



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

ENVIRONMENTAL PROTECTION IN THE REPUBLIC OF BELARUS

Short data book

MINSK

2022

EDITORIAL BOARD:

I.V. Medvedeva – Chair

E.I. Kukharevich, Zh.N. Vasilevskaya, N.V. Tarasiuk, T.V. Lapkovskaya,
I.A. Mazaiskaya, E.M. Palkovskaya, E.A. Zdrok

The Short data book provides information on the state of the environment, availability and use of natural resources, and environmental expenditure.

The publication presents green growth indicators and selected environmental indicators of the National list of Sustainable Development Goals indicators.

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 in value terms are provided at current prices.

In certain cases data for 2021 are provisional and will be revised in further issues. Relative indicators are calculated on the basis of absolute figures with smaller units of measure. In certain cases minor discrepancies between the total and the sum of its components can be explained by data rounding.

A brief glossary of statistical terms is available on the Belstat website at <https://www.belstat.gov.by/metodologiya/kratkiy-glossariy-statisticheskikh-terminov/> (in Russian only).

The methodologies for environmental statistics are available on the Belstat website at <https://www.belstat.gov.by/metodologiya/metodiki-po-formirovaniyu-i-raschetu-statistichesk/> (in Russian only).

More detailed official statistics are available in the Interactive Business Intelligence System for Distribution of Official Statistical Information (dataportal.belstat.gov.by).

ABBREVIATIONS:

m	- metre	f.e	- fuel equivalent	°C	- degree Celsius
m ³	- cubic metre	kg	- kilogramme	%	- percent
ha	- hectare	t	- tonne	BYN	- Belarusian rubles
km	- kilometre	O ₂	- oxygen	thsd	- thousand
km ²	- square kilometre	CO ₂	- carbon dioxide	mln	- million
mm	- millimetre				

Explanation of symbols:

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

ISBN 978-985-7307-03-6

© National Statistical Committee
of the Republic of Belarus, 2022
E-mail: belstat@belstat.gov.by
<http://www.belstat.gov.by>

© State Committee on Property
of the Republic of Belarus, 2022

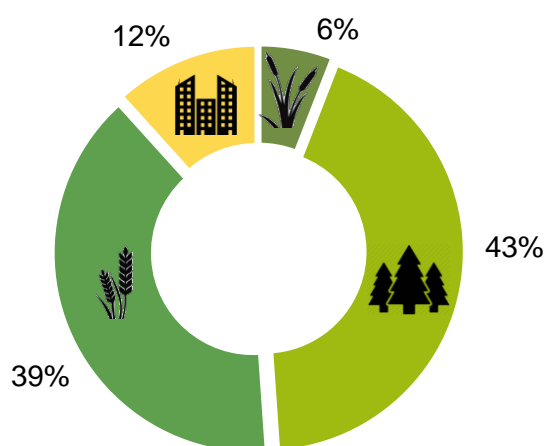
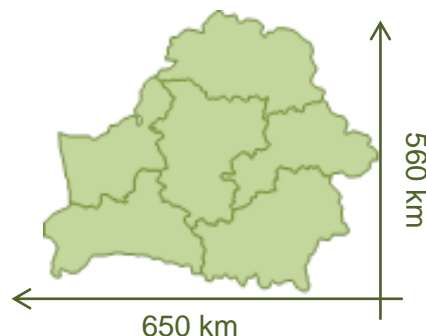
CONTENTS

	Pg.
1. Main geographic characteristics of the Republic of Belarus	5
2. National Sustainable Development Goal indicators	
2.1. Selected indicators of SDG 6. Ensure availability and sustainable management of water and sanitation for all	7
2.2. Selected indicators of SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	8
2.3. Selected indicators of SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable	8
2.4. Selected indicators of SDG 12. Ensure sustainable consumption and production patterns	9
2.5. Selected indicators of 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	10
3. Green Growth indicators	
3.1. Environmental and resource productivity of the economy	13
3.2. Natural assets	14
3.3. Environmental quality of life	15
4. Air protection and climate change	
4.1. Dynamics of air polluting emissions from stationary and mobile sources	16
4.2. Air polluting emissions by regions and Minsk city	16
4.3. Air polluting emissions per capita	17
4.4. Air polluting emissions from stationary sources by regions and Minsk city in 2021	17
4.5. Structure of air polluting emissions from stationary sources by economic activity in 2021	18
4.6. Air pollutants from stationary sources	18
4.7. Captured and detoxified air pollutants from stationary sources	18
4.8. Greenhouse gas emissions	19
4.9. Emissions of carbon dioxide (CO ₂)	20
4.10. Air quality monitoring	20
5. Protection and use of water resources	
5.1. Key indicators of protection and use of water resources	21
5.2. Water abstraction from natural sources and water use per capita	22
5.3. Water abstraction from natural sources by regions and Minsk city in 2021	22
5.4. Structure of water abstraction from natural sources by economic activity in 2021	22
5.5. Water use by regions and Minsk city in 2021	23
5.6. Structure of water use by economic activity in 2021	23
5.7. Water discharge by regions and Minsk city in 2021	24
5.8. Wastewater discharge into surface water bodies by degree of treatment by regions and Minsk city in 2021	24

	Pg.
6. Protection of forest resources	
6.1. Forest fund land by region	25
6.2. Forest cover of the territory by districts as of January 1, 2022	26
6.3. Reforestation and afforestation	27
6.4. Reforestation and afforestation area by region in 2021	27
6.5. Introduction of forest plantations in the category of valuable forest plantations	28
6.6. Seed harvesting of wood and shrub species	28
6.7. Forest pest and disease control	28
6.8. Structure of area of forest loss by cause in 2021	29
6.9. Number of forest fires and forest area affected by fires	29
6.10. Population of mammals included in the Red Book of the Republic of Belarus in their habitats taken under protection by users of hunting reserves	30
7. Protection of land resources	
7.1. Land area	31
7.2. Area of reclaimed land	31
8. Waste	
8.1. Dynamics of generation, recovery and disposal of industrial waste	32
8.2. Generation, recovery and disposal of industrial waste by regions and Minsk city in 2021	32
8.3. Generation and recovery of industrial waste per capita	32
8.4. Structure of generation of industrial waste by economic activity in 2021	33
8.5. Industrial waste by hazard class in 2021	33
8.6. Generation, recovery and landfilling of municipal solid waste	34
8.7. Recovery of municipal solid waste (collection of secondary raw materials)	34
9. Environmental protection expenditure	
9.1. Total environmental protection expenditure	35
9.2. Current environmental protection expenditure and fixed capital investment spent on environmental protection and rational use of natural resources	36

1. MAIN GEOGRAPHIC CHARACTERISTICS OF THE REPUBLIC OF BELARUS

Area¹⁾
207.6 thsd km²



Land structure¹⁾

- Land under swamps
- Forest land
- Agricultural land
- Other land

Average annual air temperatures²⁾

7.2 °C



Average annual precipitation²⁾

718 mm



38 100 mln m³

Renewable freshwater resources²⁾



¹⁾ Data of the State Committee on Property.

²⁾ Data of the Ministry of Natural Resources and Environmental Protection.

Deepest lake¹⁾

Dolgoye 53.6 m



Largest lake¹⁾

Naroch 79.6 km²



Dnieper

689 km
(within country's territory)

Longest river¹⁾

Largest reservoir¹⁾

Vileyskoye
77 km²
(surface area)



Forest cover²⁾

40.1%



Forest fund²⁾

9 706.9
thsd ha

Protected areas¹⁾



nature reserves,
national parks

refuges

natural monuments

Number
of areas

Total area,
thsd ha

5

475.5

375

1 400.3

959

13.5

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

²⁾ Data of the Ministry of Forestry.

2. NATIONAL SUSTAINABLE DEVELOPMENT GOAL INDICATORS



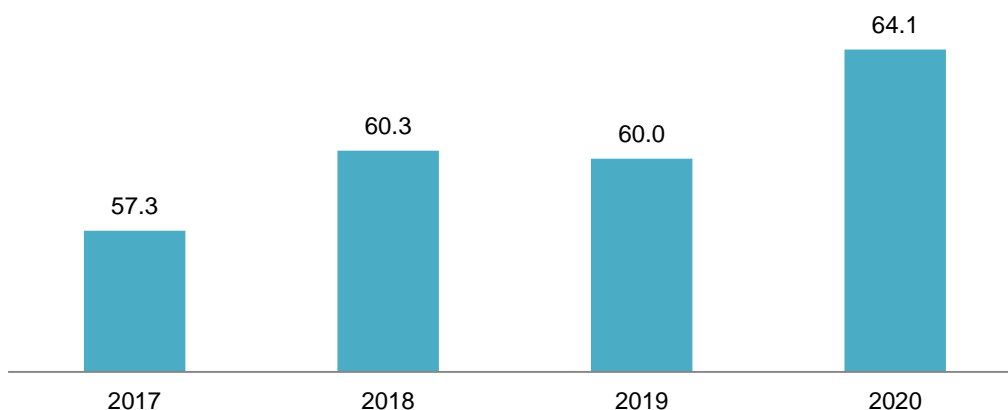
2.1. Selected indicators of SDG 6. Ensure availability and sustainable management of water and sanitation for all

6.3.1. Proportion of domestic and industrial wastewater flows safely treated¹⁾ (percent)



	2017	2018	2019	2020
Republic of Belarus	99.6	99.6	99.6	99.7
Brest region	99.8	99.9	99.9	99.9
Vitebsk region	99.7	100	100	100
Gomel region	99.9	99.7	99.9	99.9
Grodno region	99.9	99.9	99.8	99.9
Minsk city	100	100	100	100
Minsk region	98.1	98.3	97.8	98.6
Mogilev region	99.7	99.6	99.9	99.9

6.4.1. Change in water-use efficiency over time

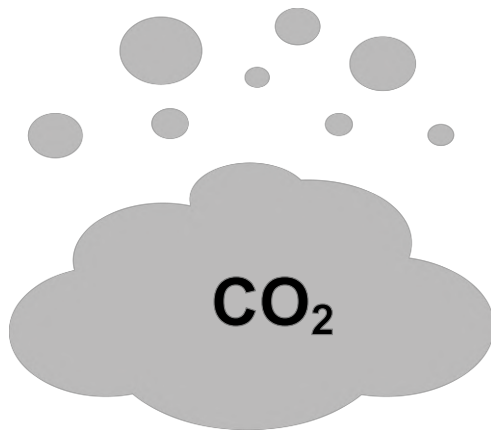


■ Water-use efficiency in the Republic of Belarus (BYN per cubic metre; GVA at 2015 prices)

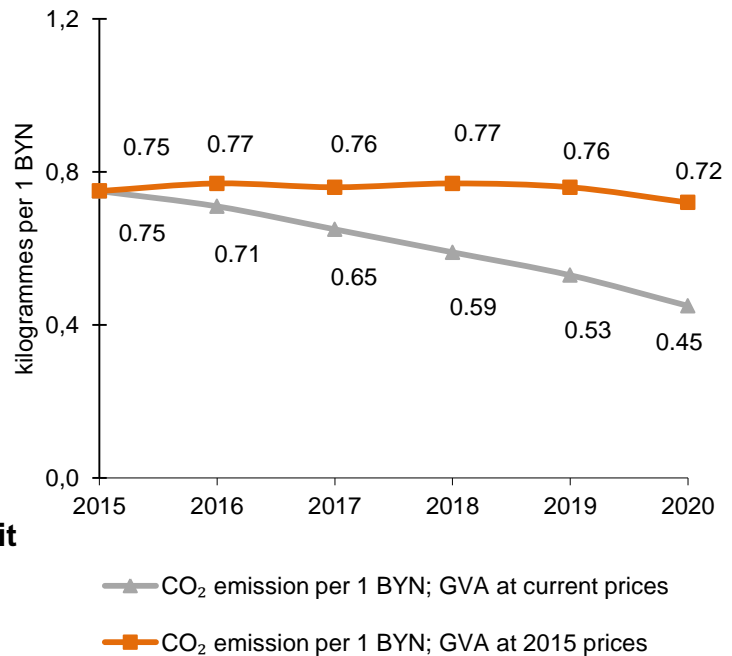
¹⁾ Data of the Ministry of Natural Resources and Environmental Protection.



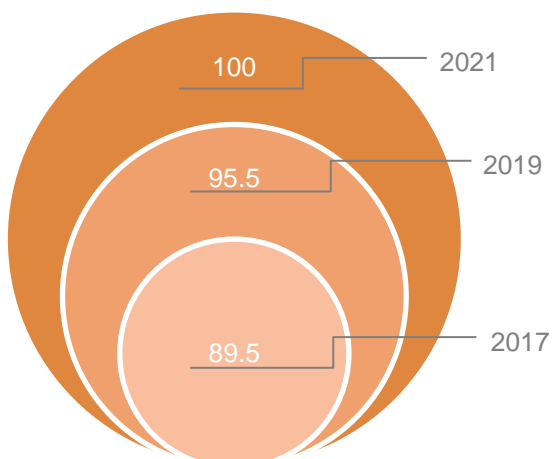
2.2. Selected indicators of SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



9.4.1. CO₂ emission per unit of value added



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



11.6.1.1. Proportion of the population using service of disposal of solid municipal waste regularly¹⁾ (percent)

¹⁾ Data of the Ministry of Housing and Utilities.

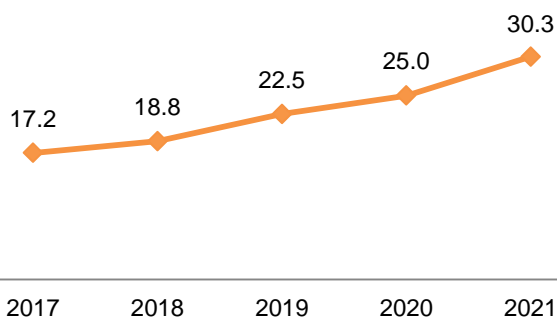
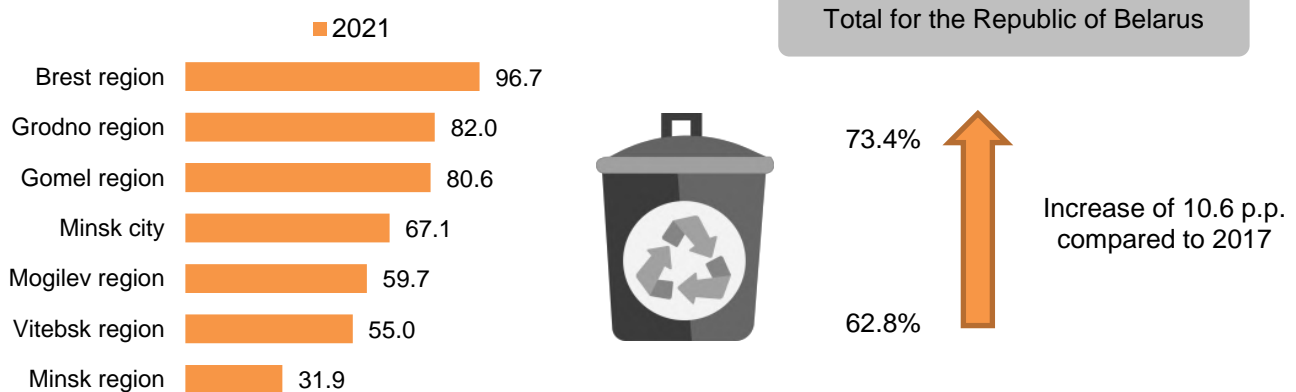


2.4. Selected indicators of SDG 12. Ensure sustainable consumption and production patterns

12.4.2.1. Industrial waste of hazard classes 1 – 3 generated per capita (kilogrammes)



12.4.2.2. Proportion of recovered industrial waste of hazard classes 1-3 in total industrial waste of hazard classes 1-3 generated¹⁾ (percent)



12.5.1.1. Proportion of municipal solid waste recovered in total municipal solid waste generated²⁾ (percent)

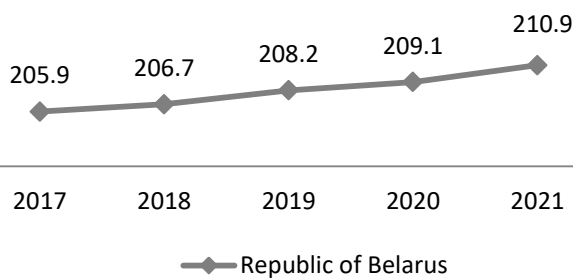
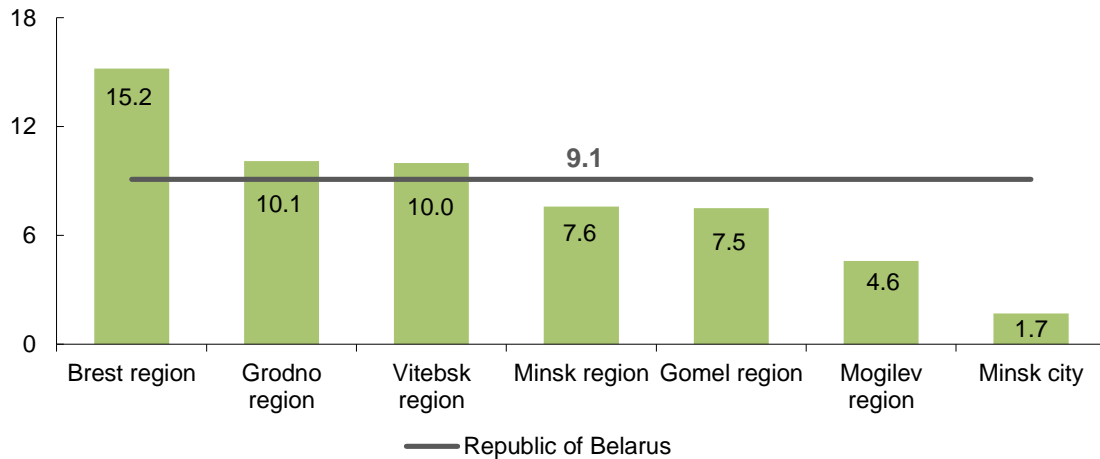
¹⁾ Data of the Ministry of Natural Resources and Environmental Protection. Recovered industrial waste is reflected taking into account partial recovery of previously accumulated waste.

²⁾ Data of the Ministry of Housing and Utilities.

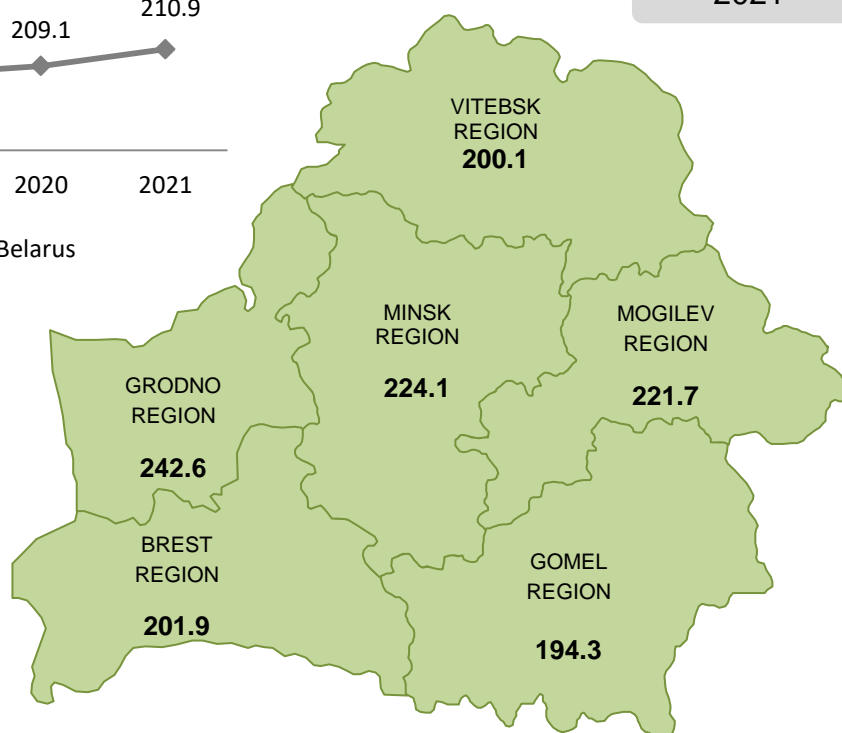


2.5. Selected indicators of SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1.2.1. Proportion of protected areas in the total area of the country (regions and Minsk city)¹⁾ (percent) (as of January 1, 2022)



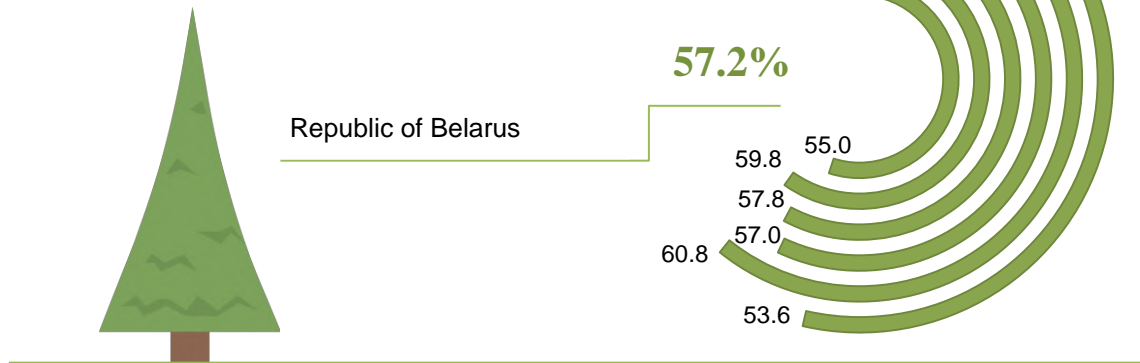
15.2.1.2. Average stock of forest vegetation²⁾ (cubic metres per 1 hectare)



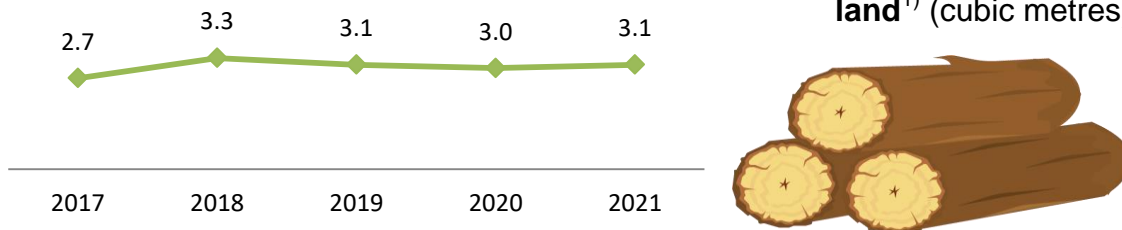
¹⁾ Data of the Ministry of Natural Resources and Environmental Protection.

²⁾ Data of the Ministry of Forestry.

15.2.1.3. Proportion of established forest plantations based on genetic selection in total forest planting and seeding (percent)

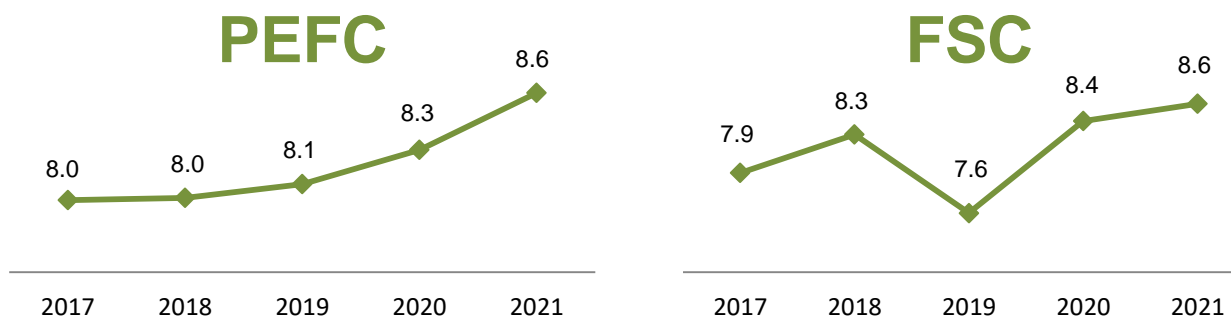


15.2.1.4. Average volume of timber harvesting from one hectare of forest land¹⁾ (cubic metres)



15.2.1. Progress towards sustainable forest management¹⁾

Area of forests certified according to an independent certification scheme, million hectares



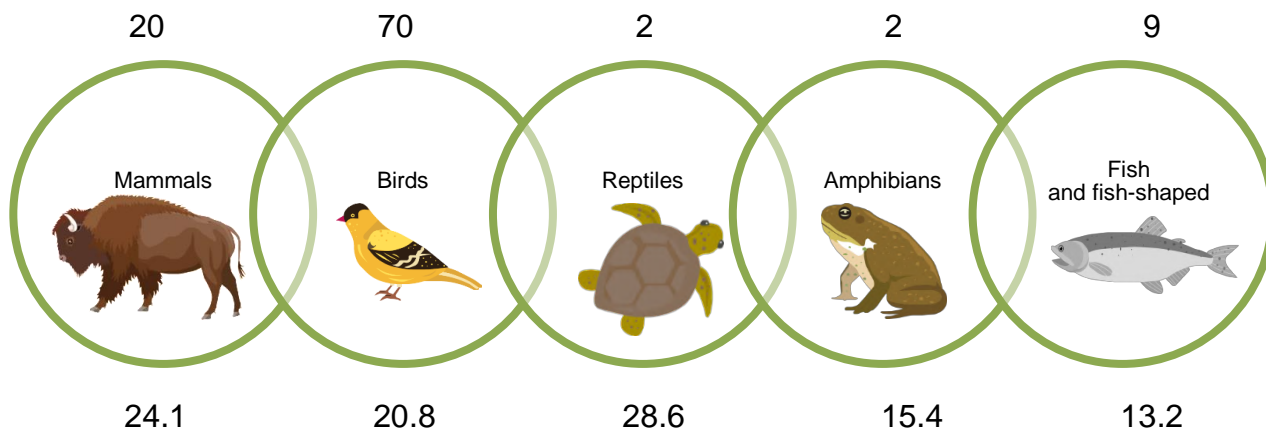
100% of the forest area is covered by the long-term management plan

¹⁾ Data of the Ministry of Forestry.

15.5.1.1. Rare and endangered wildlife animal species¹⁾

2021

Total number of rare and endangered species, units

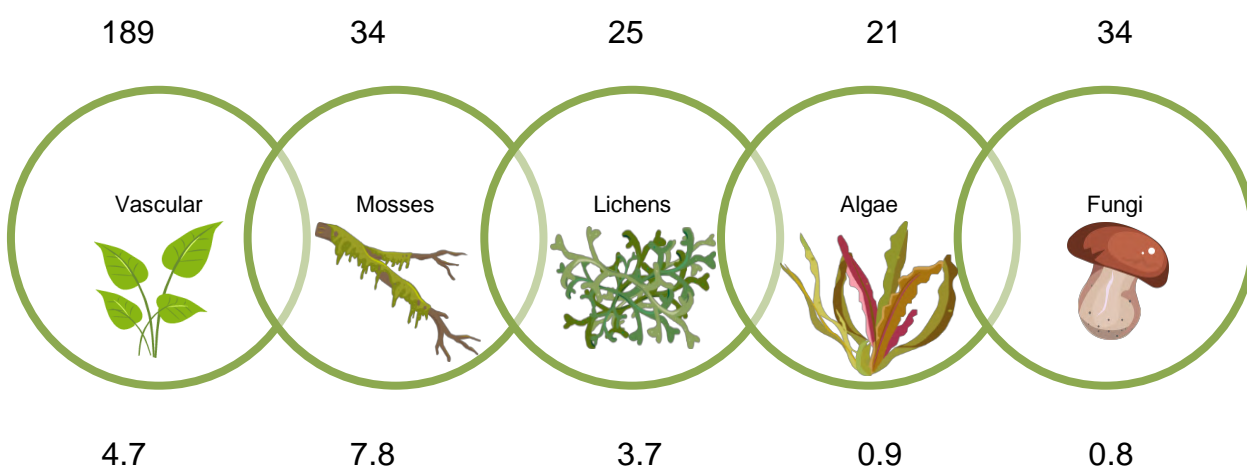


Proportion of rare and endangered wildlife species to total species, percent

15.5.1.2. Rare and endangered wildlife plant species¹⁾

2021

Total number of rare and endangered species, units



Proportion of rare and endangered wildlife species to total species, percent

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

3. GREEN GROWTH INDICATORS

3.1. Environmental and resource productivity of the economy

Production-based carbon productivity

BYN thsd/kg



2017

2020

1.78

1.87

Ratio of GDP (at 2017 prices)
to CO₂ emissions from production

Energy productivity

BYN thsd/kg of f.e.



2017

2021

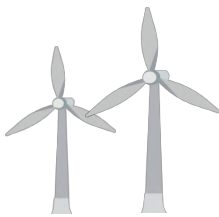
2.66

2.58

Ratio of GDP (at 2005 prices) to gross fuel
and energy resources consumption

Renewable electricity

as % of total electricity production



2.2

1.8

2.5

3.4

3.2

2017

2018

2019

2020

2021

Waste generation intensity

Industrial waste

per unit of GDP,
at 2017 prices,
kg per BYN thsd

2017

2021



525

554

tonnes
per capita

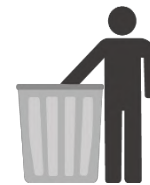


5.9

6.7

Municipal solid waste

kg
per capita



401.9

425.7

Water-use efficiency



Ratio of GVA
at 2017 prices to the total
volume of water use,
BYN thsd/m³

72.6

75.9

79.5

80.0

2017

2018

2019

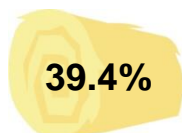
2020

3.2. Natural assets

Land resources¹⁾

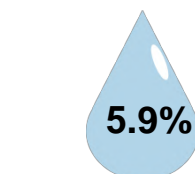
as of January 1, 2022

20 762.8 thsd ha



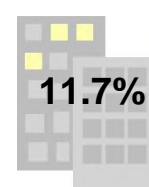
Agricultural land

Forest land



Land under swamps and water bodies

Other land



Forest resources²⁾

as of January 1, 2022



9 706.9 thsd ha

stock of forest vegetation
1 879.9 mln m³marketable timber harvested
27 mln m³

40.1%
of the territory of Belarus is covered by forests

Freshwater resources³⁾

2020

38 100 mln m³

3.5%

water exploitation index

2021



153

m³ per capita

water abstraction from natural sources

Wildlife resources⁴⁾

2021



83 species of mammals



337 species of birds



7 species of reptiles



68 species of fish



4 033 species of vascular plants

¹⁾ Data of the State Committee on Property.

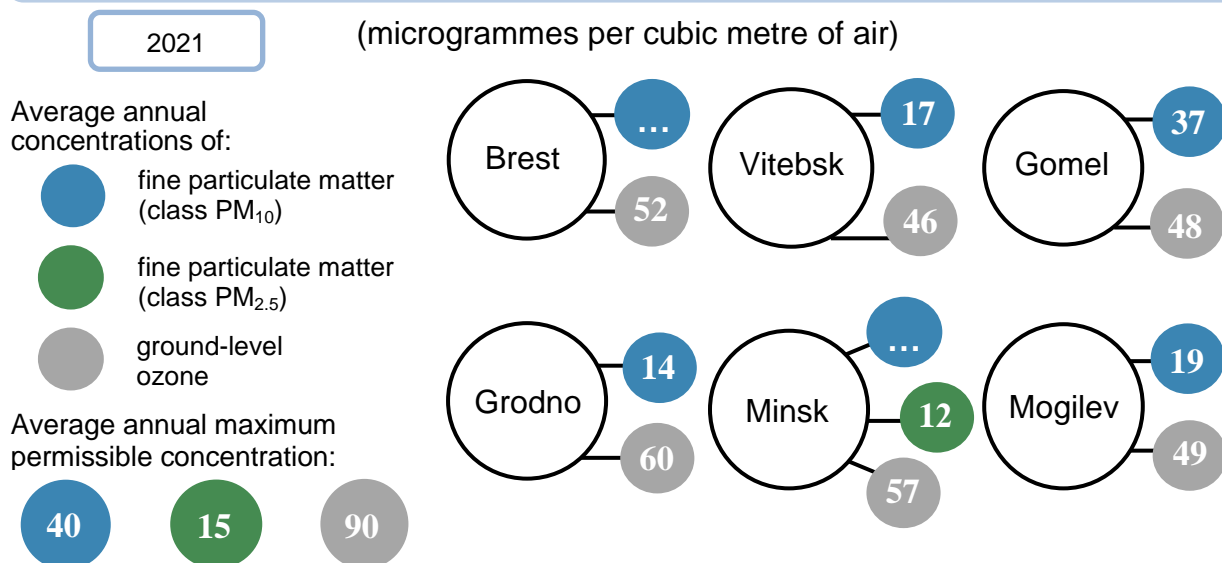
²⁾ Data of the Ministry of Forestry.

³⁾ Data of the Ministry of Natural Resources and Environmental Protection.

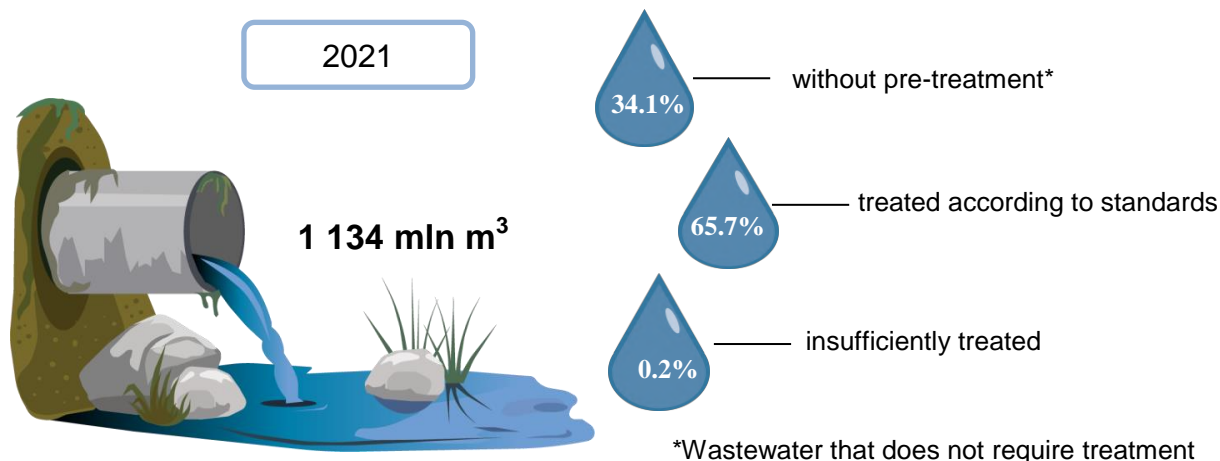
⁴⁾ Data of the National Academy of Sciences of Belarus.

3.3. Environmental quality of life

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

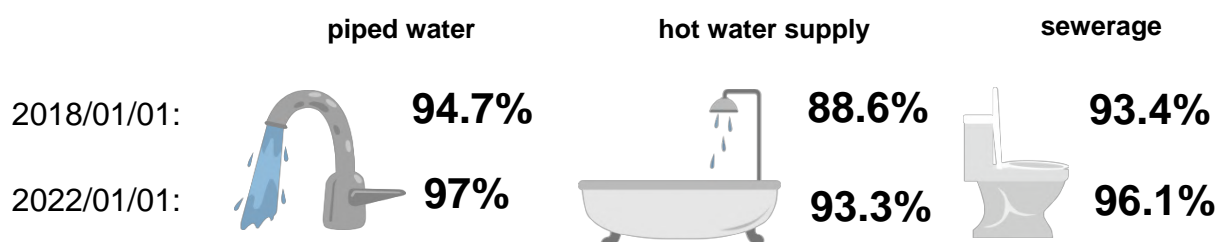


Access to water supply and sanitation¹⁾



Access to water use supply and sanitation

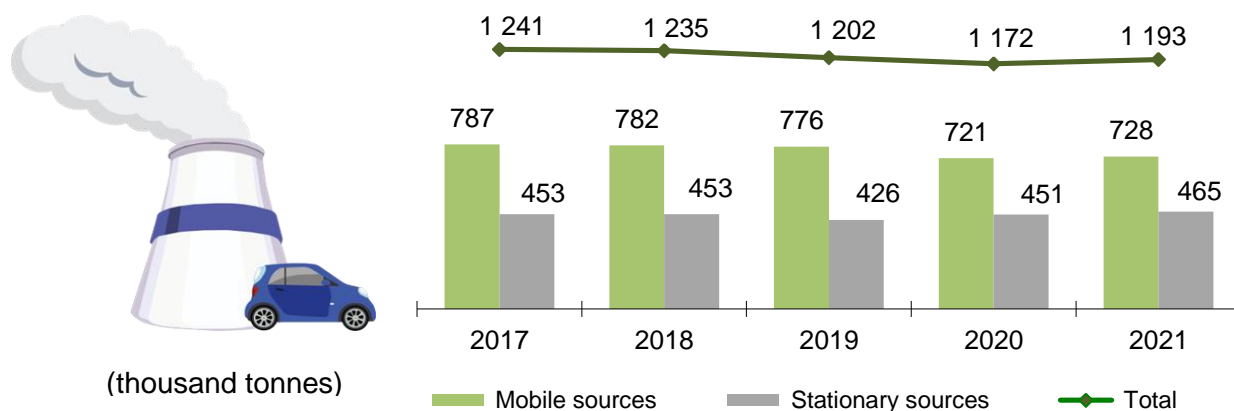
Share of households living in apartments/houses equipped with:



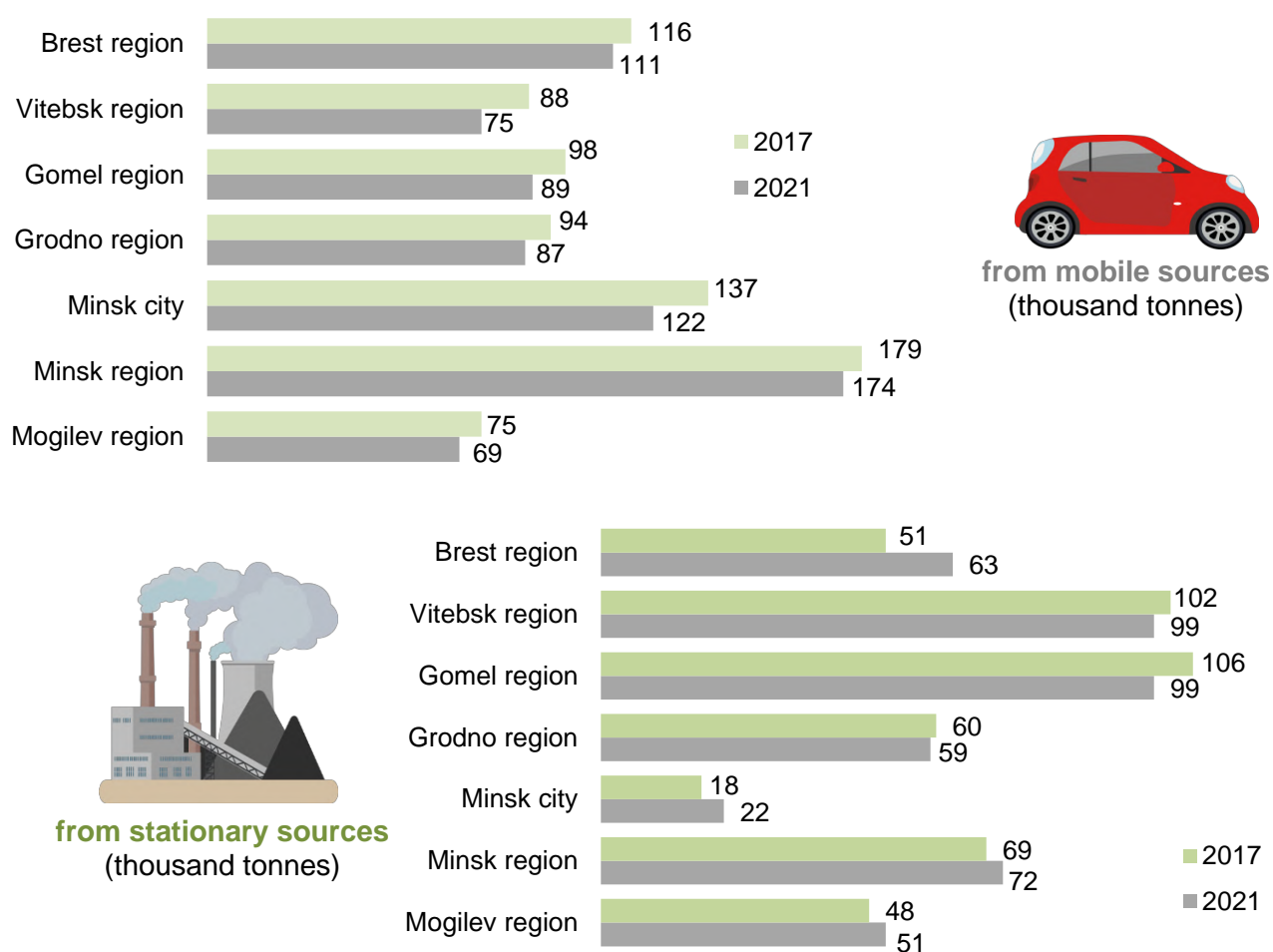
¹⁾ Data of the Ministry of Natural Resources and Environmental Protection.

4. AIR PROTECTION AND CLIMATE CHANGE¹⁾

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



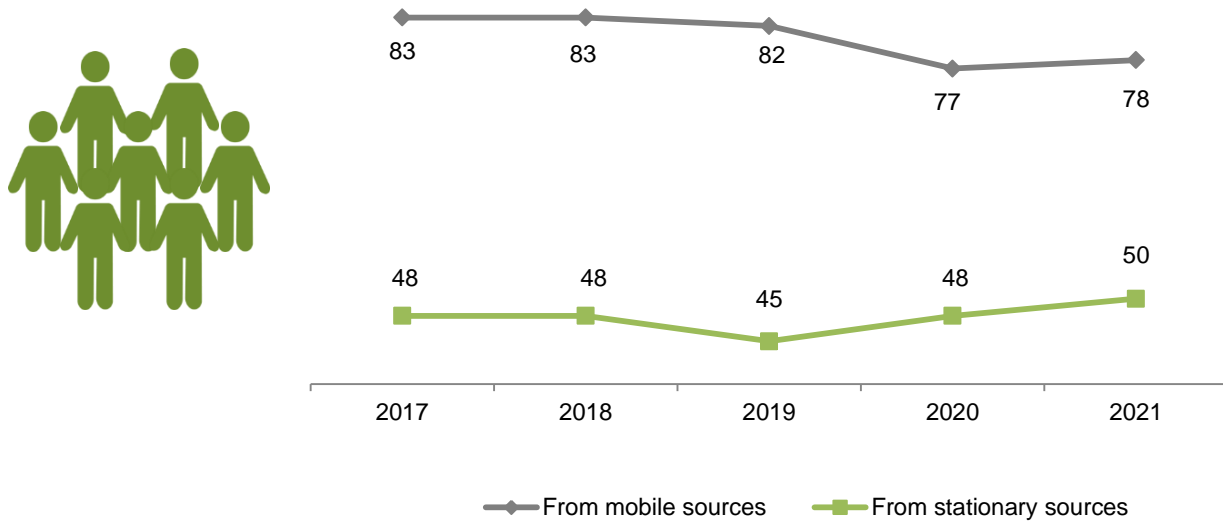
4.2. Air polluting emissions by regions and Minsk city



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

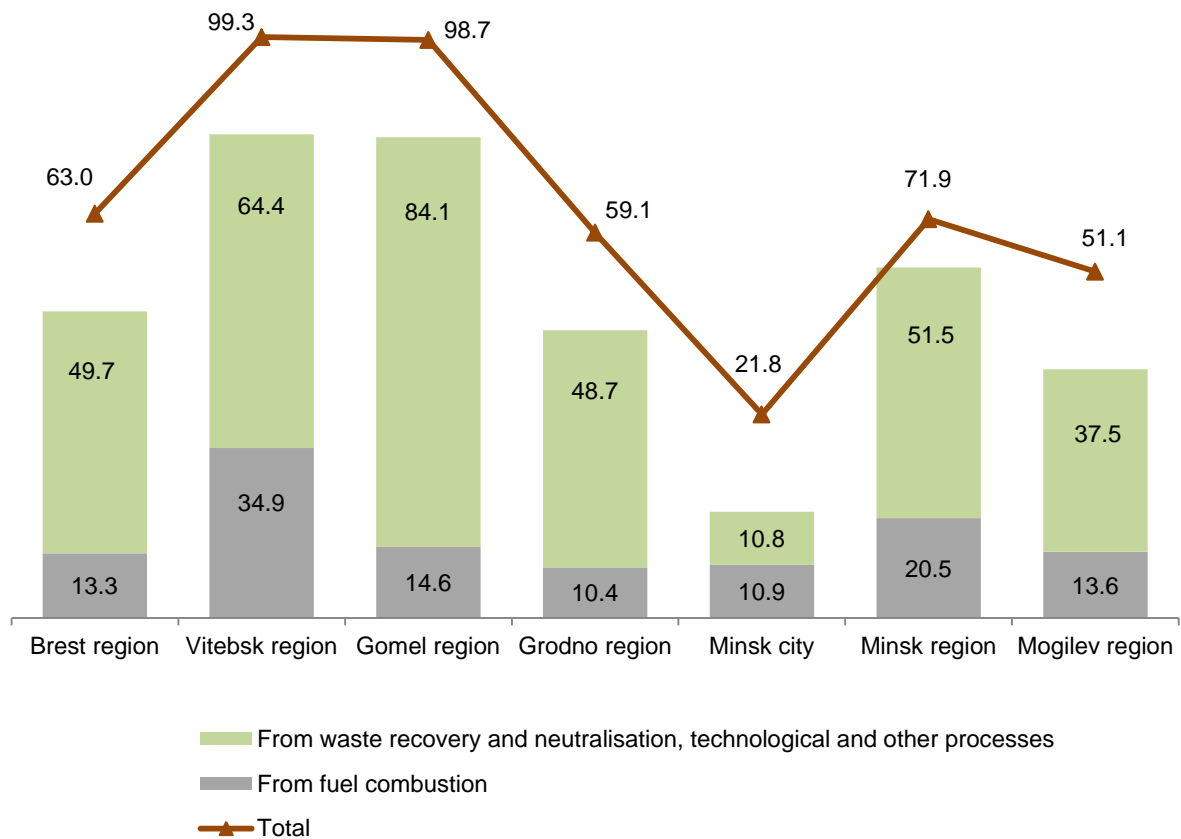
4.3. Air polluting emissions per capita

(kilogrammes)



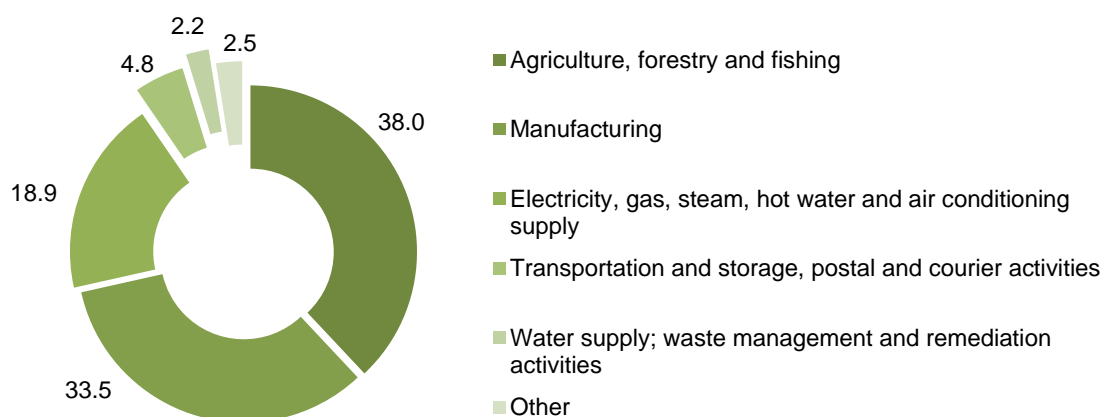
4.4. Air polluting emissions from stationary sources by regions and Minsk city in 2021

(thousand tonnes)

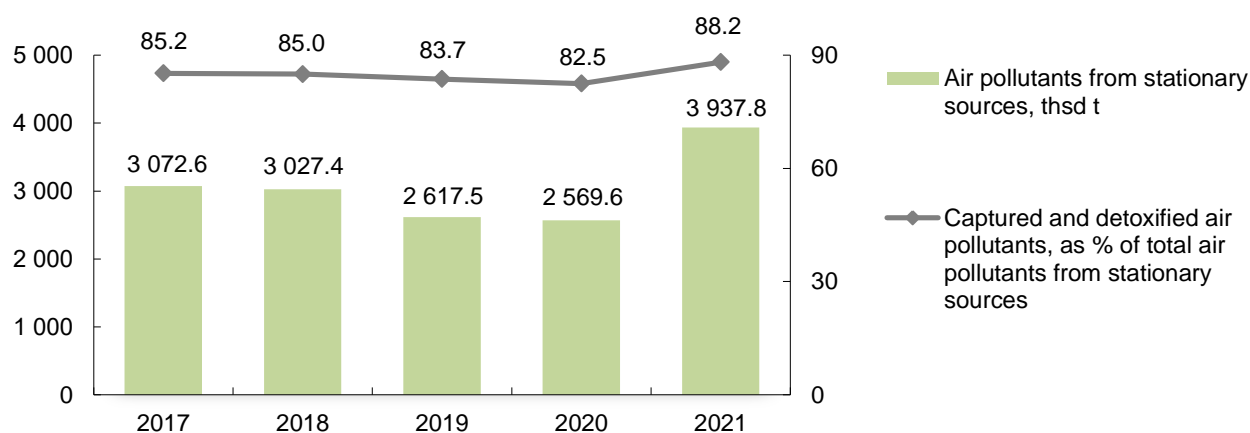


4.5. Structure of air polluting emissions from stationary sources by economic activity in 2021

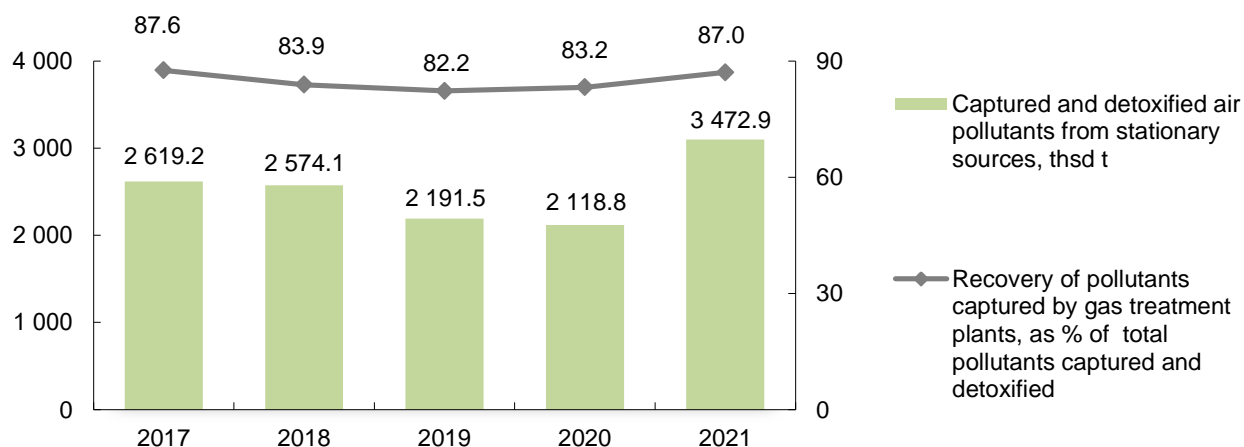
(as percent of total)



4.6. Air pollutants from stationary sources



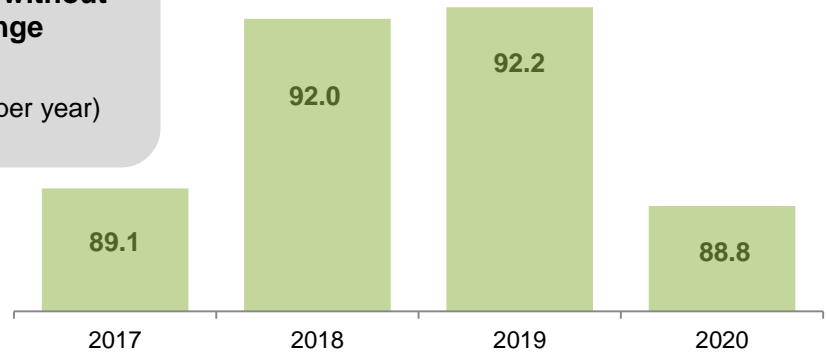
4.7. Captured and detoxified air pollutants from stationary sources



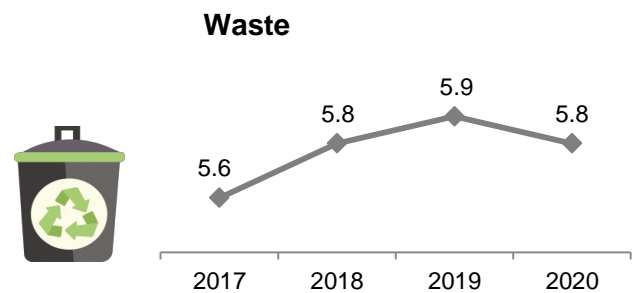
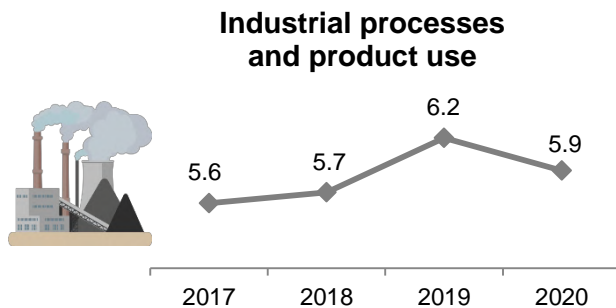
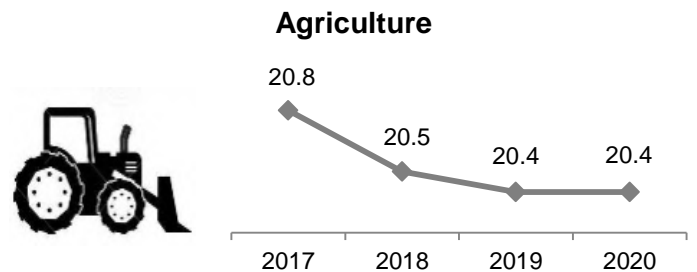
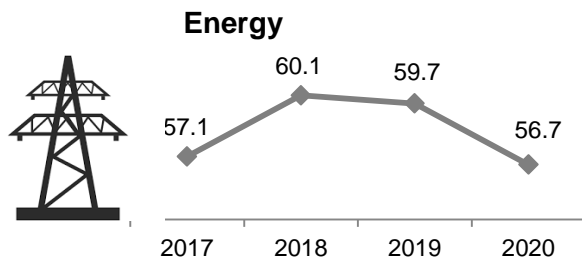
4.8. Greenhouse gas emissions

Greenhouse gas emissions without land use, land-use change and forestry

(million tonnes in terms of CO₂ per year)



by sectors

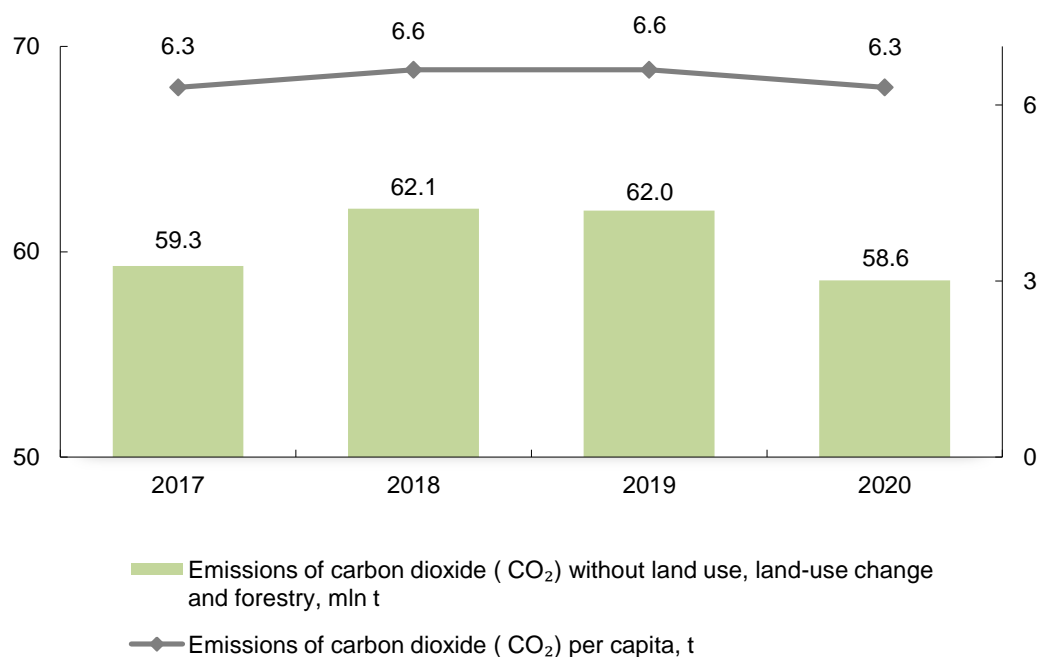


Greenhouse gas emissions with land use, land-use change and forestry

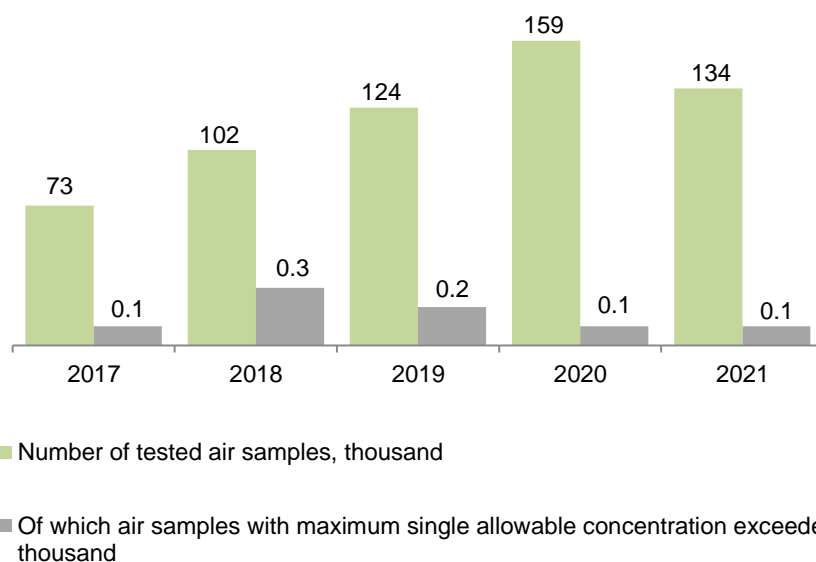
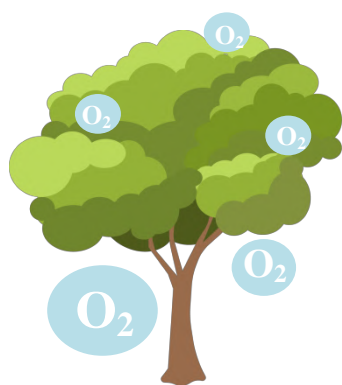
(million tonnes in terms of CO₂ per year)



4.9. Emissions of carbon dioxide (CO₂)



4.10. Air quality monitoring¹⁾

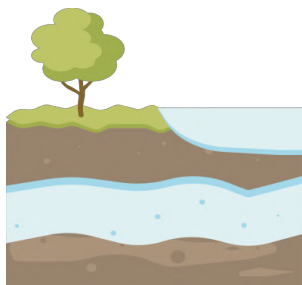


¹⁾ Data of the Ministry of Health.

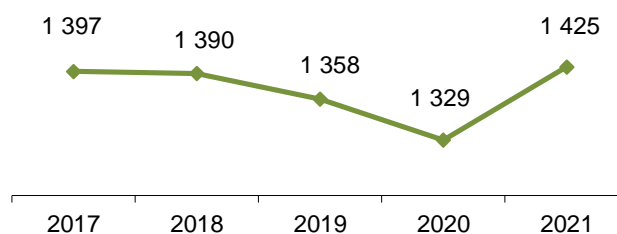
5. PROTECTION AND USE OF WATER RESOURCES¹⁾

5.1. Key indicators of protection and use of water resources

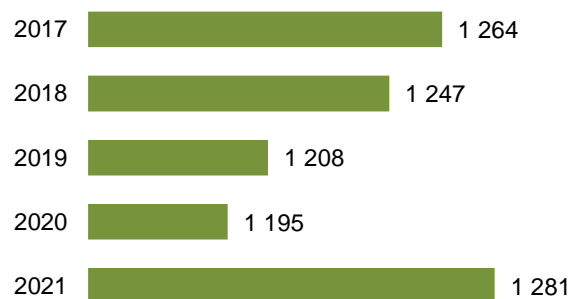
(million cubic metres)



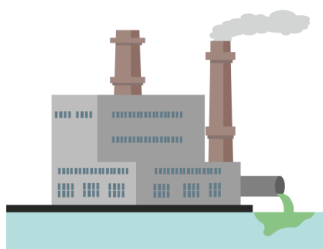
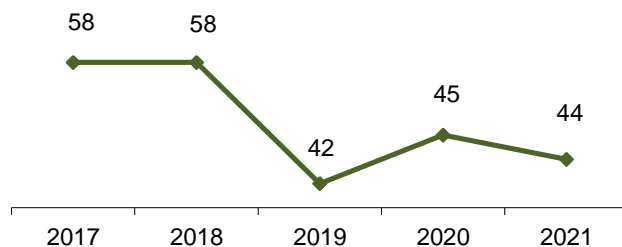
Water abstraction from natural sources



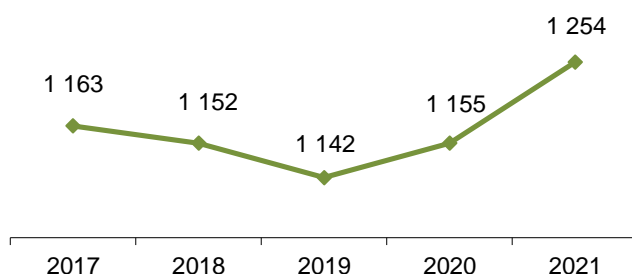
Water use



Water loss during transport



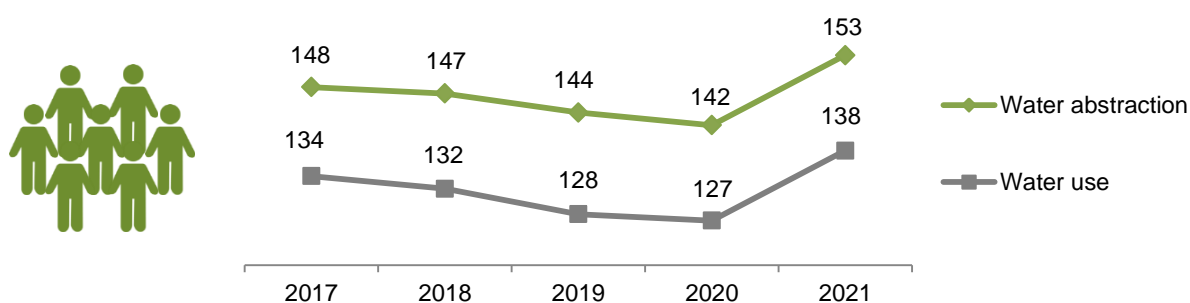
Water discharge into the environment



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

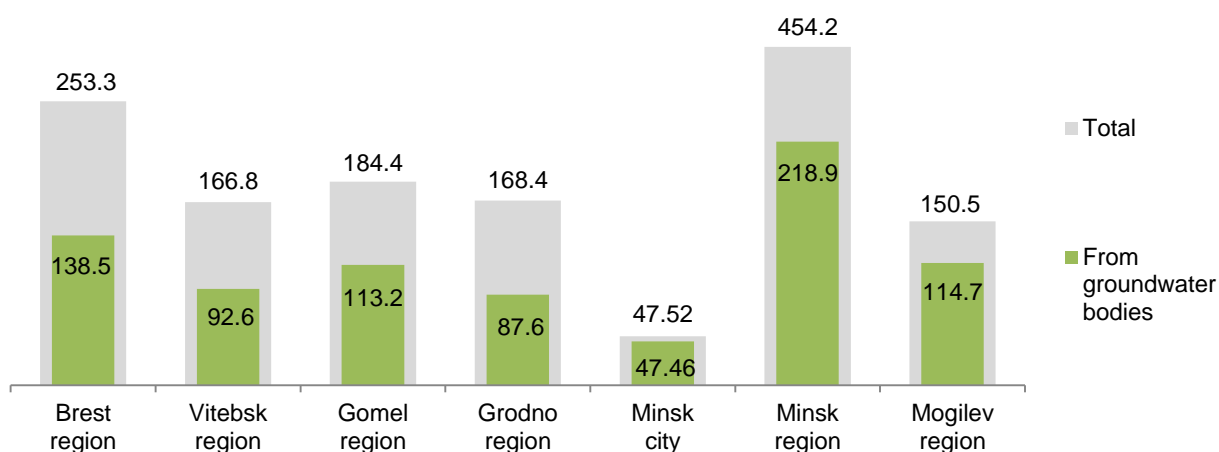
5.2. Water abstraction from natural sources and water use per capita

(cubic metres)



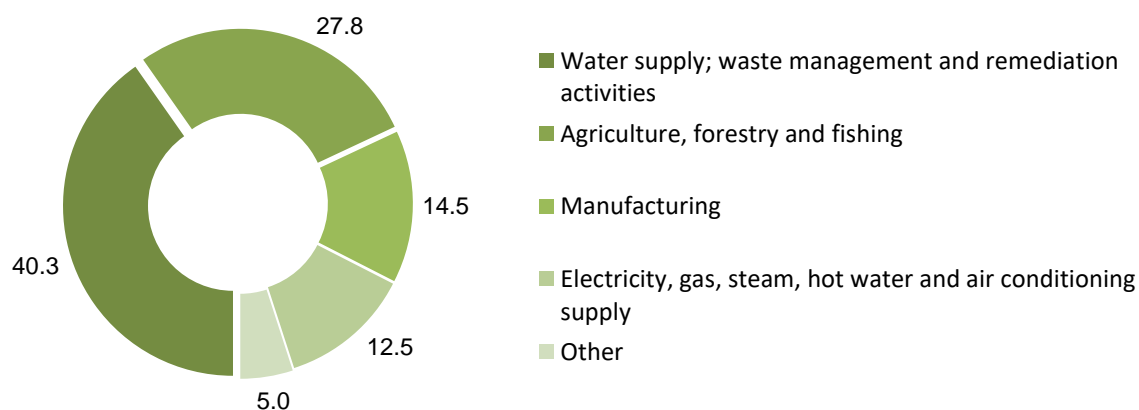
5.3. Water abstraction from natural sources by regions and Minsk city in 2021

(million cubic metres)



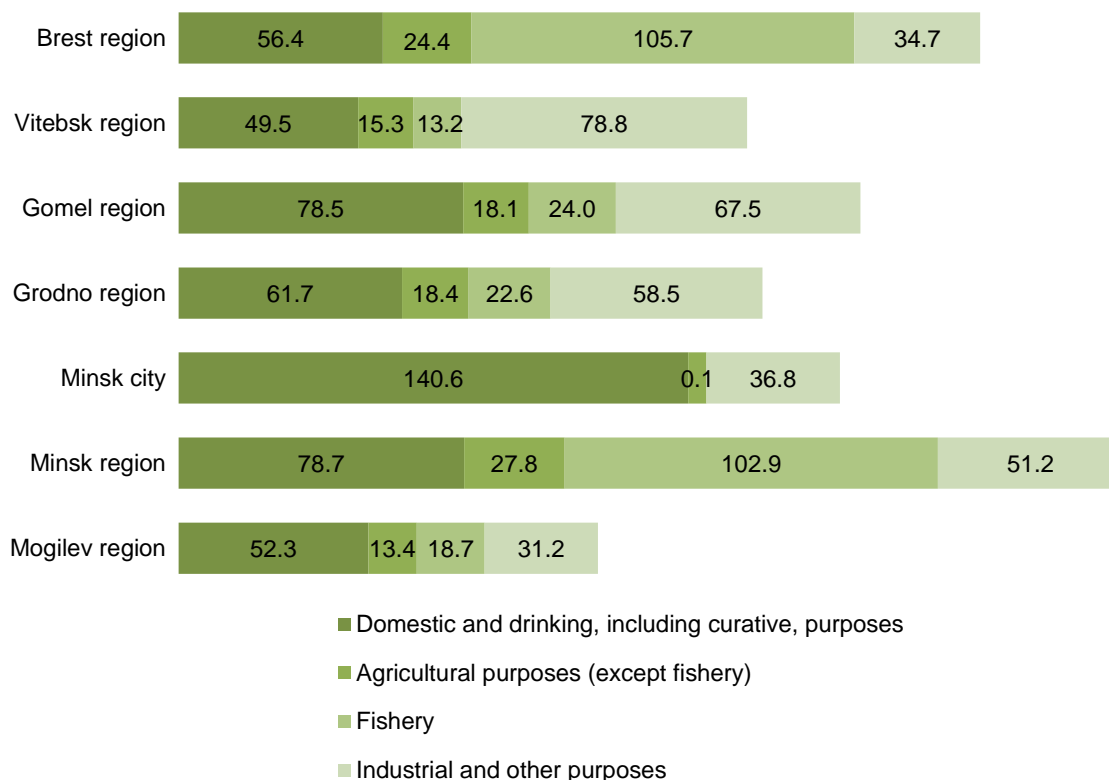
5.4. Structure of water abstraction from natural sources by economic activity in 2021

(as percent of total)



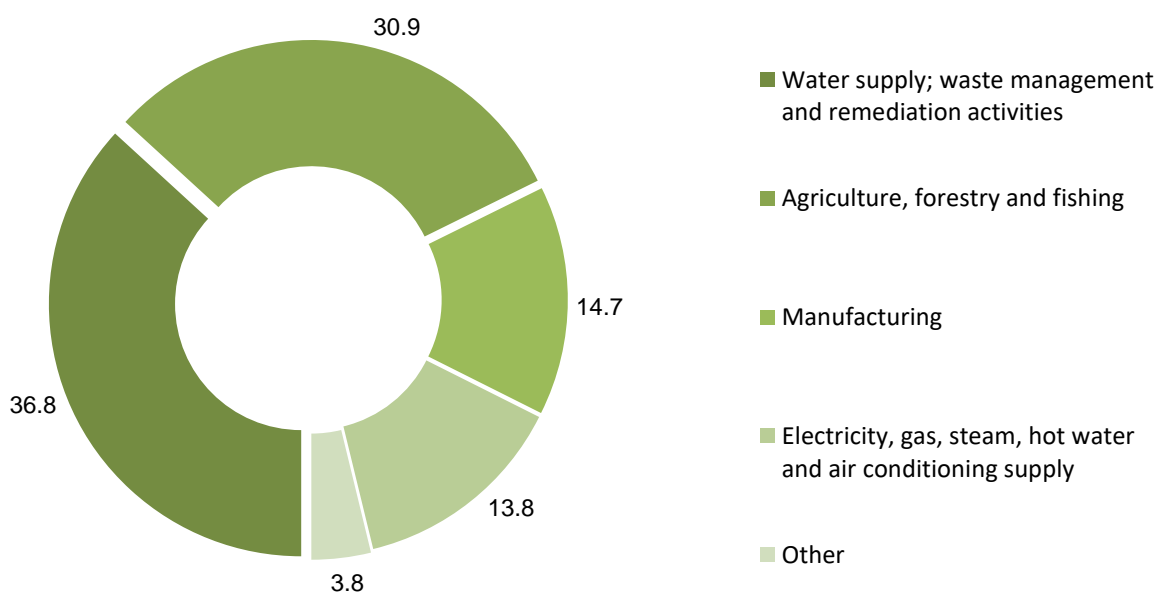
5.5. Water use by regions and Minsk city in 2021

(million cubic metres)



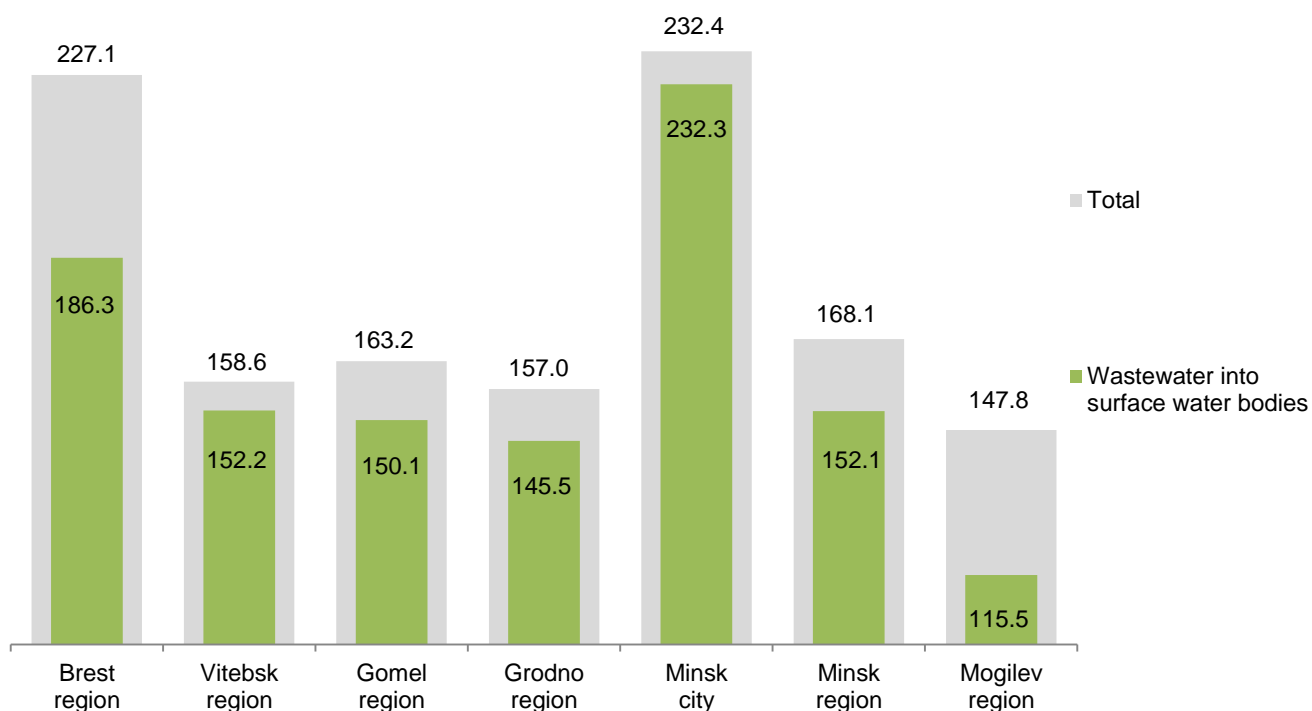
5.6. Structure of water use by economic activity in 2021

(as percent of total)



5.7. Water discharge by regions and Minsk city in 2021

(million cubic metres)



5.8. Wastewater discharge into surface water bodies by degree of treatment by regions and Minsk city in 2021

(million cubic metres)



6. PROTECTION OF FOREST RESOURCES

6.1. Forest fund land by region¹⁾

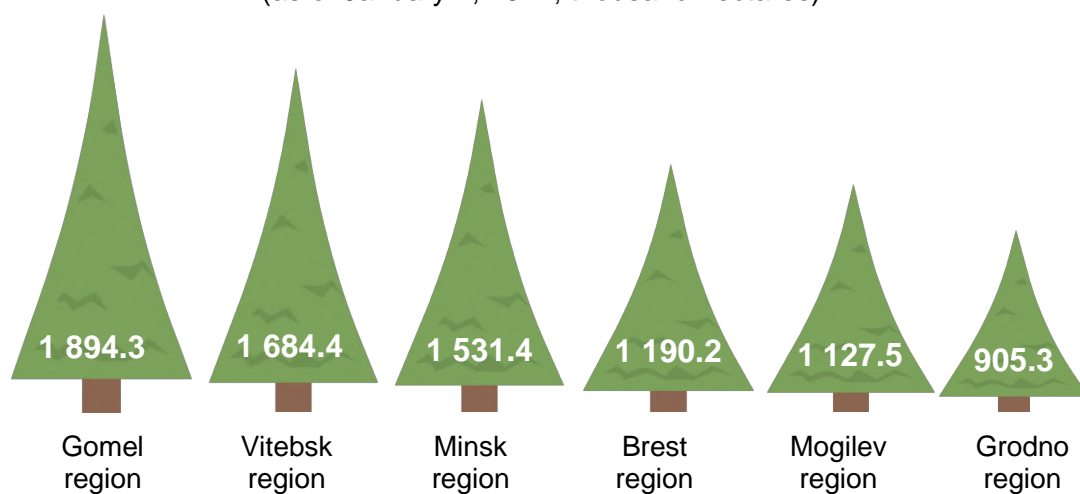
Total area of forest fund

as of January 1; thousand hectares

	2018	2019	2020	2021	2022	as of January 1, 2022; as % of total
Republic of Belarus	9 582.0	9 598.5	9 620.9	9 690.0	9 706.9	
Brest region	1 416.5	1 421.7	1 421.9	1 426.7	1 430.3	14.7
Vitebsk region	1 892.7	1 894.5	1 896.9	1 930.1	1 935.7	19.9
Gomel region	2 284.5	2 291.7	2 298.6	2 307.7	2 310.4	23.8
Grodno region	996.1	996.6	999.1	1 010.8	1 010.4	10.4
Minsk region	1 727.0	1 727.1	1 734.3	1 735.9	1 738.8	17.9
Mogilev region	1 265.1	1 266.9	1 270.2	1 278.8	1 281.2	13.2

Land area covered by forests

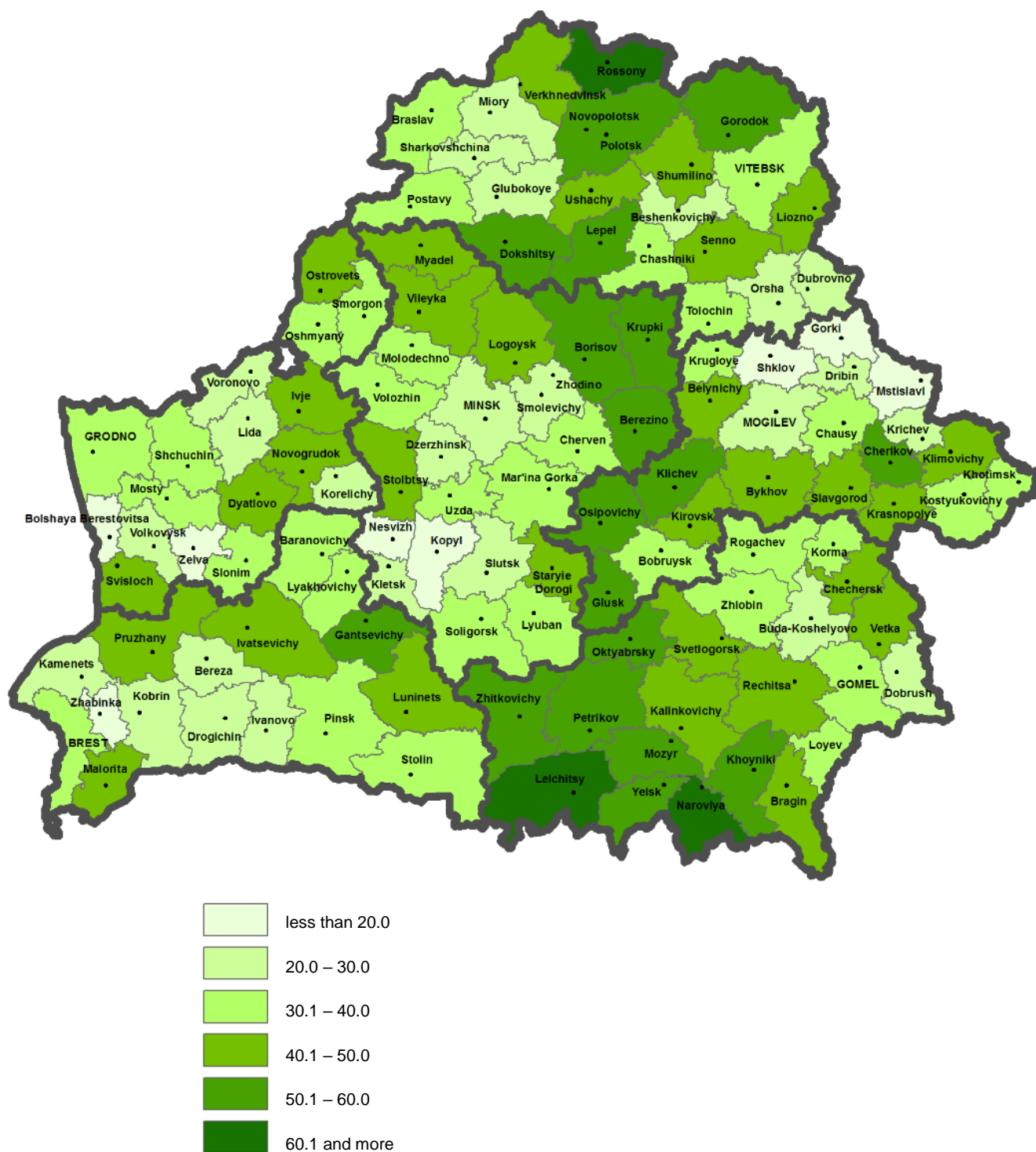
(as of January 1, 2022; thousand hectares)



¹⁾ Data of the Ministry of Forestry.

6.2. Forest cover of the territory by districts as of January 1, 2022¹⁾

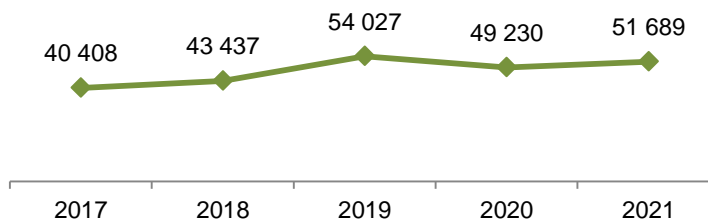
(percent)



¹⁾ Data of the Ministry of Forestry.

6.3. Reforestation and afforestation

(hectares)



Assistance to natural forest regeneration and preservation of undergrowth

2021
10 063
↑
2017
6 224



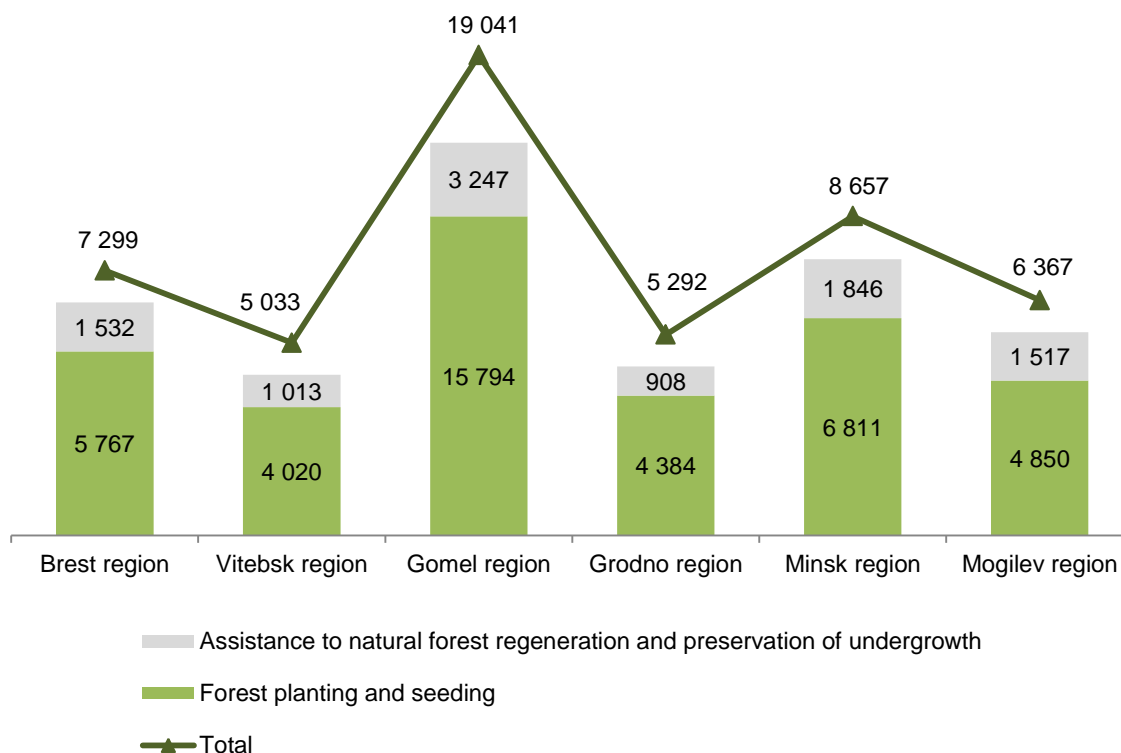
Forest planting and seeding

2021
41 626
↑
2017
34 184



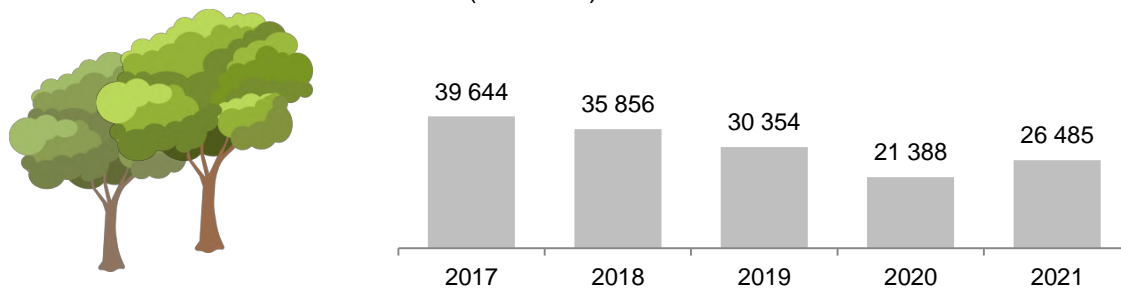
6.4. Reforestation and afforestation area by region, in 2021

(hectares)



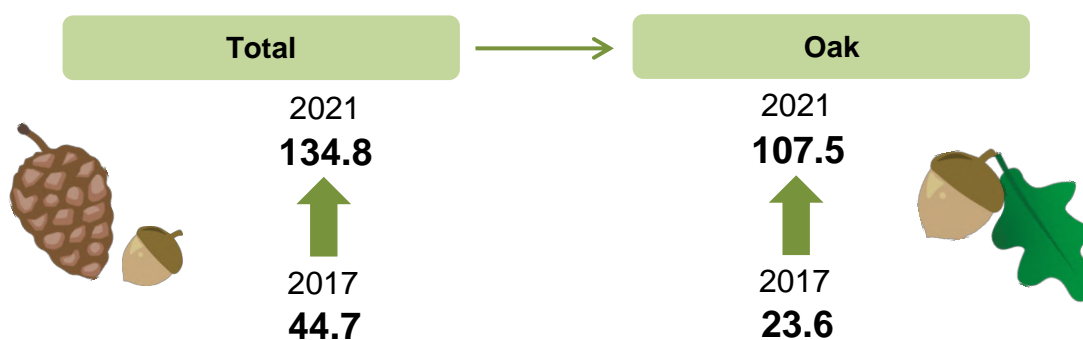
6.5. Introduction of forest plantations in the category of valuable forest plantations

(hectares)



6.6. Seed harvesting of wood and shrub species

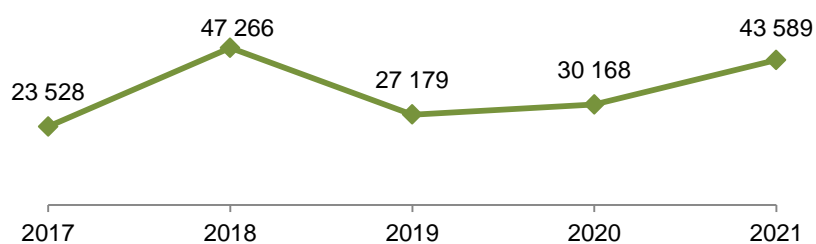
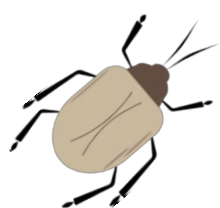
(tonnes)



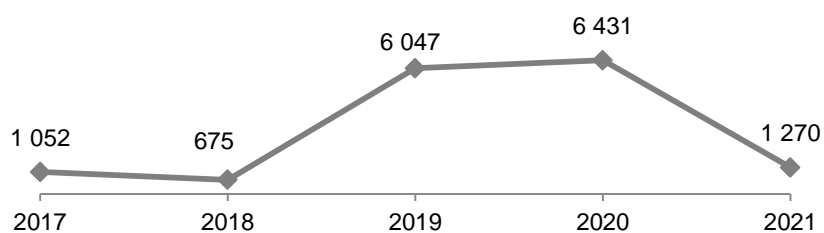
6.7. Forest pest and disease control

(hectares)

biological control

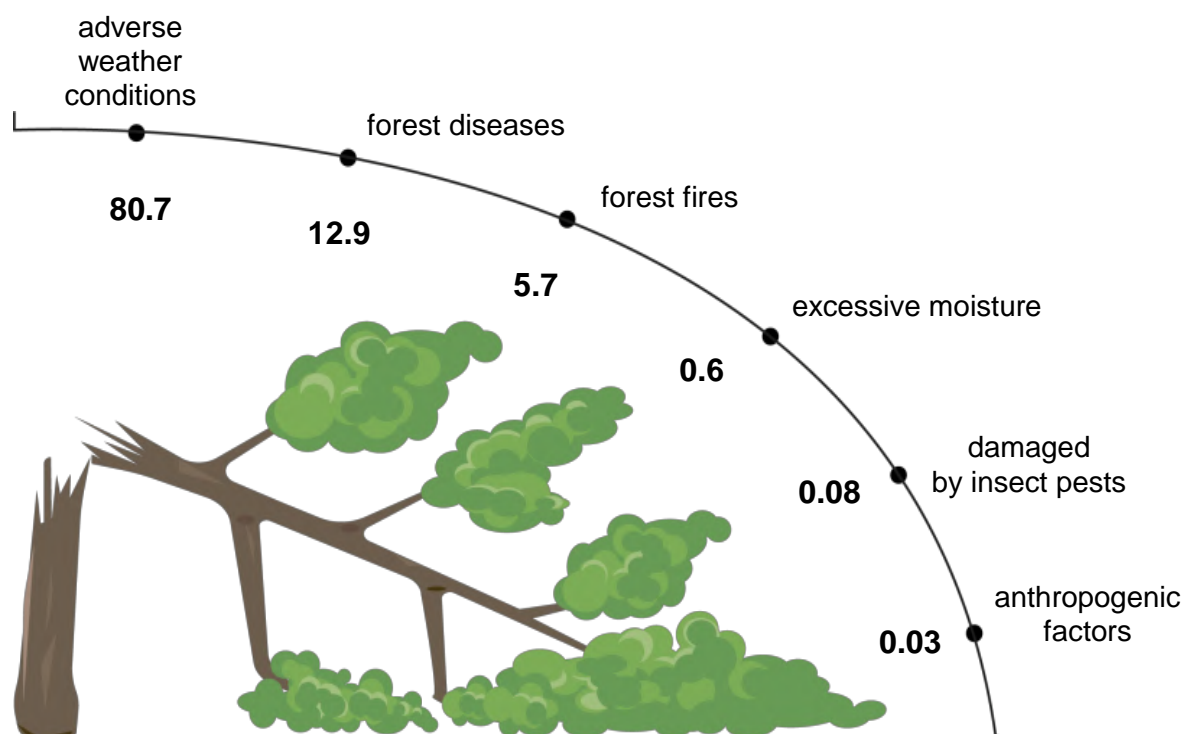


chemical control

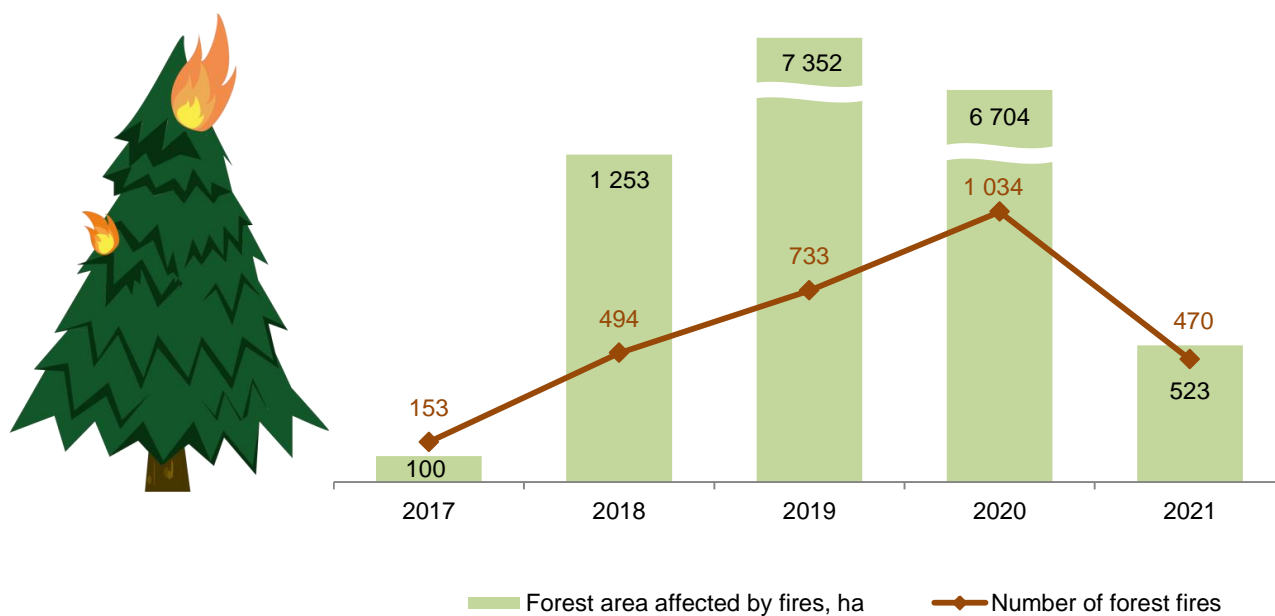


6.8. Structure of area of forest loss by cause in 2021

(as percent of total)



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

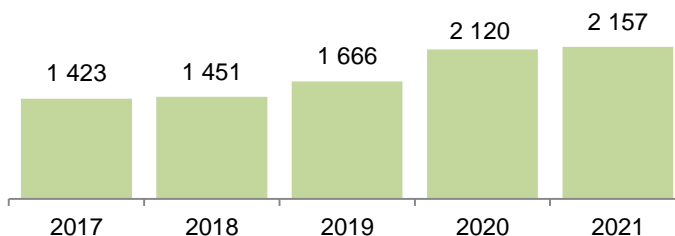


6.10. Population of mammals included in the Red Book of the Republic of Belarus in their habitats taken under protection by users of hunting reserves¹⁾

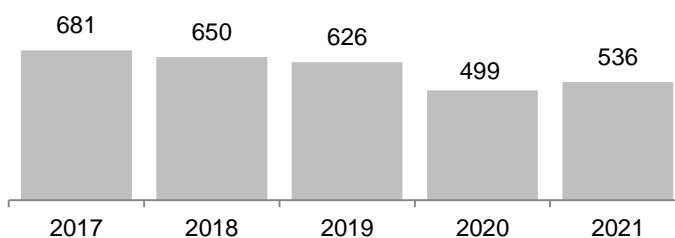
(animal units)



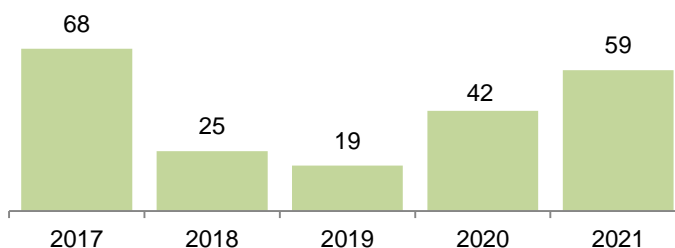
**European bison
(main gene pool)**



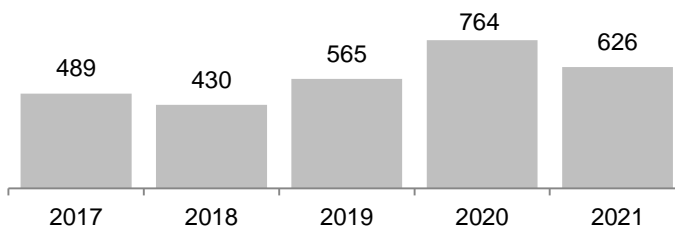
Badger



Brown bear



European lynx

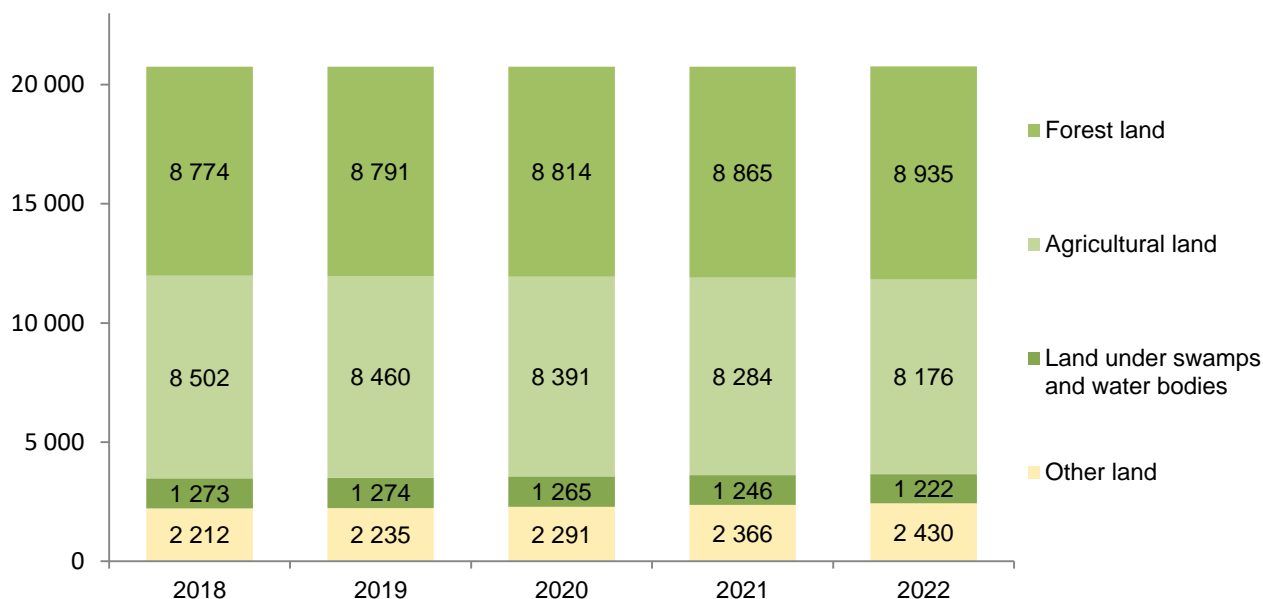


¹⁾ Data of the Ministry of Forestry.

7. PROTECTION OF LAND RESOURCES¹⁾

7.1. Land area

(as of January 1; thousand hectares)



7.2. Area of reclaimed land

(as of January 1; thousand hectares)

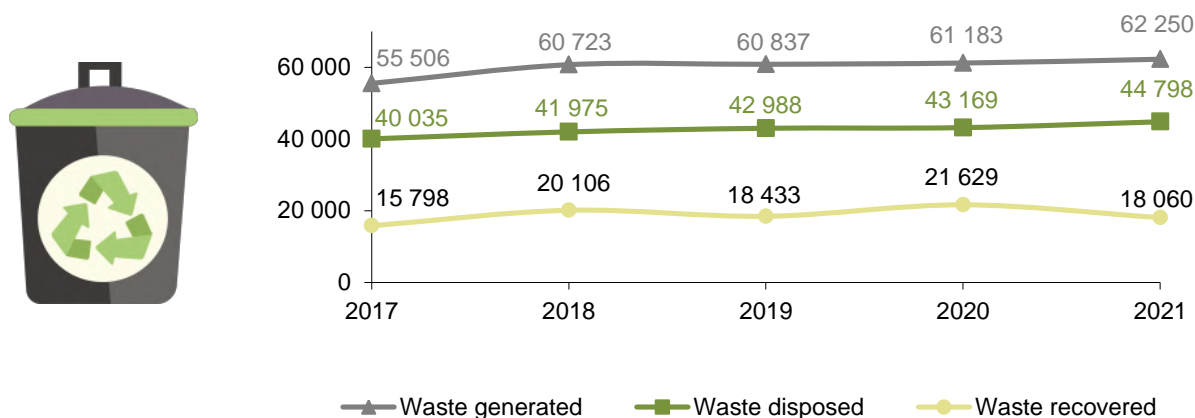
	2018	2019	2020	2021	2022
Total land reclaimed	3 446.6	3 448.5	3 453.7	3 454.8	3 337.5
of which:					
drained	3 416.3	3 418.2	3 423.4	3 424.5	3 308.8
irrigated	30.3	30.3	30.3	30.3	28.7
of which agricultural land	2 902.0	2 895.9	2 882.1	2 876.4	2 865.0
of which:					
drained	2 871.7	2 865.6	2 851.8	2 846.1	2 836.4
irrigated	30.3	30.3	30.3	30.3	28.6
Share of reclaimed land in total land area, %	16.6	16.6	16.6	16.6	16.1
of which:					
drained	16.5	16.5	16.5	16.5	15.9
irrigated	0.1	0.1	0.1	0.1	0.1

¹⁾ Data of the State Committee on Property.

8. WASTE

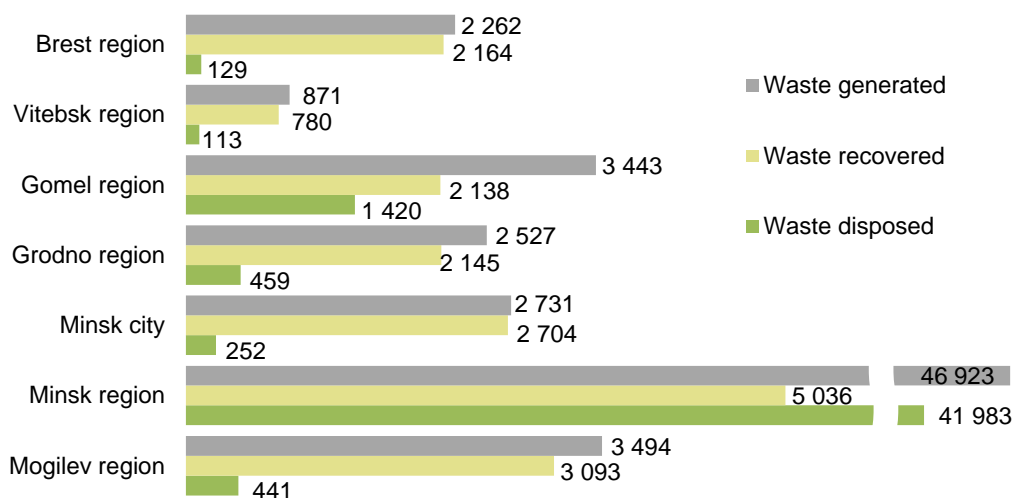
8.1. Dynamics of generation, recovery and disposal of industrial waste¹⁾

(thousand tonnes)



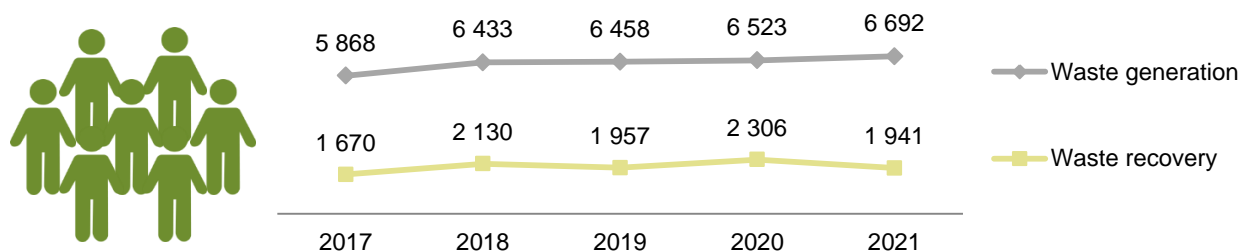
8.2. Generation, recovery and disposal of industrial waste by regions and Minsk city in 2021¹⁾

(thousand tonnes)



8.3. Generation and recovery of industrial waste per capita

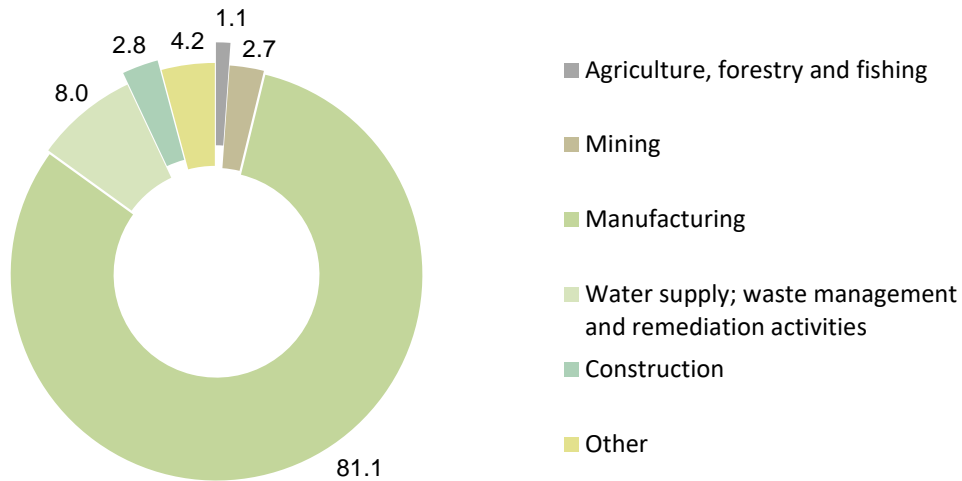
(kilogrammes)



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

8.4. Structure of generation of industrial waste by economic activity in 2021¹⁾

(as percent of total)



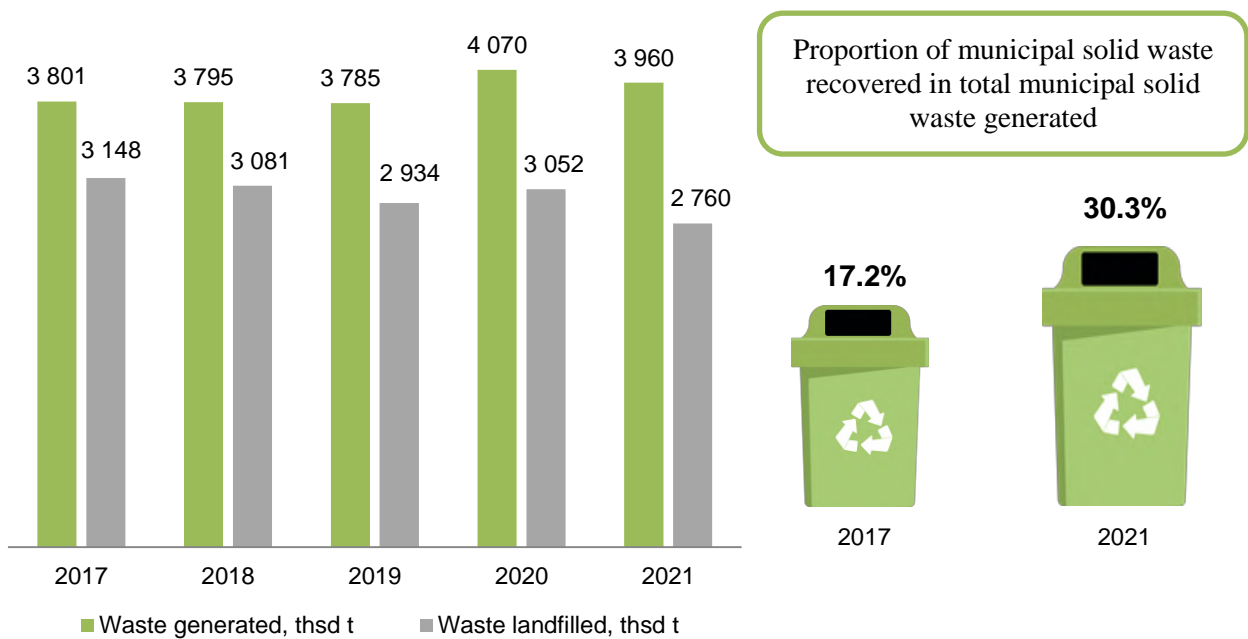
8.5. Industrial waste by hazard class in 2021¹⁾

(thousand tonnes)

	Genera- tion	Recovery	Disposal	Of which			
				storage facilities	burial sites	onsite storage	neutrali- sation
Total	62 250.0	18 059.8	44 798.1	43 111.6	750.4	808.8	127.2
of which:							
Non-hazardous	9 332.1	8 845.2	782.5	1.5	449.6	317.7	13.7
Class 1 (extremely hazardous)	21.9	17.6	5.0	0.0	0.1	1.6	3.3
Class 2 (high-hazard)	18.2	10.8	7.7	0.1	-	0.0	7.5
Class 3 (hazardous)	1 982.1	1 456.0	594.7	383.4	160.8	42.7	7.9
Class 4 (low-hazard)	50 895.6	7 730.2	43 408.2	42 726.6	139.9	446.8	94.8

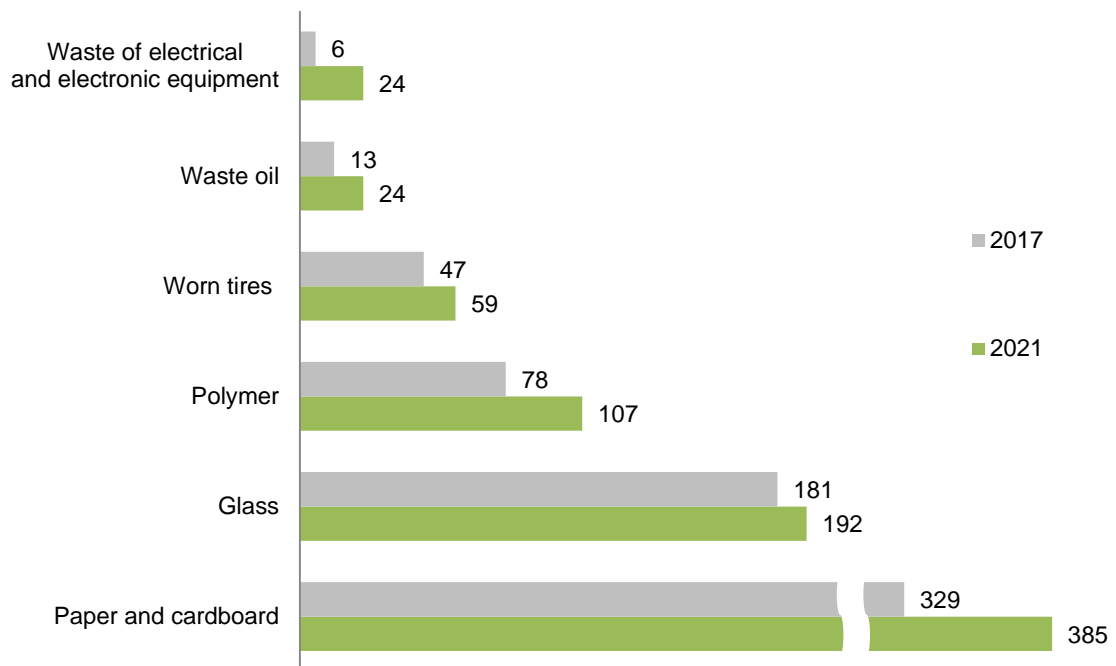
¹⁾ Data of the Ministry of Natural Resources and Environmental Protection.

8.6. Generation, recovery and landfilling of municipal solid waste¹⁾



8.7. Recovery of municipal solid waste (collection of secondary raw materials)¹⁾

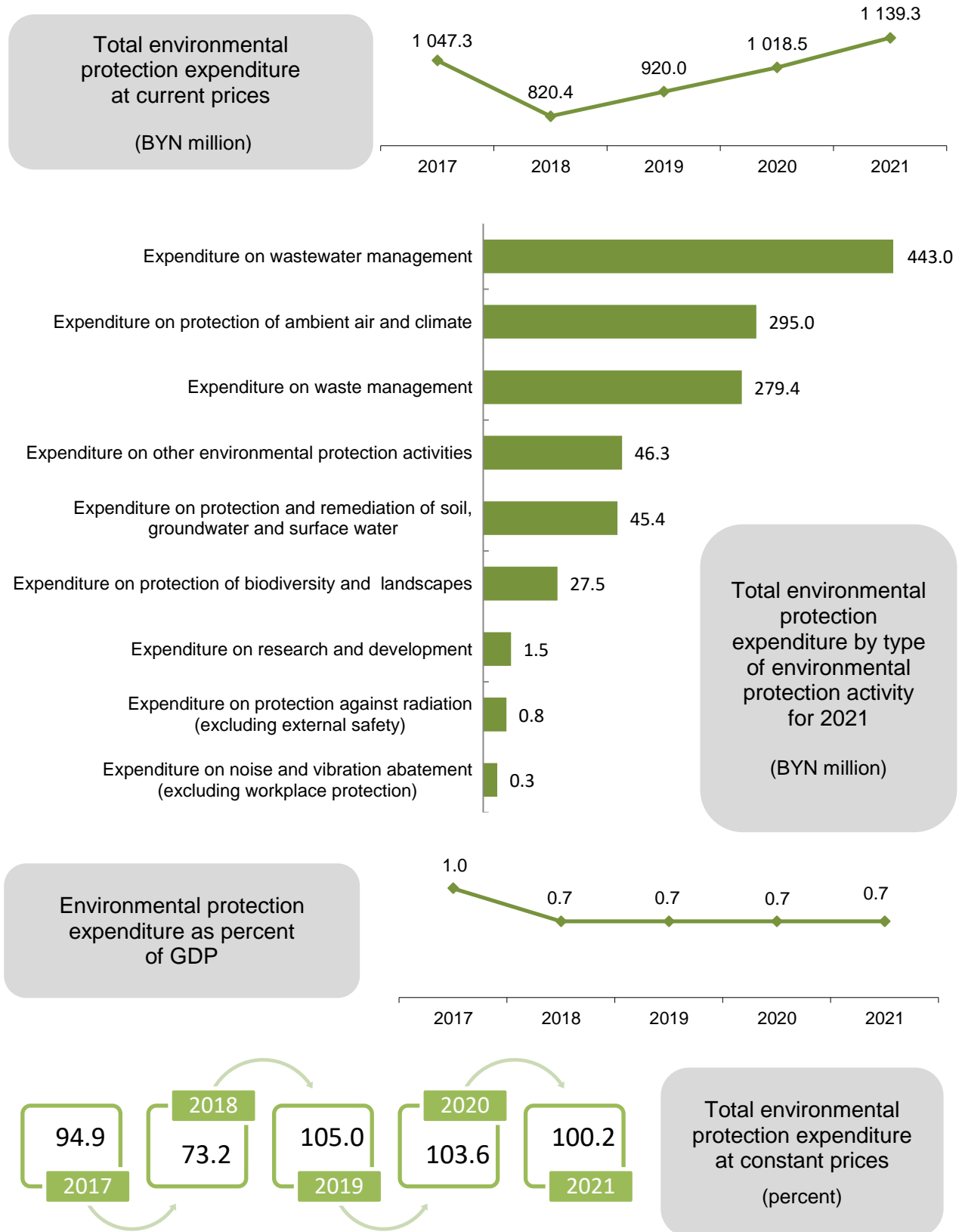
(thousand tonnes)



¹⁾ Data of the Ministry of Housing and Utilities.

9. ENVIRONMENTAL PROTECTION EXPENDITURE

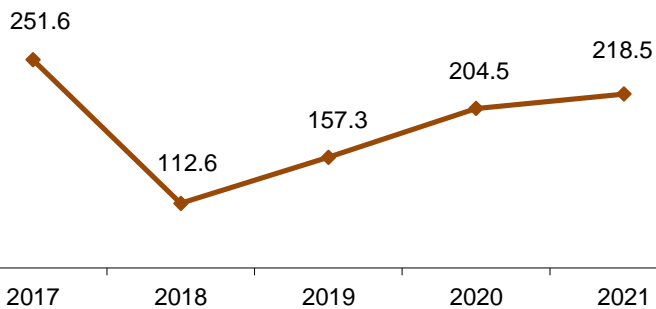
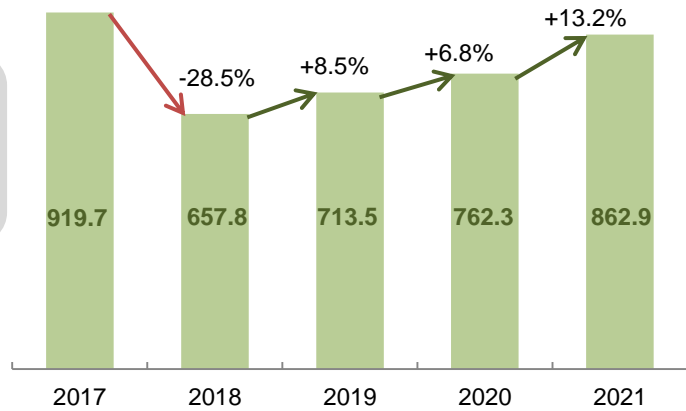
9.1. Total environmental protection expenditure



9.2. Current environmental protection expenditure and fixed capital investment spent on environmental protection and rational use of natural resources

Current environmental protection expenditure

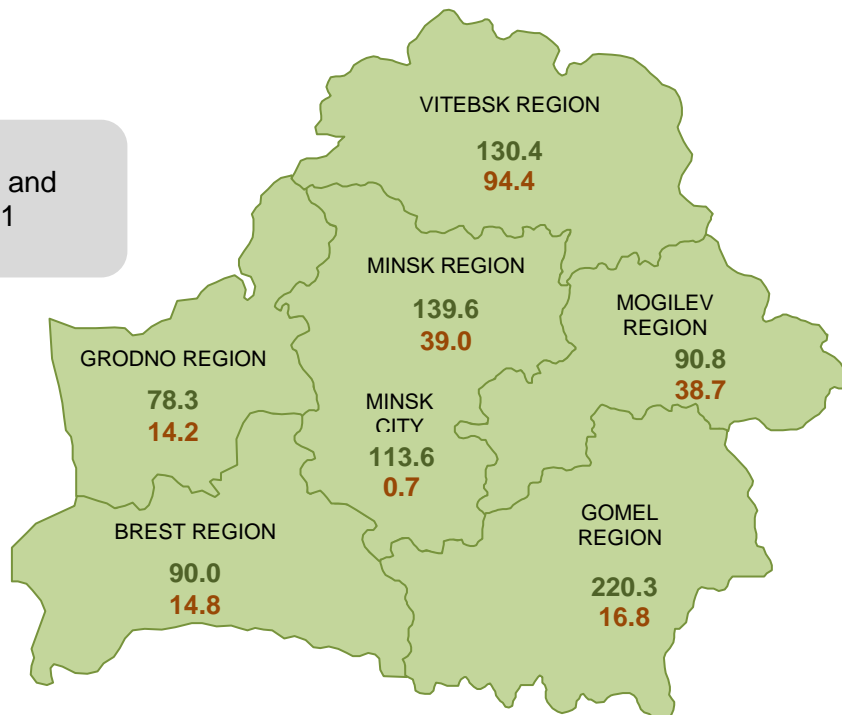
(at current prices; BYN million)



Fixed capital investment spent on environmental protection and rational use of natural resources

(at current prices; BYN million)

Of which by regions and Minsk city in 2021



ENVIRONMENTAL PROTECTION IN THE REPUBLIC OF BELARUS

Short data book

Responsible for the issue:

E. A. Zdrok

Authorized for publishing: 01.08.2022 Format 60x84 1/8
Offset paper. Digital print
Conv. printed sheets – 32. Printed sheets – 29.76
Print run: 3 copies. Order № 365

National Statistical Committee of the Republic of Belarus
12 Partizansky avenue, 220070 Minsk
Tel.: (375-17) 378 81 32;
E-mail: belstat@belstat.gov.by
<http://www.belstat.gov.by>

Republican Unitary Enterprise “Information and Computer Centre
of the National Statistical Committee of the Republic of Belarus”
12a-8a, Partizansky avenue, 220070 Minsk
ЛП № 02330/10 of 28.10.2013
Tel.: (375-17) 378 87 18; (375-17) 379 70 32
Fax.: (375-17) 378 52 11
www.ivcstat.by