslav	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Verkhnedvinsk	0.9	1.0	0.9	1.1	0.3	0.6	0.5	0.6
Vitebsk	1.6	3.7	3.5	4.4	1.1	3.0	2.8	3.8
Glubokoye	1.3	1.9	1.6	1.7	0.1	0.1	0.1	0.1
Gorodok	1.4	1.3	1.2	0.9	1.3	1.1	0.8	0.9
Dokshitsy	0.5	0.5	0.6	0.5	0.2	0.3	0.3	0.3
Dubrovno	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2
Lepel	1.8	1.7	1.9	1.9	1.5	1.4	1.6	1.6
Liozno	0.4	0.5	0.5	0.3	–	–	–	0.0
Miory	0.5	0.6	0.6	0.5	0.1	0.1	0.1	0.1
Orsha	12.6	12.2	12.3	13.1	12.2	11.8	11.3	12.6
Polotsk	62.7	64.0	66.3	55.7	62.3	63.4	65.8	55.2
Postavy	14.0	13.5	10.9	13.2	13.4	13.1	10.2	12.9
Rossony	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Senno	1.3	1.5	1.8	1.8	1.3	1.4	1.7	1.6
Tolochin	0.9	1.8	1.1	1.1	0.6	0.7	0.8	0.9
Ushachy	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Chashniki	6.1	3.7	3.7	3.8	6.1	3.7	3.6	3.8
Sharkovshchina	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Shumilino	0.8	0.8	1.0	1.3	0.7	0.8	0.9	1.3

Continued

	Total				Of which wastewater into surface water bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Gomel region	152.6	149.6	155.0	157.5	141.7	137.2	143.0	144.1
Gomel, city of	81.7	72.6	72.4	71.0	81.7	72.6	72.4	70.9
District:								
Bragin	0.2	0.3	0.3	0.3	–	–	–	–
Buda-Koshelyovo	1.0	1.4	1.4	1.4	0.9	1.1	1.0	1.0
Vetka	0.5	0.9	0.5	0.4	0.5	0.4	–	–
Gomel	1.4	1.6	1.3	1.7	0.1	0.1	0.1	0.1
Dobrush	1.8	2.2	1.7	1.9	0.2	0.2	0.2	0.2
Yelsk	0.3	0.5	0.4	0.4	–	–	–	–
Zhitkovichy	5.8	7.2	9.1	8.9	5.6	7.0	8.4	8.5
Zhlobin	7.2	6.7	7.2	6.4	6.8	6.1	6.6	5.9
Kalinkovichy	0.6	1.0	1.3	2.6	0.0	0.0	0.4	0.5
Korma	0.3	0.4	0.3	0.5	–	–	–	–
Lelchitsy	0.3	0.4	0.4	0.4	–	–	–	–
Loyev	0.2	0.3	0.3	0.2	–	–	0.0	0.0
Mozyr	17.5	17.2	15.9	17.0	17.0	16.8	15.5	16.3
Narovlya	1.0	0.5	0.9	0.5	0.5	–	0.1	–
Oktyabrsky	0.3	0.4	0.4	0.5	0.1	0.1	0.1	0.1
Petrikov	10.1	11.6	11.1	11.0	9.9	11.1	10.6	10.7
Rechitsa	6.3	5.8	5.1	5.0	4.7	4.9	4.1	4.1
Rogachev	3.0	3.2	3.3	3.3	2.3	2.4	2.4	2.7
Svetlogorsk	11.8	14.1	20.4	22.7	10.2	13.4	19.8	22.0
Khoyniki	1.0	0.9	1.0	1.0	0.8	0.8	0.9	0.9
Chechersk	0.3	0.3	0.4	0.4	0.2	0.2	0.3	0.3

Continued

	Total				Of which wastewater into surface water bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Grodno region	126.7	118.7	124.5	123.1	115.7	105.1	111.9	111.5
Grodno, city of	48.4	44.5	48.8	47.8	48.3	44.2	48.7	47.6
District:								
Berestovitsa	0.6	0.9	1.0	0.9	0.3	0.4	0.4	0.4
Volkovysk	9.7	9.4	9.0	8.1	7.6	7.1	7.0	6.3
Voronovo	1.9	2.4	2.2	2.0	1.7	1.8	1.8	1.7
Grodno	21.1	15.6	16.5	16.0	18.6	12.8	13.8	13.3
Dyatlovo	1.6	1.6	1.8	1.5	0.8	0.7	0.8	0.8
Zelva	0.6	1.0	0.5	0.6	0.4	0.2	0.2	0.2
Ivye	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3
Korelichy	0.9	1.2	0.9	0.9	0.5	0.6	0.5	0.5
Lida	15.2	14.4	13.8	12.6	14.3	13.6	12.9	11.8
Mosty	0.8	1.3	1.6	1.5	0.7	0.8	1.1	1.1
Novogrudok	2.5	2.4	5.0	4.6	2.2	2.2	4.7	4.3
Ostrovets	1.1	1.4	1.4	5.7	0.9	1.1	1.1	5.4
Oshmyany	1.1	1.2	1.5	1.6	0.9	0.9	1.1	1.1
Svisloch	0.4	0.6	0.6	0.5	0.0	–	0.0	0.3
Slonim	11.1	11.6	9.8	10.1	10.9	10.9	9.2	9.4
Smorgon	5.9	5.4	4.5	4.7	4.7	4.7	3.8	4.2
Shchuchin	3.3	3.4	5.1	3.6	2.6	2.7	4.5	2.9

Continued

	Total				Of which wastewater into surface water bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Minsk city	211.5	213.6	209.4	213.4	211.4	213.4	209.3	213.3
Minsk region	175.5	181.7	171.1	167.1	159.1	163.1	154.4	149.3
District:								
Berezino	1.0	1.5	1.5	1.3	–	1.2	1.2	1.1
Borisov	16.8	15.6	15.6	15.0	16.4	15.0	15.1	14.6
Vileyka	2.0	2.1	2.0	1.7	1.8	1.5	1.5	1.4
Volozhin	1.4	1.2	1.3	1.3	1.1	0.9	1.0	1.0
Dzerzhinsk	3.2	3.6	3.3	4.2	2.5	2.6	2.8	3.1
Kletsk	1.4	1.5	1.4	1.5	0.4	0.4	0.2	0.2
Kopyl	1.0	1.0	0.9	0.8	0.9	0.8	0.8	0.7
Krupki	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.4
Logoysk	1.3	1.6	1.5	1.4	1.2	1.3	1.4	1.2
Lyuban	32.6	28.2	20.4	19.9	32.2	27.7	19.8	19.5
Minsk	3.8	4.3	3.9	4.3	0.4	0.3	0.3	0.4
Molodechno	13.7	23.9	23.2	23.3	12.6	22.8	22.3	22.4
Myadel	3.4	3.6	3.5	3.2	3.1	3.2	3.2	2.8
Nesvizh	3.5	4.0	4.1	4.2	2.1	2.2	2.3	2.4
Pukhovichy	4.6	5.1	4.2	4.2	3.5	3.4	3.4	3.4
Slutsk	10.5	10.7	10.4	10.3	9.3	9.3	9.0	9.0
Smolevichy	10.7	11.2	10.6	10.4	9.8	10.3	9.7	9.1
Soligorsk	40.4	39.3	39.7	35.9	40.0	38.5	39.1	35.6
Staryie Dorogi	0.7	0.7	0.7	0.9	0.6	0.6	0.6	0.7
Stolbtsy	3.7	3.7	3.5	3.4	3.2	3.1	2.8	2.8
Uzda	1.2	0.7	0.6	1.2	0.1	0.1	0.0	0.1
Cherven	17.6	17.5	17.9	17.8	17.3	17.3	17.3	17.4

Continued

	Total				Of which wastewater into surface water bodies			
	2017	2018	2019	2020	2017	2018	2019	2020
Mogilev region	137.4	134.1	139.1	139.6	115.4	117.4	112.1	110.2
Mogilev, city of	55.9	56.7	54.1	52.1	55.8	56.6	54.1	52.0
District:								
Belynichy	0.8	0.9	0.8	0.9	0.1	0.2	0.1	0.1
Bobruysk	28.3	28.0	26.3	26.3	28.3	27.7	26.1	26.0
Bykhov	1.2	2.2	1.7	1.7	1.1	1.9	1.4	1.3
Glusk	0.3	0.3	0.2	0.5	0.2	0.2	0.2	0.2
Gorki	1.6	2.3	1.7	2.3	1.5	2.1	1.5	2.2
Dribin	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Kirovsk	2.1	2.2	2.1	2.2	1.9	2.2	2.0	2.1
Klimovichy	1.0	1.1	1.0	1.1	0.1	0.1	0.1	0.1
Klichev	0.3	0.3	0.3	0.3	–	–	–	–
Kostyukovichy	18.4	11.7	20.0	19.3	1.1	0.8	1.2	1.3
Krasnopolye	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
Krichev	1.0	1.5	3.0	5.1	1.0	1.5	1.2	1.2
Krugloye	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
Mogilev	3.1	3.1	3.0	3.0	2.7	2.6	2.4	2.3
Mstislavl	0.7	0.4	0.5	0.5	0.4	0.1	0.3	0.4
Osipovichy	15.7	15.3	15.3	16.6	15.4	15.1	15.1	15.2
Slavgorod	0.6	0.3	0.3	0.4	–	–	0.0	0.0
Khotimsk	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1
Chausy	1.2	1.1	1.3	1.0	1.2	1.0	1.2	0.9
Cherikov	0.4	1.0	0.9	0.3	0.2	0.8	0.6	0.0
Shklov	3.9	4.8	5.4	5.1	3.7	4.2	4.3	4.3

7.15. Water discharge by economic activity

(million cubic metres)

	2016	2017	2018	2019	2020	
					total	of which wastewater into surface water bodies
Total	1 152.9	1 162.9	1 151.8	1 141.6	1 152.1	1 034.5
of which:						
Agriculture, forestry and fishing	245.0	241.2	242.6	216.3	215.1	191.1
Mining	24.2	36.1	35.1	30.7	27.2	3.5
Manufacturing	121.5	118.8	116.0	129.1	129.1	94.1
of which:						
Manufacture of food products, beverages and tobacco products	16.0	16.0	16.9	16.6	17.5	7.9
Manufacture of textile articles, wearing apparel, articles of leather and fur	2.1	0.6	0.6	0.5	0.6	0.4
Manufacture of products of wood and paper; printing and reproduction of recorded media	5.1	6.1	8.6	15.7	18.8	17.5
Manufacture of coke and refined petroleum products	48.6	47.1	45.7	45.6	42.3	41.9
Manufacture of chemicals and chemical products	25.7	24.6	25.5	22.3	21.1	20.9
Manufacture of basic pharmaceuticals and medicinal products	0.1	0.0	0.0	0.1	0.1	0.0
Manufacture of rubber and plastics products, of other non-metallic mineral products	21.7	21.9	16.0	25.8	26.4	3.3
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	0.1	0.1	0.1	0.0	0.1	0.1
Manufacture of computer, electronic and optical products	0.0	0.0	0.0	0.0	0.0	0.0
Manufacture of electrical equipment	0.1	0.1	0.1	0.1	0.1	0.1

Continued

	2016	2017	2018	2019	2020	
					total	of which wastewater into surface water bodies
Manufacture of machinery and equipment n.e.c.	1.5	1.4	1.4	1.3	1.3	1.2
Manufacture of transport vehicles and equipment	0.1	0.7	0.9	0.8	0.8	0.7
Other manufacturing; repair and installation of machinery and equipment	0.1	0.2	0.1	0.1	0.1	0.1
Electricity, gas, steam, hot water and air conditioning supply	149.0	151.1	140.1	134.1	124.2	110.0
Water supply; waste management and remediation activities	513.4	512.6	529.2	539.3	530.6	514.4
Construction	18.0	13.0	7.7	12.8	27.4	26.8
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.9	1.8	1.8	2.0	1.3	0.5
Transportation and storage, postal and courier activities	11.7	12.1	17.5	11.7	22.8	22.5
Accommodation and food service activities	16.9	17.0	11.6	13.4	11.6	11.5
Information and communication	–	–	0.0	0.0	0.0	0.0
Financial and insurance activities	0.0	0.0	0.0	0.0	0.0	0.0
Real estate activities	2.2	0.1	0.2	0.2	0.3	0.1
Professional, scientific and technical activities	2.3	2.6	1.2	1.1	0.9	0.8
Administrative and support service activities	40.3	51.3	42.8	45.2	57.3	57.2
Public administration	1.0	0.9	1.0	0.7	0.5	0.2
Education	0.1	0.1	0.1	0.1	0.1	0.0
Human health and social work activities	3.5	2.2	2.3	2.3	1.8	0.2
Arts, sports, entertainment and recreation	1.8	1.8	2.6	2.5	1.8	1.7
Other service activity	0.0	0.0	0.0	0.0	0.1	–

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

(million cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	954.2	869.6	1 048.4	1 052.7	1 034.0	1 019.1	1 034.5
Regions and Minsk city:							
Brest	181.0	149.1	167.0	171.4	157.4	147.5	157.8
Vitebsk	127.2	128.8	143.5	138.1	140.3	140.8	148.4
Gomel	119.3	110.0	147.3	141.7	137.2	143.0	144.1
Grodno	102.6	101.4	119.7	115.7	105.1	111.9	111.5
Minsk city	168.0	162.4	214.7	211.4	213.4	209.3	213.3
Minsk	165.8	128.0	155.3	159.1	163.1	154.4	149.3
Mogilev	90.3	89.9	100.9	115.4	117.4	112.1	110.2
of which:							
without pre-treatment							
Republic of Belarus	315.7	245.7	339.1	354.0	340.9	325.8	339.3
Regions and Minsk city:							
Brest	112.4	82.3	92.0	99.8	88.8	76.9	83.7
Vitebsk	42.5	43.0	51.0	47.0	49.7	49.7	63.0
Gomel	22.2	19.5	55.7	49.2	43.7	47.6	45.9
Grodno	26.2	25.3	30.4	30.4	24.7	26.9	28.9
Minsk city	0.8	0.4	0.5	4.5	4.2	4.0	3.1
Minsk	99.9	62.3	86.0	89.4	94.4	85.6	82.2
Mogilev	11.8	13.0	23.4	33.6	35.5	35.2	32.6
treated according to standards							
Republic of Belarus	635.0	618.2	703.0	694.4	689.1	689.2	692.5
Regions and Minsk city:							
Brest	68.3	66.5	74.8	71.4	68.4	70.5	74.0
Vitebsk	84.6	85.7	91.7	90.7	90.6	91.0	85.3
Gomel	97.1	90.5	89.9	92.4	93.1	95.3	98.0
Grodno	76.4	76.1	89.3	85.2	80.3	84.9	82.5
Minsk city	167.2	162.0	213.7	206.8	209.2	205.3	210.2
Minsk	63.2	61.2	66.2	66.6	66.0	65.5	65.0
Mogilev	78.1	76.1	77.4	81.4	81.5	76.8	77.5

Continued

	2014	2015	2016	2017	2018	2019	2020
insufficiently treated							
Republic of Belarus	3.4	5.7	6.4	4.3	4.0	4.1	2.7
Regions and Minsk city:							
Brest	0.3	0.3	0.2	0.3	0.2	0.1	0.1
Vitebsk	0.1	0.1	0.8	0.4	0.1	0.0	0.0
Gomel	0.0	0.0	1.6	0.1	0.4	0.2	0.1
Grodno	0.0	0.0	0.0	0.1	0.1	0.2	0.1
Minsk city	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Minsk	2.7	4.4	3.1	3.1	2.8	3.3	2.1
Mogilev	0.3	0.8	0.0	0.3	0.4	0.1	0.1

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

	2014	2015	2016	2017	2018	2019	2020
Wastewater discharge into surface water bodies, mln m^3	954	870	1 048	1 053	1 034	1 019	1 035
Contaminants discharged:							
biochemical oxygen demand (BOD_5), thsd t	8	8	9	10	9	10	11
salinity, thsd t	398	382	404	412	419	435	429
sulphate ions, thsd t	47	53	51	49	48	51	46
chloride ions, thsd t	73	66	69	69	70	73	74
ammonium ions, thsd t	5	6	6	6	5	4	5
suspended solids, thsd t	13	12	17	16	14	15	15
synthetic surface-active substances, t	106	107	105	110	82	88	80
ferrum, total, t	289	278	297	271	231	221	270
chromium, total, t	4	3	3	3	4	3	3
copper, t	5	5	6	5	4	3	3
zinc, t	24	25	29	29	20	22	17
lead, t	2	1	0.7	0.5	0.5	0.1	0.1

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

(million cubic metres per year)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	1 871.7	1 872.9	1 845.4	1 884.8	2 365.1	2 575.2	2 821.2
Regions and Minsk city:							
Brest	313.7	318.2	332.0	325.8	360.7	384.4	383.1
Vitebsk	215.6	215.7	202.1	203.5	360.6	371.2	406.2
Gomel	240.0	239.5	241.1	266.7	425.4	442.6	470.6
Grodno	215.4	215.2	212.3	210.4	236.7	235.2	337.3
Minsk city	348.1	348.3	378.7	393.9	398.7	414.4	449.3
Minsk	273.5	271.4	227.3	224.6	309.3	433.1	489.4
Mogilev	265.4	264.6	251.8	259.8	273.5	294.4	285.3

7.19. Average annual biochemical oxygen demand in river water[1)]

(miligrammes O_2 per cubic decimetre)

	2014	2015	2016	2017	2018	2019	2020
Berezina	2.48	2.80	2.48	2.53	2.57	2.17	2.24
Viliya	2.18	2.28	2.10	2.37	2.99	2.59	2.32
Dnieper	1.97	2.00	2.07	2.02	2.06	2.05	2.05
Western Dvina	2.04	2.17	2.14	2.11	2.11	2.03	2.03
Western Bug	3.10	4.06	3.77	3.13	2.56	3.54	4.07
Mukhovets	1.75	1.84	2.18	2.21	1.77	2.50	2.69
Neman	2.16	2.13	2.27	2.13	2.40	2.38	2.94
Pripyat	2.62	2.60	2.56	2.56	2.40	2.44	2.41
Svisloch	2.45	2.28	2.38	2.52	2.47	2.39	2.33
Sozh	1.92	1.99	1.97	1.96	2.05	2.04	2.00

[1)] Water quality indicator is not more than 3 miligrammes O_2 per cubic decimetre for surface water bodies used for breeding, fattening, wintering, and migration of fish species of salmon and sturgeon; for other surface water bodies it is not more than 6 miligrammes O_2 per cubic decimetre.

7.20. Concentrations of contaminants in river water

	2014	2015	2016	2017	2018	2019	2020
Concentration of ammonium ions (in terms of nitrogen)[1], miligrammes N per cubic decimetre							
Berezina	0.50	0.50	0.47	0.49	0.34	0.33	0.29
Viliya	0.23	0.18	0.21	0.12	0.14	0.05	0.08
Dnieper	0.37	0.31	0.31	0.27	0.26	0.27	0.28
Western Dvina	0.26	0.22	0.21	0.16	0.17	0.16	0.17
Western Bug	0.60	0.43	0.42	0.41	0.36	0.25	0.18
Mukhovets	0.47	0.22	0.22	0.31	0.28	0.15	0.23
Neman	0.24	0.19	0.16	0.23	0.18	0.19	0.17
Pripyat	0.33	0.35	0.35	0.26	0.13	0.16	0.12
Svisloch	0.40	0.43	0.44	0.42	0.37	0.38	0.40
Sozh	0.34	0.29	0.27	0.26	0.23	0.24	0.25
Concentration of phosphate ions (in terms of phosphorus)[2], miligrammes P per cubic decimetre							
Berezina	0.08	0.09	0.09	0.08	0.08	0.08	0.08
Viliya	0.03	0.03	0.04	0.03	0.03	0.03	0.03
Dnieper	0.09	0.09	0.08	0.07	0.07	0.07	0.07
Western Dvina	0.04	0.04	0.06	0.06	0.05	0.05	0.05
Western Bug	0.16	0.16	0.15	0.12	0.11	0.16	0.12
Mukhovets	0.10	0.10	0.08	0.08	0.07	0.08	0.12
Neman	0.05	0.05	0.05	0.04	0.05	0.04	0.04
Pripyat	0.05	0.05	0.06	0.06	0.06	0.05	0.05
Svisloch	0.06	0.07	0.07	0.07	0.06	0.08	0.08
Sozh	0.08	0.08	0.07	0.06	0.07	0.06	0.07

Continued

	2014	2015	2016	2017	2018	2019	2020
	Concentration of nitrates (nitrate ions)[3], miligrammes NO_3 per cubic decimetre						
Berezina	4.56	5.27	7.18	6.15	4.70	5.22	5.89
Viliya	4.65	4.25	5.00	4.93	3.88	3.24	4.27
Dnieper	4.65	4.79	4.41	4.29	4.92	5.04	4.67
Western Dvina	2.04	2.04	2.81	2.46	2.04	2.16	2.25
Western Bug	5.54	3.86	6.46	5.53	7.14	6.57	6.31
Mukhovets	3.63	2.84	6.13	5.05	3.80	4.01	3.50
Neman	5.76	4.56	4.99	5.92	4.84	4.10	4.47
Pripyat	3.10	2.53	2.49	2.97	2.90	2.12	3.45
Svisloch	4.87	5.27	6.38	7.05	6.74	6.03	6.05
Sozh	3.85	4.39	3.93	3.76	4.49	4.58	4.27

[1] Maximum permissible concentration in surface water bodies – 0.39 miligrammes N per cubic decimetre.
[2] Maximum permissible concentration in surface water bodies – 0.066 miligrammes P per cubic decimetre.
[3] Maximum permissible concentration in surface water bodies – 40 miligrammes NO_3 per cubic decimetre.

7.21. Concentrations of phosphate ions (in terms of phosphorus) in lakes[1)]

(miligrammes P per cubic decimetre)

	2014	2015	2016	2017	2018	2019	2020
Vygonoschanskoye	0.016	0.019	…	0.022	…	0.024	…
Drivyaty	0.012	0.014	…	0.017	…	0.007	…
Ezerishche	0.006	0.008	…	0.009	…	0.013	…
Lepelskoye	0.025	…	0.027	…	0.029	…	0.009
Losvido	0.011	0.024	…	0.020	…	0.023	…
Lukomskoye	0.015	…	0.017	…	0.007	…	0.008
Myadel	0.008	…	0.009	…	0.011	…	0.014
Myastro	0.004	0.006	…	0.007	…	0.009	…
Naroch	0.008	0.004	0.010	…	0.008	…	0.016
Nescherdo	0.010	…	0.014	…	0.010	…	0.013
Osveyskoye	0.016	0.005	…	0.008	…	0.004	…
Richy	0.012	0.007	…	0.010	…	0.004	…
Svir	0.008	0.005	…	0.005	…	0.005	…
Selyava	0.007	0.014	…	0.033	…	0.016	…
Snudy	0.011	0.006	0.009	…	0.004	…	0.003
Strusto	0.009	…	0.009	…	0.004	…	0.004
Chervonoye	0.080	0.038	…	0.048	…	0.066	…
Chernoye	0.021	0.019	0.036	0.019	0.011	0.014	0.026

[1)] Maximum permissible concentration in surface water bodies – 0.066 miligrammes P per cubic decimetre.

7.22. Drinking water sample tests for compliance with sanitary hygienic safety standards[1)]

	2018		2019		2020	
	total samples taken	of which samples not compliant with hygienic standard	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)	17 785	118	17 751	210	14 348	230
Public water supply	67 542	643	69 289	839	53 097	688
Corporate water supply	29 505	380	28 689	342	21 301	360
Decentralised water supply sources	26 754	4 201	33 910	6 837	20 326	3 069
For sanitary chemical parametres						
Centralised water supply sources (groundwater)	17 348	5 975	15 834	6 605	13 134	6 198
Public water supply	57 626	9 070	50 948	10 145	38 247	9 066
Corporate water supply	29 009	5 158	27 292	5 538	21 146	4 821
Decentralised water supply sources	25 893	7 494	34 262	11 343	19 797	5 863

[1)] Data of the Ministry of Health.

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 fund 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.

Agricultural 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 on Property.

8.1. Land area

(as of January 1; thousand hectares)

	2015	2017	2018	2019	2020	2021	
						total	as % of total
Total land area	20 760	20 760	20 760	20 760	20 760	20 761	100
of which:							
agricultural land	8 632	8 540	8 502	8 460	8 391	8 284	39.9
forest land	8 653	8 769	8 774	8 791	8 814	8 865	42.7
land under swamps and water bodies	1 309	1 271	1 273	1 274	1 265	1 246	6.0
other land	2 166	2 180	2 212	2 235	2 291	2 366	11.4

8.2. Area of agricultural land by region

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
				Total			
Republic of Belarus	8 632.3	8 581.9	8 540.2	8 501.6	8 460.1	8 390.6	8 283.9
Region:							
Brest	1 414.8	1 406.4	1 388.7	1 388.1	1 388.1	1 364.8	1 362.4
Vitebsk	1 490.0	1 474.3	1 467.2	1 454.8	1 435.4	1 425.2	1 371.1
Gomel	1 346.7	1 330.4	1 323.8	1 322.7	1 311.0	1 296.7	1 291.4
Grodno	1 236.5	1 233.0	1 230.8	1 218.2	1 217.8	1 214.3	1 213.6
Minsk	1 849.0	1 845.1	1 846.1	1 842.7	1 842.0	1 840.9	1 796.9
Mogilev	1 295.3	1 292.7	1 283.6	1 275.1	1 265.8	1 248.7	1 248.5
				of which arable			
Republic of Belarus	5 662.1	5 677.4	5 683.8	5 727.3	5 712.3	5 713.1	5 660.0
Region:							
Brest	828.4	832.3	834.4	835.2	835.0	842.9	841.6
Vitebsk	961.1	956.4	914.4	913.0	906.7	907.4	891.6
Gomel	863.8	881.3	914.2	916.2	911.5	909.5	904.9
Grodno	840.9	843.2	844.2	845.1	843.8	841.8	841.7
Minsk	1 316.4	1 313.0	1 316.0	1 350.9	1 349.8	1 348.5	1 316.3
Mogilev	851.5	851.2	860.6	866.9	865.5	863.0	863.9

8.3. Area of damaged land by region

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	26.4	26.9	27.3	26.1	25.4	25.1	25.3
Region:							
Brest	4.3	4.6	4.8	4.8	4.7	3.9	3.5
Vitebsk	4.5	4.6	5.3	4.7	4.6	4.9	5.2
Gomel	3.4	3.3	3.4	3.4	2.9	3.2	3.2
Grodno	4.5	4.8	4.6	4.5	4.6	4.5	4.0
Minsk	6.9	6.8	6.4	5.9	6.0	6.1	6.7
Mogilev	2.8	2.8	2.8	2.8	2.6	2.5	2.7

8.4. Area of reclaimed land

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
Total land reclaimed	3 440.1	3 442.5	3 445.4	3 446.6	3 448.5	3 453.7	3 454.8
of which:							
drained	3 410.4	3 412.3	3 415.1	3 416.3	3 418.2	3 423.4	3 424.5
irrigated	29.7	30.2	30.3	30.3	30.3	30.3	30.3
of which agricultural land	2 910.1	2 908.1	2 904.7	2 902.0	2 895.9	2 882.1	2 876.4
of which:							
drained	2 880.4	2 877.9	2 874.4	2 871.7	2 865.6	2 851.8	2 846.1
irrigated	29.7	30.2	30.3	30.3	30.3	30.3	30.3
Share of reclaimed land in total land area, %	16.6	16.6	16.6	16.6	16.6	16.6	16.6
of which:							
drained	16.4	16.4	16.5	16.5	16.5	16.5	16.5
irrigated	0.1	0.1	0.1	0.1	0.1	0.1	0.1

8.5. Area of drained land by region

(as of January 1; thousand hectares)

	2015	2017	2018	2019	2020	2021	
						total	of which agricultural land
Republic of Belarus	3 410.4	3 415.1	3 416.3	3 418.2	3 423.4	3 424.5	2 846.1
Region:							
Brest	758.5	759.0	759.2	759.2	759.2	759.3	687.9
Vitebsk	627.3	628.9	629.3	630.3	630.9	631.8	503.5
Gomel	651.3	652.0	652.0	652.3	656.4	656.2	502.3
Grodno	331.4	331.6	331.6	331.6	331.7	331.6	293.9
Minsk	707.9	707.9	707.9	708.0	708.0	708.0	596.0
Mogilev	334.0	335.7	336.3	336.8	337.2	337.6	262.5

8.6. Area of irrigated agricultural land by region

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	29.7	30.2	30.3	30.3	30.3	30.3	30.3
Region:							
Brest	4.4	4.9	4.9	4.9	4.9	4.9	4.9
Vitebsk	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Gomel	4.3	4.3	4.4	4.4	4.4	4.4	4.4
Grodno	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Minsk	1.9	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 agricultural land withdrawn from productive turnover

(as of January 1)

	2015	2016	2017	2018	2019	2020	2021
Land withdrawn from productive turnover:							
thsd ha	3.2	5.2	2.1	1.5	1.1	1.2	1.6
as % of total land area	0.02	0.03	0.01	0.01	0.01	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.

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)

	2014	2015	2016	2017	2018	2019	2020
Mineral fertilizers							
Republic of Belarus	162	148	112	110	121	120	140
Region:							
Brest	167	145	129	129	134	142	167
Vitebsk	131	104	59	57	69	63	69
Gomel	176	156	104	106	130	114	130
Grodno	201	187	134	156	178	181	193
Minsk	168	172	149	135	133	130	156
Mogilev	131	121	88	75	81	90	126

Continued

	2014	2015	2016	2017	2018	2019	2020
of which:							
nitrogenous							
Republic of Belarus	61	60	47	55	55	55	63
Region:							
Brest	63	61	53	60	58	59	69
Vitebsk	47	44	28	33	36	32	37
Gomel	63	66	43	55	57	53	60
Grodno	82	76	62	76	82	86	85
Minsk	63	65	58	63	59	61	70
Mogilev	48	45	34	41	37	42	59
phosphorous							
Republic of Belarus	20	18	10	10	14	12	14
Region:							
Brest	20	15	11	12	14	13	15
Vitebsk	13	14	4	4	6	7	7
Gomel	24	23	11	11	18	13	14
Grodno	27	23	10	15	16	14	17
Minsk	22	22	15	14	18	16	19
Mogilev	18	10	8	6	11	9	9
potassium							
Republic of Belarus	81	70	55	45	52	52	63
Region:							
Brest	84	69	65	57	62	69	84
Vitebsk	72	46	27	20	27	25	25
Gomel	89	67	50	40	55	48	55
Grodno	93	88	62	65	80	81	91
Minsk	84	84	75	57	55	53	67
Mogilev	64	66	46	28	33	39	58

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

(percent)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	83.1	83.5	80.2	79.9	79.7	80.5	82.5
Region:							
Brest	88.2	87.4	86.5	85.7	85.1	86.4	90.7
Vitebsk	79.2	77.1	71.2	68.8	70.7	69.1	71.0
Gomel	85.0	84.8	81.7	82.6	81.6	82.0	82.9
Grodno	84.9	83.8	80.4	82.1	84.2	85.8	86.6
Minsk	85.5	88.4	86.4	84.4	82.5	84.1	85.0
Mogilev	74.8	78.3	73.4	75.1	73.2	74.7	78.4

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

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

	2014	2015	2016	2017	2018	2019	2020
	Mineral fertilizers						
Republic of Belarus	236	209	158	155	168	165	191
Region:							
Brest	266	230	200	197	206	218	249
Vitebsk	185	147	85	84	102	94	101
Gomel	280	237	155	152	185	163	182
Grodno	272	250	181	210	234	237	248
Minsk	232	223	192	177	173	166	199
Mogilev	192	169	126	105	114	125	173

Continued

	2014	2015	2016	2017	2018	2019	2020
			of which:				
			nitrogenous				
Republic of Belarus	87	83	65	76	76	76	86
Region:							
Brest	99	95	81	91	89	91	102
Vitebsk	64	60	39	48	51	46	53
Gomel	100	99	65	79	81	76	85
Grodno	108	100	82	101	106	111	109
Minsk	85	84	75	82	76	78	89
Mogilev	71	63	49	57	52	59	81
			phosphorous				
Republic of Belarus	32	27	15	16	21	17	20
Region:							
Brest	35	26	19	20	24	22	24
Vitebsk	20	21	6	6	10	10	10
Gomel	40	36	17	16	26	18	20
Grodno	39	33	15	21	23	20	25
Minsk	31	31	21	19	25	21	25
Mogilev	28	15	12	9	16	12	13
			potassium				
Republic of Belarus	117	99	77	63	72	72	85
Region:							
Brest	132	109	100	87	93	105	122
Vitebsk	101	66	40	30	41	37	37
Gomel	140	102	74	57	78	68	78
Grodno	125	117	84	88	105	105	114
Minsk	116	109	96	76	72	67	85
Mogilev	94	91	66	38	46	54	80

9.4. Application of organic fertilizers in agricultural organisations by region

(tonnes)

	2014	2015	2016	2017	2018	2019	2020
Per hectare of agricultural land							
Republic of Belarus	6.9	6.8	6.5	6.6	6.3	6.7	7.1
Region:							
Brest	9.3	9.4	8.6	9.0	8.8	9.4	9.9
Vitebsk	4.0	3.5	3.6	3.5	3.3	3.7	3.7
Gomel	6.7	6.0	5.9	5.5	5.4	5.4	6.4
Grodno	8.2	8.3	7.9	7.8	7.7	8.2	8.2
Minsk	7.4	7.5	7.2	8.0	7.4	8.0	8.2
Mogilev	6.2	6.4	5.9	5.7	5.1	5.3	5.7
Per hectare of arable land							
Republic of Belarus	10.7	10.3	9.7	9.8	9.2	9.8	10.2
Region:							
Brest	16.0	16.0	14.4	14.8	14.4	15.4	16.1
Vitebsk	6.1	5.3	5.4	5.5	5.1	5.6	5.6
Gomel	11.2	9.4	9.1	8.1	7.9	7.9	9.2
Grodno	12.0	12.1	11.4	11.4	11.1	11.7	11.7
Minsk	10.7	10.4	9.9	10.9	9.9	10.6	10.9
Mogilev	9.6	9.6	8.9	8.3	7.4	7.6	8.1

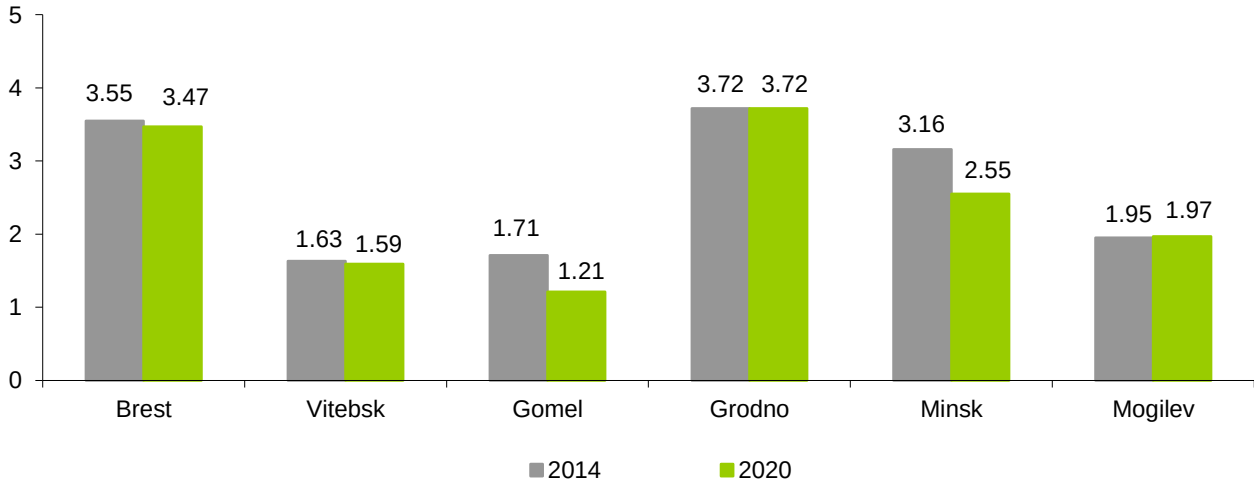
9.5. Application of pesticides per hectare of arable land by region

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	2.63	1.82	1.72	1.88	1.99	2.19	2.39
Region:							
Brest	3.55	2.48	2.40	2.69	2.89	3.10	3.47
Vitebsk	1.63	1.15	1.07	1.33	1.56	1.47	1.59
Gomel	1.71	1.21	0.84	1.00	0.78	0.94	1.21
Grodno	3.72	2.76	2.68	2.91	3.28	3.22	3.72
Minsk	3.16	2.18	2.24	2.14	2.31	2.45	2.55
Mogilev	1.95	1.15	0.95	1.24	1.15	2.06	1.97

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

(kilogrammes)



10. SPECIALLY PROTECTED NATURAL AREAS

Specially protected natural areas are the part of the territory of the Republic of Belarus with valuable natural complexes and/or features in respect to which special protection and use regulations are established.

Nature reserve is a natural area designated as such for the purpose of establishing of conditions for the natural course of processes in nature, preservation of natural state and study of valuable natural complexes and features.

National park is a specially protected natural area designated as such to preserve, restore (reproduce) valuable complexes and features, to sustainable serve for nature protection, research, educational, tourism and recreational purposes.

Refuge is a specially protected natural area designated as such to restore and preserve (reproduce) valuable natural complexes and features.

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

10.1. Specially protected natural areas in the Republic of Belarus

(as of January 1)

	2016	2018	2019	2020	2021		
					number of areas	total area, thsd ha	share of specially protected natural areas in total country area, %
Total specially protected natural areas	1 265	1 285	1 289	1 297	1 307	1 879.1	9.0
of which:							
nature reserves, national parks	5	5	5	5	5	475.5	2.3
refuges	373	376	381	381	381	1 390.3	6.7
national significance	98	99	99	99	99	972.1	4.7
local significance	275	277	282	282	282	418.2	2.0
natural monuments	887	904	903	911	921	13.3	0.1
national significance	319	326	326	326	326	3.5	0.0
local significance	568	578	577	585	595	9.8	0.0

10.2. Specially protected natural areas by regions and Minsk city as of January 1, 2021

	Nature reserves, national parks			Refuges of national significance		
	number	thsd ha	as % of total land area	number	thsd ha	as % of total land area
Republic of Belarus	5[1)]	475.5	2.3	99[1)]	972.1	4.7
Regions and Minsk city:						
Brest	1	86.3	2.6	18	344.7	10.5
Vitebsk	3	132.4	3.3	25	193.1	4.8
Gomel	1	88.0	2.2	13	112.7	2.8
Grodno	2	64.0	2.5	15	130.6	5.2
Minsk city	–	–	–	2	0.5	1.4
Minsk	2	104.8	2.6	23	125.4	3.1
Mogilev	–	–	–	5	65.1	2.2

	Refuges of local significance			Natural monuments	
	number	thsd ha	as % of total land area	of national significance	of local significance
Republic of Belarus	282	418.2	2.0	326	595
Regions and Minsk city:					
Brest	32	58.4	1.8	29	83
Vitebsk	66	73.4	1.8	86	141
Gomel	41	96.3	2.4	13	56
Grodno	28	55.0	2.2	95	122
Minsk city	–	–	–	2	8
Minsk	50	68.3	1.7	87	108
Mogilev	65	66.8	2.3	14	77

[1)] The total number of nature reserves, national parks and refuges of national significance is given considering the fact that the Berezinsky Biosphere Reserve, the National Park “Belovezhskaya Pushcha”, the National Park “Narochansky” and some refuges of national significance are situated in the territory of several regions.

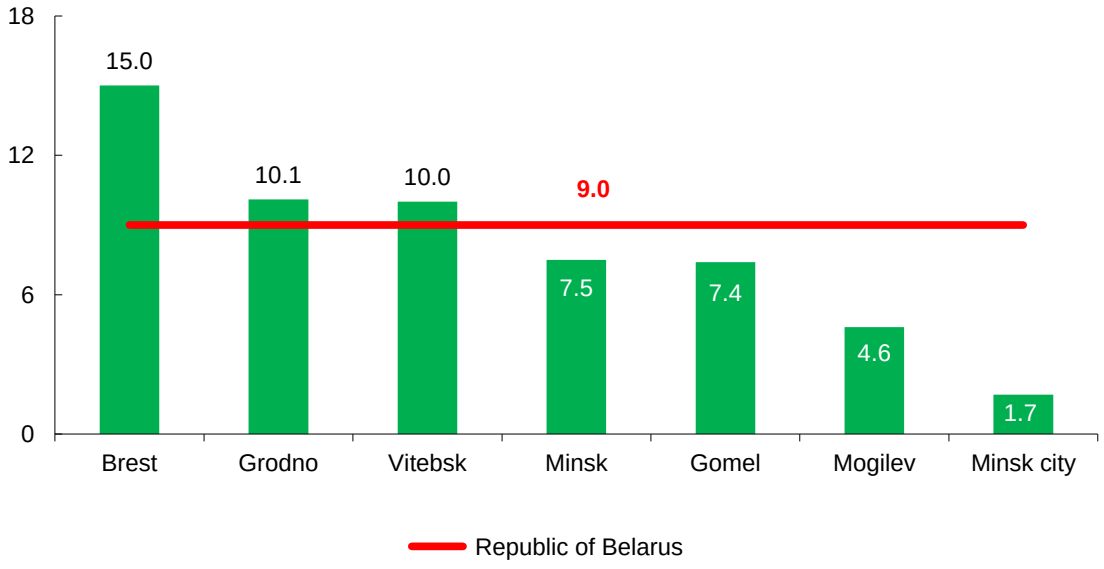
10.3. Proportion of specially protected natural areas in the total area of the country, regions and Minsk city

(as of January 1; percent)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	8.2	8.8	8.7	8.7	8.9	9.0	9.0
Regions and Minsk city:							
Brest	14.1	14.2	14.4	14.4	14.7	15.0	15.0
Vitebsk	8.8	9.5	9.5	9.5	9.7	9.8	10.0
Gomel	6.8	7.4	7.4	7.4	7.4	7.4	7.4
Grodno	9.8	9.9	10.1	10.1	10.1	10.1	10.1
Minsk city	0.4	1.7	1.7	1.7	1.7	1.7	1.7
Minsk	6.9	7.6	7.6	7.6	7.6	7.5	7.5
Mogilev	3.8	4.4	3.0	3.5	4.6	4.6	4.6

10.4. Proportion of specially protected natural areas in the area of the country, regions and Minsk city as of January 1, 2021

(percent)



10.5. Main characteristics of nature reserves and national parks

(as of January 1, 2021)

	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**	86.1	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**	217.2	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 Pruzhany 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**	64.2	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 Polessye 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.

10.6. Rare and endangered wildlife species listed in the Red Book of the Republic of Belarus

(number of species)

	2014	2015	2016	2017	2018	2019	2020
Plants – total	303	303	303	303	303	303	303
of which:							
angiosperms	173	173	173	173	173	173	173
gymnosperms	1	1	1	1	1	1	1
horsetails, club mosses, ferns	15	15	15	15	15	15	15
mosses	34	34	34	34	34	34	34
lichens	25	25	25	25	25	25	25
algae	21	21	21	21	21	21	21
fungi	34	34	34	34	34	34	34
Mammals	20	20	20	20	20	20	20
Birds	70	70	70	70	70	70	70
Reptiles	2	2	2	2	2	2	2
Amphibians	2	2	2	2	2	2	2
Fish and fish-shaped	9	9	9	9	9	9	9

11. PROTECTION AND USE OF FOREST RESOURCES

Forest fund land is forest land and non-forest land within the boundaries of forest fund 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 were 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 types.

Timber felling with final purpose is clearcuts, gradual and selective cuttings of ripe and overripe stands carried out for the purpose of 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.

Data for the Minsk region are presented taking into account data for the Minsk city.

11.1. Forest fund land by region[1)]

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
Total area of forest fund							
Republic of Belarus	9 499.5	9 549.2	9 565.8	9 582.0	9 598.5	9 620.9	9 690.0
Region:							
Brest	1 411.1	1 414.1	1 414.7	1 416.5	1 421.7	1 421.9	1 426.7
Vitebsk	1 866.4	1 885.6	1 889.3	1 892.7	1 894.5	1 896.9	1 930.1
Gomel	2 270.9	2 282.9	2 284.3	2 284.5	2 291.7	2 298.6	2 307.7
Grodno	989.1	989.3	990.1	996.1	996.6	999.1	1 010.8
Minsk	1 713.9	1 715.2	1 723.7	1 727.0	1 727.1	1 734.3	1 735.9
Mogilev	1 248.1	1 262.2	1 263.7	1 265.1	1 266.9	1 270.2	1 278.8
of which forest-covered area							
Republic of Belarus	8 204.1	8 239.8	8 259.4	8 260.9	8 256.9	8 280.3	8 334.4
Region:							
Brest	1 186.7	1 188.6	1 187.4	1 185.7	1 193.6	1 192.8	1 191.8
Vitebsk	1 616.0	1 633.5	1 641.8	1 644.3	1 646.8	1 655.7	1 687.2
Gomel	1 892.3	1 896.3	1 902.4	1 890.4	1 879.1	1 882.9	1 892.9
Grodno	882.6	883.0	883.5	897.9	897.9	897.7	905.2
Minsk	1 527.0	1 532.7	1 535.9	1 533.1	1 527.6	1 534.6	1 535.0
Mogilev	1 099.5	1 105.6	1 108.6	1 109.5	1 111.9	1 116.7	1 122.3

[1)] Data of the Ministry of Forestry.

11.2. Forest cover of the territory at the country, regional and district levels[1)]

(as of January 1; percent)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	39.5	39.7	39.8	39.8	39.8	39.9	40.1
Brest region	36.2	36.3	36.3	36.2	36.4	36.4	36.4
District:							
Baranovichy	30.4	30.5	30.6	30.5	30.7	30.6	30.4
Bereza	25.7	25.6	25.6	25.5	25.4	25.4	25.2
Brest	33.5	33.5	33.4	33.7	33.6	33.6	33.4
Gantsevichy	53.3	53.4	53.4	53.5	56.8	56.5	56.7
Drogichin	26.2	26.1	26.1	26.0	25.9	26.1	26.1
Zhabinka	18.8	18.7	18.7	18.7	18.7	18.7	18.6
Ivanovo	27.9	28.1	28.1	28.2	28.5	28.5	29.1
Ivatsevichy	49.1	49.0	49.0	48.9	49.3	49.1	48.9
Kamenets	28.4	28.4	28.4	28.4	29.0	28.9	29.2
Kobrin	26.9	27.0	27.0	26.9	26.7	26.6	26.3
Luninets	43.6	43.7	43.7	43.7	43.3	43.1	42.5
Lyakhovichy	37.3	37.3	37.3	37.3	37.0	36.7	36.7
Malorita	47.3	47.4	47.3	47.4	47.1	47.2	47.3
Pinsk	30.7	30.7	30.7	30.4	30.7	30.9	30.4
Pruzhany	41.6	42.0	43.3	43.3	43.5	43.4	43.3
Stolin	36.9	36.9	36.9	36.7	36.5	37.2	37.6

Continued

	2015	2016	2017	2018	2019	2020	2021
Vitebsk region	40.3	40.8	40.8	41.0	41.1	41.3	42.1
District:							
Beshenkovichy	27.6	27.7	27.7	27.8	28.3	28.8	29.1
Braslav	35.3	35.3	35.3	35.3	34.7	34.8	34.8
Verkhnedvinsk	40.3	40.9	40.9	40.9	40.8	41.2	41.5
Vitebsk	37.2	37.6	37.6	37.5	37.5	37.8	39.6
Glubokoye	26.9	27.6	27.6	27.6	27.6	27.8	28.1
Gorodok	52.7	54.7	54.7	55.0	55.0	55.7	56.9
Dokshitsy	49.3	49.7	49.7	51.4	51.5	51.6	51.7
Dubrovno	25.4	26.4	26.4	26.6	26.4	27.1	27.8
Lepel	53.8	53.9	53.9	53.8	53.9	55.1	56.9
Liozno	44.8	44.8	44.8	44.8	45.0	45.4	45.6
Miory	26.3	26.3	26.3	26.3	26.7	26.7	27.0
Orsha	22.2	22.7	22.7	22.7	22.5	22.7	23.0
Polotsk	54.8	55.1	55.2	55.2	55.9	55.9	56.5
Postavy	34.0	34.0	34.0	34.6	34.5	34.8	35.9
Rossony	71.2	71.3	71.3	71.4	71.3	71.3	72.2
Senno	37.6	39.2	39.2	39.2	39.2	39.3	40.6
Tolochin	32.0	32.4	32.4	32.5	33.0	32.9	33.9
Ushachy	41.9	42.5	42.5	42.7	43.4	43.6	44.4
Chashniki	29.3	29.3	29.3	29.4	29.7	30.1	36.6
Sharkovshchina	24.2	24.2	24.2	25.0	25.1	25.2	25.4
Shumilino	42.8	42.8	42.8	42.7	42.6	42.5	44.0

Continued

	2015	2016	2017	2018	2019	2020	2021
Gomel region	46.9	47.0	46.9	47.1	46.4	46.6	46.9
District:							
Bragin	37.1	37.2	37.2	37.3	36.1	37.9	40.6
Buda-Koshelyovo	23.1	23.3	23.3	23.6	23.8	24.1	24.0
Vetka	44.5	45.0	45.0	46.4	46.7	47.9	48.4
Gomel	35.3	35.5	35.9	35.7	35.3	35.1	37.4
Dobrush	25.2	25.3	25.3	25.6	25.5	25.7	26.4
Yelsk	56.7	56.6	56.6	56.7	56.2	56.2	55.3
Zhitkovichy	54.6	54.6	54.6	54.7	54.8	55.1	55.3
Zhlobin	34.5	34.5	34.5	34.4	33.5	33.3	33.3
Kalinkovichy	50.1	50.1	50.1	50.2	49.1	49.2	48.8
Korma	30.5	33.2	33.2	33.3	32.8	33.0	32.7
Lelchitsy	69.1	69.2	69.2	69.1	68.2	68.6	68.4
Loyev	36.4	36.6	36.6	37.1	35.7	35.4	35.2
Mozyr	53.6	53.8	53.8	53.3	52.2	51.7	51.0
Narovlya	64.4	64.5	64.5	64.7	64.1	66.2	67.3
Oktyabrsky	56.7	56.7	56.7	56.6	55.4	54.9	56.3
Petrikov	55.0	55.2	55.2	55.3	54.5	54.9	54.9
Rechitsa	43.7	43.6	43.6	43.6	42.1	41.6	41.3
Rogachev	33.7	33.8	33.8	33.8	33.3	33.1	33.2
Svetlogorsk	50.9	50.9	50.9	51.5	50.5	50.1	49.8
Khoyniki	48.4	47.3	47.3	47.6	47.3	48.0	50.2
Chechersk	49.0	49.0	49.0	49.0	48.3	48.2	47.8

Continued

	2015	2016	2017	2018	2019	2020	2021
Grodno region	35.1	35.1	35.1	35.2	35.7	35.7	36.0
District:							
Berestovitsa	15.3	15.3	15.3	15.2	15.1	15.0	15.4
Volkovysk	23.0	22.9	22.9	22.9	22.8	22.6	22.5
Voronovo	26.9	27.0	27.0	27.0	27.4	27.5	27.3
Grodno	38.0	37.9	37.8	37.7	37.7	37.5	39.1
Dyatlovo	44.8	45.0	45.0	45.0	46.4	46.3	46.7
Zelva	16.6	16.5	16.5	17.3	17.4	17.4	17.7
Ivye	44.4	44.5	44.5	44.5	45.4	45.0	46.0
Korelichy	20.6	20.7	20.7	20.7	21.2	21.1	21.1
Lida	26.2	26.2	26.2	26.1	27.4	27.6	27.7
Mosty	34.7	34.7	34.7	34.7	35.1	35.2	35.2
Novogrudok	40.9	41.2	41.2	41.2	41.8	41.8	42.5
Ostrovets	48.7	48.7	48.7	48.7	48.7	48.7	49.3
Oshmyany	33.9	34.1	34.1	34.0	35.4	35.5	35.6
Svisloch	47.2	47.1	47.1	47.3	48.2	48.4	49.0
Slonim	36.6	36.5	36.5	36.6	36.2	36.1	36.3
Smorgon	37.3	37.4	37.4	37.4	38.5	39.1	39.7
Shchuchin	32.6	32.5	32.5	32.4	33.3	33.4	33.7

Continued

	2015	2016	2017	2018	2019	2020	2021
Minsk region	38.0	38.1	38.2	38.1	38.0	38.2	38.2
District:							
Berezino	49.2	49.6	49.6	50.8	51.3	51.9	51.3
Borisov	50.7	51.5	51.5	51.5	51.4	51.1	50.8
Vileyka	40.7	40.7	40.7	40.7	40.6	42.1	42.3
Volozhin	37.0	37.0	37.0	37.1	36.9	37.8	37.2
Dzerzhinsk	29.4	29.1	29.1	29.1	28.9	29.1	29.4
Kletsk	25.8	25.7	25.7	25.7	25.3	25.4	25.2
Kopyl	17.7	17.8	17.8	18.1	17.7	17.5	17.4
Krupki	48.2	48.2	50.7	50.7	50.8	50.8	51.9
Logoysk	48.8	48.8	48.8	49.4	50.3	50.1	50.1
Lyuban	37.3	37.5	37.5	37.9	36.3	36.0	35.8
Minsk	26.1	26.1	26.1	26.0	26.1	26.1	27.9
Molodechno	31.3	31.5	31.5	31.6	31.8	31.8	31.8
Myadel	42.2	42.2	42.2	42.2	42.1	42.0	43.0
Nesvizh	11.1	11.1	11.1	11.1	11.0	11.3	11.2
Pukhovichy	39.2	39.2	39.2	39.3	39.2	39.5	39.5
Slutsk	21.7	21.6	21.6	22.1	21.5	21.5	21.4
Smolevichy	33.3	33.0	33.0	28.9	28.5	29.3	29.2
Soligorsk	35.4	35.5	35.5	35.3	34.5	34.6	35.3
Staryie Dorogi	49.8	49.8	49.8	50.5	48.9	48.6	48.2
Stolbtsy	46.2	46.3	46.3	46.4	46.3	46.9	46.8
Uzda	39.4	39.4	39.4	39.4	39.0	39.0	38.5
Cherven	39.2	40.5	40.5	38.3	37.3	38.5	38.4

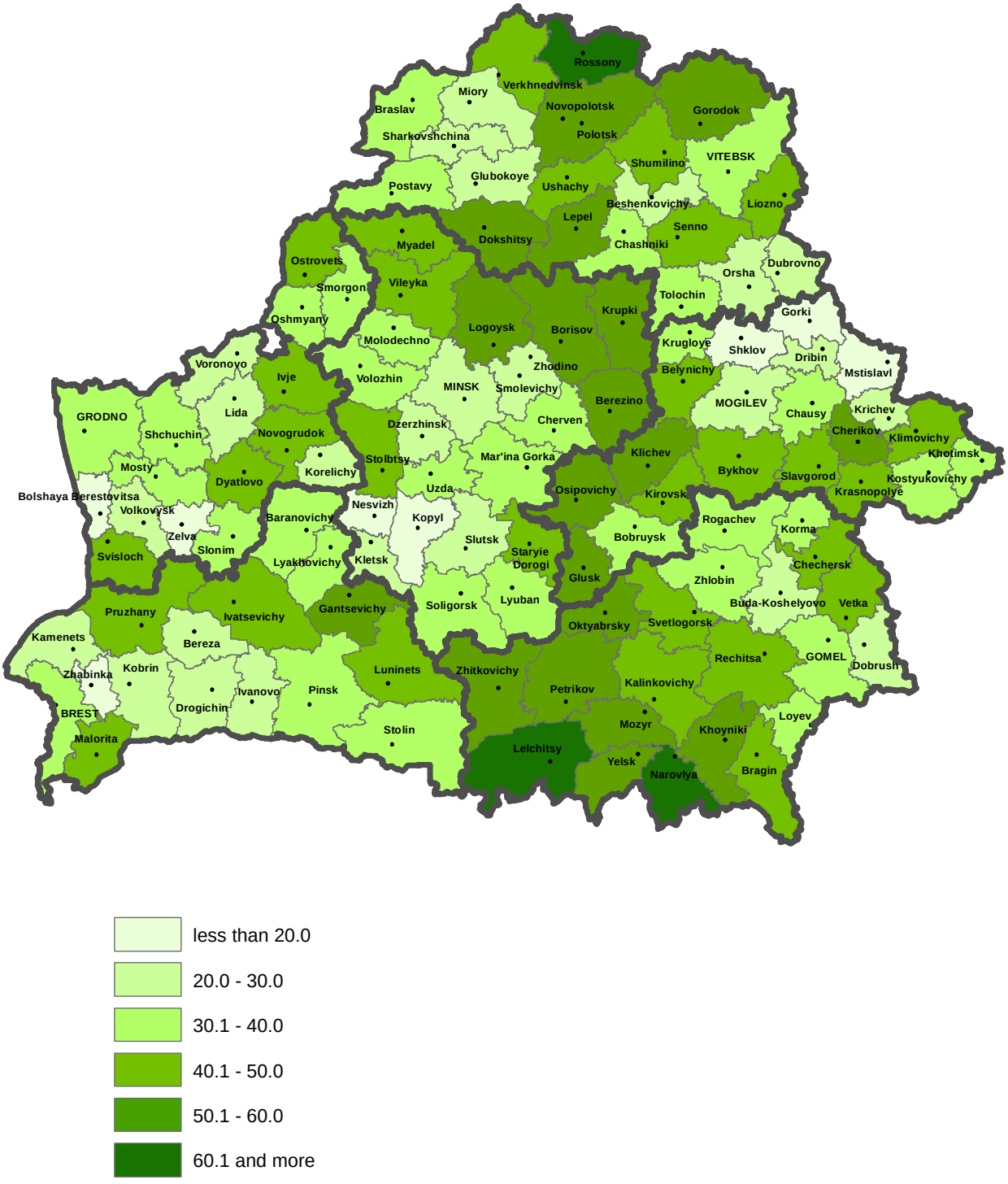
Continued

	2015	2016	2017	2018	2019	2020	2021
Mogilev region	37.8	38.0	38.1	38.2	38.0	38.4	38.6
District:							
Belynichy	45.0	45.3	45.3	45.3	45.0	45.8	46.3
Bobruysk	37.4	37.4	37.5	37.5	37.4	37.2	37.1
Bykhov	44.1	44.3	44.3	44.5	44.2	44.4	44.9
Glusk	52.7	52.8	52.8	52.7	51.9	51.8	51.4
Gorki	16.4	16.5	16.5	16.6	16.4	16.6	16.5
Dribin	26.9	27.1	27.1	27.1	26.9	27.9	28.1
Kirovsk	40.4	40.4	40.4	40.5	40.2	40.3	40.6
Klimovichy	41.0	41.1	41.4	41.8	41.7	41.8	41.9
Klichev	57.7	58.5	58.6	58.9	58.4	58.7	58.6
Kostyukovichy	33.8	34.0	34.0	33.9	33.9	35.6	36.4
Krasnopolye	46.0	46.0	46.0	46.1	46.1	46.6	47.4
Krichev	25.0	25.2	25.2	25.1	25.5	25.5	25.9
Krugloye	30.6	31.0	32.0	30.6	30.5	30.7	31.9
Mogilev	24.9	25.1	25.2	25.4	25.4	26.0	26.0
Mstislavl	16.0	16.2	16.2	16.4	16.4	17.1	17.3
Osipovichy	57.0	56.7	56.7	56.5	56.2	56.7	56.3
Slavgorod	42.9	43.0	43.0	43.0	43.1	43.1	43.2
Khotimsk	33.3	33.3	33.3	33.3	33.3	34.7	35.0
Chausy	30.8	31.6	31.6	32.0	32.3	32.4	32.5
Cherikov	50.0	50.6	50.6	51.0	51.3	51.7	52.1
Shklov	18.1	18.3	18.3	18.2	18.1	18.3	18.5

[1)] Data of the Ministry of Forestry.

11.3. Forest cover of the territory by districts as of January 1, 2021[1)]

(percent)



[1)] Data of the Ministry of Forestry.

11.4. Main activities in forestry

	2014	2015	2016	2017	2018	2019	2020
Reforestation and afforestation, ha:	32 374	33 094	37 179	40 408	43 437	54 027	49 230
assistance to natural forest regeneration and preservation of undergrowth	6 127	6 608	5 603	6 224	6 946	8 626	8 692
forest planting and seeding	26 247	26 486	31 576	34 184	36 491	45 401	40 538
Introduction of forest plantations in the category of valuable forest plantations, ha	59 237	54 039	44 537	39 644	35 856	30 405	21 394
Seed harvesting of wood and shrub species, t	86.1	162.1	27.6	44.7	258.4	46.2	87.2
Forest felling area[1)], thsd ha	523.9	466.9	487.5	451.0	499.1	489.1	504.2
Marketable timber harvested[1)], thsd m^3	19 550	18 473	21 071	23 801	28 590	26 996	27 049
Forest pest and disease control, ha:							
biological	23 904	22 458	21 640	23 528	47 266	27 179	30 168
chemical	356	357	1 367	1 052	675	6 047	6 431
Forest fire control with the aid of aviation, thsd ha	9 420	9 461	9 526	9 560	9 570	9 315	9 458

Continued

	2014	2015	2016	2017	2018	2019	2020
				As % of previous year			
Reforestation and afforestation	106.9	102.2	112.3	108.7	107.5	124.4	91.1
Introduction of forest plantations in the category of valuable forest plantations	101.5	91.2	82.4	89.0	90.4	84.8	70.4
Seed harvesting of wood and bush species	49.3	188.3	17.0	162.2	577.9	17.9	188.6
Forest felling area	97.9	89.1	104.4	92.5	110.7	98.0	103.1
Marketable timber harvested	105.6	94.5	114.1	113.0	120.1	94.4	100.2
Forest pest and disease control							
biological	68.1	94.0	96.4	108.7	200.9	57.5	111.0
chemical	64.0	100.3	382.9	77.0	64.1	896.2	106.3
Forest fire control with the aid of aviation	100.1	100.4	100.7	100.4	100.1	97.3	101.5
				As % of 2015			
Reforestation and afforestation	–	100	112.3	122.1	131.3	163.3	148.8
Introduction of forest plantations in the category of valuable forest plantations	–	100	82.4	73.4	66.4	56.3	39.6
Seed harvesting of wood and bush species	–	100	17.0	27.6	159.4	28.5	53.8
Forest felling area	–	100	104.4	96.6	106.9	104.7	108.0
Marketable timber harvested	–	100	114.1	128.8	154.8	146.1	146.4
Forest pest and disease control							
biological	–	100	96.4	104.8	210.5	121.0	134.3
chemical	–	100	382.9	294.8	189.1	1 694.4	1 802.0
Forest fire control with the aid of aviation	–	100	100.7	101.0	101.1	98.5	100.0

[1)] Data of the Ministry of Forestry.

11.5. Reforestation and afforestation by region

	2014	2015	2016	2017	2018	2019	2020
Total, hectares							
Republic of Belarus	32 374	33 094	37 179	40 408	43 437	54 027	49 230
Region:							
Brest	3 574	3 383	3 762	3 753	6 525	7 393	6 293
Vitebsk	6 144	6 048	6 122	5 922	5 484	5 400	4 742
Gomel	7 329	7 509	8 896	11 963	13 441	19 962	17 451
Grodno	4 214	3 810	3 476	2 651	3 405	3 860	4 729
Minsk	5 668	5 471	8 570	10 411	8 977	10 218	9 514
Mogilev	5 445	6 873	6 353	5 708	5 605	7 194	6 501
of which:							
assistance to natural forest regeneration and preservation of undergrowth							
Republic of Belarus	6 127	6 608	5 603	6 224	6 946	8 626	8 692
Region:							
Brest	834	662	642	853	1 270	1 457	1 350
Vitebsk	1 934	1 892	1 692	1 362	1 495	1 294	1 063
Gomel	971	1 117	1 179	1 377	1 482	2 421	2 735
Grodno	502	522	389	390	433	633	827
Minsk	936	1 103	764	1 117	1 116	1 297	1 450
Mogilev	950	1 312	937	1 125	1 150	1 524	1 267
forest planting and seeding							
Republic of Belarus	26 247	26 486	31 576	34 184	36 491	45 401	40 538
Region:							
Brest	2 740	2 721	3 120	2 900	5 255	5 936	4 943
Vitebsk	4 210	4 156	4 430	4 560	3 989	4 106	3 679
Gomel	6 358	6 392	7 717	10 586	11 959	17 541	14 716
Grodno	3 712	3 288	3 087	2 261	2 972	3 227	3 902
Minsk	4 732	4 368	7 806	9 294	7 861	8 921	8 064
Mogilev	4 495	5 561	5 416	4 583	4 455	5 670	5 234

Continued

	2014	2015	2016	2017	2018	2019	2020
of which using selected planting and improved seeding stock							
Republic of Belarus	9 915	10 611	12 908	15 512	18 974	25 739	21 922
Region:							
Brest	1 170	1 201	1 204	1 422	2 485	3 467	2 542
Vitebsk	1 572	1 510	1 890	2 381	2 466	2 804	2 071
Gomel	1 425	1 836	2 924	4 915	6 236	9 832	7 833
Grodno	2 037	1 705	1 630	1 318	1 619	1 854	2 122
Minsk	2 053	2 012	2 788	2 779	3 678	4 694	4 472
Mogilev	1 658	2 347	2 472	2 697	2 490	3 088	2 882

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

(hectares)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	59 237	54 039	44 537	39 644	35 856	30 405	21 394
Region:							
Brest	7 246	5 715	3 748	3 441	3 520	3 525	2 035
Vitebsk	10 461	10 860	9 735	7 754	6 752	4 724	3 700
Gomel	14 644	13 110	11 355	10 141	9 279	7 226	5 026
Grodno	5 353	4 561	2 913	3 731	4 340	3 973	3 145
Minsk	8 720	8 687	7 877	7 754	6 500	5 400	3 158
Mogilev	12 813	11 106	8 909	6 823	5 465	5 557	4 330

11.7. Seed harvesting of wood and shrub species by region

(tonnes)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	86.1	162.1	27.6	44.7	258.4	46.2	87.2
Region:							
Brest	8.1	11.2	3.3	11.6	20.7	6.1	15.8
Vitebsk	7.0	13.2	3.9	3.0	16.3	1.7	2.4
Gomel	27.6	87.0	3.4	10.2	75.0	23.6	38.7
Grodno	6.2	6.5	4.4	7.0	20.0	3.6	3.9
Minsk	14.3	19.1	8.5	8.2	45.1	7.6	19.1
Mogilev	22.9	25.1	4.1	4.7	81.3	3.6	7.1
of which: Coniferous species							
Republic of Belarus	11.4	31.5	7.0	15.1	7.6	12.6	15.7
Region:							
Brest	1.5	1.5	0.6	1.4	0.7	2.8	2.6
Vitebsk	1.3	11.6	0.8	2.3	0.4	0.3	0.7
Gomel	2.7	2.9	1.9	3.6	2.7	4.1	5.7
Grodno	1.0	2.9	0.3	1.6	1.1	0.9	1.7
Minsk	2.5	7.3	1.5	3.0	1.7	3.2	3.3
Mogilev	2.3	5.3	2.0	3.1	1.0	1.2	1.7
of which: pine tree							
Republic of Belarus	10.9	7.2	6.2	11.2	6.4	12.5	15.1
Region:							
Brest	1.5	0.8	0.5	1.1	0.7	2.8	2.6
Vitebsk	1.3	0.4	0.4	0.7	0.2	0.3	0.6
Gomel	2.7	2.8	1.9	3.6	2.7	4.1	5.7
Grodno	1.0	0.4	0.3	0.9	0.3	0.9	1.4
Minsk	2.5	0.9	1.1	2.0	1.4	3.2	3.2
Mogilev	1.9	2.0	1.9	2.9	1.0	1.2	1.7

Continued

	2014	2015	2016	2017	2018	2019	2020
				spruce			
Republic of Belarus	0.5	24.3	0.8	3.8	1.2	0.0	0.4
Region:							
Brest	–	0.6	0.1	0.2	0.0	–	0.0
Vitebsk	0.0	11.2	0.3	1.6	0.2	–	0.2
Gomel	0.0	0.1	0.0	0.1	0.0	0.0	–
Grodno	–	2.5	0.0	0.7	0.8	0.0	0.1
Minsk	0.0	6.5	0.4	1.0	0.2	–	0.1
Mogilev	0.5	3.3	0.0	0.2	–	0.0	0.0
				Deciduous and shrub species			
Republic of Belarus	74.7	130.6	20.6	29.6	250.8	33.6	71.4
Region:							
Brest	6.6	9.8	2.8	10.2	20.0	3.4	13.1
Vitebsk	5.7	1.6	3.1	0.7	16.0	1.5	1.7
Gomel	24.9	84.1	1.5	6.5	72.3	19.4	33.1
Grodno	5.2	3.6	4.1	5.4	18.9	2.7	2.3
Minsk	11.9	11.8	7.0	5.1	43.4	4.4	15.8
Mogilev	20.5	19.8	2.2	1.7	80.3	2.3	5.5
				of which oak			
Republic of Belarus	66.0	122.1	12.7	23.6	239.9	22.6	62.8
Region:							
Brest	5.2	8.2	1.2	9.5	18.5	2.1	12.2
Vitebsk	4.7	0.7	2.4	0.2	14.6	–	0.4
Gomel	23.4	83.1	0.6	5.7	70.8	17.6	31.4
Grodno	3.7	2.4	2.8	4.7	17.3	0.9	0.8
Minsk	9.0	8.6	4.4	3.4	41.0	0.9	13.7
Mogilev	19.9	19.0	1.3	0.1	77.6	1.1	4.2

11.8. Forest felling area by region[1)]

(thousand hectares)

	2014	2015	2016	2017	2018	2019	2020
All cutting types							
Republic of Belarus	523.9	466.9	487.5	451.0	499.1	489.1	504.2
Region:							
Brest	99.8	91.0	91.9	89.4	98.8	91.3	84.2
Vitebsk	65.2	58.9	60.0	58.7	64.2	62.8	67.1
Gomel	100.4	86.3	87.5	80.5	90.6	96.4	104.0
Grodno	57.9	48.6	44.5	41.9	52.7	48.7	47.6
Minsk	125.0	112.3	128.7	115.5	117.1	107.4	114.1
Mogilev	75.5	69.9	74.9	65.1	75.6	82.4	87.3
of which final cutting							
Republic of Belarus	37.5	31.3	25.1	25.0	27.1	37.8	44.1
Region:							
Brest	6.7	4.2	3.3	3.0	2.6	3.8	5.6
Vitebsk	7.4	6.3	4.9	5.5	7.9	9.0	9.4
Gomel	8.3	6.8	6.9	6.0	4.7	7.6	9.5
Grodno	2.5	2.3	1.7	2.1	2.7	4.3	4.4
Minsk	6.9	5.8	3.8	4.2	5.4	7.5	8.6
Mogilev	5.7	6.0	4.5	4.2	3.8	5.6	6.6

[1)] Data of the Ministry of Forestry.

11.9. Marketable timber harvested by region[1)]

(thousand cubic metres)

	2014	2015	2016	2017	2018	2019	2020
All cutting types							
Republic of Belarus	19 550	18 473	21 071	23 801	28 590	26 996	27 049
Region:							
Brest	2 298	2 357	2 414	3 215	3 610	3 554	3 590
Vitebsk	3 406	3 339	2 987	3 208	3 811	3 892	3 941
Gomel	4 149	3 790	3 940	6 496	8 602	6 627	6 729
Grodno	2 184	1 976	1 953	2 070	2 442	2 879	2 936
Minsk	3 846	3 600	6 350	5 389	5 735	5 497	5 404
Mogilev	3 669	3 412	3 427	3 423	4 390	4 547	4 451
of which final cutting							
Republic of Belarus	7 786	7 480	6 062	6 293	7 055	9 397	11 156
Region:							
Brest	842	849	716	656	631	841	1 359
Vitebsk	1 489	1 495	1 130	1 335	1 993	2 193	2 281
Gomel	1 868	1 634	1 638	1 528	1 202	1 782	2 332
Grodno	666	603	492	600	736	1 111	1 180
Minsk	1 557	1 462	936	1 095	1 468	2 006	2 243
Mogilev	1 364	1 437	1 150	1 078	1 026	1 464	1 762

[1)] Data of the Ministry of Forestry.

11.10. Forest pest and disease control by region

(hectares)

	2014	2015	2016	2017	2018	2019	2020
Biological control							
Republic of Belarus	23 904	22 458	21 640	23 528	47 266	27 179	30 168
Region:							
Brest	2 876	3 024	2 670	2 751	2 693	2 611	2 251
Vitebsk	3 161	2 767	2 584	2 944	3 583	3 446	3 803
Gomel	7 329	7 400	6 807	6 846	7 270	6 921	6 861
Grodno	3 730	2 719	2 712	3 507	3 967	4 062	4 158
Minsk	4 315	4 133	4 414	4 262	26 147	6 150	6 344
Mogilev	2 492	2 416	2 453	3 219	3 606	3 988	6 750
Chemical control							
Republic of Belarus	356	357	1 367	1 052	675	6 047	6 431
Region:							
Brest	34	31	479	675	83	910	1 188
Vitebsk	87	78	86	94	163	261	227
Gomel	27	28	505	46	101	2 311	1 627
Grodno	32	39	58	59	75	387	614
Minsk	112	99	131	97	163	1 937	2 554
Mogilev	64	83	108	82	90	241	222

11.11. Pest-affected forest area

(end of year; hectares)

	2014	2015	2016	2017	2018	2019	2020
Total pest-affected area	191 905	176 753	178 938	206 474	152 648	156 240	150 738
of which with:							
needle-eating pests	335	691	975	35 855	5 228	9 937	1 167
leaf-eating pests	8 526	2 668	1 377	867	309	365	306
other pests	2 511	2 383	4 060	9 975	7 152	5 314	5 261
forest diseases	180 533	171 011	172 526	159 777	139 959	140 624	144 004
of which with pine fungus	138 503	130 984	132 957	123 599	103 481	106 789	111 027

11.12. Area of forest loss by region

(hectares)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	8 594	13 660	27 206	35 367	49 966	33 759	24 465
Region:							
Brest	764	1 978	2 913	6 394	8 141	5 990	3 325
Vitebsk	1 319	1 250	1 341	1 006	838	880	641
Gomel	1 578	6 369	4 012	16 075	22 718	13 672	11 562
Grodno	1 215	1 039	1 350	1 275	2 207	2 344	1 749
Minsk	1 145	983	14 440	7 188	9 183	5 790	3 961
Mogilev	2 572	2 041	3 150	3 429	6 879	5 083	3 227

11.13. Area of forest loss by cause

(hectares)

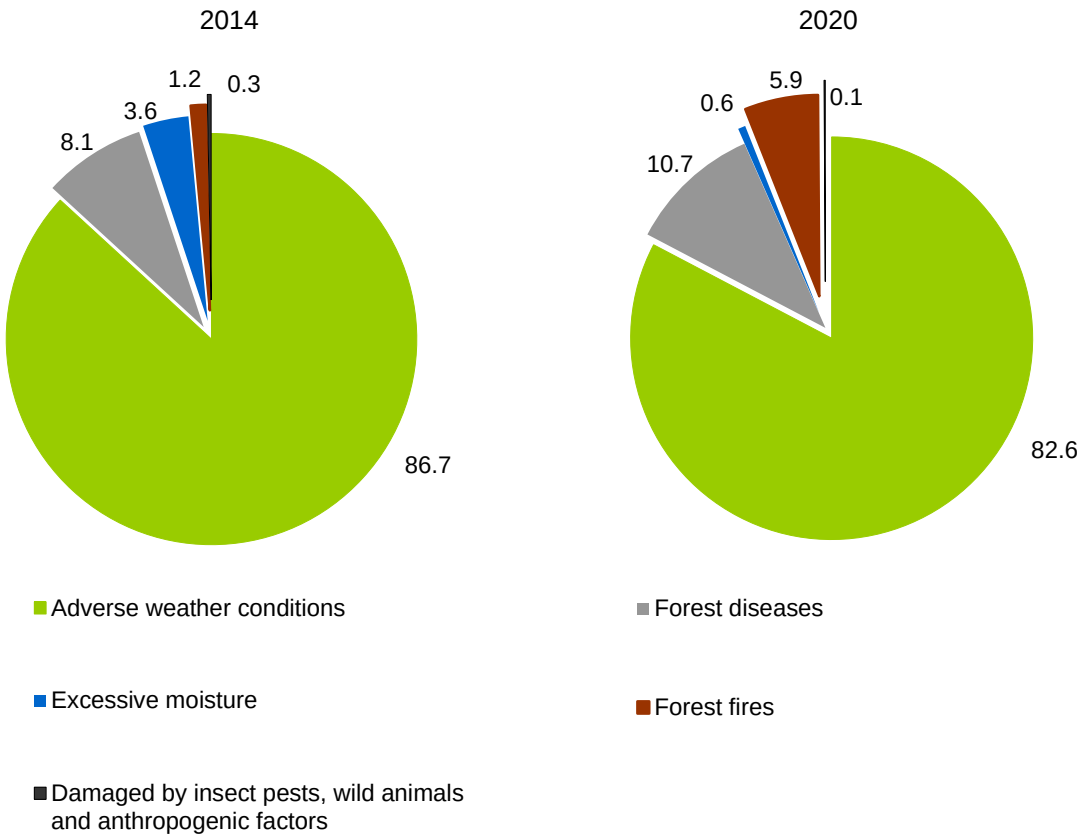
	2014	2015	2016	2017	2018	2019	2020
Total							
Total forest loss	8 594	13 660	27 206	35 367	49 966	33 759	24 465
of which by cause:							
damaged by insect pests	24	8	–	4	6	33	5
damaged by wild animals	2	–	5	1	–	7	26
forest diseases	697	985	1 554	2 336	5 122	3 179	2 622
anthropogenic factors	1	–	–	9	–	–	–
adverse weather conditions	7 455	6 446	24 540	32 769	44 060	28 336	20 220
excessive moisture	310	253	150	69	62	90	138
forest fires	105	5 968	957	179	716	2 114	1 454
of which: coniferous species							
Total forest loss	7 746	12 206	24 457	34 588	49 492	33 326	23 977
of which by cause:							
damaged by insect pests	24	8	–	4	6	33	5
damaged by wild animals	2	–	–	1	–	7	12
forest diseases	634	962	1 533	2 299	5 082	3 110	2 609
anthropogenic factors	1	–	–	9	–	–	–
adverse weather conditions	6 781	5 974	21 900	32 050	43 657	28 046	19 817
excessive moisture	199	201	103	48	31	56	123
forest fires	104	5 061	921	177	716	2 074	1 411

Continued

	2014	2015	2016	2017	2018	2019	2020
deciduous species							
Total forest loss	848	1 454	2 749	779	474	433	488
of which by cause:							
damaged by wild animals	–	–	5	–	–	–	14
forest diseases	63	23	21	37	40	69	13
adverse weather conditions	674	472	2 640	719	403	290	403
excessive moisture	111	52	47	21	31	34	15
forest fires	1	907	36	2	–	40	43

11.14. Structure of area of forest loss by cause

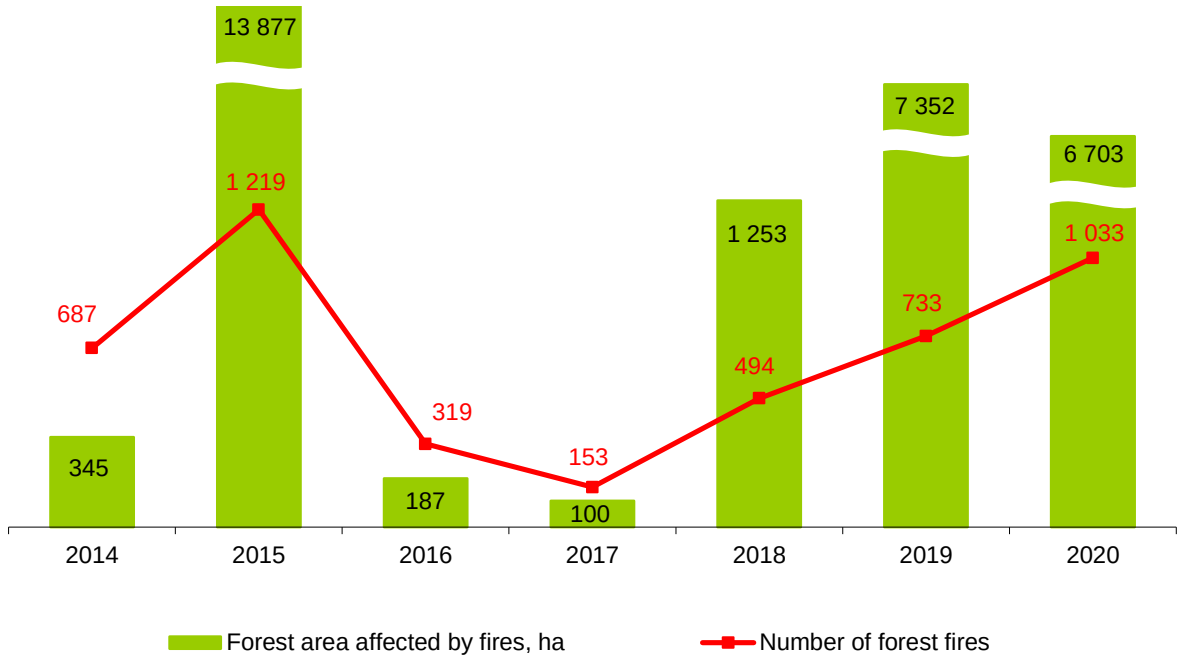
(as % of total)



11.15. Forest fires by region

	2014	2015	2016	2017	2018	2019	2020
Number of forest fires							
Republic of Belarus	687	1 219	319	153	494	733	1 033
Region:							
Brest	92	240	57	37	115	249	374
Vitebsk	30	60	29	8	20	41	34
Gomel	285	452	117	64	142	169	311
Grodno	47	63	22	5	52	87	118
Minsk	163	233	58	32	130	133	104
Mogilev	70	171	36	7	35	54	92
Forest area affected by fires, hectares							
Republic of Belarus	345	13 877	187	100	1 253	7 352	6 703
Region:							
Brest	30	1 360	52	16	299	5 337	2 366
Vitebsk	24	75	46	6	15	75	37
Gomel	157	11 991	51	56	262	749	3 597
Grodno	15	28	5	3	392	917	81
Minsk	75	75	11	8	237	208	158
Mogilev	45	349	23	11	48	66	464
Standing timber damaged, cubic metres							
Republic of Belarus	13 735	398 496	4 052	3 201	11 248	49 102	39 531
Region:							
Brest	2 411	81 409	3 327	2 328	2 723	41 499	18 526
Vitebsk	–	–	68	–	536	2 364	294
Gomel	6 774	296 686	–	873	5 769	3 150	19 052
Grodno	133	3 967	80	–	120	2 063	–
Minsk	3 500	1 239	338	–	–	–	62
Mogilev	917	15 196	240	–	2 100	26	1 596

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



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

(thousand hectares)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	9 420	9 461	9 526	9 560	9 570	9 315	9 458
Region:							
Brest	1 500	1 500	1 473	1 408	1 410	1 372	1 420
Vitebsk	1 873	1 883	1 903	1 906	1 911	1 894	1 897
Gomel	2 225	2 239	2 274	2 287	2 285	2 289	2 292
Grodno	924	924	927	992	995	771	849
Minsk	1 660	1 660	1 685	1 699	1 700	1 718	1 725
Mogilev	1 239	1 254	1 265	1 268	1 270	1 271	1 275

12. 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 includes the amount of money spent on such activities as biotechnical activities aimed at the reproduction and protection of wild animals; conducting accounting of the number of wild animals; conducting hunting management, maintenance of hunting dogs, planted and catching birds, horses; protection of hunting areas and combating poaching; payment of employees engaged in the game economy; rent for the use of the hunting grounds; rent for the use of offices and production buildings (heating, lighting, current repairs), access roads, transportation; amortization charges on fixed assets; repair of hunting weapons, the purchase of inventory and other costs of the hunting economy.

The expenditure on biotechnical activities includes the amount of money spent on reproduction and protection of wild animals: procurement and purchase of fodder and salt for feeding wild animals, construction and establishing 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, provision of services to hunters (transport, accommodation, special clothing), operation of hunting centres and boat stations.

Game animal population is the number of game animals living in the hunting areas.

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

12.1. Area of hunting grounds by region

(end of year; million hectares)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	16.6	16.7	16.5	16.6	16.8	16.9	17.1
Region:							
Brest	2.7	2.5	2.6	2.6	2.6	2.7	2.7
Vitebsk	3.5	3.5	3.4	3.4	3.4	3.4	3.4
Gomel	3.0	3.1	3.0	3.1	3.1	3.1	3.2
Grodno	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Minsk	3.2	3.3	3.2	3.2	3.3	3.3	3.3
Mogilev	2.4	2.4	2.4	2.4	2.4	2.5	2.5
of which under game husbandry management							
Republic of Belarus	15.1	16.1	15.6	15.9	16.6	16.8	17.1
Region:							
Brest	2.7	2.5	2.2	2.2	2.5	2.5	2.7
Vitebsk	3.5	3.5	3.4	3.4	3.4	3.4	3.4
Gomel	1.6	2.8	2.7	2.8	3.0	3.1	3.2
Grodno	1.8	1.8	1.7	1.9	1.9	1.9	1.9
Minsk	3.1	3.1	3.2	3.2	3.3	3.3	3.3
Mogilev	2.4	2.4	2.4	2.4	2.4	2.5	2.5

12.2. Game husbandry expenditures and earnings

(BYN thousand (2014 – 2015 – BYR million); at current prices)

	2014	2015	2016	2017	2018	2019	2020
Expenditures on game husbandry maintenance	185 424	207 830	20 891	23 734	26 190	27 420	28 108
of which on biotechnical activities designed for wildlife reproduction and protection	33 776	43 958	3 529	3 551	4 361	3 557	4 014
of which:							
distribution of game animals	7 194	9 802	571	1 018	1 069	482	819
procurement and purchase of fodder and salt for feeding wild animals	22 823	25 523	1 551	1 256	1 842	1 708	2 701
Earnings from game husbandry maintenance	173 536	198 971	22 102	22 518	25 158	27 316	25 436

12.3. Expenditures on biotechnical activities designed for wildlife reproduction and protection by region

(BYN thousand (2014 – 2015 – BYR million); at current prices)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	33 776	43 958	3 529	3 551	4 361	3 557	4 014
Region:							
Brest	9 234	14 316	1 015	546	1 011	707	1 263
Vitebsk	13 048	13 768	1 060	1 613	1 551	1 212	1 137
Gomel	7 055	10 133	513	467	515	350	286
Grodno	1 041	1 600	308	278	342	375	357
Minsk	2 393	3 541	488	492	772	681	476
Mogilev	1 006	601	144	156	170	232	496

12.4. Populations of major game species

(thousand animal units)

	2014	2015	2016	2017	2018	2019	2020
Elk	30.1	32.0	33.7	36.3	38.4	41.7	42.8
Red deer	13.6	15.2	16.7	21.5	22.7	26.2	31.0
Boar	8.6	8.0	2.6	2.8	2.6	2.4	2.9
Roe deer	71.5	74.7	82.1	92.8	100.2	109.2	119.3
Squirrel	102.4	118.4	110.3	111.8	106.5	104.3	101.2
White hare	52.6	53.4	52.5	53.0	53.3	50.5	48.9
Brown hare	100.2	105.8	105.2	114.5	119.1	123.2	125.1
Fox	29.7	27.5	25.5	25.2	25.3	23.8	24.5
Muskrat	24.4	29.9	27.4	25.8	18.9	17.8	17.3
American mink	22.5	23.0	23.3	24.1	24.5	23.9	23.8
Beaver	63.4	58.3	51.3	51.1	52.9	53.9	53.0
Wood grouse	8.2	8.4	9.0	7.9	8.1	8.3	8.2
Black grouse	39.9	37.3	38.5	40.6	43.2	44.0	46.4

12.5. Hunting of major game species

(thousand animal units)

	2014	2015	2016	2017	2018	2019	2020
Elk	3.3	3.8	4.2	4.6	5.5	6.9	7.0
Red deer	1.1	1.2	1.5	1.7	2.0	2.6	3.1
Boar	30.6	17.2	10.7	9.1	7.7	11.4	16.2
Roe deer	6.6	7.9	9.3	11.1	12.4	15.7	16.5
Squirrel	2.5	2.5	2.2	2.2	2.2	2.0	1.6
White hare	5.9	4.8	5.2	5.1	5.0	4.0	3.9
Brown hare	34.3	38.5	44.2	49.1	52.4	38.3	37.0
Fox	15.2	15.4	13.3	17.3	16.7	19.9	19.9
Muskrat	1.8	1.3	0.8	0.6	0.5	0.5	0.4
American mink	4.0	3.3	2.4	2.2	2.1	1.7	1.3
Beaver	6.0	8.9	7.9	8.3	7.3	8.4	9.5
Wood grouse	0.1	0.1	0.4	0.1	0.1	0.1	0.0
Black grouse	0.2	0.2	0.4	0.6	0.3	0.3	0.2

12.6. 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	2018	2019	2020
European bison (main gene pool)	…	…	1 092	1 423	1 451	1 666	2 120
Badger	1 416	728	695	681	650	626	499
Bear	119	20	76	68	25	19	42
Lynx	771	421	532	489	430	565	764

13. 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, work performing, provision of services), by- and related products of extraction and processing of minerals.

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

Waste disposal comprises activities of temporary storage and transportation of waste for its preparation, storage, burial, detoxification and / or recovery.

Recovered and disposed industrial waste is reflected taking into account partial recovery 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).

Consumption waste is waste generated in the process of human vital activities, not related to economic activities, waste generated in consumer cooperatives and gardening partnerships, as well as waste generated from sweepings on common areas.

Municipal waste is consumption waste and industrial waste included in the List of waste referred to municipal waste. The List is approved by the Ministry of Housing and Utilities.

According to the List of municipal waste, it includes consumption waste, as well as selected industrial waste generated at the facilities of emergency and rescue services, consumer services, road services, cultural infrastructure, the National Bank, banks and non-bank credit and financial organizations, public catering, public associations (organizations), healthcare and social service organizations, physical education and sport organizations, postal services, political parties, law enforcement authorities, religious organizations, sanatorium-resort and recreation organizations, insurance organizations, transport infrastructure, educational institutions; in the buildings of administrative and household legal entities, archives, media outlets, republican bodies of state administration, local administrative bodies and bodies of self-governance, courts; in military units; in places of burial; in office premises; in public toilets; on the territories and premises of trade facilities, markets, fairs, including waste (sweepings) from cleaning; at facilities that use municipal waste in order to generate thermal and (or) electric energy. In addition, municipal waste includes waste (sweepings) from cleaning the territory of industrial organizations; street and courtyard sweepings arising at the adjacent and recreation areas; plant waste arising from cleaning the territory of gardens, parks, squares, burial places and other green areas located on public use lands; plant waste arising from cleaning water bodies located on public use lands and territories of recreation areas.

Secondary raw materials is waste in relation to which there is a possibility of using it on the territory of the republic. Since 2019 the collection of secondary raw materials includes data on the extraction of the organic component of municipal waste, as well as ferrous and non-ferrous metal scrap, excluding its collection from the population.

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

13.1. Generation, recovery and disposal of industrial waste by regions and Minsk city

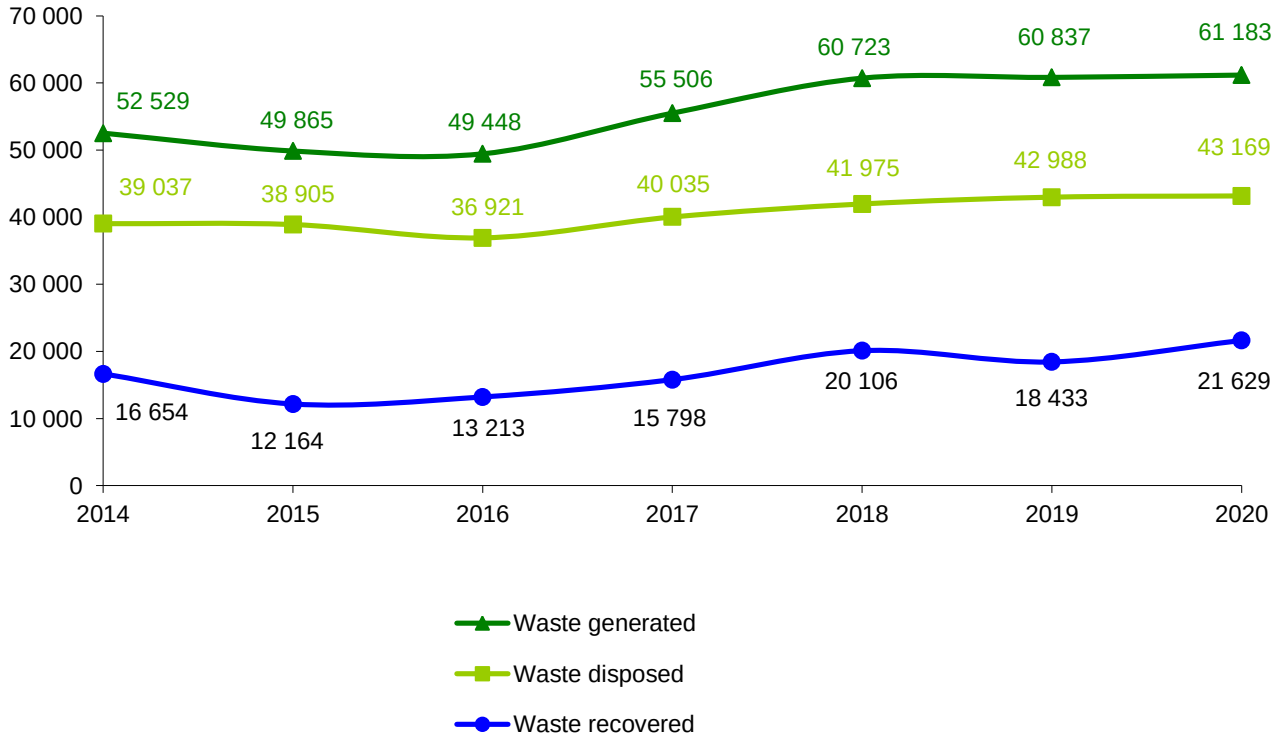
	2014	2015	2016	2017	2018	2019	2020
Waste generated, thousand tonnes							
Republic of Belarus	52 529	49 865	49 448	55 506	60 723	60 837	61 183
Regions and Minsk city:							
Brest	1 449	1 244	1 579	1 488	1 974	2 021	2 217
Vitebsk	836	552	510	769	770	901	1 010
Gomel	3 702	3 097	2 867	3 114	4 639	3 769	4 040
Grodno	1 864	1 786	2 072	2 349	2 528	3 485	2 358
Minsk city	2 072	1 980	2 858	3 139	3 185	3 012	2 977
Minsk	38 210	36 601	36 565	40 714	43 316	43 616	43 944
Mogilev	4 396	4 605	2 996	3 933	4 313	4 032	4 636
Waste recovered, thousand tonnes							
Republic of Belarus	16 654	12 164	13 213	15 798	20 106	18 433	21 629
Regions and Minsk city:							
Brest	1 244	1 039	1 450	1 343	2 211	1 866	2 132
Vitebsk	631	388	397	633	627	757	936
Gomel	5 032	2 632	1 730	1 748	3 162	2 278	2 712
Grodno	1 131	1 008	1 425	1 816	1 925	2 551	1 880
Minsk city	996	1 177	2 068	2 473	2 760	2 829	2 759
Minsk	5 772	3 362	4 016	4 304	5 510	4 816	7 048
Mogilev	1 848	2 557	2 128	3 481	3 912	3 336	4 161
As percentage of waste generated							
Republic of Belarus	31.7	24.4	26.7	28.5	33.1	30.3	35.4
Regions and Minsk city:							
Brest	85.9	83.5	91.8	90.3	112.0	92.3	96.2
Vitebsk	75.5	70.3	77.9	82.3	81.4	84.1	92.6
Gomel	135.9	85.0	60.3	56.1	68.2	60.4	67.1
Grodno	60.7	56.4	68.8	77.3	76.2	73.2	79.7
Minsk city	48.1	59.4	72.3	78.8	86.7	93.9	92.7
Minsk	15.1	9.2	11.0	10.6	12.7	11.0	16.0
Mogilev	42.0	55.5	71.0	88.5	90.7	82.7	89.8

Continued

	2014	2015	2016	2017	2018	2019	2020
Waste disposed, thousand tonnes							
Republic of Belarus	39 037	38 905	36 921	40 035	41 975	42 988	43 169
Regions and Minsk city:							
Brest	248	241	223	196	130	180	130
Vitebsk	224	173	148	162	152	162	89
Gomel	1 431	1 306	1 322	1 435	2 138	1 630	1 549
Grodno	824	827	694	619	622	993	506
Minsk city	1 091	820	887	705	474	279	384
Minsk	32 522	33 274	32 667	36 445	37 852	38 991	39 742
Mogilev	2 698	2 264	979	472	607	753	769

13.2. Dynamics of generation, recovery and disposal of industrial waste

(thousand tonnes)



13.3. Generation, recovery and disposal of industrial waste by waste types

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Waste generated							
Total	52 529	49 865	49 448	55 506	60 723	60 837	61 183
of which waste of:							
plant and animal origin	5 349	4 113	4 145	4 966	5 269	4 656	5 003
mineral origin	11 028	9 369	8 607	9 804	12 888	12 783	12 354
chemical production and related industries	33 374	34 155	34 076	38 140	39 562	40 033	40 675
of which halite	29 801	30 541	30 202	33 853	35 050	35 300	35 739
medical	10	14	17	51	26	64	29
(precipitation) of water treatment of boiler and heat economy and drinking water, sewage treatment, rainwater and water use in electric power station	1 902	1 538	1 782	1 635	2 165	2 371	2 239
from human vital activities and similar production waste	866	677	822	911	814	930	882
Waste recovered							
Total	16 654	12 164	13 213	15 798	20 106	18 433	21 629
of which waste of:							
plant and animal origin	5 452	4 134	4 138	4 813	5 120	4 539	4 859
mineral origin	9 571	6 685	6 783	8 326	11 220	10 869	12 382
chemical production and related industries	935	945	1 529	1 762	2 060	1 353	1 208
of which halite	651	692	903	1 119	1 232	695	594

Continued

	2014	2015	2016	2017	2018	2019	2020
medical	5	3	4	22	11	11	10
(precipitation) of water treatment of boiler and heat economy and drinking water, sewage treatment, rainwater and water use in electric power station	681	384	687	641	1 465	1 232	2 771
from human vital activities and similar production waste	11	13	72	233	229	430	399
Waste disposed							
Total	39 037	38 905	36 921	40 035	41 975	42 988	43 169
of which waste of:							
plant and animal origin	326	381	293	254	329	250	312
mineral origin	4 063	3 420	2 152	1 673	2 486	2 300	1 929
chemical production and related industries	32 461	33 241	32 570	36 397	37 531	38 711	39 495
of which halite	29 151	29 849	29 299	32 734	33 818	34 605	35 145
medical	5	11	13	29	15	54	20
(precipitation) of water treatment of boiler and heat economy and drinking water, sewage treatment, rainwater and water use in electric power station	1 324	1 186	1 140	1 003	1 024	1 155	911
from human vital activities and similar production waste	858	666	753	679	589	518	502

13.4. Generation of industrial waste per capita by regions and Minsk city

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	5 560	5 271	5 222	5 868	6 433	6 458	6 523
Regions and Minsk city:							
Brest	1 054	908	1 157	1 094	1 458	1 498	1 651
Vitebsk	705	468	436	663	670	792	897
Gomel	2 613	2 191	2 033	2 217	3 319	2 711	2 925
Grodno	1 778	1 710	1 991	2 265	2 449	3 390	2 308
Minsk city	1 069	1 010	1 441	1 572	1 587	1 494	1 477
Minsk	26 792	25 442	25 198	27 894	29 543	29 645	29 827
Mogilev	4 152	4 369	2 858	3 777	4 174	3 929	4 549

13.5. Recovery of industrial waste per capita by regions and Minsk city

(kilogrammes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	1 763	1 286	1 395	1 670	2 130	1 957	2 306
Regions and Minsk city:							
Brest	905	758	1 062	987	1 633	1 383	1 588
Vitebsk	532	329	340	546	546	665	830
Gomel	3 552	1 862	1 226	1 244	2 262	1 638	1 963
Grodno	1 079	965	1 369	1 752	1 865	2 482	1 840
Minsk city	514	600	1 042	1 239	1 375	1 403	1 369
Minsk	4 047	2 337	2 767	2 949	3 758	3 273	4 784
Mogilev	1 745	2 426	2 030	3 343	3 786	3 250	4 083

13.6. Generation of industrial waste by regions, cities and districts

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	52 529.3	49 865.3	49 448.2	55 506.0	60 723.4	60 836.8	61 183.4
Brest region	1 449. 1	1 244.0	1 579.4	1 487.7	1 973.7	2 021.2	2 217.2
Brest, city of	762.7	497.5	889.9	688.3	1 220.1	1 260.8	1 500.2
District:							
Baranovichy	72.3	77.4	109.7	78.2	124.1	139.4	185.6
Bereza	87.4	84.2	108.9	52.3	71.1	63.7	106.2
Brest	1.7	54.6	7.2	52.3	52.2	64.5	11.8
Gantsevichy	35.0	77.0	13.5	21.1	20.5	16.2	20.7
Drogichin	14.4	17.1	16.3	12.4	15.1	11.6	20.1
Zhabinka	79.0	93.2	96.7	39.7	5.3	10.8	7.9
Ivanovo	90.1	25.9	20.5	23.9	87.9	68.1	29.5
Ivatsevichy	84.0	45.5	61.1	258.6	198.4	105.4	124.4
Kamenets	10.0	5.1	3.3	3.8	24.9	24.9	17.6
Kobrin	13.6	11.7	11.7	17.1	17.2	79.3	31.8
Luninets	43.9	14.4	12.8	12.3	15.4	16.6	27.1
Lyakhovichy	5.5	7.6	8.5	15.6	11.5	17.6	11.0
Malorita	7.2	6.5	7.7	8.0	6.6	14.6	13.2
Pinsk	91.7	209.4	198.4	183.9	78.6	68.6	83.4
Pruzhany	14.4	14.4	11.2	12.1	15.0	16.4	17.8
Stolin	38.6	2.3	2.2	8.3	9.9	42.8	9.0

Continued

	2014	2015	2016	2017	2018	2019	2020
Vitebsk region	835.8	551.6	509.9	769.0	769.8	901.0	1 010.5
Vitebsk, city of	201.5	115.4	101.5	109.9	91.8	176.0	212.5
District:							
Beshenkovichy	0.9	0.5	0.4	0.4	1.3	1.2	1.7
Braslav	12.2	8.0	12.5	22.7	27.3	18.5	18.1
Verkhnedvinsk	13.8	14.2	11.1	16.2	16.0	11.9	24.3
Vitebsk	0.2	8.7	6.8	25.6	74.2	75.3	63.2
Glubokoye	13.6	11.9	11.7	21.2	11.4	10.0	8.6
Gorodok	4.1	1.8	7.2	9.2	11.4	11.3	9.2
Dokshitsy	1.6	1.6	1.8	5.0	1.6	1.5	1.3
Dubrovno	1.3	2.2	2.8	2.7	2.0	2.3	7.5
Lepel	9.6	16.0	12.1	16.3	23.4	24.3	10.5
Liozno	2.8	4.3	18.6	19.7	24.4	23.9	19.7
Miory	4.9	4.2	4.4	4.4	4.3	3.6	4.9
Orsha	79.6	67.1	46.6	121.8	76.3	109.2	196.6
Polotsk	93.8	70.5	63.2	98.0	125.4	142.6	114.6
Postavy	218.3	43.2	34.3	60.8	64.9	63.3	64.5
Rossony	3.8	3.6	3.8	1.9	4.8	3.9	4.4
Senno	80.3	58.0	71.5	83.6	83.2	72.1	75.9
Tolochin	10.9	51.6	28.4	44.5	26.5	53.8	13.8
Ushachy	5.2	6.2	6.5	6.5	5.3	3.6	0.6
Chashniki	70.8	58.8	57.8	94.4	86.3	86.1	151.2
Sharkovshchina	2.5	1.7	4.3	1.8	4.7	2.2	0.8
Shumilino	4.2	2.4	2.6	2.5	3.2	4.3	6.7

Continued

	2014	2015	2016	2017	2018	2019	2020
Gomel region	3 702.1	3 097.4	2 867.1	3 114.3	4 638.5	3 769.2	4 040.2
Gomel, city of	983.1	1 016.2	1 047.7	1 115.2	1 209.3	1 392.1	1 457.4
District:							
Bragin	0.0	0.2	0.1	0.1	0.6	0.3	0.3
Buda-Koshelyovo	11.0	9.1	12.5	14.1	23.3	27.4	28.9
Vetka	3.0	4.7	4.4	3.2	1.8	2.1	28.5
Gomel	80.5	12.5	47.2	181.9	180.3	175.1	228.1
Dobrush	81.1	53.0	34.7	22.2	11.4	14.2	8.8
Yelsk	2.6	4.5	3.8	3.3	3.4	11.6	6.8
Zhitkovichy	12.3	29.4	25.8	27.6	13.2	30.3	30.7
Zhlobin	1 907.6	1 385.1	1 221.5	1 184.1	2 570.6	1 414.2	1 228.0
Kalinkovichy	14.7	21.6	23.2	24.7	19.3	37.6	23.3
Korma	1.4	4.0	6.0	4.8	6.8	10.9	7.0
Lelchitsy	3.6	10.6	7.3	17.5	9.2	20.6	18.1
Loyev	1.8	1.5	2.1	1.2	1.5	3.5	3.9
Mozyr	124.4	87.7	121.9	113.8	137.5	137.2	150.0
Narovlya	3.1	2.5	3.0	0.9	2.4	4.7	15.8
Oktyabrsky	5.7	12.1	5.0	4.6	8.5	7.9	22.5
Petrikov	69.3	37.8	82.1	119.8	79.1	81.9	349.7
Rechitsa	222.3	260.1	107.9	118.5	186.9	182.3	181.2
Rogachev	7.8	14.4	15.3	20.7	18.8	15.1	20.0
Svetlogorsk	140.5	108.4	67.5	114.3	131.0	168.5	193.5
Khoyniki	11.5	12.8	17.8	13.9	11.0	18.3	26.4
Chechersk	14.8	9.3	10.5	8.0	12.7	13.7	11.3

Continued

	2014	2015	2016	2017	2018	2019	2020
Grodno region	1 863.7	1 785.8	2 072.4	2 348.5	2 528.1	3 484.7	2 358.4
Grodno, city of	823.5	821.3	1 040.3	985.9	904.7	1 860.7	734.9
District:							
Berestovitsa	3.2	2.8	17.0	15.9	20.0	19.6	5.0
Volkovysk	330.8	275.8	224.6	238.2	284.5	369.0	360.4
Voronovo	3.3	3.3	5.0	3.3	4.2	3.5	3.1
Grodno	172.0	100.4	100.4	160.6	318.0	204.4	140.8
Dyatlovo	4.2	6.8	3.3	9.4	8.5	8.4	11.5
Zelva	3.0	1.7	2.2	1.8	1.9	1.9	4.1
Ivye	7.5	2.6	5.6	7.2	10.4	17.2	18.7
Korelichy	5.2	6.9	6.5	5.2	13.2	9.5	6.0
Lida	81.5	72.3	84.5	116.3	129.4	154.3	154.0
Mosty	5.5	6.2	5.0	85.7	21.1	82.3	40.9
Novogrudok	8.0	13.2	4.5	11.0	19.5	21.7	28.8
Ostrovets	9.7	6.6	12.6	18.4	21.0	21.4	19.6
Oshmyany	26.0	21.4	39.6	35.7	26.8	4.4	6.5
Svisloch	7.4	4.6	5.3	4.7	4.5	11.7	10.1
Slonim	200.3	184.5	198.7	214.7	235.6	241.7	176.3
Smorgon	152.1	247.3	310.2	413.8	487.2	431.2	585.9
Shchuchin	20.8	8.2	7.5	20.8	17.4	21.9	51.9

Continued

	2014	2015	2016	2017	2018	2019	2020
Minsk city	2 072.3	1 980.4	2 857.9	3 138.9	3 184.7	3 012.5	2 976.8
Minsk region	38 210.1	36 600.9	36 565.3	40 714.1	43 316.0	43 615.8	43 944.5
District:							
Berezino	33.5	42.6	31.9	89.4	198.5	52.0	56.0
Borisov	230.6	212.8	174.3	214.4	241.7	117.9	332.1
Vileyka	39.7	42.9	28.7	24.5	25.7	39.0	36.7
Volozhin	8.8	8.2	6.3	7.9	21.7	9.0	6.5
Dzerzhinsk	14.4	11.4	12.5	19.8	101.5	443.8	250.2
Kletsk	19.7	13.9	16.5	10.2	25.8	22.0	20.8
Kopyl	48.1	15.8	12.0	20.7	5.3	18.9	43.5
Krupki	54.1	55.0	60.8	73.7	49.0	59.9	48.2
Logoysk	1 334.2	420.0	1 046.2	1 019.9	1 380.9	991.6	39.6
Lyuban	73.1	41.2	73.1	110.8	9 681.1	9 971.0	9 896.8
Minsk	707.9	171.1	126.1	118.2	684.6	1 049.9	2 103.2
Molodechno	221.5	167.3	171.0	274.1	211.2	202.5	147.7
Myadel	1 164.2	5.3	34.0	44.9	41.7	42.5	42.9
Nesvizh	649.9	865.8	649.0	731.7	732.4	594.1	424.3
Pukhovichy	254.5	381.7	334.7	77.4	298.5	189.9	196.4
Slutsk	190.5	196.7	186.9	221.3	358.1	243.1	114.8
Smolevichy	50.4	50.8	63.5	81.8	33.6	65.2	108.1
Soligorsk	32 970.9	33 804.7	33 439.4	37 428.6	29 059.2	29 352.6	29 899.2
Staryie Dorogi	19.0	14.1	16.8	22.8	30.1	28.4	27.4
Stolbtsy	89.3	51.5	56.4	88.9	98.0	93.4	82.8
Uzda	21.8	15.7	14.9	21.0	24.2	9.6	42.6
Cherven	13.7	12.3	10.4	12.0	13.2	19.6	24.7

Continued

	2014	2015	2016	2017	2018	2019	2020
Mogilev region	4 396.5	4 605.3	2 996.2	3 933.5	4 312.7	4 032.5	4 636.0
Mogilev, city of	327.2	398.8	400.5	1 058.9	688.8	503.6	621.4
District:							
Belynichy	10.0	8.1	7.3	9.6	12.0	11.1	9.5
Bobruysk	416.8	401.9	455.5	516.6	574.2	770.2	546.3
Bykhov	8.5	12.7	8.4	4.5	7.7	8.5	13.3
Glusk	21.1	18.8	19.9	21.1	1.6	1.3	1.1
Gorki	29.5	1.3	12.9	15.0	11.6	12.9	14.4
Dribin	0.6	1.0	0.9	5.6	0.3	0.3	1.3
Kirovsk	6.0	6.3	6.7	4.5	3.6	3.6	5.8
Klimovichy	15.2	9.0	6.8	8.7	8.3	10.1	9.7
Klichev	5.0	1.8	2.8	3.0	2.3	6.8	7.0
Kostyukovichy	3 371.7	3 612.3	1 913.5	2 050.4	2 553.4	2 222.3	2 655.5
Krasnopolye	0.0	0.0	0.2	0.0	3.8	0.3	0.2
Krichev	2.1	2.9	2.1	3.7	14.2	124.2	78.9
Krugloye	9.9	10.3	14.3	15.7	15.3	17.5	12.4
Mogilev	0.8	1.9	33.1	59.8	213.5	177.9	398.7
Mstislavl	4.9	2.9	3.4	4.8	4.4	4.7	5.5
Osipovichy	57.7	53.2	54.1	78.2	106.0	42.9	156.4
Slavgorod	1.7	1.3	0.5	1.3	1.7	1.7	2.4
Khotimsk	42.6	2.5	0.3	2.0	2.1	8.4	2.4
Chausy	1.2	7.1	6.6	9.3	12.2	7.2	14.0
Cherikov	3.9	3.3	1.7	0.7	1.5	1.0	0.7
Shklov	60.0	48.2	44.6	60.1	74.2	96.1	79.4

13.7. Generation of industrial waste by economic activity

(thousand tonnes)

	2016	2017	2018	2019	2020
Republic of Belarus	49 448.2	55 506.0	60 723.4	60 836.8	61 183.4
of which:					
Agriculture, forestry and fishing	563.9	621.0	698.9	727.4	997.1
Mining	1 253.4	1 011.9	1 207.1	1 248.8	455.9
Manufacturing	42 900.1	47 855.3	52 025.0	50 887.6	50 119.1
of which:					
Manufacture of food products, beverages and tobacco products	1 858.5	2 055.2	2 548.6	1 907.2	1 877.5
Manufacture of textile articles, wearing apparel, articles of leather and fur	111.9	126.6	139.2	116.1	149.3
Manufacture of products of wood and paper; printing and reproduction of recorded media	756.7	1 244.1	1 301.8	1 511.5	1 409.6
Manufacture of coke and refined petroleum products	46.1	75.8	82.9	100.8	100.1
Manufacture of chemicals and chemical products	34 595.2	39 128.8	42 071.6	42 018.8	41 432.6
Manufacture of basic pharmaceuticals and medicinal products	6.6	7.7	8.4	4.2	5.0
Manufacture of rubber and plastics products, of other non-metallic mineral products	3 026.3	3 397.7	3 717.3	3 570.6	3 501.4
Manufacture of basic metals; manufacture of fabricated metal products, except machinery and equipment	771.6	762.5	934.3	765.6	908.6
Manufacture of computer, electronic and optical products	5.1	5.7	6.3	3.3	4.5
Manufacture of electrical equipment	12.4	13.1	14.3	10.1	28.0
Manufacture of machinery and equipment n.e.c.	300.7	298.3	331.1	350.0	367.1
Manufacture of transport vehicles and equipment	19.8	135.0	151.5	63.3	58.8
Other manufacturing; repair and installation of machinery and equipment	1 389.2	604.8	717.7	466.1	174.1
Electricity, gas, steam, hot water and air conditioning supply	276.5	447.5	705.9	661.4	499.3
Water supply; waste management and remediation activities	2 141.5	2 688.6	3 041.6	3 578.1	5 045.7
Construction	1 172.3	1 446.8	1 682.4	1 976.6	1 857.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	485.2	498.6	542.6	256.5	598.2
Transportation and storage, postal and courier activities	135.1	112.7	123.3	692.3	765.9
Accommodation and food service activities	8.3	63.1	69.0	50.0	46.9
Information and communication	5.2	8.1	8.8	4.5	13.1
Financial and insurance activities	7.5	3.6	4.0	15.2	20.6
Real estate activities	168.6	23.7	25.9	56.5	99.3
Professional, scientific and technical activities	14.6	23.2	25.4	192.5	179.3
Administrative and support service activities	1.8	189.6	207.5	40.1	35.0
Public administration	103.0	36.7	40.1	121.2	129.8
Education	24.7	104.3	114.1	78.8	32.3
Human health and social work activities	68.2	138.9	149.9	138.0	293.1
Arts, sports, entertainment and recreation	116.5	43.9	48.0	83.2	69.1
Other service activity	1.9	1.7	1.9	28.2	29.3

13.8. Recovery of industrial waste by regions, cities and districts

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	16 653.9	12 163.8	13 213.0	15 798.3	20 106.0	18 433.1	21 628.7
Brest region	1 244.2	1 039.0	1 449.8	1 343.0	2 210.8	1 865.7	2 132.5
Brest, city of	705.0	466.0	909.7	648.0	1 182.6	1 214.0	1 492.0
District:							
Baranovichy	50.7	69.7	77.3	53.2	122.1	129.4	153.3
Bereza	40.6	27.5	53.2	48.8	69.5	60.9	102.2
Brest	1.6	27.7	6.1	38.8	46.8	57.0	11.0
Gantsevichy	34.7	75.9	12.9	20.4	19.8	15.6	20.2
Drogichin	12.2	14.9	15.2	11.3	13.5	11.6	17.6
Zhabinka	82.5	86.9	101.4	4.3	2.7	9.7	7.7
Ivanovo	87.9	21.6	17.5	23.1	86.6	65.7	28.4
Ivatsevichy	79.9	42.7	58.4	288.0	198.5	98.6	118.7
Kamenets	8.3	1.5	1.7	2.3	23.3	23.4	14.7
Kobrin	7.3	7.7	11.1	13.4	15.6	71.1	34.0
Luninets	38.8	9.9	10.6	7.5	11.2	13.2	24.6
Lyakhovichy	5.4	3.4	4.2	6.1	4.6	6.6	7.6
Malorita	4.4	4.2	6.4	7.2	6.3	11.4	12.3
Pinsk	72.3	169.9	156.2	161.2	394.5	54.4	70.3
Pruzhany	8.3	8.9	7.5	8.1	8.3	12.1	13.1
Stolin	4.4	1.0	0.6	1.3	4.9	11.0	5.0

Continued

	2014	2015	2016	2017	2018	2019	2020
Vitebsk region	631.1	388.3	397.2	633.1	626.5	757.4	935.9
Vitebsk, city of	129.4	76.1	75.8	66.8	65.3	139.9	195.1
District:							
Beshenkovichy	0.0	0.0	0.0	0.0	0.4	0.1	0.3
Braslav	10.0	6.1	9.9	21.3	24.5	18.1	16.7
Verkhnedvinsk	12.3	13.2	9.8	15.2	14.0	11.0	23.7
Vitebsk	0.0	4.5	2.2	17.8	51.2	74.0	50.6
Glubokoye	6.9	5.8	7.0	14.4	7.5	6.3	6.6
Gorodok	2.1	0.6	5.7	8.1	10.8	10.6	8.6
Dokshitsy	0.6	0.1	0.2	3.4	0.4	0.3	1.0
Dubrovno	0.3	1.0	0.5	0.5	0.4	0.7	6.7
Lepel	6.9	11.3	12.1	14.7	20.1	19.5	9.4
Liozno	1.7	2.8	17.1	18.2	24.9	23.2	19.5
Miory	2.2	2.0	2.3	2.4	2.3	2.3	4.3
Orsha	58.5	38.9	32.4	113.3	56.4	103.1	186.5
Polotsk	37.3	28.7	26.9	57.0	87.0	78.2	92.4
Postavy	215.9	37.1	28.9	56.1	59.2	59.0	61.3
Rossony	2.3	2.1	3.0	1.0	4.1	3.7	4.3
Senno	79.7	61.5	68.6	87.7	79.1	68.6	79.2
Tolochin	7.4	43.5	32.2	42.6	24.6	46.7	14.6
Ushachy	4.6	5.2	5.3	5.3	4.5	3.0	0.3
Chashniki	51.4	47.2	53.8	86.5	85.0	84.9	148.8
Sharkovshchina	0.2	0.1	2.7	0.3	4.1	1.6	0.4
Shumilino	1.7	0.5	0.8	0.7	1.1	2.6	5.8

Continued

	2014	2015	2016	2017	2018	2019	2020
Gomel region	5 032.0	2 632.3	1 729.7	1 747.6	3 161.6	2 278.0	2 711.6
Gomel, city of	268.7	317.9	354.9	338.9	405.7	496.6	514.8
District:							
Bragin	0.0	0.1	0.0	0.0	0.5	0.2	0.1
Buda-Koshelyovo	9.1	6.6	7.8	11.8	31.3	26.4	27.2
Vetka	2.6	4.0	2.9	2.5	1.2	1.6	13.6
Gomel	74.8	6.0	38.8	152.0	168.7	185.7	212.9
Dobrush	23.1	23.9	26.9	18.4	7.1	7.7	9.2
Yelsk	2.9	3.8	3.9	2.8	3.4	10.6	6.8
Zhitkovichy	6.4	18.8	21.3	19.8	9.7	27.2	27.5
Zhlobin	3 941.2	1 514.9	775.0	714.3	1 987.2	897.6	1 024.3
Kalinkovichy	9.5	15.9	18.1	20.2	14.4	32.6	19.3
Korma	0.1	2.4	4.2	3.8	6.5	10.1	6.0
Lelchitsy	1.8	7.9	6.1	15.6	7.8	25.2	17.4
Loyev	1.0	0.6	1.1	0.7	0.9	1.4	3.4
Mozyr	89.9	104.6	141.9	101.0	133.3	121.3	134.4
Narovlya	0.2	1.9	2.7	0.6	1.5	3.6	10.4
Oktyabrsky	3.5	10.0	4.3	4.3	7.4	6.3	14.9
Petrikov	60.6	42.0	76.8	115.8	77.2	78.6	299.1
Rechitsa	384.8	427.9	162.7	100.9	163.3	162.0	162.3
Rogachev	5.1	8.2	5.3	19.6	15.2	11.6	17.0
Svetlogorsk	125.4	101.2	52.4	81.7	98.9	146.1	165.7
Khoyniki	9.8	5.7	13.7	15.9	9.1	13.6	16.5
Chechersk	11.7	8.2	8.9	7.1	11.4	12.6	8.8

Continued

	2014	2015	2016	2017	2018	2019	2020
Grodno region	1 130.9	1 008.2	1 425.2	1 816.4	1 925.4	2 551.2	1 880.4
Grodno, city of	262.4	280.9	595.0	623.5	557.1	1 165.9	433.5
District:							
Berestovitsa	1.1	0.8	14.6	14.5	17.7	18.0	3.6
Volkovysk	305.6	268.2	212.1	230.7	236.7	372.6	318.1
Voronovo	1.3	2.0	2.1	2.4	3.1	1.6	1.1
Grodno	233.6	48.7	93.2	172.7	303.0	145.2	130.6
Dyatlovo	0.3	2.5	0.6	5.5	4.8	4.0	5.7
Zelva	0.8	0.8	0.6	0.9	0.9	1.3	0.9
Ivye	6.5	1.4	4.5	4.4	6.7	14.4	17.4
Korelichy	3.2	2.7	4.4	8.0	12.6	6.2	1.9
Lida	52.9	51.0	59.6	97.2	105.5	134.7	127.0
Mosty	0.7	1.2	2.3	87.4	18.7	61.1	37.7
Novogrudok	2.2	4.6	2.0	5.2	13.1	15.8	25.2
Ostrovets	7.9	3.4	8.0	9.6	11.1	13.2	14.6
Oshmyany	9.0	20.4	35.6	33.1	23.2	1.5	2.7
Svisloch	5.5	3.2	3.0	2.8	2.9	3.7	3.9
Slonim	86.7	79.7	80.9	99.3	126.3	152.9	137.1
Smorgon	139.3	234.0	303.6	403.5	470.1	422.3	569.9
Shchuchin	12.2	2.9	3.3	15.8	12.1	16.9	49.6

Continued

	2014	2015	2016	2017	2018	2019	2020
Minsk city	995.8	1 177.0	2 067.5	2 473.3	2 760.1	2 829.3	2 759.4
Minsk region	5 772.1	3 361.9	4 015.5	4 303.9	5 509.8	4 816.0	7 047.9
District:							
Berezino	33.0	40.8	30.9	87.9	197.7	50.1	55.7
Borisov	198.9	184.9	150.2	196.1	217.6	118.3	318.7
Vileyka	33.5	37.2	24.1	20.0	20.9	34.1	32.1
Volozhin	7.3	5.9	3.4	3.9	13.5	12.8	5.5
Dzerzhinsk	7.2	5.0	4.5	14.1	96.4	437.2	280.4
Kletsk	15.7	10.0	13.8	7.7	22.3	16.5	18.4
Kopyl	43.3	11.9	8.9	7.5	4.1	16.5	37.5
Krupki	45.8	50.4	60.6	73.9	50.2	57.4	45.8
Logoysk	1 330.8	416.8	1 043.1	1 018.3	1 378.1	989.2	1 340.0
Lyuban	67.8	37.8	71.4	113.9	1 311.1	828.2	498.8
Minsk	659.5	117.1	84.3	81.5	345.6	813.1	1 756.8
Molodechno	210.5	158.0	161.0	251.5	201.0	184.6	138.2
Myadel	1 151.9	1.5	30.2	42.4	38.5	39.2	1 452.8
Nesvizh	652.1	871.6	630.0	706.1	723.4	588.2	431.5
Pukhovichy	240.2	363.9	320.6	61.7	286.0	165.5	191.9
Slutsk	166.0	176.4	167.8	197.8	317.9	207.5	110.7
Smolevichy	29.4	26.7	40.1	52.8	28.2	65.1	98.6
Soligorsk	718.4	763.0	1 080.3	1 236.6	103.4	54.7	80.9
Staryie Dorogi	15.1	12.7	14.2	20.3	26.9	26.3	25.5
Stolbtsy	86.2	47.6	55.7	85.2	95.2	89.8	77.2
Uzda	19.5	13.6	12.3	15.7	20.3	4.5	29.2
Cherven	40.1	9.2	8.2	8.9	11.6	17.2	22.2

Continued

	2014	2015	2016	2017	2018	2019	2020
Mogilev region	1 847.7	2 557.1	2 128.1	3 481.0	3 911.8	3 335.5	4 161.1
Mogilev, city of	224.3	411.4	296.8	981.7	564.9	415.9	804.5
District:							
Belynichy	6.6	5.8	5.5	7.7	10.9	10.0	8.4
Bobruysk	291.8	235.7	305.8	241.8	322.6	253.8	283.8
Bykhov	3.5	10.6	4.8	2.0	11.4	30.7	12.5
Glusk	14.3	9.2	17.6	20.2	1.3	0.8	0.4
Gorki	20.2	11.8	7.8	11.3	8.4	9.4	9.9
Dribin	0.2	0.3	0.5	0.3	0.1	0.1	0.6
Kirovsk	5.3	1.3	1.5	2.9	2.0	3.3	4.2
Klimovichy	13.6	6.0	7.0	5.8	5.7	7.9	8.0
Klichev	4.3	1.3	2.2	2.6	2.0	6.1	5.6
Kostyukovichy	1 111.1	1 756.6	1 351.8	2 030.2	2 560.7	2 220.7	2 652.4
Krasnopolye	0.0	0.0	0.1	0.0	0.1	0.2	0.2
Krichev	1.3	1.0	1.1	1.5	5.7	98.6	79.7
Krugloye	15.5	9.8	13.2	14.3	14.4	19.0	10.5
Mogilev	0.1	0.4	27.3	41.8	223.3	159.6	87.7
Mstislavl	3.4	2.4	2.4	3.1	3.3	3.2	3.5
Osipovichy	53.6	48.9	50.7	76.1	109.1	37.1	114.0
Slavgorod	0.5	0.1	0.0	0.2	0.7	0.8	1.1
Khotimsk	37.8	2.2	0.1	1.8	2.0	2.0	2.2
Chausy	0.1	6.4	6.2	8.4	10.1	6.4	12.8
Cherikov	2.0	0.7	1.3	0.4	0.4	0.6	0.3
Shklov	38.2	35.6	24.4	27.0	53.0	49.4	58.8

13.9. Industrial waste by hazard class in 2020

	Genera-tion	Recovery	Disposal	Of which			
				storage facilities	burial sites	onsite storage	neutrali-sation
	Thousand tonnes						
Total	61 183.4	21 628.7	43 169.0	41 108.6	877.1	982.4	200.9
of which:							
Non-hazardous	9 279.4	8 617.2	1 168.8	0.6	517.1	541.0	110.2
Class 1 (extremely hazardous)	28.9	24.7	5.0	0.0	0.0	1.9	3.1
Class 2 (high-hazard)	17.4	10.0	7.5	0.2	0.0	0.3	7.0
Class 3 (hazardous)	2 240.3	1 724.8	622.2	407.2	134.1	73.1	7.7
Class 4 (low-hazard)	49 617.5	11 252.0	41 365.6	40 700.7	225.9	366.1	72.9
	As % of total						
Total	100	100	100	100	100	100	100
of which:							
Non-hazardous	15.2	39.8	2.7	0.0	59.0	55.1	54.8
Class 1 (extremely hazardous)	0.0	0.1	0.0	0.0	0.0	0.2	1.5
Class 2 (high-hazard)	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Class 3 (hazardous)	3.7	8.0	1.4	1.0	15.3	7.4	3.8
Class 4 (low-hazard)	81.1	52.0	95.8	99.0	25.8	37.3	36.3

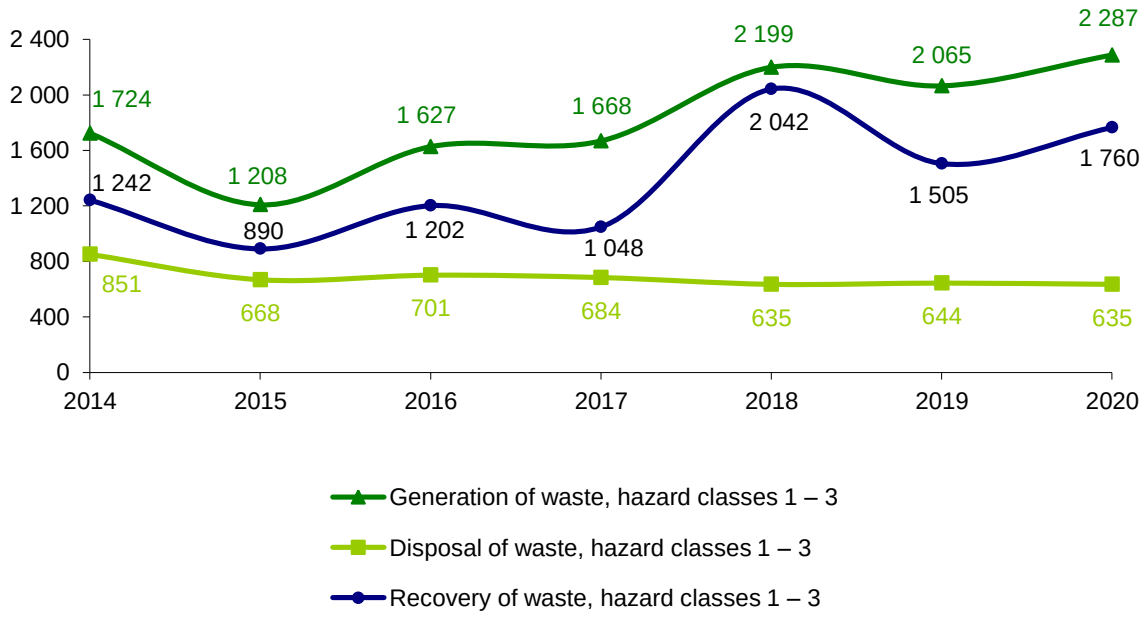
13.10. Generation, recovery and disposal of industrial waste hazard classes 1 – 3

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Generation	1 724.0	1 207.8	1 626.6	1 668.1	2 199.4	2 065.3	2 286.6
Recovery	1 242.2	889.8	1 201.6	1 047.9	2 041.9	1 505.2	1 759.6
Disposal – total	851.4	668.1	701.0	683.6	634.9	643.7	634.7
of which:							
storage facilities	581.0	496.5	472.5	469.9	430.4	398.8	407.4
burial sites	153.6	99.3	116.0	110.7	123.9	177.2	134.1
onsite storage	57.5	47.8	78.8	53.2	51.5	37.4	75.3
neutralisation	59.3	24.5	33.8	49.8	29.1	30.3	17.8

13.11. Dynamics of generation, recovery and disposal of industrial waste hazard classes 1 – 3

(thousand tonnes)



13.12. Generation, recovery and disposal of industrial waste hazard classes 1 – 3 by regions and Minsk city in 2020

(thousand tonnes)

	Genera-tion	Reco-very	Disposal	Of which			
				storage facilities	burial sites	onsite storage	neutrali-sation
			Total				
Republic of Belarus	2 286.6	1 759.6	634.7	407.4	134.1	75.3	17.8
Regions and Minsk city:							
Brest	753.6	731.3	25.8	1.1	13.6	8.5	2.6
Vitebsk	44.2	24.9	20.4	8.0	8.5	3.9	0.1
Gomel	201.4	229.0	40.6	4.9	27.3	8.4	0.1
Grodno	413.3	313.1	109.6	48.4	17.2	32.9	11.1
Minsk city	74.4	47.7	39.3	0.0	32.9	3.6	2.7
Minsk	316.1	88.0	235.6	206.7	16.7	11.5	0.6
Mogilev	483.6	325.6	163.3	138.2	17.9	6.4	0.7
			As % of total				
Republic of Belarus	100	100	100	100	100	100	100
Regions and Minsk city:							
Brest	33.0	41.6	4.1	0.3	10.1	11.3	14.6
Vitebsk	1.9	1.4	3.2	2.0	6.3	5.2	0.4
Gomel	8.8	13.0	6.4	1.2	20.3	11.1	0.3
Grodno	18.1	17.8	17.3	11.9	12.8	43.7	62.1
Minsk city	3.3	2.7	6.2	0.0	24.6	4.8	15.4
Minsk	13.8	5.0	37.1	50.7	12.5	15.3	3.4
Mogilev	21.1	18.5	25.7	33.9	13.4	8.6	3.8

13.13. Generation, recovery and landfilling of solid municipal waste by regions and Minsk city

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Waste generated							
Republic of Belarus	3 723	3 735	3 794	3 801	3 795	3 785	4 070
Regions and Minsk city:							
Brest	457	441	448	477	472	554	575
Vitebsk	405	416	414	419	425	434	593
Gomel	605	600	598	613	617	578	593
Grodno	380	381	413	422	446	450	413
Minsk city	985	985	1 008	968	935	773	786
Minsk	500	522	525	514	543	543	644
Mogilev	391	390	389	389	358	453	466
Waste recovered (collection of secondary raw materials)							
Republic of Belarus	540	583	599	654	714	851	1 019
Regions and Minsk city:							
Brest	68	75	72	77	91	169	180
Vitebsk	48	64	71	69	75	81	173
Gomel	89	90	94	101	111	122	135
Grodno	54	58	55	75	82	90	91
Minsk city	154	158	169	181	190	201	207
Minsk	56	65	65	70	77	94	131
Mogilev	71	74	73	80	88	94	101
Waste landfilled							
Republic of Belarus	3 183	3 152	3 195	3 148	3 081	2 934	3 052
Regions and Minsk city:							
Brest	389	366	376	399	380	385	395
Vitebsk	357	352	342	349	350	354	420
Gomel	516	510	504	511	505	456	458
Grodno	326	324	358	347	365	359	322
Minsk city	831	827	839	787	745	572	579
Minsk	444	457	460	444	465	449	513
Mogilev	320	316	316	310	270	358	366

13.14. Collection of secondary raw materials by selected materials by regions and Minsk city

(thousand tonnes)

	2014	2015	2016	2017	2018	2019	2020
Total							
Republic of Belarus	539.8	582.6	599.5	653.8	714.3	850.9	1 018.7
Regions and Minsk city:							
Brest	68.2	74.6	72.3	77.1	91.1	169.2	180.2
Vitebsk	47.6	63.7	71.3	69.1	75.0	80.5	173.4
Gomel	89.2	90.2	94.2	101.4	111.3	121.7	135.4
Grodno	54.1	57.5	54.9	74.7	81.8	90.2	91.1
Minsk city	153.9	157.9	168.6	181.3	189.6	201.0	206.7
Minsk	55.9	64.8	65.0	70.4	77.4	94.0	131.4
Mogilev	70.9	73.9	73.1	79.9	88.2	94.3	100.5
of which:							
paper and cardboard							
Republic of Belarus	329.4	323.0	306.5	329.0	355.9	381.8	394.6
Regions and Minsk city:							
Brest	41.1	41.2	35.7	37.3	42.1	49.1	48.1
Vitebsk	31.6	33.1	33.1	31.4	35.2	37.9	41.4
Gomel	51.4	45.7	41.7	41.4	42.8	47.8	50.4
Grodno	28.0	27.8	26.0	34.8	36.8	40.1	39.0
Minsk city	109.0	103.4	105.6	114.7	123.8	126.0	134.7
Minsk	32.2	34.9	31.4	34.1	37.3	41.5	40.1
Mogilev	36.1	36.9	33.0	35.3	37.9	39.5	40.9
glass							
Republic of Belarus	122.9	164.3	168.2	181.3	189.5	188.1	188.9
Regions and Minsk city:							
Brest	17.9	21.3	19.3	20.3	25.5	26.7	25.2
Vitebsk	6.8	19.1	21.7	20.1	20.1	17.8	21.0
Gomel	19.5	25.8	28.7	34.5	38.3	36.1	35.7
Grodno	18.0	20.8	16.0	22.7	25.3	25.6	25.6
Minsk city	28.9	38.3	43.1	41.2	35.5	34.1	30.5
Minsk	13.7	19.4	19.2	19.2	19.6	22.8	23.7
Mogilev	18.1	19.6	20.2	23.3	25.2	25.0	27.2

Continued

	2014	2015	2016	2017	2018	2019	2020
				polymer			
Republic of Belarus	47.9	52.1	67.3	77.8	85.8	97.2	97.6
Regions and Minsk city:							
Brest	4.7	6.2	8.6	10.3	13.0	14.2	14.7
Vitebsk	5.1	5.8	8.7	8.9	9.0	9.1	9.4
Gomel	12.8	13.3	16.8	16.7	17.7	17.7	18.3
Grodno	3.6	4.1	6.5	9.7	10.6	11.0	11.0
Minsk city	9.8	9.8	10.3	12.6	15.2	20.9	16.6
Minsk	5.0	5.0	7.5	9.3	9.4	12.3	15.3
Mogilev	6.9	7.9	8.9	10.3	10.9	12.0	12.3
				worn tires			
Republic of Belarus	39.6	43.2	44.6	46.8	51.9	54.2	57.4
Regions and Minsk city:							
Brest	4.5	5.9	6.6	6.7	7.0	7.6	8.0
Vitebsk	4.1	5.7	6.1	6.3	6.7	6.9	7.2
Gomel	5.5	5.4	5.4	5.9	7.4	6.9	7.5
Grodno	4.5	4.8	5.2	5.7	6.5	7.0	8.4
Minsk city	6.2	6.4	6.5	8.0	7.2	7.3	8.3
Minsk	5.0	5.5	5.1	5.1	6.3	7.3	7.4
Mogilev	9.8	9.5	9.7	9.1	10.8	11.2	10.6
				waste oil			
Republic of Belarus	…	…	8.3	12.8	16.8	18.2	22.2
Regions and Minsk city:							
Brest	…	…	1.6	1.9	2.5	2.5	2.6
Vitebsk	…	…	1.0	1.6	1.9	2.2	2.4
Gomel	…	…	1.1	2.0	2.3	2.6	2.9
Grodno	…	…	0.9	1.4	1.9	2.0	2.3
Minsk city	…	…	1.5	2.9	3.6	4.0	6.8
Minsk	…	…	1.4	1.6	2.9	2.8	2.9
Mogilev	…	…	0.8	1.3	1.7	2.1	2.3

Continued

	2014	2015	2016	2017	2018	2019	2020
waste of electrical and electronic equipment							
Republic of Belarus	…	…	4.5	6.2	14.4	25.5	29.1
Regions and Minsk city:							
Brest	…	…	0.5	0.6	1.0	2.6	3.3
Vitebsk	…	…	0.8	0.8	2.0	3.3	3.8
Gomel	…	…	0.5	1.0	2.8	3.7	4.5
Grodno	…	…	0.3	0.4	0.6	1.9	2.3
Minsk city	…	…	1.6	1.9	4.3	7.7	8.8
Minsk	…	…	0.4	1.1	1.9	3.7	3.3
Mogilev	…	…	0.5	0.6	1.7	2.7	3.2

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

(thousand cubic metres)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	1 422	1 301	1 317	1 320	1 065	605	468
Regions and Minsk city:							
Brest	262	247	231	200	225	156	136
Vitebsk	64	81	106	175	89	53	56
Gomel	260	224	179	166	144	60	33
Grodno	216	200	193	190	174	82	128
Minsk city	47	37	16	8	6	7	5
Minsk	470	403	465	456	364	199	98
Mogilev	103	110	125	125	63	47	11

14. 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 cesium-137 (radioactive cesium) 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 cesium-137, with its content in soil over 1 Ku/km^2, affected the territory of Belarus, covering an area of 46 thsd km^2 (23% of the total area), of which 19 thsd km^2 of agricultural land, 20 thsd km^2 of forest fund land.

14.1. Area of agricultural land contaminated with cesium-137 in use of agricultural organisations by region[1)]

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	941.3	927.7	903.1	877.2	864.4	848.0	825.4
Region:							
Brest	52.6	52.1	50.7	45.7	41.6	36.4	34.4
Vitebsk	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Gomel	561.7	552.0	533.3	516.7	513.4	510.6	495.7
Grodno	20.8	19.8	18.3	18.3	16.8	15.1	13.7
Minsk	50.0	48.7	46.9	44.7	43.2	40.1	37.1
Mogilev	255.9	254.9	253.7	251.6	249.2	245.8	244.5

[1)] Data of the Ministry of Agriculture and Food.

14.2. Area of agricultural land contaminated with cesium-137 in use of agricultural organisations by region as of January 1, 2021[1)]

	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	825.4	10.0	665.5	144.8	15.0	0.1
Region:						
Brest	34.4	2.5	33.5	0.9	–	–
Vitebsk	0.1	0.0	0.1	–	–	–
Gomel	495.7	38.4	380.8	102.8	12.0	0.1
Grodno	13.7	1.1	13.4	0.3	–	–
Minsk	37.1	2.1	36.9	0.1	–	–
Mogilev	244.5	19.6	200.8	40.7	3.0	–

[1)] Data of the Ministry of Agriculture and Food.

14.3. Area of forest fund contaminated with cesium-137 by region

(as of January 1; thousand hectares)

	2015	2016	2017	2018	2019	2020	2021
Republic of Belarus	1 701.3	1 671.9	1 652.4	1 632.0	1 591.2	1 560.3	1 538.9
Region:							
Brest	94.2	89.7	85.7	83.6	80.3	78.5	77.3
Vitebsk	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gomel	1 119.8	1 104.7	1 098.1	1 088.6	1 070.7	1 050.9	1 039.3
Grodno	31.4	30.0	26.0	25.6	18.8	16.9	14.6
Minsk	36.1	34.9	34.6	34.1	32.8	32.0	31.5
Mogilev	419.7	412.5	407.9	400.0	388.5	381.9	376.1

[1)] Data of the Ministry of Forestry.

14.4. Area of forest fund contaminated with cesium-137 by region as of January 1, 2021[1)]

	Area of forest fund contaminated		Of which by soil contamination density, thsd ha			
	thsd ha	% of forest fund	1 – 5 Ci/km^2	5 – 15 Ci/km^2	15 – 40 Ci/km^2	40 Ci/km^2
Total						
Republic of Belarus	1 538.9	15.9	977.1	387.4	147.9	26.5
Region:						
Brest	77.3	5.4	75.2	2.1	–	–
Vitebsk	0.1	0.0	0.1	–	–	–
Gomel	1 039.3	45.0	612.1	290.0	110.9	26.3
Grodno	14.6	1.4	14.6	–	–	–
Minsk	31.5	1.8	31.3	0.2	–	–
Mogilev	376.1	29.4	243.8	95.1	37.0	0.2
of which area of forest fund of the Ministry of Forestry						
Republic of Belarus	1 262.4	14.6	874.3	291.6	96.0	0.5
Region:						
Brest	77.3	5.9	75.2	2.1	–	–
Vitebsk	0.1	0.0	0.1	–	–	–
Gomel	766.0	40.8	512.5	194.2	59.0	0.3
Grodno	14.6	1.5	14.6	–	–	–
Minsk	28.3	1.8	28.1	0.2	–	–
Mogilev	376.1	30.2	243.8	95.1	37.0	0.2

[1)] Data of the Ministry of Forestry.

14.5. Forest seeding and planting on areas contaminated with cesium-137 by region

(hectares)

	2014	2015	2016	2017	2018	2019	2020
Republic of Belarus	5 767	5 541	6 037	7 359	7 707	10 708	8 069
Region:							
Brest	118	188	290	280	851	893	327
Gomel	3 702	3 403	4 052	5 543	5 091	7 699	6 231
Grodno	102	104	38	34	10	88	46
Minsk	83	87	73	70	78	97	76
Mogilev	1 762	1 759	1 584	1 432	1 677	1 931	1 389

14.6. Forest seeding and planting on areas contaminated with cesium-137 by region in 2020

(hectares)

	Forest seeding and planting	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	8 069	5 966	1 529	574
Region:				
Brest	327	325	2	–
Gomel	6 231	4 558	1 175	498
Grodno	46	46	–	–
Minsk	76	76	–	–
Mogilev	1 389	961	352	76
of which on land excluded from agricultural use				
Republic of Belarus	197	58	25	114
Region:				
Gomel	151	37	–	114
Grodno	17	17	–	–
Mogilev	29	4	25	–

14.7. Fixed capital investment in post-catastrophe remedial actions by regions and Minsk city

(at current prices)

	2014	2015	2016	2017	2018	2019	2020
BYN million (2014 – 2015 – BYR billion)							
Republic of Belarus	607.3	789.9	72.6	67.4	69.1	73.0	55.8
Regions and Minsk city:							
Brest	73.8	75.2	9.8	9.9	9.3	12.8	12.2
Vitebsk	2.3	3.0	1.5	–	–	–	1.0
Gomel	435.8	535.1	33.1	36.7	46.7	38.4	24.6
Grodno	3.3	–	–	–	–	–	–
Minsk city	–	2.0	0.3	0.0	–	–	–
Minsk	3.9	2.7	–	–	–	–	–
Mogilev	88.1	171.9	27.9	20.7	13.0	21.8	18.0
As % of total investment							
Republic of Belarus	0.3	0.4	0.4	0.3	0.3	0.3	0.2
Regions and Minsk city:							
Brest	0.3	0.4	0.5	0.4	0.3	0.4	0.4
Vitebsk	0.01	0.02	0.09	–	–	–	0.03
Gomel	1.1	1.3	1.3	1.2	1.4	0.9	0.6
Grodno	0.01	–	–	–	–	–	–
Minsk city	–	0.0	0.0	0.0	–	–	–
Minsk	0.01	0.01	–	–	–	–	–
Mogilev	0.5	0.9	2.0	1.7	0.8	1.1	0.9

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