



Report on the technical review of the eighth national communication and the technical review of the fifth biennial report of Belarus

Parties included in Annex I to the Convention were requested by decision 6/CP.25 to submit their eighth national communication to the secretariat by no later than 31 December 2022. According to decision 15/CMP.1, Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol are required to include in their national communications supplementary information under Article 7, paragraph 2, of the Kyoto Protocol. This report presents the results of the technical review of the eighth national communication and relevant supplementary information under the Kyoto Protocol of Belarus, conducted by an expert review team in accordance with the “Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention” and the “Guidelines for review under Article 8 of the Kyoto Protocol”.

Developed country Parties were requested by decision 6/CP.25 to submit their fifth biennial report to the secretariat by no later than 31 December 2022. This report presents the results of the technical review of the fifth biennial report of Belarus, conducted by an expert review team in accordance with the “Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention”.

The review of these submissions took place in Bonn from 16 to 20 October 2023.



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Abbreviations and acronyms

Annex I Party	Party included in Annex I to the Convention
Annex II Party	Party included in Annex II to the Convention
AR	Assessment Report of the Intergovernmental Panel on Climate Change
BR	biennial report
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ eq	carbon dioxide equivalent
CTF	common tabular format
ERT	expert review team
F-gas	fluorinated gas
GDP	gross domestic product
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IE	included elsewhere
IPPU	industrial processes and product use
LEAP	Low Emissions Analysis Platform
LULUCF	land use, land-use change and forestry
N ₂ O	nitrous oxide
NA	not applicable
NC	national communication
NDC	nationally determined contribution
NE	not estimated
NF ₃	nitrogen trifluoride
NMVOC	non-methane volatile organic compound
NO	not occurring
NO _x	nitrogen oxides
PaMs	policies and measures
PFC	perfluorocarbon
reporting guidelines for supplementary information	“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol. Part II: Reporting of supplementary information under Article 7, paragraph 2”
RES	renewable energy source(s)
SF ₆	sulfur hexafluoride
SO _x	sulfur oxides
UNFCCC reporting guidelines on BRs	“UNFCCC biennial reporting guidelines for developed country Parties”
UNFCCC reporting guidelines on NCs	“Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications”
WAM	‘with additional measures’
WEM	‘with measures’
WMO	World Meteorological Organization
WOM	‘without measures’

I. Introduction and summary

A. Introduction

1. This is a report on the blended centralized¹ technical review of the NC8 and BR5 of Belarus. The review was organized by the secretariat in accordance with the “Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention”, particularly “Part IV: UNFCCC guidelines for the technical review of biennial reports from Parties included in Annex I to the Convention” and “Part V: UNFCCC guidelines for the technical review of national communications from Parties included in Annex I to the Convention” (annex to decision 13/CP.20), and the “Guidelines for review under Article 8 of the Kyoto Protocol” (annex to decision 22/CMP.1 and annex I to decision 4/CMP.1).
2. In accordance with decision 13/CP.20, a draft version of this report was transmitted to the Government of Belarus, which did not provide any comments.
3. The review was conducted from 16 to 20 October 2023 in Bonn by the following team of nominated experts from the UNFCCC roster of experts: Anudari Batsaikhan (Mongolia), Kent Buchanan (South Africa), Olia Glade (New Zealand), Innocent Nkurikiyimfura (Rwanda) and Goran Vukmir (Bosnia and Herzegovina). Olia Glade and Goran Vukmir were the lead reviewers. The review was coordinated by Anna Sikharulidze and Andrea Nuesse (secretariat).

B. Summary

4. The ERT conducted a technical review of the information reported in the NC8 of Belarus in accordance with the UNFCCC reporting guidelines on NCs,² the reporting guidelines for supplementary information, in particular the supplementary information required under Article 7, paragraph 2, and on the minimization of adverse impacts under Article 3, paragraph 14, of the Kyoto Protocol³ and of the information reported in the BR5 of Belarus in accordance with the UNFCCC reporting guidelines on BRs.⁴

1. Timeliness

5. The NC8 was submitted on 30 December 2022, before the deadline of 31 December 2022 mandated by decision 6/CP.25.
6. The BR5 was submitted on 30 December 2022, before the deadline of 31 December 2022 mandated by decision 6/CP.25. The CTF tables were also submitted on 30 December 2022. The CTF tables were resubmitted on 1 November 2023 to address issues raised during the review. The resubmission included changes to CTF tables 2(b), 3 and 6(a–c). Detailed information on improvements related to the resubmission is provided in paragraph 12 below. Unless otherwise specified, the information and values from the latest submission are used in this report.

2. Completeness, transparency of reporting and adherence to the reporting guidelines

7. Issues and gaps identified by the ERT related to the information reported by Belarus in its NC8 are presented in tables 1–2. The information reported, including the supplementary

¹ This review was to be conducted as an in-country review. However, travel following the established in-country review schedule was not considered possible owing to political developments in the region, so a centralized review was conducted while ensuring interaction with the Party and its national technical experts using videoconferencing.

² Decision 6/CP.25, annex.

³ Decision 15/CMP.1, annex, and decision 3/CMP.11, annex III.

⁴ Decision 2/CP.17, annex.

information under the Kyoto Protocol, mostly adheres to the UNFCCC reporting guidelines on NCs.

8. The ERT noted that Belarus made improvements to the reporting in its NC8 compared with that in its NC6,⁵ including by addressing some recommendations and encouragements from the previous review report regarding PaMs, and vulnerability assessment, climate change impacts and adaptation measures.

Table 1

Assessment of completeness and transparency of mandatory information reported by Belarus in its eighth national communication

<i>Section of NC</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of recommendation</i>
Executive summary	Complete	Transparent	–
National circumstances relevant to GHG emissions and removals	Complete	Mostly transparent	Issue 1 in table I.1
GHG inventory	Complete	Transparent	–
PaMs	Mostly complete	Mostly transparent	Issues 1, 3 and 4 in table I.2
Projections and the total effect of PaMs	Mostly complete	Mostly transparent	Issues 1, 5, 8 and 11 in table I.3
Vulnerability assessment, climate change impacts and adaptation measures	Complete	Transparent	–
Financial resources and transfer of technology ^a	NA	NA	–
Research and systematic observation	Mostly complete	Transparent	Issue 1 in table I.5
Education, training and public awareness	Complete	Transparent	–

Note: A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in annex I. The assessment of completeness and transparency by the ERT in this table is based only on the “shall” reporting requirements.

^a Belarus is not an Annex II Party and is therefore not obliged to adopt measures and fulfil obligations defined in Article 4, paras. 3–5, of the Convention.

Table 2

Assessment of completeness and transparency of mandatory supplementary information under the Kyoto Protocol reported by Belarus in its eighth national communication

<i>Supplementary information under the Kyoto Protocol</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of recommendation</i>
National system ^a	NA	NA	–
National registry ^a	NA	NA	–
Supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17 ^a	NA	NA	–
PaMs in accordance with Article 2	Complete	Transparent	–
Domestic and regional programmes and/or arrangements and procedures	Complete	Transparent	–
Information under Article 10 ^b	NA	NA	–
Financial resources ^c	NA	NA	–
Minimization of adverse impacts in accordance with Article 3, paragraph 14 ^a	NA	NA	–

Note: A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in annex I. The assessment of completeness and transparency by the ERT in this table is based only on the “shall” reporting requirements.

^a As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus has no obligation to report on its national system in accordance with Article 5, paragraph 1, of the Kyoto Protocol; its national registry; supplementarity relating to the

⁵ The last NC of Belarus that underwent technical review was NC6.

mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol; or the minimization of adverse impacts in accordance with Article 3, para. 14, of the Kyoto Protocol.

^b The assessment refers to information provided by the Party on the provisions contained in Article 4, paras. 3, 5 and 7, of the Convention, as reported under Article 10 of the Kyoto Protocol, which is relevant to Annex II Parties only. An assessment of the information on the other provisions of Article 10 of the Kyoto Protocol is provided under the relevant substantive headings under the Convention, for example research and systematic observation.

^c Belarus is not an Annex II Party and is therefore not obliged to provide information on financial resources under Article 11 of the Kyoto Protocol, including on “new and additional” resources.

9. Issues and gaps identified by the ERT related to the information reported by Belarus in its BR5 are presented in table 3. The information reported mostly adheres to the UNFCCC reporting guidelines on BRs.

10. Belarus did not submit an English translation of its BR5. The ERT notes that, in paragraph 26 of the UNFCCC reporting guidelines on BRs, Parties are encouraged to submit an English translation of the BR to facilitate its use in the review process.

11. The ERT noted that Belarus made improvements to the reporting in its BR5 compared with that in its BR2,⁶ including by addressing some recommendations and encouragements from the previous review report regarding its quantified economy-wide emission reduction target and related assumptions, conditions and methodologies, progress in the achievement of the quantified economy-wide emission reduction target, PaMs and projections.

Table 3

Summary of completeness and transparency of mandatory information reported by Belarus in its fifth biennial report

<i>Section of BR</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to description of recommendation</i>
GHG emissions and removals	Complete	Transparent	–
Quantified economy-wide emission reduction target and related assumptions, conditions and methodologies	Complete	Mostly transparent	Issue 1 in table II.1
Progress in achievement of targets	Mostly complete	Mostly transparent	Issues 1, 5 and 10 in table II.2
Provision of support to developing country Parties ^a	NA	NA	NA

Note: A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in annex II. The assessment of completeness and transparency by the ERT in this table is based only on the “shall” reporting requirements.

^a Belarus is not an Annex II Party and is therefore not obliged to adopt measures and fulfil obligations defined in Article 4, paras. 3–5, of the Convention.

12. The CTF tables resubmission made during the review improved:

(a) The information reported on the quantified economy-wide emission reduction target and related assumptions, conditions and methodologies by clearly indicating the base year for target purposes for F-gases in CTF table 2(b);

(b) The information reported on PaMs by clarifying the use of the notation key “IE” and the inclusion of different PaMs in the WEM and WAM scenarios in CTF table 3;

(c) The information reported on projections by including total national emission projections for 2020 and 2030 in CTF table 6(a–c).

⁶ The last BR of Belarus that underwent technical review was BR2.

II. Technical review of the information reported in the eighth national communication and fifth biennial report

A. National circumstances relevant to greenhouse gas emissions and removals

1. Technical assessment of the reported information

13. The NC8 contains key data on legislation, population trends, geography and land use, climate and climate change, economic developments, energy, transport, the buildings sector, industry, trade, the services sector, agriculture, forestry, resource efficiency and wastewater. Each of the economic sectors and significant changes within each sector since the NC7 are also described.

14. The population of Belarus was 9.35 million on 1 January 2021. Its average population density is 45 people/km² and 78 per cent of the population live in urban areas. The land area of Belarus is 20,760,000 ha, of which 40.0 per cent is agricultural land, 42.7 per cent is forest land, 6.0 per cent is swampland and water bodies, and the remainder is other land.

15. Between 2010 and 2020, the country's GDP grew by 18.3 per cent, with labour productivity rising by 28.2 per cent over that period. GDP per capita in purchasing power parity terms rose from USD 15,400 in 2010 to USD 20,200 in 2020.

16. The energy sector is one of the main sectors of the economy in Belarus and is being further developed in order to increase the country's energy security through the development of nuclear and renewable energy and by increasing the efficient use of energy. Belarus's energy balance is mainly based on fossil fuels. In 2019, Belarus's total primary energy supply was 26,607 ktoe, of which natural gas accounted for 62 per cent, oil accounted for 28 per cent and biofuels and waste accounted for 6 per cent. The total share of RES in total primary energy supply was 7 per cent. Final energy consumption was 70 per cent of the total primary energy supply (18,505 ktoe), with conversion and distribution losses and non-energy use of 15, 4 and 12 per cent respectively.

17. Belarus reported that the energy intensity of its GDP compared with that of developed countries with similar climatic conditions has improved since 2015. The share of RES, such as biogas (which has had a fivefold increase in consumption compared with 2010), wind, hydro and solar energy (which have had a 15-fold increase in electricity generation compared with 2010), has experienced significant growth. However, RES is used for only 11 per cent of heating, which accounts for 30 per cent of Belarus's energy consumption. The industrial sector is the largest energy consumer (30 per cent), while the residential sector consumes 27 per cent, the transport sector consumes 23 per cent and the services sector consumes 10 per cent.

18. The transport sector in Belarus is a large consumer of raw materials and fuel. It consumes about 6 per cent of the electricity produced, 66 per cent of gasoline and 52 per cent of diesel annually. Industrial production accounted for 25.5 per cent of Belarus's GDP in 2020. The most developed industrial sectors of the country are machine building, light industry, the food industry, wood processing, petrochemicals and pharmaceuticals. Agriculture is an important sector of Belarus's economy, contributing 6 per cent of GDP in 2020. Agricultural production provides food security and employment for approximately 266,000 people. Through a State-run housing construction programme from 2016 to 2020, Belarus amended technical regulations on energy efficiency requirements for new residential buildings and increased to 90.9 per cent the total area of energy-efficient apartment buildings as a share of the total volume of housing commissioned in 2019 (excluding individual houses).

2. Assessment of adherence to the reporting guidelines

19. The ERT assessed the information reported in the NC8 of Belarus and identified issues related to transparency and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.1.

B. Greenhouse gas inventory information⁷

1. Technical assessment of the reported information

20. Belarus reported information in its BR5 and NC8 on its historical GHG emissions and inventory arrangements using GWP values from the AR4. More recent information on GHG emissions was reported in Belarus's 2023 annual submission, for which GWP values from the AR4 were also used. Total GHG emissions⁸ excluding emissions and removals from LULUCF decreased by 38.1 per cent between 1990 and 2020, while the total GHG emissions including net emissions or removals from LULUCF decreased by 54.7 per cent over the same period. Emissions peaked in 1990 and sharply decreased until 1995, owing to a general economic downturn, and then remained relatively stable, with some decline between 1999 and 2005 and since 2014, owing to a decrease in production in key emission categories (energy industries in the energy sector and cement and lime production in the IPPU sector).

21. Table 4 illustrates the emission trends by sector and by gas for Belarus. The emissions reported in the 2022 annual submission are the same as those reported in CTF table 1; however, they differ from the emissions reported in the 2023 annual submission. The recalculations in the 2023 annual submission resulted in an increase of 0.1 per cent of the estimated total national emissions for 1990 and a decrease of 1.3 per cent for 2020 compared with the estimates reported in the 2022 annual submission.

Table 4

Greenhouse gas emissions by sector and by gas for Belarus for 1990–2021

	GHG emissions (kt CO ₂ eq)					Change (%)		Share (%)	
	1990	2000	2010	2020	2021	2020	2021	1990	2021
<i>Sector</i>									
1. Energy	105 289.29	54 222.40	59 916.05	56 696.37	58 521.59	–46.2	3.2	72.4	63.6
A1. Energy industries	62 191.86	32 416.93	33 023.68	30 390.71	31 404.40	–51.1	3.3	42.8	34.1
A2. Manufacturing industries and construction	8 462.37	3 120.24	4 129.81	4 630.92	4 564.96	–45.3	–1.4	5.8	5.0
A3. Transport	12 528.87	6 792.27	11 120.69	11 086.08	11 137.03	–11.5	0.5	8.6	12.1
A4. and A5. Other	19 165.51	9 137.23	8 806.46	7 732.18	8 602.28	–59.7	11.3	13.2	9.4
B. Fugitive emissions from fuels	2 940.67	2 755.72	2 835.41	2 856.47	2 812.92	–2.9	–1.5	2.0	3.1
C. CO ₂ transport and storage	NO	NO	NO	NO	NO	NA	NA	NA	NA
2. IPPU	5 667.74	4 171.99	5 877.42	6 274.46	6 311.85	10.7	0.6	3.9	6.9
3. Agriculture	29 869.32	18 303.67	20 919.69	21 139.73	21 178.89	–29.2	0.2	20.6	23.0
4. LULUCF	–29 399.08	–34 637.77	–46 146.22	–37 448.42	–43 073.28	–27.4	–15.0	NA	NA
5. Waste	4 513.54	4 447.87	5 171.11	5 829.72	5 975.87	29.2	2.5	3.1	6.5
6. Other ^a	NO	NO	NO	NO	NO	NA	NA	NA	NA
<i>Gas^b</i>									
CO ₂	108 345.06	54 905.98	62 445.12	59 055.55	60 938.20	–45.5	3.2	74.5	66.2
CH ₄	20 770.34	15 093.48	16 727.66	17 678.09	17 875.94	–14.9	1.1	14.3	19.4
N ₂ O	16 224.49	11 103.09	12 599.35	12 978.35	12 938.02	–20.0	–0.3	11.2	14.1
HFCs	NO, NE	9.13	80.63	200.98	208.96	NA	4.0	NA	0.2
PFCs	NO, NE	18.68	16.09	10.66	10.54	NA	–1.1	NA	0.0
SF ₆	NO, NE	4.84	6.18	10.53	10.49	NA	–0.3	NA	0.0

⁷ GHG emission data in this section, for which GWP values from the AR4 were used, are based on Belarus's 2023 annual submission, version 3, which has not yet been subject to review. All emission data in subsequent chapters are based on Belarus's BR5 CTF tables, for which GWP values from the AR4 were also used unless otherwise noted.

⁸ In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of CO₂ eq excluding LULUCF, unless otherwise specified.

	GHG emissions (kt CO ₂ eq)					Change (%)		Share (%)	
	1990	2000	2010	2020	2021	2020	2021	1990	2021
	NO, NE								
NF ₃		10.73	9.24	6.12	6.05	NA	-1.1	NA	0.0
Total GHG emissions excluding LULUCF	145 339.89	81 145.92	91 884.27	89 940.28	91 988.20	-38.1	2.3	100.0	100.0
Total GHG emissions including LULUCF	115 940.81	46 508.15	45 738.05	52 491.86	48 914.92	-54.7	-6.8	NA	NA

Source: GHG emission data: Belarus's 2023 annual submission, version 3.

^a Emissions and removals reported under the sector other (sector 6) are not included in total GHG emissions.

^b Emissions by gas without LULUCF. The Party did not report indirect CO₂ emissions.

22. In brief, Belarus's national inventory arrangements were updated on 9 March 2021 in accordance with a national regulation of the Council of Ministers on the implementation of the provisions of the Paris Agreement. This regulation supersedes the previous regulations and defines the procedures for maintaining the Party's inventory records of anthropogenic emissions by sources and removals by sinks of GHGs. The Ministry of Natural Resources and Environmental Protection is responsible for maintaining the national inventory of anthropogenic emissions by sources and removals by sinks of GHGs.

2. Assessment of adherence to the reporting guidelines

23. The ERT assessed the information reported in the NC8 and BR5 of Belarus and recognized that the reporting is complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs and the UNFCCC reporting guidelines on BRs. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

3. National system for the estimation of anthropogenic emissions by sources and removals by sinks

24. As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus has no obligation to report supplementary information on its national system under Article 5, paragraph 1, of the Kyoto Protocol. However, Belarus provided in the NC8 a description of how its national system for the estimation of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol is performing the general and specific functions defined in the annex to decision 19/CMP.1. The description includes most of the elements mandated in paragraph 30 of the annex to decision 15/CMP.1. The ERT commends Belarus for its efforts to include information on the national system in its NC8.

4. National registry

25. As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus has no obligation to report on how its national registry performs the functions in accordance with the annex to decision 13/CMP.1 in conjunction with decision 3/CMP.11 and the annex to decision 5/CMP.1 and complies with the requirements of the technical standards for data exchange between registry systems. Belarus provided in the NC8 (section 3.5) a clear statement in this regard, indicating that owing to the fact that Belarus was not included in Annex B to the Kyoto Protocol, no work was carried out to maintain a national registry of carbon units.

C. Quantified economy-wide emission reduction target and related assumptions, conditions and methodologies

1. Technical assessment of the reported information

26. Belarus reported information on its economy-wide emission reduction target in its BR5. For Belarus the Convention entered into force on 21 March 1994. Under the Convention Belarus committed to reducing its GHG emissions by 10 per cent below the 1990 level by 2020. The target includes all GHGs included in the "Guidelines for the preparation of national

communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories”, namely CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃. It also includes all Intergovernmental Panel on Climate Change sources and sectors included in the annual GHG inventory, excluding LULUCF. The GWP values used are from the AR4. In absolute terms this means that, under the Convention, Belarus has to reduce its emissions from 145,461.61 kt CO₂ eq in 1990 to 130,915.45 kt CO₂ eq by 2020.

27. In addition to its 2020 target, Belarus also has longer-term targets under the Paris Agreement. In its intended NDC, Belarus pledged to reduce GHG emissions by at least 28 per cent, excluding LULUCF, by 2030 compared with the 1990 level, without the use of international carbon market mechanisms or the need for international financial resources. On 11 October 2021, Belarus announced a more ambitious GHG emission reduction target in its updated NDC of reducing GHG emissions by at least 35 per cent, including LULUCF, by 2030 compared with the 1990 level. The updated NDC also includes a new national conditional economy-wide target to reduce GHG emissions by at least 40 per cent, including LULUCF, by 2030 compared with the 1990 level, which is subject to attracting international financial resources.

28. Belarus assesses progress towards achieving the nationally set target for GHG emission reductions by analysing its annual GHG inventory. Information on the national GHG inventory is posted on the Ministry of Natural Resources and Environmental Protection’s website and can be used free of charge. As part of the implementation of the Action Plan to Implement the Provisions of the Paris Agreement to the United Nations Framework Convention on Climate Change, approved by presidential decree on 20 September 2016 and amended by presidential decree on 22 December 2018, the Ministry of Natural Resources and Environmental Protection prepares an annual consolidated report on the implementation of measures by national governmental bodies and other organizations to achieve the national goal of reducing GHG emissions and submits it to the Council of Ministers.

2. Assessment of adherence to the reporting guidelines

29. The ERT assessed the information reported in the BR5 of Belarus and identified an issue related to transparency and thus adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table II.1.

D. Information on policies and measures

1. Technical assessment of the reported information

30. Belarus provided in its NC8 and BR5 information on its PaMs⁹ implemented and adopted to fulfil its commitments under the Convention. Belarus’s set of PaMs is similar to that previously reported, with a few exceptions. In the NC7 Belarus reported on high-level policies, such as programmes, strategies, concepts and plans, and legislation and sectoral policies, that were adopted and implemented across the energy, transport, industry, agriculture, LULUCF and waste sectors up to 2020. In the NC8 and BR5 Belarus reported on similar policies that concluded in 2020 and the replacement policies in place for the subsequent five-year period (2021–2025). Belarus also included additional PaMs in the agriculture, LULUCF and waste sectors.

31. Belarus reported on its policy context and legal and institutional arrangements in place for implementing its commitments and monitoring and evaluating the effectiveness of its PaMs. Belarus also reported that there have been no changes to its institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of progress towards its target. The Ministry of Natural Resources and Environmental Protection is responsible for coordinating and implementing climate policy in the country and for adhering to international obligations

⁹ The UNFCCC reporting guidelines on BRs use the term “mitigation actions”, whereas the UNFCCC reporting guidelines on NCs use the term “policies and measures”. The terms are used interchangeably in this report to refer to the relevant information in either the NC or BR.

under the Convention, Kyoto Protocol and Paris Agreement. The Council of Ministers and the Ministries of Foreign Affairs, Economy, Forestry, Agriculture and Food, Energy and Finance play important roles in shaping and implementing climate policy. The Councils of Deputies is responsible for the adoption and implementation of climate change mitigation programmes at the local level.

32. Belarus reported that annual monitoring of the implementation of PaMs is undertaken by the Ministry of Natural Resources and Environmental Protection. The monitoring of individual PaMs is undertaken by the responsible ministry based on the specific policy monitoring and evaluation framework that is legislated for in each policy.

33. Belarus’s assessment of the economic and social consequences of its response measures is presented in tables 4.4, 4.6–4.9 and 4.11 of the NC8, where these consequences are presented as the co-benefits of each policy. Belarus also identified and reported on its own policies and practices that lead to greater levels of emissions, which are presented in section 4.8 of the NC8 and include increasing the share of local fuels, such as peat, and increasing the production of agricultural products, such as meat and milk products.

34. In its reporting on PaMs, Belarus provided the estimated emission reduction impacts for most of its PaMs. Where estimated impacts were not provided, the Party supplied explanations applicable to all PaMs by using the notation keys “NA”, “NE” or “IE”. The footnotes to CTF table 3 provided clarification on the use of notation keys. For each policy or measure that was included elsewhere, the policy for which this additional impact was estimated was provided. During the review, Belarus explained that the estimated impacts were not provided for some PaMs in order to avoid double counting owing to overlaps with other policies.

35. The Party described its general methodology for estimating the impacts of its PaMs during the review. Depending on whether the measure was included in the WEM or WAM scenario, the impact was calculated as the difference between the WOM and WEM scenarios or between the WAM and WEM scenarios. In addition, the Party indicated that for implemented PaMs in the energy sector the mitigation effect was estimated by multiplying the known value of the reduced amount of fuel combusted and the GHG emission factor for that fuel.

36. The key overarching cross-sectoral policy reported by Belarus is its National Strategy for Sustainable Development, which covers the period up until 2035. The Strategy provides the framework for future climate policy and for Belarus to meet its development objectives for 2050 while keeping GHG emissions low. The Concept of Energy Security is the most significant policy that covers mitigation of GHG emissions; it determines the goals for energy supply and has an objective of reducing the environmental impact of the energy sector. It is implemented through several State programmes for developing nuclear and renewable energy and increasing the efficiency of final energy consumption. The aim of the Concept is to reduce the energy intensity of Belarus’s GDP by 29 per cent compared with the 2015 level by 2035. Other policies that have delivered significant emission reductions are the Concept for the Development of Electricity Generating Capacities and Electric Grids for the Period up to 2030, which provides a comprehensive and systematic approach to developing the electric power industry, and the State Program for the Development of Transport of the Republic of Belarus for 2016 to 2020, which has the key objective of creating an efficient, well-developed transport infrastructure to improve safety, security and efficiency. This policy has been updated for 2021–2025.

37. Belarus did not report on planned measures.

Table 5
Summary of information on policies and measures reported by Belarus

<i>Sector</i>	<i>Key PaMs^a</i>	<i>Estimated mitigation impact in 2020 (kt CO₂ eq)</i>	<i>Estimated mitigation impact in 2030 (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures			
Energy			
Energy efficiency	Concept of Energy Security	1 665.00	12 655.00

<i>Sector</i>	<i>Key PaMs^a</i>	<i>Estimated mitigation impact in 2020 (kt CO₂ eq)</i>	<i>Estimated mitigation impact in 2030 (kt CO₂ eq)</i>
Energy supply and renewable energy	Concept for the Development of Electricity Generating Capacities and Electric Grids for the Period up to 2030	1 629.00	15 910.00
Transport	State Program for the Development of Transport of the Republic of Belarus for 2016 to 2020	6 900.00	6 900.00
IPPU	Projects for the Creation of New Industries Establishing Innovative Development	NE	NE
Agriculture	Law on Production and Management of Organic Products	9.80	138.6
LULUCF	Belarus Forestry Adaptation Strategy to Climate Change	NE	7 200.00
Waste	National Strategy for the Management of Municipal Solid Waste and Secondary Material Resources	NE	1 046.50

Note: The estimated mitigation impacts are estimates of emissions of CO₂ eq avoided in a given year as a result of the implementation of mitigation actions

^a Names of PaMs reproduced as reported in Belarus's BR5.

2. Assessment of adherence to the reporting guidelines

38. The ERT assessed the information reported in the NC8 and BR5 of Belarus and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.3.

3. Domestic and regional programmes and legislative arrangements and procedures related to the Kyoto Protocol

(a) Technical assessment of the reported information

39. Belarus does not have a binding target for reducing its GHG emissions under the Kyoto Protocol, and consequently has no obligation to report on institutional arrangements and decision-making procedures relating to commitments, including those relating to participation in the Kyoto Protocol mechanisms. However, Belarus reported in its NC8 some information on legislative arrangements and procedures related to the Kyoto Protocol.

40. In its NC8 Belarus reported that its implementation of the Kyoto Protocol is underpinned by the concepts of preventing climate change, climate change mitigation and adapting to climate change. The overall responsibility for climate change policymaking lies with the Ministry of Natural Resources and Environmental Protection.

41. As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus does not have legislative arrangements explicitly associated with Article 3, paragraphs 3–4, of the Kyoto Protocol. It reports the LULUCF sector under the Convention.

(b) Assessment of adherence to the reporting guidelines

42. The ERT assessed the information reported in the NC8 of Belarus and recognized that the reporting is complete and transparent, and thus adheres to the reporting guidelines for supplementary information. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

4. Policies and measures in accordance with Article 2 and minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol

(a) Technical assessment of the reported information

43. As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus has no obligation to report under Article 2 of the Kyoto Protocol on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol. In its NC8 Belarus reported that it is an Annex I Party and a country with an economy in transition and, as such, does not provide financial assistance to developing

countries. However, Belarus reported that it prioritizes the development of climate cooperation with developed and developing countries and with international organizations. Priority is given to institutional strengthening, capacity-building and technology transfer to developing countries.

44. The NC8 includes information on the National Action Plan to Reduce Carbon Dioxide Emissions by Civil Aircraft Operators of the Republic of Belarus, which is the regulatory, legal, financial and economic tool that presents the basis for a thorough system of market-based measures for international aviation. The plan sets out emission reductions by year, with an estimated impact of 4.7 kt CO₂ eq by 2025 and 5.6 kt CO₂ eq by 2030. The Ministry of Transport is responsible for its implementation, the time frame for which is 2020–2050.

(b) Assessment of adherence to the reporting guidelines

45. The ERT assessed the information reported in the NC8 of Belarus and recognized that the reporting is complete and transparent, and thus adheres to the reporting guidelines for supplementary information. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

E. Estimates of emission reductions and removals and the use of units from market-based mechanisms and land use, land-use change and forestry and progress in achieving the quantified economy-wide emission reduction target

1. Technical assessment of the reported information

46. On its use of units from LULUCF activities, Belarus reported in CTF tables 4 and 4(a) that it did not use any units from LULUCF activities at any time, as LULUCF is not included in its quantified economy-wide emission reduction target. Belarus also reported that it did not use units from market-based mechanisms under the Convention. Table 6 illustrates Belarus's total GHG emissions, contribution of LULUCF and use of units from market-based mechanisms towards achieving its target.

Table 6

Summary of information on greenhouse gas emissions, use of units from market-based mechanisms and land use, land-use change and forestry by Belarus

(kt CO₂ eq)

<i>Year</i>	<i>Emissions excluding LULUCF</i>	<i>Contribution of LULUCF^a</i>	<i>Use of units from market-based mechanisms</i>	<i>Net emissions including LULUCF and market-based mechanisms</i>
1990	145 461.61	NA	NA	145 461.61
2010	91 791.64	NA	NA	91 791.64
2011	91 198.82	NA	NA	91 198.82
2012	92 258.73	NA	NA	92 258.73
2013	94 304.91	NA	NA	94 304.91
2014	93 264.12	NA	NA	93 264.12
2015	88 139.13	NA	NA	88 139.13
2016	87 468.23	NA	NA	87 468.23
2017	89 069.33	NA	NA	89 069.33
2018	92 029.14	NA	NA	92 029.14
2019	92 183.17	NA	NA	92 183.17
2020	88 802.06	NA	NA	88 802.06
			2020 target ^b	130 915.45

Sources: Belarus's BR5 and BR5 CTF tables 1, 2(a) and 4.

^a Belarus's emission reduction target does not include emissions or removals from LULUCF.

^b The emission level that corresponds to the 2020 target is calculated on the basis of the GHG emissions excluding LULUCF in the base year and the Party's target (i.e. reduction in emissions compared with the base year).

2. Assessment of adherence to the reporting guidelines

47. The ERT assessed the information reported in the BR5 of Belarus and recognized that the reporting is complete and transparent, and thus adheres to the UNFCCC reporting guidelines on BRs. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

3. Assessment of achievement of the quantified economy-wide emission reduction target

48. In assessing the Party's achievement of its 2020 target on the basis of the information reported in its BR5, the ERT noted that Belarus committed to reducing its emissions to 10 per cent below the 1990 level by 2020 (see para. 26 above). In 2020, Belarus's annual total GHG emissions excluding LULUCF were 88,802.06 kt CO₂ eq. The ERT noted that the contribution of LULUCF is not included in the Party's base or target year and that Belarus did not use units from market-based mechanisms. Taking this into account, emissions in 2020 were 42,113.39 kt CO₂ eq (32.2 per cent) below the emission level corresponding to the 2020 target (see table 6). The ERT concluded that, based on the information reported in the BR5 and provided during the review, the total 2020 GHG emissions excluding LULUCF of Belarus do not exceed the emission level corresponding to the 2020 target, and thus that the target has been achieved.

F. Projections

1. Projections overview, methodology and results

(a) Technical assessment of the reported information

49. Belarus reported in its BR5 and NC8 updated projections for 2018–2030 relative to adjusted inventory data for 1990–2018 under the WEM scenario. The WEM scenario reported by Belarus includes PaMs implemented and adopted before 2018.

50. In addition to the WEM scenario, Belarus reported the WAM and WOM scenarios. The WAM scenario includes implemented and adopted PaMs after 2018, while the WOM scenario also has 2018 as the base year but excludes the impacts of any implemented or adopted PaMs. Belarus provided a definition of its scenarios, explaining that its WEM scenario includes policies such as maintaining fuel consumption patterns at power plants; maintaining the ratio of energy consumption to GDP; maintaining support for the development of electric transport, with a gradual reduction in the cost of electric vehicles; and maintaining the nominal capacity of existing plants to support the economy. Its WAM scenario includes incentives to attract private investment in energy efficiency and a reduction of 5 per cent in the energy intensity of its GDP; the introduction of electric vehicles (the share of privately owned electric cars will increase to 15 per cent by 2030, and commercial electric cars to 10 per cent); the introduction of stricter measures for GHG emissions in the cement, metallurgical and chemical industries; and an increase in forest productivity. The definitions indicate that the scenarios were not prepared in accordance with the UNFCCC reporting guidelines on BRs. Belarus reported that the reason for this was that the scenarios were developed for a different purpose, which was to set the NDC target for 2030.

51. The projections are presented on a sectoral basis, using the same sectoral categories as from those used in the reporting on mitigation actions. The projections are also provided in an aggregated format for each sector and for a Party total using GWP values from the AR4. Belarus did not report on factors and activities affecting emissions for each sector. Projections on a gas-by-gas basis for CO₂, CH₄, N₂O, PFCs, HFCs, SF₆ and NF₃ for 2018–2030 are not presented in the NC8 and are reported as “NE” in the BR5.

(b) Methodology, assumptions and changes since the previous submission

52. The methodology used for the preparation of the projections is identical to that used for the preparation of the emission projections for the NC7, except for the energy sector, for which a new model reflecting Belarus's national GHG inventory was developed and used in the projections. Previously, the LEAP model was used in the energy sector. Belarus did not

provide information on changes since the submission of its NC7 in the assumptions, methodologies, models and approaches used for the projection scenarios.

53. To prepare its projections, Belarus relied on key underlying assumptions relating to population and economic development indicators such as GDP. The assumptions were updated on the basis of the most recent economic developments known at the time of the preparation of the projections. The base year for the economic analysis was chosen as 2018, for which the latest data on the balance of fixed assets were available. Retrospective capital estimates were made based on an estimate of the growth rate of the residual value of property, plant and equipment in real terms. The output elasticity of capital was estimated based on the share of capital income and employment in the GDP. The disposal rate was assumed to be 4 per cent. The employment dynamics were estimated based on the United Nations median projection of the number and age structure of the population of Belarus in 2020, 2025 and 2030, and the employment rate by age group in 2019. To calculate the scenarios, individual assumptions were made about what share of the GDP will be spent on fixed capital formation and how the productivity of the economy will change over the long term. The scenarios used moderate economic forecast, which assumed that the share of gross fixed capital formation expenditure in the GDP structure will remain unchanged compared with 2019. The results of the economic analysis showed that, without the influence of external shocks and fluctuations in economic conditions, the economy will grow at an average rate of 3.2 per cent per year. Consequently, by 2030 the economy will have grown by 46.8 per cent relative to 2015. Gross value added growth rates by economic sectors were also projected, which were used to build GHG emission scenarios, and a waste projection was made based on determining the dynamics of household consumption.

54. Sensitivity analyses of important assumptions, such as population trends and economic development indicators, were not performed.

(c) Results of projections

55. The projected emission levels under different scenarios are presented in table 7 and figure 1.

Table 7

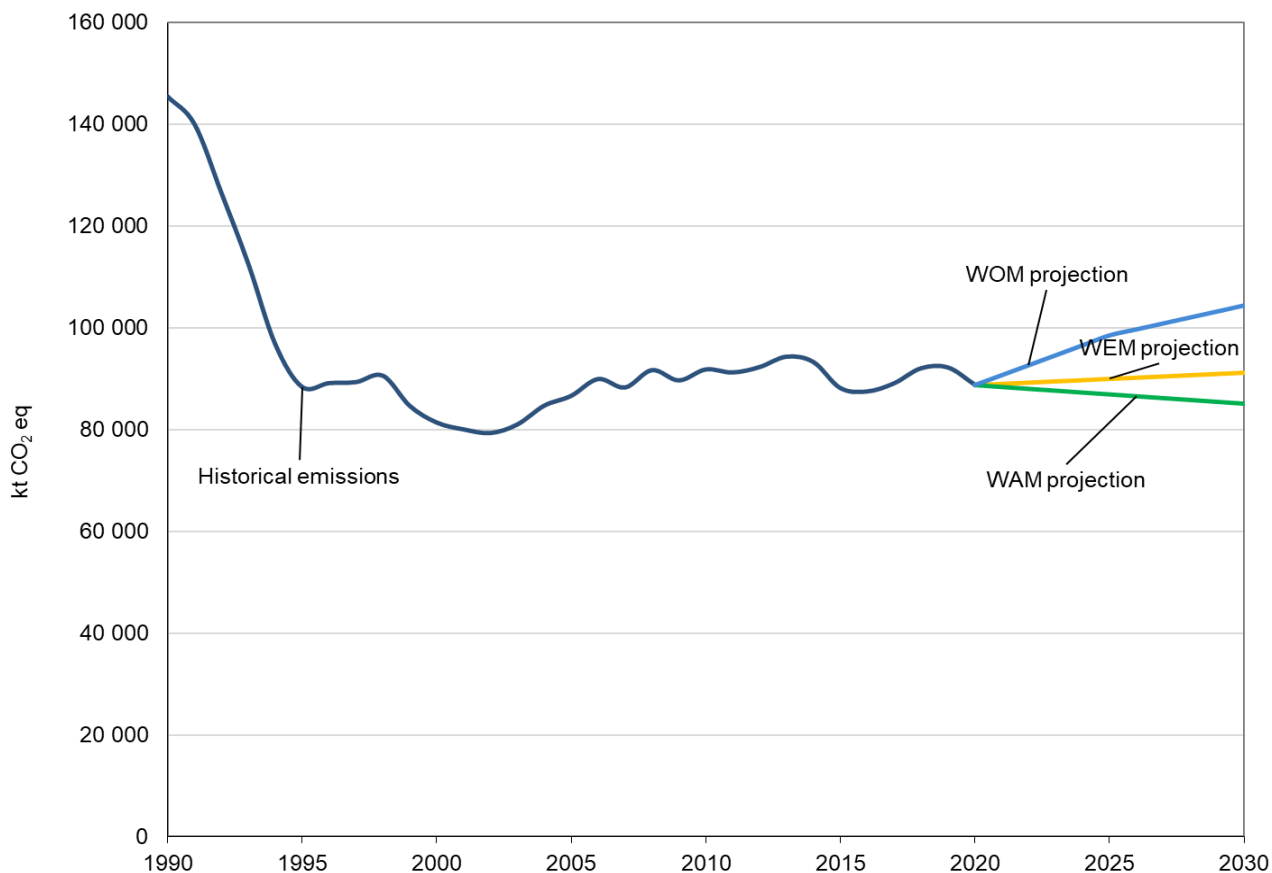
Summary of greenhouse gas emission projections for Belarus

	<i>GHG emissions (kt CO₂ eq/year)</i>	<i>Change in relation to 1990 level (%)</i>	<i>Change in relation to 2020 level (%)</i>
Inventory data 1990	145 461.61	NA	NA
Inventory data 2020	88 802.06	–39.0	NA
WOM projections for 2030	104 385.00	–28.2	17.5
WEM projections for 2030	91 218.00	–37.3	2.7
WAM projections for 2030	85 083.00	–41.5	–4.2

Sources: Belarus's NC8 and BR5 CTF tables 1 and 6, for which GWP values from the AR4 were used.

Note: The projections are of GHG emissions excluding LULUCF and excluding indirect CO₂.

Figure 1
Greenhouse gas emission projections reported by Belarus

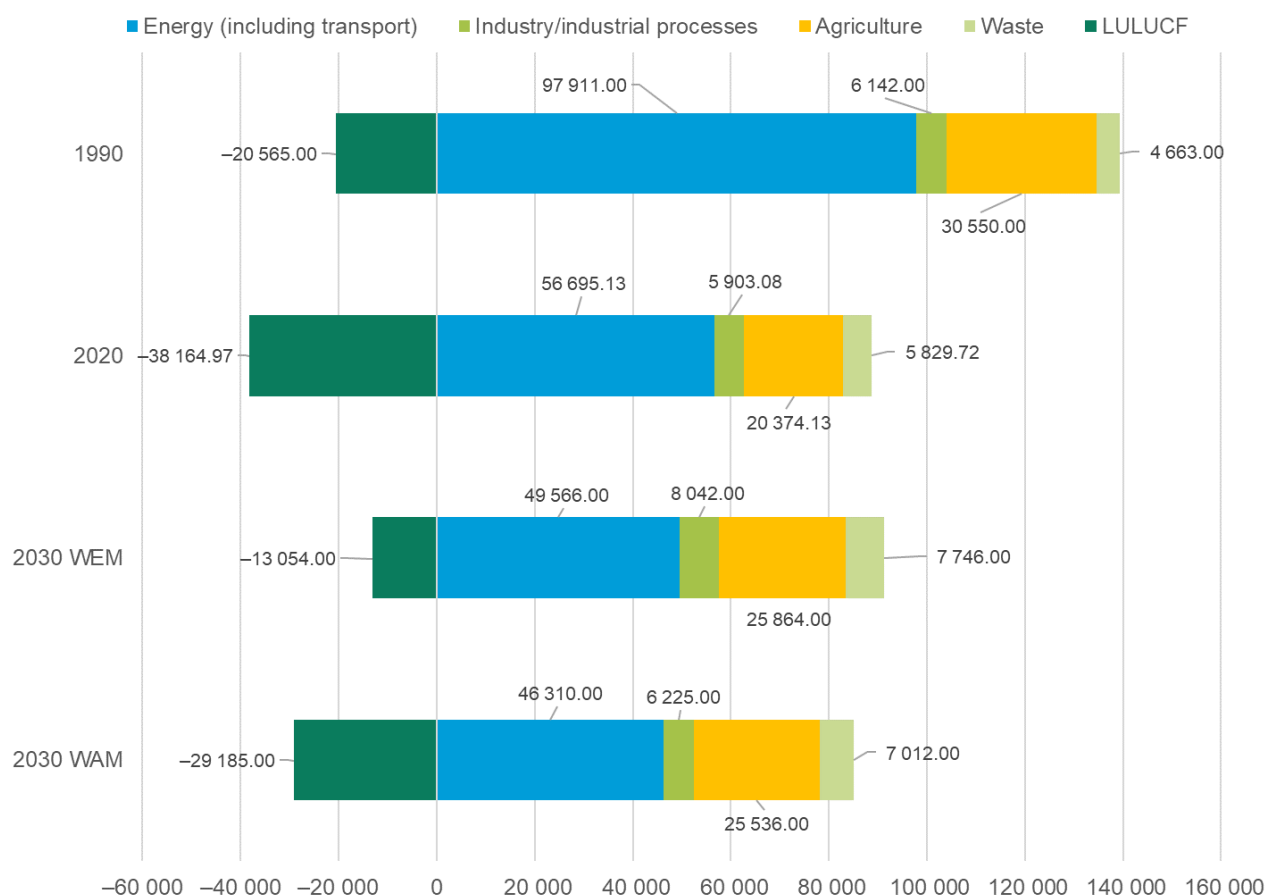


Sources: Belarus’s NC8 and BR5 CTF tables 1 and 6 (total GHG emissions excluding LULUCF), for which GWP values from the AR4 were used.

56. Belarus’s total GHG emissions excluding LULUCF are projected under the WEM scenario to decrease by 37.3 per cent below the 1990 level in 2030. When including LULUCF, total GHG emissions are projected under the WEM scenario to decrease by 20 per cent below the 1990 level in 2030. Under the WAM scenario, emissions in 2030 are projected to be lower than those in 1990 by 41.5 per cent, or by 53 per cent including LULUCF.

57. Belarus presented the WEM and WAM scenarios by sector for 2030, as summarized in figure 2 and table 8.

Figure 2

Greenhouse gas emission projections for Belarus presented by sector(kt CO₂ eq)

Sources: Belarus's NC8 and BR5 CTF tables 1 and 6, for which GWP values from the AR4 were used.

Note: Transport emissions were not reported separately by Belarus and were included in the energy sector.

Table 8

Summary of greenhouse gas emission projections for Belarus presented by sector

Sector	GHG emissions and removals (kt CO ₂ eq)			Change (%)	
	1990	2030		1990–2030	
		WEM	WAM	WEM	WAM
Energy (including transport)	97 911.00	49 566.00	46 310.00	-49.4	-52.7
Transport	IE	IE	IE	NA	NA
Industry/industrial processes	6 142.00	8 042.00	6 225.00	30.9	1.4
Agriculture	30 550.00	25 864.00	25 536.00	-15.3	-16.4
LULUCF	-20 565.00	-13 054.00	-29 185.00	36.5	-41.9
Waste	4 663.00	7 746.00	7 012.00	66.1	50.4
Other	NA	NA	NA	NA	NA
Total GHG emissions excluding LULUCF	145 461.62	91 218.00	85 083.00	-37.3	-41.5

Sources: Belarus's NC8 and BR5 CTF tables 1 and 6, for which GWP values from the AR4 were used.

Note: Transport emissions were not reported separately by Belarus and were included in the energy sector.

58. According to the projections reported for 2030 under the WEM scenario, the most significant absolute emission reductions are expected to occur in the energy (including transport) sector, amounting to projected reductions of 48,345 kt CO₂ eq (49.4 per cent) between 1990 and 2030.

59. According to the projections reported for 2030 under the WAM scenario, the most significant absolute emission reductions are expected to occur in the energy (including transport) sector, amounting to projected reductions of 51,601 kt CO₂ eq (52.7 per cent) between 1990 and 2030.

60. Belarus did not present the WEM and WAM scenarios by gas for 2030.

(d) Assessment of adherence to the reporting guidelines

61. The ERT assessed the information reported in the NC8 and BR5 of Belarus and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs and the UNFCCC reporting guidelines on BRs. The findings are in tables I.3 and II.2.

2. Assessment of the total effect of policies and measures

(a) Technical assessment of the reported information

62. In its NC8 Belarus presented the estimated and expected total effect of implemented and adopted PaMs and an estimate of the total effect of its PaMs, in accordance with the WEM, WOM and WAM scenarios. Information is presented in terms of total GHG emissions avoided or sequestered, on a CO₂ eq basis, for 2020–2030. Although Belarus did not report on the total effect of PaMs by sector or by gas, it presented relevant information on factors and activities for each sector for 1990–2030.

63. Belarus reported that the total estimated effect of its implemented and adopted PaMs is 1,705.00 kt CO₂ eq in 2020 and 13,167.00 kt CO₂ eq in 2030 without LULUCF; including LULUCF, the total estimated effect of its implemented and adopted PaMs is 1,705.00 kt CO₂ eq in 2020 and 22,918.00 kt CO₂ eq in 2030. The Party also reported the total effect of the WAM scenario compared with the WOM scenario, which is 1,680.00 kt CO₂ eq in 2020 and 19,303.00 kt CO₂ eq in 2030 without LULUCF; including LULUCF, the total effect of the WAM scenario compared with the WOM scenario is 1,680.00 kt CO₂ eq in 2020 and 22,893.00 kt CO₂ eq in 2030. According to the information reported in its NC8, PaMs implemented in the energy, transport and agriculture sectors will deliver the largest emission reductions.

(b) Assessment of adherence to the reporting guidelines

64. The ERT assessed the information reported in the NC8 of Belarus and identified issues relating to completeness and transparency, and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.3.

3. Supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol

Technical assessment of the reported information

65. As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus has no obligation to report on supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol.

66. In the NC8 Belarus reported that it is an Annex I Party and a country with an economy in transition and, as such, does not provide financial assistance to developing countries. However, Belarus reported that it prioritizes the development of climate cooperation with developed and developing countries and with international organizations. Priority is given to institutional strengthening, capacity-building and technology transfer to developing countries.

G. Vulnerability assessment, climate change impacts and adaptation measures

1. Technical assessment of the reported information

67. In its NC8 Belarus provided information on the expected impacts of climate change in the country; the adaptation policies covering regional, sectoral and cross-sectoral vulnerabilities and considerations; and an outline of the action taken to implement Article 4, paragraph 1(b) and (e), of the Convention regarding adaptation. Belarus provided a description of climate change vulnerability and impacts on agriculture and food security, forestry and biodiversity, water resources and human health, and highlighted the adaptation response actions taken and planned at different levels of government. A study on the impact of climate change on sectors of the economy was carried out and recommendations for adaptation were developed within the framework of a joint Russian Federation and Belarus programme entitled Development of the Union State Hydrometeorological Security System (2017–2021). Agriculture is reported to be the most climate-dependent sector of the economy.

68. Belarus has implemented adaptation measures for a number of its economy's sectors and has adopted strategies that provide further direction to government agencies on enhancing preparedness for climate change. In the agriculture and food security sector, the Strategy for Adaptation of Agriculture in the Republic of Belarus to Climate Change was approved by the Ministry of Agriculture and Food in 2019. In the forestry and biodiversity sector, the Party has approved the Strategy for Adaptation of Forestry in Belarus to Climate Change until 2050, the National Action Plan on Adaptation of Forestry in Belarus to Climate Change until 2030 and the National Action Plan to Increase Greenhouse Gas Absorption by Sinks to 2030. In the water resources sector, the Water Management Strategy in the Climate Change Context for the Period until 2030 was developed to follow on from the Water Strategy of the Republic of Belarus until 2020. In the human health sector, relevant measures are being undertaken within the framework of the Action Plan to Improve the Preparedness and Response of Public Health Systems in the World Health Organization European Region, the Sustainable Development Goals and the Regulations of the Council of Ministers and Republican Public Administration Authorities. The Party plans to develop the National Action Plan on Adaptation to Climate Change in 2024.

69. Table 13 summarizes the information on vulnerability and adaptation to climate change presented in the NC8 of Belarus.

Table 9

Summary of information on vulnerability and adaptation to climate change reported by Belarus

<i>Vulnerable area</i>	<i>Examples/comments/adaptation measures reported</i>
Agriculture and food security	<p>Vulnerability: damage to winter crops due to uneven snow cover and sharp temperature fluctuations; insufficient water available for crops and increased crop production costs owing to drought; increased animal mortality and decreased livestock productivity owing to high summer temperatures; increases in the impact of common pests and the emergence of new pests.</p> <p>Adaptation: improving, optimizing and modernizing general agricultural practices and tools; introducing varieties of crops and animals that are resistant to the adverse effects of climate change; adjusting agricultural practices in accordance with seasonal changes; strengthening measures to prevent the spread of pests, pathogens and weeds; replacing conventional pesticides with new ways to protect plants; introducing precision farming; modernizing and optimizing the land reclamation system; restoring natural river channels and floodplains to prevent flooding and reduce flood damage; livestock health monitoring and protection from heat stress; feed optimization; increasing the efficiency of water collection, delivery and management; continuous monitoring of ichthyofauna and aquatic environments; increasing the resilience of fish stocks to climate change and maintaining sufficient natural and artificial water bodies for fish farming and fisheries; promoting organic agriculture.</p>
Forestry and biodiversity	<p>Vulnerability: changes in forest stand composition; overgrowth of woody and shrub vegetation in wetlands; accelerated forest ecosystem cycles; increased risk of pathogens and forest pests; deterioration of boreal forest flora and fauna and introduction of forest</p>

<i>Vulnerable area</i>	<i>Examples/comments/adaptation measures reported</i>
	<p>steppe species into forest ecosystems; northward movement of European spruce habitat boundaries; increased probability of late spring frost; decline in forest stand growth owing to insufficient water availability at the beginning of the growing season and droughts during the growing season; degradation of tree and shrub vegetation in winter due to snow cover and late melting of the snow cover; changes in the phenology of woody and shrub vegetation and wild berries; increased duration of the fire season and frequency of forest fires; tree damage owing to increased wind speeds.</p> <p>Adaptation: improving the legal and regulatory framework on forestry adaptation to climate change; improving the forest monitoring system; improving logging methods and technologies; improving methods and technologies for forest conservation, protection, reforestation and afforestation; increasing reforestation and afforestation areas; improving forest biodiversity by increasing the proportion of mixed forest crops and the number of tree species used for reforestation and afforestation; improving the adaptive capacity of forest plantations by identifying local populations of Scots pine and European spruce resilient to the adverse effects of climate change and using them for forest seed production; changing forest management regimes for transitional and upland swamp forests.</p>
Water resources	<p>Vulnerability: increased irregularity in the intra-annual redistribution of run-off; earlier onset of spring flooding; increased hazardous hydrometeorological events (droughts and floods); increased risk of flood damage owing to urban development in flood-prone areas; increased rainfall and flood duration and increased cost of flood protection measures; increase in water temperature and decrease in dissolved oxygen content; deterioration of hydrobiological indicators of aquatic ecosystems; risk of significant reductions in the flow of small streams; erosion of riverbanks; accelerated nutrient removal in the drainage system.</p> <p>Adaptation: improving surface water monitoring systems in the most climate-sensitive areas and developing forecasting models for such areas; reassessing natural resources, including groundwater resources; limiting urban development in flood-prone areas; developing structural measures (dam safety, forest plantations, run-off accumulation sites) to prevent flooding; promoting water-saving measures and efficient water use; preventing the siting of waste disposal sites in flood-prone areas; improving wastewater management; expanding reclamation measures in river basins.</p>
Human health	<p>Vulnerability: adverse effects of heat and heatwaves on the health of vulnerable populations; increased health impacts due to increased weather variability; decreased productivity during adverse weather conditions; increased respiratory, infectious and vector-borne diseases; negative effects of severe and extreme weather on mental health.</p> <p>Adaptation: notifying and reporting emergencies via various channels to the population in the event of natural or human-made threats or emergencies; operating fire, radiation and early warning systems of the National Hydrometeorological Service to reduce the socioeconomic risks related to weather, climate, hydrological disasters, forest fires and radiation incidents; developing medical systems.</p>

70. Belarus provided a description of its international cooperation activities linked to adaptation. Belarus conducted international cooperation within the framework of the joint Russian Federation and Belarus programme entitled Development of the Union State Hydrometeorological Security System (2017–2021).

2. Assessment of adherence to the reporting guidelines

71. The ERT assessed the information reported in the NC8 of Belarus and identified an issue relating to completeness and thus adherence to the UNFCCC reporting guidelines on NCs. The finding is described in table I.4.

H. Research and systematic observation

1. Technical assessment of the reported information

72. In its NC8 Belarus provided information on its general policy relating to research and systematic observation and both domestic and international activities, including contributions to the Global Climate Observing System and participation in the WMO and North Eurasian

Climate Outlook Forum. In the NC8 the Party reported on its contributions to the data exchange system of WMO, World Weather Watch and Global Atmospheric Watch.

73. Belarus has implemented international and domestic policies and programmes on climate change research, systematic observation and climate modelling that aim to advance capabilities to predict and observe the physical, chemical, biological and human components of the Earth's system over space and time. The National Hydrometeorological Service conducts climate monitoring and climate change research. Climate research is also carried out by the Institute of Nature Management of the National Academy of Sciences of Belarus, the National Ozone Monitoring Research Center of the Belarusian State University and the Geography and Geoinformatics Department of the Belarusian State University.

74. In terms of activities related to systematic observation, Belarus reported on national strategies, plans, programmes and support for ground- and space-based climate observing systems, including satellite and non-satellite climate observation. The technological upgrading and improvement of the surface meteorological network in Belarus is carried out in accordance with the Strategy for the Development of Hydrometeorological and Environmental Monitoring Activities in the Republic of Belarus until 2030. The strategy also provides for the development of national climate research, the main object of which is modelling possible future fluctuations and changes in climatic parameters on the territory of Belarus and in the climate system as a whole.

75. The National Hydrometeorological Service's hydrometeorological observation network carries out hydrometeorological observations. As at 1 January 2021, climatic observations were carried out at 50 meteorological observation sites. Data from monitoring are regularly published on the National Hydrometeorological Service's website and are summarized in annual publications. Air quality monitoring is carried out by agencies of the Ministry of Natural Resources and Environmental Protection.

76. The quality of surface meteorological observations is continuously monitored. Quality requirements for making and processing surface meteorological observations are established in technical normative acts approved by the Ministry of Natural Resources and Environmental Protection. Archival materials are stored on paper and electronically.

77. Between 2015 and 2020, an international technical assistance project entitled Removing Barriers to Wind Energy Development in the Republic of Belarus was carried out and an updated electronic version of the Atlas of Wind Potential was released. Between 2017 and 2021, the National Hydrometeorological Service, together with the Vovyeikov Main Geophysical Observatory and the All-Russian Research Institute for Hydrometeorological Information – World Data Centre, carried out an investigation on the development of a system of climate services for the population and different sectors of the economies of the Russian Federation and Belarus within the framework of the joint Russian Federation and Belarus programme entitled Development of the Union State Hydrometeorological Security System (2017–2021).

2. Assessment of adherence to the reporting guidelines

78. The ERT assessed the information reported in the NC8 of Belarus and identified issues relating to completeness and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.5.

I. Education, training and public awareness

1. Technical assessment of the reported information

79. In its NC8 Belarus provided information on its actions relating to education, training and public awareness at the domestic level. The Party provided information on the general policy on education, training and public awareness; primary, secondary and higher education; public information campaigns; training programmes; education materials; resource or information centres; the involvement of the public and non-governmental organizations; and its participation in international activities.

80. In Belarus, education, training and public awareness are formalized through the normative legal documents of the Ministry of Education, and special attention is given to environmental issues. The environment is one of the most important components of the key policy documents of the education sector in Belarus. Education on the environment and sustainable development is provided through workshops, activities at museums, field workshops, expeditions, excursions, school experiments and research. Belarus reported that, since 2018, a network of green schools has been developed in the country. As at 2022, a total of 457 institutions from all regions of the country were involved in the Green Schools educational project, of which 237 were recognized as green schools. Students and teachers in these institutions were actively involved in environmental protection and related educational activities and training. Furthermore, Belarus reported that 19,430 local and 1,865 foreign undergraduate students studied subjects related to climate change at higher education institutions in Belarus in the 2020–2021 academic year.

81. The legal basis for access to environmental information is in accordance with Belarus's international obligations. Belarus is party to 24 international treaties in the field of environmental protection. Belarus reported that access to environmental information is an inalienable right of citizens of Belarus. In 2020, the Ministry of Environment developed an online portal giving access to all relevant information on the environment.

2. Assessment of adherence to the reporting guidelines

82. The ERT assessed the information reported in the NC8 of Belarus and identified issues relating to completeness and thus adherence to the UNFCCC reporting guidelines on NCs. The findings are described in table I.6.

III. Conclusions and recommendations

83. The ERT conducted a technical review of the information reported in the NC8 of Belarus in accordance with the UNFCCC reporting guidelines on NCs. The ERT concluded that the reported information mostly adheres to the UNFCCC reporting guidelines on NCs and that the NC8 provides an overview of the national climate policy of Belarus.

84. As an Annex I Party with no commitments inscribed in Annex B to the Kyoto Protocol, Belarus has no obligation to report on its national system in accordance with Article 5, paragraph 1, of the Kyoto Protocol; its national registry; complementarity relating to the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol; or the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol.

85. The ERT conducted a technical review of the information reported in the BR5 and BR5 CTF tables of Belarus in accordance with the UNFCCC reporting guidelines on BRs. The ERT concluded that the reported information mostly adheres to the UNFCCC reporting guidelines on BRs and that the BR5 and its CTF tables provide an overview of emissions and removals related to the Party's quantified economy-wide emission reduction target; assumptions, conditions and methodologies related to the attainment of the target; and the progress of Belarus towards achieving its target.

86. In its NC8 Belarus reported on its key national circumstances related to GHG emissions and removals, including the provision of key data on legislation, population trends, geography and land use, climate and climate change, economic developments, energy, transport, the buildings sector, industry, trade, the services sector, agriculture, forestry, resource efficiency and wastewater. Belarus reported that the energy sector is a very important part of the national economy. The share of RES has grown significantly since 2010. In particular, biogas consumption and solar power generation have increased five and 15 fold respectively since 2010.

87. Belarus's total GHG emissions excluding LULUCF were estimated to be 38.1 per cent below the 1990 level, while total GHG emissions including LULUCF were estimated to be 54.7 per cent below the 1990 level. Emissions peaked in 1990 and sharply decreased until 1995, owing to a general economic downturn, and then remained relatively stable, with some decline between 1999 and 2005 and since 2014, owing to a decrease in production in key

emission categories (energy industries in the energy sector and cement and lime production in the IPPU sector). The changes in total emissions were driven mainly by factors such as the reduction of emissions from the energy and IPPU sectors.

88. As reported in the BR5, under the Convention Belarus committed to achieving a quantified economy-wide emission reduction target of 10 per cent below the 1990 level by 2020. The target covers CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃, expressed using GWP values from the AR4, and covers all sources and sectors included in the annual GHG inventory excluding the LULUCF sector. Belarus reported that it does not make use of market-based mechanisms for achieving its target. In absolute terms, this means that under the Convention Belarus has to reduce its emissions from 145,461.61 kt CO₂ eq in the base year to 130,915.45 kt CO₂ eq by 2020, excluding accounting for units from market-based mechanisms and the contribution of LULUCF.

89. In addition to its 2020 target, Belarus reported on its longer-term targets under the Paris Agreement. In 2021, in its updated NDC, Belarus announced an unconditional economy-wide GHG emission reduction target of at least 35 per cent, including LULUCF, by 2030 compared with the 1990 level. The updated NDC also defined a new national conditional economy-wide target to reduce GHG emissions by at least 40 per cent, including LULUCF, by 2030 compared with the 1990 level, which is subject to attracting international financial resources.

90. Belarus's annual total GHG emissions excluding LULUCF in 2020 were 32.17 per cent (42,113.39 kt CO₂ eq) below the base-year level. The ERT noted that the contribution of LULUCF is not included in the Party's base or target year and that Belarus did not use units from market-based mechanisms. The ERT concluded that the total GHG emissions excluding LULUCF of Belarus do not exceed the emission level corresponding to the 2020 target, and therefore that the target has been achieved.

91. The GHG emission projections provided by Belarus in its NC8 and BR5 correspond to the WEM, WOM and WAM scenarios. Belarus's total GHG emissions excluding LULUCF are projected under the WEM scenario to decrease by 37.3 per cent by 2030 compared with the 1990 level. When including LULUCF, total GHG emissions are projected under the WEM scenario to decrease by 20 per cent by 2030 compared with the 1990 level. Under the WAM scenario, emissions in 2030 excluded LULUCF and are projected to be lower than those in 1990 by 41.5 per cent and by 53 per cent below the 1990 level if LULUCF is included.

92. Belarus's main policy framework relating to energy and climate change includes programmes and legislation to reduce energy consumption and increase the use of local fuels, including renewables. The Party described the mitigation actions that it has implemented to help it achieve its 2020 and longer-term targets, which include the Concept of Energy Security, the Concept for the Development of Electricity Generating Capacities and Electric Grids for the Period up to 2030 and the State Program for the Development of Transport of the Republic of Belarus for 2016–2020. These PaMs are important for ensuring energy security and accessible transport while also minimizing impacts on the environment, including the climate.

93. In its NC8 Belarus provided information on the expected impacts of climate change in the country; the adaptation policies covering regional, sectoral and cross-sectoral vulnerabilities and considerations; and an outline of the action taken to implement Article 4, paragraph 1(b) and (e), of the Convention with regard to adaptation. About 40 per cent of Belarus's GDP depends on the weather, and agriculture is estimated to be the most affected sector. Consequently, the Party has developed and implemented adaptation measures for the agriculture and food security sector (the Strategy for Adaptation of Agriculture in the Republic of Belarus to Climate Change) and for the forestry and biodiversity sector (the Strategy for Adaptation of Forestry in Belarus to Climate Change until 2050 and the National Action Plan on Adaptation of Forestry in Belarus to Climate Change until 2030). In the water resources sector the Party has developed the Water Management Strategy in the Climate Change Context for the Period until 2030, and for the human health sector it has developed the National Action Plan on Adaptation to Climate Change, which will include adaptation to climate change.

94. In its NC8 Belarus provided information on its activities relating to research and systematic observation. Climate monitoring and climate change studies are mainly carried out by the National Hydrometeorological Service. Belarus has a well-established hydrometeorological observation network, and air quality monitoring is also undertaken. At the international level, Belarus contributes data to the Global Climate Observation System, the data exchange system of WMO, World Weather Watch and Global Atmospheric Watch.

95. In its NC8 Belarus provided information on its actions relating to education, training and public awareness. In the normative legal documents of the Ministry of Education, special attention is given to the environmental education of children and adolescents. Environmental education on sustainable development is through activities at museums, field workshops, expeditions, excursions, school experiments and research. Since 2018, a network of green schools has been developed in the country. As at 2022, a total of 457 institutions from all regions of the country were involved in the Green Schools educational project, of which 237 were recognized as green schools. Students and teachers in these institutions were actively involved in environmental protection and related educational activities and training.

96. In the course of the review, the ERT formulated the following recommendations for Belarus to improve its adherence to the UNFCCC reporting guidelines on NCs in its next NC:

- (a) To improve the completeness of its reporting by:
 - (i) Providing information on the methods and tools used to quantify the mitigation impacts of the main PaMs and to describe how these methods take into account the overlaps between PaMs (see issue 4 in table I.2);
 - (ii) Providing information on its projection tables on a gas-by-gas basis and including projections for F-gases (see issue 5 in table I.3);
 - (iii) Providing information on the total effect of PaMs presented to at least 15 years from the most recent inventory year and report on these GHG emissions by gas on a CO₂ eq basis (see issue 8 in table I.3);
 - (iv) Providing information on factors and activities explaining emission trends that underpin emission projections for each sector (see issue 11 in table I.3);
 - (v) Providing information on action taken to support related capacity-building in developing countries (see issue 1 in table I.5);
- (b) To improve the transparency of its reporting by:
 - (i) Clearly explaining how the national circumstances and any changes in the national circumstances over the reporting period have affected or will affect the GHG emissions and removals over time (see issue 1 in table I.1);
 - (ii) Clearly describing the GHGs affected for all PaMs reported, including cross-cutting PaMs (see issue 1 in table I.2);
 - (iii) Describing the reasons why it is not applicable to estimate the quantitative impacts of individual policies, why it is not possible to estimate the quantitative impacts of individual policies or measures and in the event that the impacts are included elsewhere, clearly describe in which policy or measure the impact is included (see issue 3 in table I.2);
 - (iv) Reporting scenarios in accordance with the scenario definitions in the UNFCCC reporting guidelines on NCs, and consistently with the statuses of reported PaMs, where a WEM projection encompasses currently implemented and adopted PaMs and a WAM projection also encompasses planned PaMs (see issue 1 in table I.3).

97. In the course of the review of Belarus's BR5, the ERT formulated the following recommendations relating to adherence to the UNFCCC reporting guidelines on BRs:

- (a) To improve the completeness of its reporting by:

- (i) Providing information on its projection tables on a gas-by-gas basis and including projections for F-gases (see issue 5 in table II.2);
- (ii) Providing information on factors and activities explaining emission trends that underpin emission projections for each sector (see issue 10 in table II.2);
- (b) To improve with the transparency of its reporting by:
 - (i) Reporting consistently on the inclusion of NF_3 in the GHG emission reduction target in the BR text and CTF tables (see issue 1 in table II.1);
 - (ii) Reporting scenarios in accordance with the scenario definitions in the UNFCCC reporting guidelines on NCs, and consistently with the statuses of reported PaMs, where a WEM projection encompasses currently implemented and adopted PaMs and a WAM projection also encompasses planned PaMs (see issue 1 in table II.2).

Annex I

Assessment of adherence to the reporting guidelines for the eighth national communication of Belarus

Tables I.1–I.6 summarize the ERT assessment of adherence to the UNFCCC reporting guidelines on NCs for Belarus’s NC8.

Table I.1

Findings on national circumstances relevant to greenhouse gas emissions and removals from the review of the eighth national communication of Belarus

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 3 Issue type: transparency Assessment: recommendation	<p>The Party described its national circumstances in the NC8 but did not describe the links between its national circumstances or changes in circumstances and its GHG emissions. The Party provided key sectoral data for most sectors of the economy but did not include any analysis of the links between these data and its GHG emissions. For the buildings sector, the information reported was limited to one State programme and did not include any trends for activity data or other indicators that would explain GHG emission trends in the sector.</p> <p>During the review, Belarus provided additional information on the influence of its national circumstances in key sectors of its economy (i.e. energy, industrial production, agriculture, waste, forestry) and its GHG emissions. The Party also provided detailed information on its urban infrastructure, including quantifiable indicators on its building stock, energy-efficiency levels in residential and non-residential buildings, energy consumption trends, most commonly used heating technologies, renovation and new construction rates, and the main barriers to better energy efficiency in buildings.</p> <p>The ERT reiterates the recommendation from the previous review report for Belarus to provide further explanation of how its national circumstances and any changes in its national circumstances over the reporting period have affected or will affect GHG emissions and removals over time, for example by providing an analysis of the connection between key activity data and emissions, as well as disaggregated activity data for the buildings sector.</p>
2	Reporting requirement specified in paragraph 3 Issue type: completeness Assessment: encouragement	<p>The Party did not report disaggregated indicators to explain the relationship between its national circumstances and emissions or removals.</p> <p>During the review, Belarus provided additional information on the influence of its national circumstances in key sectors of its economy (i.e. energy, industrial production, agriculture, waste, forestry) and its GHG emissions, but did not outline the relevant indicators nor provide an analysis of the relationship between the indicators and the GHG emissions.</p> <p>The ERT encourages Belarus to develop and report disaggregated indicators to explain the relationship between its national circumstances and emissions or removals.</p>

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs.

Table I.2

Findings on policies and measures from the review of the eighth national communication of Belarus

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 14 Issue type: transparency	<p>The Party reported cross-cutting PaMs in the NC8 (table 4.2). The name, objective (including the information on specific GHG reduction activities) and implementation period are described. However, the GHGs affected are not reported. An example of such a policy or measure is the National Strategy for Sustainable Development of the Republic of Belarus.</p> <p>During the review, Belarus explained that it is not possible to assess all mitigation impacts (and therefore the GHGs affected) for cross-cutting PaMs because in some</p>

No.	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
	Assessment: recommendation	<p>cases there are no well-defined indicators to assess the impacts of these PaMs, which only outline the directions for the further development of the sectoral policies. In addition, Belarus explained that the National Strategy for Sustainable Development is a comprehensive long-term strategy that determines the key cross-sectoral directions of the socioeconomic development of Belarus and targets all GHGs and all sectors (energy, IPPU, agriculture, waste and LULUCF).</p> <p>The ERT recommends that Belarus report on the GHGs affected for all PaMs reported, including cross-cutting PaMs, in its next submission.</p>
3	Reporting requirement specified in paragraph 19 Issue type: transparency Assessment: encouragement	<p>The ERT noted that the description of activities affected by PaMs is not always consistent with the GHGs affected. For example, according to the description given in the NC (table 4.4), the policy entitled Concept of Energy Security of the Republic of Belarus includes efficient means of cleaning waste gases and modern means of reducing NO_x and CO₂ emissions from the combustion of natural gas, fuel oil, wood and other fuels. However, the affected GHGs include CO₂ and CH₄. It is not clear which specific activities covered by this policy result in the reduction of these GHGs. Also, under the measure entitled Projections for the Creation of New Industries of Crucial Importance for the Innovative Development of the Republic of Belarus, Belarus did not clearly outline the particular activities that would have resulted in the reduction of CO₂.</p> <p>During the review, Belarus explained that the Concept of Energy Security is a comprehensive policy for energy security and the supply of energy resources. It describes changes in the structure of final fuel consumption and activities resulting in a reduction in the consumption of fossil fuels and affecting CO₂, CH₄ and N₂O emissions. It also describes the implementation of countrywide measures and efficient technologies that reduce emissions of particulate matter, NO_x and other pollutants. Additionally, Belarus explained that the policy entitled Projection for the Creation of New Industries of Crucial Importance for the Innovative Development of the Republic of Belarus implements the programme entitled On Priority Directions for Scientific, Technical and Innovative Activities for 2021–2025. This programme aims to reduce the consumption of materials and energy generated from fossil fuels and increase the use of renewables through improving the economy’s energy intensity, using innovative production technologies and processes, commissioning the new Belarusian nuclear power plant and implementing smart power supply networks.</p> <p>The ERT encourages the Party to report consistently on the activities affected by each reported policy and the GHGs affected by that policy.</p>
4	Reporting requirement specified in paragraph 20 Issue type: transparency Assessment: recommendation	<p>The Party reported on the mitigation impacts of some of its policies in the NC8. For some policies, the impacts were reported as “NA”, “NE” or “IE” (tables 4.4, 4.6–4.9 and 4.11). However, for those reported as “NA” it was not clear why the impacts were not applicable, for those reported as “NE” it was not clear why the impacts were not estimated and for those reported as “IE” it was not clear under which other policy or policies the impact was included.</p> <p>During the review, Belarus provided clarification on the use of “NA”, and “NE” and explained that some policies in tables 4.4, 4.6–4.9 and 4.11 are marked as “IE” because if they were quantified it would result in double counting. Belarus explained that there is an overlap of some measures in legislative acts and in most cases the mitigation effect is included in the more comprehensive legislative act, such as a sectoral strategy or concept.</p> <p>The ERT recommends that Belarus describe the reasons why it is not applicable to estimate the quantitative impacts of individual policies, why it is not possible to estimate the quantitative impacts of individual policies or measures and, in the event that the impacts are included elsewhere, clearly describe in which policy or measure the impact is included.</p>
5	Reporting requirement specified in paragraph 20 Issue type: completeness Assessment: recommendation	<p>The Party did not provide a brief description of the estimation methods used to quantify the mitigation impacts of the reported PaMs listed for all sectors in its NC8.</p> <p>During the review, Belarus explained that for PaMs already implemented in the energy sector a mitigation effect was calculated based on the known value of the reduced amount of fuel combusted and the GHG emission factor for that fuel. For measures at the implementation stage (adopted but not yet fully implemented) that were included in the WEM scenario, or at the planning stage (included in the WAM scenario), the</p>

No.	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
		<p>mitigation effect was calculated as the difference between the WOM scenario and the WEM or WAM scenario.</p> <p>The ERT recommends that Belarus report the methods and tools used to quantify the mitigation impacts of the main PaMs and describe how these methods take into account the overlaps between PaMs.</p>

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs.

Table I.3

Findings on projections including aggregate effects of policies and measures reported in the eighth national communication of Belarus

No.	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
1	<p>Reporting requirement specified in paragraph 26</p> <p>Issue type: transparency</p> <p>Assessment: recommendation</p>	<p>The Party reported its PaMs in tables 4.1–4.9 of its NC8 and the definitions and assumptions for its scenarios in table 5.1 of its NC8. However, the reporting of PaMs as implemented, adopted and planned does not match the definitions of the WEM and WAM scenarios as given in paragraph 26 of the UNFCCC reporting guidelines on NCs. In particular, the WEM scenario does not include all PaMs that are reported as implemented and adopted in the policy section of the NC8. In addition, although the policy chapter does not include planned PaMs, the Party reports on the WAM scenario.</p> <p>During the review, Belarus explained that all adopted policies up until 2018 were included in the WEM scenario. Accordingly, PaMs adopted after 2018 were considered as planned PaMs for the scenario definition. The Party further explained that the sectoral tables within the policy chapter of the NC8 and BR5 provided a starting year for the implementation of each policy or measure to better understand which one was included in each scenario. In addition, in these tables PaMs were marked with an asterisk or a double asterisk to indicate their inclusion in the WEM and WAM scenarios respectively.</p> <p>The ERT reiterates the recommendation from the previous review report that Belarus report scenarios in accordance with the scenario definitions in the UNFCCC reporting guidelines on NCs, and consistently with the statuses of reported PaMs, where a WEM projection encompasses currently implemented and adopted PaMs and a WAM projection also encompasses planned PaMs.</p>
2	<p>Reporting requirement specified in paragraph 27</p> <p>Issue type: completeness</p> <p>Assessment: encouragement</p>	<p>The Party did not report a sensitivity analysis for any of the projections in its NC8.</p> <p>During the review, Belarus acknowledged that a sensitivity analysis was not developed and reported.</p> <p>The ERT reiterates the encouragement from the previous review report for Belarus to perform a sensitivity analysis for each scenario and report information on the sensitivity analysis and its results in its next submission.</p>
3	<p>Reporting requirement specified in paragraph 29</p> <p>Issue type: completeness</p> <p>Assessment: encouragement</p>	<p>For the WEM and WAM projections, the starting point should generally be the most recent inventory year. In its NC8 Belarus explained that the starting point for its WEM and WAM scenarios was 2018, while the most recent inventory year at the time of preparation of the NC8 was 2020.</p> <p>During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. These projections were prepared in the framework of the implementation of the EU4Climate project and at the time of the preparation of the projections the latest inventory data available were for 2018.</p> <p>The ERT encourages Belarus, in its next submission, to report the WEM and WAM projections using the most recent inventory year as the starting point.</p>
4	<p>Reporting requirement specified in paragraph 30</p> <p>Issue type: completeness</p>	<p>Belarus reported its projections relative to the GHG inventory data, which were adjusted for the preparation of the projections. The Party did not report its projections in its NC8 relative to unadjusted inventory data for the preceding years presented in the most recent annual inventory submission available.</p>

<i>No.</i>	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
	Assessment: encouragement	<p>During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. These projections were prepared in the framework of the implementation of the EU4Climate project and at the time of the preparation of the projections the latest inventory data available were for 2018. The Party noted that, when preparing the projections, the historical emissions were adjusted to account for some inaccuracies in the inventory in the LULUCF and waste sectors.</p> <p>The ERT encourages Belarus to present its projections relative to unadjusted inventory data for the preceding years in the most recent annual inventory submission available.</p>
5	Reporting requirement specified in paragraph 32	<p>The Party did not report emission projections on gas-by-gas basis (they were reported as “NE”).</p> <p>During the review, Belarus explained that it included in its NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. The projections available were on the aggregated total CO₂ equivalent emissions and covered all direct sources of GHG emissions except F-gases, owing to their insignificance to the total share of emissions. Therefore, it was not possible to provide disaggregated data for the NC8 and BR5 on a gas-by-gas basis.</p> <p>The ERT recommends that Belarus report its projection tables on a gas-by-gas basis and include projections for F-gases.</p>
	Issue type: completeness	
	Assessment: recommendation	
6	Reporting requirement specified in paragraph 32	<p>The Party did not report projections of indirect emissions of CO, NO_x, NMVOCs or SO_x in its NC8.</p> <p>During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. Since these projections were made for direct emissions sources, Belarus could not include projections for indirect gases.</p> <p>The ERT encourages Belarus to include projections of indirect GHGs, such as CO, NO_x, NMVOCs and SO_x, in its next submission, and/or provide clear references to available documents containing projections for these gases.</p>
	Issue type: completeness	
	Assessment: encouragement	
7	Reporting requirement specified in paragraph 34	<p>The Party reported projections for up until 2030 in its NC8. Except for international bunkers, the projections were not reported for 2035, which is 15 years after the latest inventory year.</p> <p>During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections, excluding international bunkers, which were made for the NDC target for 2030, and therefore 2030 was applied as the end year for the projections. Belarus further explained that it included data on projections for international bunkers from the National Action Plan to Reduce Carbon Dioxide Emissions by Civil Aircraft Operators of the Republic of Belarus, which are available for 2050.</p> <p>The ERT encourages Belarus to present projections for the years that end in either a zero or a five, extending at least 15 years from the most recent inventory year (e.g. 2035 if the latest inventory year is 2020).</p>
	Issue type: completeness	
	Assessment: encouragement	
8	Reporting requirement specified in paragraph 37	<p>The Party did not report in section 5 of its NC8 the total effect of PaMs presented to at least 15 years from the most recent inventory year, nor is the total effect presented by gas.</p> <p>During the review, Belarus explained that the projections used were the latest available results from projections used for the development of the NDC target for 2030 and projections beyond 2030 were not available at the date of the preparation of the NC8 and BR5. The Party further explained that additional projections are currently being developed up to 2050.</p> <p>The ERT recommends that the Party report on the total effect of PaMs presented to at least 15 years from the most recent inventory year and report on the total effect by gas.</p>
	Issue type: completeness	
	Assessment: recommendation	
9	Reporting requirement specified in paragraph 40	<p>The Party reported the models used for the emission projections in its NC8. However, Belarus did not include in the NC8 or BR5 the information on the models and methodologies as required by paragraph 40 of the UNFCCC reporting guidelines on NCs (e.g. gases affected, strengths and weaknesses, etc.).</p> <p>During the review, Belarus explained that it used a bottom-up approach for GHG emission projections across the energy, IPPU, agriculture, waste and LULUCF sectors.</p>
	Issue type: completeness	

<i>No.</i> <i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
Assessment: encouragement	<p>The Party further explained that it used the same definitions for each of the scenarios in order to increase the consistence and accuracy of the results. The Party noted that a possible weakness of its approach is the use of GDP as the only key underlying assumption in all sectors, which led to projections that are highly sensitive to GDP growth rates.</p> <p>The ERT reiterates the encouragement from the previous review report for Belarus to include in its next submission information on the model or approach used for projections by providing information on the gases and/or sectors for which the model or approach was used; the type of model or approach used and its characteristics; the original purpose for which the model or approach was designed and any further modifications, if applicable; the strengths and weaknesses of the model or approach used for the various sectors; and how the model or approach used accounts for any overlaps or synergies between different PaMs.</p>
10 Reporting requirement specified in paragraph 44 Issue type: transparency Assessment: encouragement	<p>The Party reported projections of population and GDP in its NC8 (CTF table 5). However, the NC8 mentions other important parameters that were used for projections, such as “employment dynamics”, which were estimated based on the United Nations median projection of the number and age structure of the population of Belarus in 2020, 2025 and 2030, and the employment rate by age group in 2019. However, the values of these variables are not presented.</p> <p>During the review, Belarus explained that the projections included in the NC8 and BR5 were prepared within the framework of the implementation of the EU4Climate project and correspond to the adopted NDC target for 2030. More detailed information was not available for some of these key parameters.</p> <p>The ERT reiterates the encouragement from the previous review report for Belarus to report, in tabular format, information about key underlying assumptions and values of variables and any other underlying assumptions and values used to develop the emission projections, including for historical and projected years.</p>
11 Reporting requirement specified in paragraph 45 Issue type: completeness Assessment: recommendation	<p>The Party provided a general description of the factors that affect sectoral emissions in each of the scenarios in its NC8 (table 5.1) and BR5 (table 4). However, it did not report actual data or explain the past trends. For example, for the energy sector Belarus includes the assumption of “existing changes in energy consumption of population”; however, the existing and future trends themselves are not described.</p> <p>During the review, Belarus explained that the projections included in the NC8 and BR5 were prepared within the framework of the implementation of the EU4Climate project and correspond to the adopted NDC target for 2030. More detailed information was not available for some of these key factors and activities.</p> <p>The ERT recommends that Belarus improve the completeness of its reporting by including in its next submission relevant information on factors and activities explaining emission trends that underpin emission projections for each sector. This information on factors and activities may be presented in a tabular format.</p>

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs.

Table I.4

Findings on vulnerability assessment, climate change impacts and adaptation measures from the review of the eighth national communication of Belarus

<i>No.</i> <i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
1 Reporting requirement specified in paragraph 47 Issue type: completeness Assessment: encouragement	<p>The Party did not report information on a monitoring and evaluation framework for implemented adaptation strategies in its NC8.</p> <p>During the review, Belarus informed the ERT that for the agriculture and food security sector and the forestry and biodiversity sector, individual programme documents always include information on existing procedures for the monitoring and evaluation of implemented adaptation measures, responsible authorities and reporting time frames. For the water resources sector and the human health sector, adaptation measures and a monitoring and evaluation framework are under development. Belarus also informed the</p>

<i>No.</i> <i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
	<p>ERT that it plans to develop a national action plan for economy-wide adaptation in 2024, which will include a national procedure for the evaluation of such activities.</p> <p>The ERT encourages the Party to include information on a monitoring and evaluation framework, such as that provided during the review, in its next submission.</p>

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs.

Table I.5

Findings on research and systematic observation from the review of the eighth national communication of Belarus

<i>No.</i> <i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
<p>1 Reporting requirement specified in paragraph 61</p> <p>Issue type: completeness</p> <p>Assessment: recommendation</p>	<p>The Party did not report on action taken to support related capacity-building in developing countries.</p> <p>During the review, Belarus informed the ERT that the Party participates twice a year in the North Eurasian Climate Outlook Forum. For example, at the twenty-fourth session of the North Eurasian Climate Outlook Forum, which took place in 2023, the Party presented and shared experiences on a possible consensus on the forecast of temperature and precipitation anomalies.</p> <p>The ERT reiterates the recommendation from the previous review report that Belarus include information on action taken to support related capacity-building in developing countries in the next submission.</p>
<p>2 Reporting requirement specified in paragraph 62</p> <p>Issue type: completeness</p> <p>Assessment: encouragement</p>	<p>The Party reported information on global climate observing systems in its NC8, but without referring to the guidance in the “UNFCCC reporting guidelines on global climate observing systems” (annex to decision 11/CP.13).</p> <p>During the review, Belarus explained that it plans to refer to the guidance in the next submission.</p> <p>The ERT encourages the Party to refer to the guidance in the “UNFCCC reporting guidelines on global climate observing systems” (annex to decision 11/CP.13) and cite it when reporting on global climate observing systems in the next submission.</p>
<p>3 Reporting requirement specified in paragraph 64</p> <p>Issue type: completeness</p> <p>Assessment: encouragement</p>	<p>The Party reported information on its general policy on research and systematic observation in its NC8. However, information on funding of research and systematic observation was missing.</p> <p>During the review, Belarus explained that the activities of the National Hydrometeorological Service and the development of observation systems are funded by the Government.</p> <p>The ERT encourages the Party to include information on funding of research and systematic observation, such as that provided during the review, in the next submission.</p>
<p>4 Reporting requirement specified in paragraph 65</p> <p>Issue type: completeness</p> <p>Assessment: encouragement</p>	<p>The Party reported information on international exchange of climatic data and information, such as its participation in the data exchange system of WMO, in its NC8. However, it did not report on the identification of opportunities for and barriers to free and open international exchange of data and information and action taken to overcome such barriers.</p> <p>During the review, Belarus explained that the hydrometeorological observation system is updated each year, with instruments that have reached the end of their technical life being replaced and the latest observation and measurement technologies introduced. However, owing to pressure from sanctions on the Party, some bilateral treaties and agreements with neighbouring countries on the exchange of hydrometeorological information have been ended.</p> <p>The ERT encourages the Party to include the identification of opportunities for and barriers to free and open international exchange of data and information and action taken to overcome such barriers in the next submission.</p>

<i>No.</i>	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
5	Reporting requirement specified in paragraph 67 Issue type: completeness Assessment: encouragement	The Party did not report information on support for developing countries to establish and maintain observing systems and related data and monitoring systems. During the review, Belarus explained that it cooperates with other countries within the framework of WMO and participates in international exchange of climate data. The Party also participates in the preparation of the WMO annual statement on the state of the climate and in the preparation of a consolidated annual communication on the state of the climate and climate change in the territories of the member States of the Commonwealth of Independent States. In addition, the Party participates twice a year in the North Eurasian Climate Outlook Forum. The ERT encourages the Party to include information on support for developing countries to establish and maintain observing systems and related data and monitoring systems in the next submission.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs.

Table I.6

Findings on education, training and public awareness from the review of the eighth national communication of Belarus

<i>No.</i>	<i>Reporting requirement, issue type and assessment</i>	<i>Description of the finding with recommendation or encouragement</i>
1	Reporting requirement specified in paragraph 68 Issue type: completeness Assessment: encouragement	Belarus did not report in its NC8 whether public associations and the public in general were involved, and if so to what extent, in the process of the preparation or domestic review of the NC. During the review, Belarus explained that the public was informed about the preparation of the NC8 and BR5 through seminars and workshops organized within the framework of the implementation of international projects, such as EU4Climate and the UNDP–GEF project Capacity Building for Emission Trading and Strengthening of Measurement, Reporting and Verification in the Republic of Belarus. Public associations, including associations of academics, researchers, non-governmental organizations and businesses, were invited to participate in these meetings. Information on these meeting was published on the Ministry of Natural Resources and Environmental Protection website. In addition, representatives of the Ministry of Environment participated in press conferences on ongoing improvements in the Party’s climate policies. No comments were received from the public on the preparation of the NC and BR. The ERT encourages the Party to include information on the extent of public participation in the preparation or domestic review of the NC in future submissions.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs.

Annex II

Assessment of adherence to the reporting guidelines for the fifth biennial report of Belarus

The BR5 of Belarus is the final BR under the measurement, reporting and verification system established under the Convention.¹ Nevertheless, ERTs continue to provide recommendations and encouragements to the Parties on completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. Parties may find these recommendations and encouragements relevant, as appropriate, when preparing their initial biennial transparency report under the enhanced transparency framework of the Paris Agreement. Tables II.1–II.2 summarize the ERT assessment of adherence to the UNFCCC reporting guidelines on BRs for Belarus's BR5.

Table II.1

Findings on the quantified economy-wide emission reduction target from the review of the fifth biennial report of Belarus

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
1	Reporting requirement specified in paragraph 5(b) Issue type: transparency Assessment: recommendation	The Party reported in its BR5 (table 3, p.10) that its economy-wide emission reduction target of a 10 per cent reduction by 2020 from the 1990 level includes CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs and SF ₆ . However, tables 2(b) and (c) also include NF ₃ . During the review, Belarus explained that the 2020 target includes NF ₃ . The ERT recommends that Belarus report consistently in the BR text and CTF tables on the inclusion of NF ₃ in its emission reduction target.

Note: Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on BRs.

Table II.2

Findings on projections reported in the fifth biennial report of Belarus

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
1	Reporting requirement ^a specified in paragraph 26 Issue type: transparency Assessment: recommendation	The Party reported its PaMs in CTF table 3 and the definitions and assumptions for its scenarios in table 4 of its BR5. However, the reporting of PaMs as implemented, adopted and planned does not match the definitions of the WEM and WAM scenarios as given in paragraph 26 of the UNFCCC reporting guidelines on NCs. In particular, the WEM scenario does not include all PaMs that are reported as implemented and adopted in CTF table 3. In addition, although CTF table 3 does not include planned PaMs, the Party reports on the WAM scenario. During the review, Belarus explained that all adopted policies up to 2018 were included in the WEM scenario. Accordingly, PaMs adopted after 2018 were considered as planned PaMs for the scenario definition. The Party further explained that the sectoral tables within the policy chapter of the NC8 and BR5 provided a starting year for the implementation of each policy or measure to better understand which one was included in each scenario. In addition, in these tables PaMs were marked with an asterisk or a double asterisk to indicate their inclusion in the WEM and WAM scenarios respectively. The ERT reiterates the recommendation from the previous review report that Belarus report scenarios in accordance with the scenario definitions in the UNFCCC reporting guidelines on NCs, and consistently with the statuses of reported PaMs, where a WEM

¹ The Conference of the Parties, by decision 1/CP.24, decided that the final BRs shall be those submitted to the secretariat no later than 31 December 2022 and reaffirmed that, for Parties to the Paris Agreement, following the submission of the final BR, the modalities, procedures and guidelines contained in the annex to decision 18/CMA.1 will supersede the measurement, reporting and verification system established under decision 1/CP.16, paras. 40–47 and 60–64, and decision 2/CP.17, paras. 12–62.

No.	Reporting requirement and issue type	Description of the finding with recommendation or encouragement
		projection encompasses currently implemented and adopted PaMs and a WAM projection also encompasses planned PaMs.
2	Reporting requirement ^a specified in paragraph 27 Issue type: completeness Assessment: encouragement	The Party did not report a sensitivity analysis for any of the projections its BR5. During the review, Belarus acknowledged that a sensitivity analysis was not developed and reported for its projections (2025 and 2030). The ERT reiterates the encouragement from the previous review report for Belarus to provide information on a sensitivity analysis for the projections in the next submission.
3	Reporting requirement ^a specified in paragraph 29 Issue type: completeness Assessment: encouragement	For the WEM and WAM projections, the starting point should generally be the most recent inventory year. In its BR5, Belarus explained that the starting point for its WEM and WAM scenarios was 2018, while the most recent inventory year at the time of preparation of the BR5 was 2020. During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. These projections were prepared in the framework of the implementation of the EU4Climate project and at the time of the preparation of the projections the latest inventory data available were for 2018. The ERT encourages Belarus, in its next submission, to report on the WEM and WAM projections using the most recent inventory year as the starting point.
4	Reporting requirement ^a specified in paragraph 30 Issue type: completeness Assessment: encouragement	Belarus reported its projections relative to the GHG inventory data, which were adjusted for the preparation of the projections. The Party did not report its projections in its BR5 and CTF table 6 relative to unadjusted inventory data for the preceding years presented in the most recent annual inventory submission available. During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. These projections were prepared in the framework of the implementation of the EU4Climate project and at the time of the preparation of the projections the latest inventory data available were for 2018. The Party noted that, when preparing the projections, the historical emissions were adjusted to account for some inaccuracies in the inventory in the LULUCF and waste sectors. The ERT encourages Belarus to present its projections relative to unadjusted inventory data for the preceding years in the most recent annual inventory submission available when preparing its next submission.
5	Reporting requirement ^a specified in paragraph 32 Issue type: completeness Assessment: recommendation	The Party did not report emission projections on a gas-by-gas basis in CTF table 6 (they were reported as “NE”). During the review, Belarus explained that it included in its NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. The projections available were on the aggregated total CO ₂ equivalent emissions and covered all direct sources of GHG emissions except F-gases, owing to their insignificance to the total share of emissions. Therefore, it was not possible to provide disaggregated data for the NC8 and BR5 on gas-by-gas basis. The ERT recommends that Belarus report its projection tables on a gas-by-gas basis and including projections for F-gases.
6	Reporting requirement ^a specified in paragraph 32 Issue type: completeness Assessment: encouragement	The Party did not report projections of indirect emissions of CO, NO _x , NMVOCs or SO _x in the BR. During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections applied for the development of the NDC target for 2030. Since these projections were made for direct emissions sources, Belarus could not include projections for indirect gases. The ERT encourages Belarus to include projections of the indirect GHGs, such as CO, NO _x , NMVOCs and SO _x , and/or to provide clear references to available documents containing projections for these gases.

No.	<i>Reporting requirement and issue type</i>	<i>Description of the finding with recommendation or encouragement</i>
7	Reporting requirement ^a specified in paragraph 34 Issue type: completeness Assessment: encouragement	<p>The Party reported projections up to 2030 in its BR5. Except for international bunkers, the projections were not reported for 2035, which is 15 years after the latest inventory year.</p> <p>During the review, Belarus explained that it included in the NC8 and BR5 the latest available projections, excluding international bunkers, which were made for the NDC target for 2030, and therefore 2030 was applied as the end year for the projections. Belarus further explained that it included data on projections for international bunkers from the National Action Plan to Reduce Carbon Dioxide Emissions by Civil Aircraft Operators of the Republic of Belarus, which are available for 2050.</p> <p>The ERT encourages Belarus to present projections for the years that end in either a zero or a five, extending at least 15 years from the most recent inventory year (e.g. 2035 if the latest inventory year is 2020).</p>
8	Reporting requirement ^a specified in paragraph 40 Issue type: completeness Assessment: encouragement	<p>The Party reported the models used for the emission projections in its BR5. However, Belarus did not include in the NC8 or BR5 detailed information on the models and methodologies as required by paragraph 40 of the UNFCCC reporting guidelines on NCs (i.e. gases affected, strengths and weaknesses, etc.).</p> <p>During the review, Belarus explained that it used a bottom-up approach for GHG emission projections across the energy, IPPU, agriculture, waste and LULUCF sectors. The Party further explained that it used the same definitions for each of the scenarios in order to increase the consistence and accuracy of the results. The Party noted that a possible weakness of its approach is the use of GDP as the only key underlying assumption in all sectors, which led to projections that are highly sensitive to GDP growth rates.</p> <p>The ERT reiterates the encouragement from the previous review report for Belarus to report in its next submission information on the model or approach used for projections by providing information on the gases and/or sectors for which the model or approach was used; the type of model or approach used and its characteristics; the original purpose for which the model or approach was designed and any further modifications, if applicable; the strengths and weaknesses of the model or approach used for the various sectors; and how the model or approach used accounts for any overlaps or synergies between different PaMs.</p>
9	Reporting requirement ^a specified in paragraph 44 Issue type: transparency Assessment: encouragement	<p>The Party reported projections of population and GDP in CTF table 5. However, the NC8 and BR5 mentions other important parameters that were used for projections, such as “employment dynamics”, which were estimated based on the United Nations median projection of the number and age structure of the population of Belarus in 2020, 2025 and 2030, and the employment rate by age group in 2019. However, the values of these variables are not presented.</p> <p>During the review, Belarus explained that the projections included in the NC8 and BR5 were prepared within the framework of the implementation of the EU4Climate project and correspond to the adopted NDC target for 2030. More detailed information was not available for some of these key parameters.</p> <p>The ERT reiterates the encouragement from the previous review report for Belarus to report, in tabular format, information about key underlying assumptions and values of variables and any other underlying assumptions and values used to develop the emission projections, including for historical and projected years.</p>
10	Reporting requirement ^a specified in paragraph 45 Issue type: completeness Assessment: recommendation	<p>The Party provided a general description of the factors that affect sectoral emissions in each of the scenarios in its BR5 (table 4). However, it did not report actual data or explain the past trends. For example, for the energy sector Belarus includes the assumption of “existing changes in energy consumption of population”; however, the existing and future trends themselves are not described.</p> <p>During the review, Belarus explained that the projections included in the NC8 and BR5 were prepared within the framework of the implementation of the EU4Climate project and correspond to the adopted NDC target for 2030. More detailed information was not available for some of these key factors and activities.</p> <p>The ERT recommends that Belarus improve the completeness of its reporting by including in its next submission relevant information on factors and activities explaining</p>

<i>No.</i>	<i>Reporting requirement and issue type</i>	<i>Description of the finding with recommendation or encouragement</i>
11	Reporting requirement ^b specified in paragraph 12 Issue type: completeness Assessment: encouragement	<p>emission trends that underpin emission projections for each sector. This information on factors and activities may be presented in a tabular format.</p> <p>The Party did not report on changes since its most recent NC in the models or methodologies used for the preparation of projections in its BR5.</p> <p>During the review, Belarus explained that it used the same approach as for previous submissions, analysing the correlations between activity data for different sectors on the one hand and GDP on the other. Belarus also explained that it updated only assumptions and PaMs in accordance with a recently adopted policy. Regarding the projections in the NC8 and BR5 for the energy sector, Belarus explained that it had developed a new model that better corresponded to the GHG inventory methodology to replace the LEAP model, which it had used in the previous BR.</p> <p>The ERT encourages Belarus to provide in its next submission a short summary of the main changes to the models or methodologies used for projections since the most recent NC, including, where appropriate, references to external supporting documentation.</p>

Note: The reporting on the requirements not included in this table is considered to be complete and transparent, and thus adheres to the UNFCCC reporting guidelines on NCs and on BRs.

^a Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs, as per para. 11 of the UNFCCC reporting guidelines on BRs.

^b Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs.

Annex III

Documents and information used during the review

A. Reference documents

2022 GHG inventory submission of Belarus. Available at <https://unfccc.int/ghg-inventories-annex-i-parties/2022>.

2023 GHG inventory submission of Belarus. Available at <https://unfccc.int/ghg-inventories-annex-i-parties/2023>.

BR5 CTF tables of Belarus. Available at <https://unfccc.int/BR5>.

BR5 of Belarus. Available at <https://unfccc.int/BR5>.

“Common tabular format for ‘UNFCCC biennial reporting guidelines for developed country Parties’”. Annex to decision 19/CP.18. Available at <https://unfccc.int/resource/docs/2012/cop18/eng/08a03.pdf>.

“Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention”. FCCC/SBSTA/2014/INF.6. Available at <http://unfccc.int/resource/docs/2014/sbsta/eng/inf06.pdf>.

“Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications”. FCCC/CP/2019/13/Add.1. Available at <https://unfccc.int/documents/210471>.

“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol”. Annex to 15/CMP.1. Available at <https://unfccc.int/documents/4253>.

“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol”. Annex III to decision 3/CMP.11. Available at <https://unfccc.int/documents/9101>.

“Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention”. Annex to decision 13/CP.20. Available at <http://unfccc.int/resource/docs/2014/cop20/eng/10a03.pdf>.

NC8 of Belarus. Available at <https://unfccc.int/NC8>.

Report on the individual review of the inventory submission of Belarus submitted in 2021. FCCC/ARR/2021/BLR. Available at <https://unfccc.int/documents/460970>.

Report on the technical review of the BR2 of Belarus. FCCC/TRR.2/BLR. Available at <https://unfccc.int/node/66151>.

Report on the technical review of the NC6 of Belarus. FCCC/IDR.6/BLR. Available at <https://unfccc.int/node/66151>.

“UNFCCC biennial reporting guidelines for developed country Parties”. Annex I to decision 2/CP.17. Available at <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf>.

B. Additional information provided by the Party

Responses to questions during the review were received from Yevgenia Bertosh and Kristina Gonchar (Belarusian Scientific and Research Centre “Ecology”), including additional material. The following references were provided by Belarus and may not conform to UNFCCC editorial style as some have been reproduced as received:

Yevgenia I. Bertosh. 2020. *Scenarios of greenhouse gas emissions in the updated NDC in the Agriculture and Waste Sectors*. Minsk, Belarus, Available at <https://eu4climate.eu/ndc/>.