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Report of the technical review of the second biennial report of Belarus

According to decision 2/CP.17, developed country Parties are requested to submit their second biennial reports by 1 January 2016, that is, two years after the due date for submission of a full national communication. This report presents the results of the technical review of the second 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”.

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I. Introduction and summary

A. Introduction

1. This report covers the centralized technical review of the second biennial report (BR2)¹ 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” (annex to decision 13/CP.20). In accordance with the same decision, a draft version of this report was communicated to the Government of Belarus, which provided comments that were considered and incorporated, as appropriate, into this final version of the report.

2. The review took place from 30 May to 4 June 2016 in Bonn, Germany, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Ms. Maryna Bereznytska (Ukraine), Mr. Nagmeldin Goutbi Elhassan Mahmoud (Sudan), Ms. Violeta Hristova (Bulgaria), Ms. Aiymgul Kerimray (Kazakhstan), Mr. Mahendra Kumar (Fiji), Ms. Sara Moarif (France), Ms. Lilia Taranu (Republic of Moldova), Mr. Antonin Vergez (France), Mr. Vute Wangwacharakul (Thailand) and Ms. Songli Zhu (China). Ms. Bereznytska and Mr. Kumar were the lead reviewers. The review was coordinated by Ms. Ruta Bubniene, Mr. Javier Hanna and Mr. Pedro Torres (UNFCCC secretariat).

B. Summary

3. The expert review team (ERT) conducted a technical review of the information reported in the BR2 of Belarus in accordance with the “UNFCCC biennial reporting guidelines for developed country Parties” (hereinafter referred to as the UNFCCC reporting guidelines on BRs). During the review, Belarus provided the following additional relevant information: assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target; and progress made towards the achievement of the target.

1. Timeliness

4. The BR2 was submitted on 30 December 2015, before the deadline of 1 January 2016 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 30 December 2015.

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

5. Issues and gaps related to the reported information identified by the ERT are presented in table 1 below. The information reported by Belarus in its BR2 is partially in adherence with the UNFCCC reporting guidelines on BRs as per decision 2/CP.17.

¹ The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables are subject to the technical review.

Table 1

Summary of completeness and transparency issues related to mandatory reported information in the second biennial report of Belarus

<i>Chapter of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Paragraphs with recommendations</i>
Greenhouse gas emissions and trends	Complete	Transparent	
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Mostly transparent	15
Progress in achievement of targets	Partially complete	Partially transparent	22, 25, 40, 45–49, 54
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 chapter III.

Abbreviation: NA = not applicable.

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

II. Technical review of the reported information

A. All greenhouse gas emissions and removals related to the quantified economy-wide emission reduction target

6. Belarus has provided a summary of information on greenhouse gas (GHG) emission trends for the period 1990–2012 in its BR2 and CTF tables 1(a)–(d). The BR2 makes reference to the national inventory arrangements, which are explained in more detail in the national inventory report included in the 2014 annual inventory submission of Belarus (in chapter 1.2). The established national inventory arrangements were in line with the reporting requirements related to national inventory arrangements contained 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” (hereinafter referred to as the UNFCCC Annex I inventory reporting guidelines) that are required by paragraph 3 of the UNFCCC reporting guidelines on BRs. Belarus reported in its BR2 that there were no changes in the national inventory arrangements since its first biennial report (BR1). During the review, Belarus confirmed to the ERT that no changes in the national inventory arrangements had occurred since its sixth national communication (NC6) and BR1.

7. The information reported in the BR2 on emission trends is not fully consistent with that reported in the 2014 annual inventory submission of Belarus. The ERT noted inconsistencies in CTF table 1 for the industrial processes and product use (IPPU) and agriculture sectors. In CTF table 1, the Party has reported higher emissions for the IPPU sector for all years compared with those reported in its 2014 annual inventory submission. In addition, for the agriculture sector, the same values were reported for the years 1991–1999 in CTF table 1, which is not consistent with the data reported in the 2014 annual inventory submission of Belarus. Also, the ERT noted that CTF table 1(a) does not include values for total carbon dioxide (CO₂) emissions with and without land use, land-use change and forestry (LULUCF) (including and excluding indirect CO₂) for the years 1990–1994. Further, in the columns for the base year in CTF tables 1 and 1(a)–(d), no values were

reported. To reflect the most recently available data, version 1.2 of the 2014 annual inventory submission of Belarus has been used as the basis for discussion in chapter II.A of this review report.

8. During the review, Belarus provided additional information, elaborating on the inconsistencies between the BR2 and the 2014 GHG inventory submission. Belarus acknowledged the inconsistencies in the CTF tables and also informed the ERT about inconsistencies identified in CTF tables 6(a) and 6(c) regarding the emission trends in the agriculture sector (see para. 49 below). Belarus clarified that the data provided in the 2014 annual inventory submission are correct in comparison with the data reported in CTF table 1(a). In addition, Belarus informed the ERT that the data in the CTF tables will be verified in the future, in line with the most recent GHG annual inventory submission. The ERT noted that at the time of the review, the 2015 GHG inventory submission had not yet been submitted to the secretariat. In its comments on the draft review report, Belarus indicated that at the time of providing its comments it had already submitted its 2015 and 2016 annual GHG inventory submissions to the secretariat.

9. The ERT encourages Belarus to provide, in its next biennial report (BR), information on GHG emissions and emission trends consistent with that provided in the most recent GHG annual inventory submission, and fully explain any differences.

10. Total GHG emissions² excluding emissions and removals from LULUCF decreased by 35.8 per cent between 1990 and 2012, whereas total GHG emissions including net emissions and removals from LULUCF decreased by 42.3 per cent over the same period. The decrease in the total GHG emissions can be attributed mainly to CO₂ emissions, which decreased by 44.6 per cent (excluding LULUCF) between 1990 and 2012. Over the same period, emissions of methane (CH₄) increased by 1.1 per cent, while emissions of nitrous oxide (N₂O) decreased by 18.5 per cent. Numerical values for emissions of fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆), are not reported for 1990; however, numerical values for HFC emissions are reported for the years 1995–2010, and for SF₆ emissions for the years 1995–2012. No numerical values are reported for PFC emissions for the years 1990–2012. The emission trends were driven mainly by structural changes in the national economy in the early 1990s, with a dramatic decrease in consumption of fuel in the energy sector and other energy-intensive activities, followed by an increase in less energy-intensive sectors, such as services and trade, a reduction in industrial production, the introduction of energy-saving policies, and a change in the fuel mix.

11. The ERT noted that, during the period 1990–2012, the gross domestic product (GDP) per capita of Belarus increased by 109.2 per cent, while GHG emissions per GDP and GHG emissions per capita decreased by 67.0 and 30.9 per cent, respectively. During the period 2000–2012, the GDP per capita of Belarus grew significantly (by 131.6 per cent), due to the recovery of industrial production levels. At the same time, GHG emissions per GDP decreased significantly (by 48.5 per cent), due to the increase in less energy-intensive sectors (e.g. services and trade), the switch from coal and fuel oil to natural gas and the wider use of biomass, while GHG emissions per capita increased (by 19.2 per cent), due to the decrease in population and the net increase in GHG emissions. Table 2 below illustrates the emission trends by sector and some of the economic indicators relevant to GHG emissions for Belarus.

² In this report, the term “total GHG emissions” refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding land use, land-use change and forestry, unless otherwise specified. Values in this paragraph are calculated based on the 2014 inventory submission, version 1.2.

Table 2
Greenhouse gas emissions by sector and some indicators relevant to greenhouse gas emissions for Belarus for the period 1990–2012

Sector	GHG emissions (kt CO ₂ eq)					Change (%)		Share by sector (%)	
	1990	2000	2010	2011	2012	1990–2012	2011–2012	1990	2012
	1. Energy	102 242.80	52 684.07	56 441.59	53 380.41	55 303.82	–45.9	3.6	73.5
A1. Energy industries	65 307.26	30 751.18	31 773.38	29 073.01	28 664.97	–56.1	–1.4	46.9	32.1
A2. Manufacturing industries and construction	7 238.50	6 767.49	8 141.64	8 057.63	9 924.68	37.1	23.2	5.2	11.1
A3. Transport	13 074.05	3 132.64	5 283.88	6 618.13	7 217.24	–44.8	9.1	9.4	8.1
A4.–A5. Other	15 382.97	10 568.54	9 520.23	8 006.64	7 894.39	–48.7	–1.4	11.1	8.8
B. Fugitive emissions from fuels	1 240.02	1 464.21	1 722.46	1 625.00	1 602.53	29.2	–1.4	0.9	1.8
2. IPPU	3 689.08	2 680.76	4 214.60	4 189.60	4 338.80	17.6	3.6	2.7	4.9
3. Agriculture	30 644.62	20 844.70	22 586.57	23 442.58	23 371.52	–23.7	–0.3	22.0	26.2
4. LULUCF	–28 574.44	–30 902.78	–30 179.18	–29 233.59	–25 500.74	–10.8	–12.8	NA	NA
5. Waste	2 574.73	2 955.57	6 183.13	6 486.97	6 269.18	143.5	–3.4	1.9	7.0
6. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total GHG emissions without LULUCF	139 151.23	79 165.10	89 425.90	87 499.56	89 283.33	–35.8	2.0	100.0	100.0
Total GHG emissions with LULUCF	110 576.79	48 262.32	59 246.72	58 265.97	63 782.58	–42.3	9.5	NA	NA
<i>Indicators</i>									
GDP per capita (thousands 2011 USD using PPP)	8.08	7.30	15.70	16.60	16.91	109.2	1.8		
GHG emissions without LULUCF per capita (t CO ₂ eq)	13.66	7.91	9.42	9.24	9.43	–30.9	2.1		
GHG emissions without LULUCF per GDP unit (kg CO ₂ eq per 2011 USD using PPP)	1.69	1.08	0.60	0.56	0.56	–67.0	0.3		

Sources: (1) GHG emission data: the 2014 annual inventory submission of Belarus, version 1.2; (2) GDP per capita data: World Bank.

Note: The ratios per capita and per GDP unit as well as the changes in emissions and the shares by sector are calculated relative to total GHG emissions without LULUCF using the exact (not rounded) values, and may therefore differ from the ratio calculated with the rounded numbers provided in the table.

Abbreviations: GDP = gross domestic product, GHG = greenhouse gas, IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry, NA = not applicable, PPP = purchasing power parity.

B. Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target

12. In its BR2 and CTF tables 2(a)–(f), Belarus reported a description of its target, including associated conditions and assumptions. CTF tables 2(a)–(f) contain the required information in relation to the description of the Party's emission reduction target, such as the base year (1990), the target year (2020), the emission reduction target (an 8 per cent reduction by 2020 compared with the 1990 level), the period in which to achieve this target (base year–2020), the gases covered (CO₂, CH₄, N₂O, HFCs, PFCs and SF₆), the sectors covered (energy, transport (subsector of the energy sector), industrial processes, agriculture, LULUCF and waste), the global warming potential (GWP) values used (from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (SAR)), and the use of market-based mechanisms and the possible scale of contributions from such mechanisms. In CTF table 2(e)I, the Party has used the notation key “NA” (not applicable) to report the information on the possible contributions of market-based mechanisms, and in the footnote to CTF table 2(f), the Party states that the use of market-based mechanisms is not considered in the emission reduction target. Further information on the target and the assumptions, conditions and methodologies related to the target is provided in chapter 2 of the BR2, in paragraph 15 of the report of the technical review of the first biennial report (TRR1) and in this report (see para. 16 below).

13. The BR2 and CTF tables 2(a)–(f) include the information required by the UNFCCC reporting guidelines on BRs. However, the following information reported by Belarus is not transparent: the inclusion of nitrogen trifluoride (NF₃) in the emission reduction target; whether the LULUCF sector is included in the quantified economy-wide emission reduction target; the approach used to count emissions and removals from the LULUCF sector; and the description of the emission reduction target relative to the base year. The ERT noted that in CTF table 2(b), Belarus reports that the LULUCF sector is included in the emission reduction target, but at the same time, CTF table 2(d) states that the LULUCF sector is excluded from the base year and the target, which is confirmed in the footnote to CTF table 2(f). The ERT also noted that the BR1 reports that the Party's emission reduction target excludes the LULUCF sector and the BR2 confirms this statement and clarifies that it was excluded due to the high uncertainty in the assessment of emissions/removals in that sector. In addition, the ERT noted that in CTF table 2(b), NF₃ is reported as “NA”, which is confirmed in the footnote to CTF table 2(f), while in the CTF tables of the BR1, NF₃ was reported as included in the emission reduction target. The ERT also noted a minor inconsistency in CTF table 2(a), which includes both a 0.0 per cent emission reduction target below the base year level and an 8.0 per cent emission reduction target below the 1990 level. The ERT further noted that since the base year is 1990, these values should be the same.

14. During the review, Belarus confirmed that the LULUCF sector is not included in the quantified economy-wide emission reduction target, as per the country's formal communication to the secretariat.³ Nevertheless, the ERT noted that the formal communication of Belarus does not indicate the exclusion of the LULUCF sector in its quantified economy-wide emission reduction target. With regard to the inclusion of NF₃, Belarus informed the ERT that it is not included in its quantified economy-wide emission reduction target. In addition, Belarus confirmed that in CTF table 2(a), the “Emission reduction target” as a percentage of the “base year/base period” should not be 0.0 per cent, but rather 8.0 per cent, since 1990 is chosen as the base year.

³ Available at <http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/belarusphaccord_app1.pdf>.

15. The ERT recommends that Belarus improve the transparency of its reporting by including, in its next BR, a consistent and clear description of the sectors and gases covered in its target, and of the emission reduction target relative to the base year. The ERT noted that the transparency of the Party's reporting of the description of the quantified economy-wide emission reduction target could benefit from the use of GWP values from the IPCC Fourth Assessment Report, given that, since 2015, Parties shall use these values to report national emission totals in their GHG inventory submissions.

16. For Belarus, the Convention entered into force on 9 August 2000. Under the Convention, Belarus made a commitment to reduce its GHG emissions by 8.0 per cent below the 1990 level by 2020. This target includes the GHGs included in the UNFCCC Annex I inventory reporting guidelines, namely CO₂, CH₄, N₂O, HFCs, PFCs and SF₆. It also includes all IPCC sources and sectors included in the annual GHG inventory. The GWP values used are those from the IPCC SAR. Emissions and removals from the LULUCF sector are not included in the target. Belarus reported that it does not plan to make use of market-based mechanisms to achieve its target (see para. 37 below). In absolute terms, this means that under the Convention, Belarus has to reduce emissions from 139,151.23 kt of carbon dioxide equivalent (CO₂ eq) (in the base year)⁴ to 128,019.13 kt CO₂ eq in 2020.

C. Progress made towards the achievement of the quantified economy-wide emission reduction target

17. This chapter provides information on the review of the reporting by Belarus on the progress made in reducing emissions in relation to the target, mitigation actions taken to achieve its target, and the use of units from market-based mechanisms and LULUCF.

1. Mitigation actions and their effects

18. In its BR2 and CTF table 3, Belarus reported on its progress in the achievement of its target and the mitigation actions adopted and implemented since its NC6 and BR1 to achieve its target. The BR2 and CTF table 3 include information on mitigation actions organized by sector and by gas. The ERT noted that Belarus has provided information in its BR2 on mitigation actions introduced to achieve its target, limited to some textual information. Further information on mitigation actions related to the Party's target is provided in chapter 3 of the BR2, in CTF table 3 and in this report (see paras. 32–35 below).

19. This report highlights the changes made since the publication of the Party's NC6 and BR1. In its BR2, Belarus provided general information on changes in its domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress made towards its target. In particular, the ERT noted that the information on changes in the procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress made towards the target was limited and lacking in detail to allow the ERT to understand the procedures established by the Party for these purposes.

20. With regard to the reported changes in its institutional arrangements, Belarus explained that by Order No. 180-OD of the First Deputy Minister of Natural Resources and Environmental Protection of the Republic of Belarus of 5 May 2015, the Interdepartmental Working Group on Climate Change was created with the main task of coordinating

⁴ Belarus chose 1990 as the base year for its 2020 target. The emission level in the base year is calculated based on the 2014 annual inventory submission of Belarus, version 1.2.

activities aimed at the fulfilment of the obligations under the Convention, the Kyoto Protocol and the Paris Agreement.

21. The ERT noted that Belarus did not include in its BR2 transparent information on changes in its procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress made towards its target (see para. 19 above). During the review, Belarus explained that a detailed monitoring mechanism for measuring the effectiveness and progress of implemented mitigation actions has been established within each mitigation action. The methods, data and indicators used for the evaluation process may differ for each mitigation action, but the common indicators include: GHG emission reductions and GHG removal increases, including afforestation activities and increases in forest land areas; power generation using renewable energy sources; and heat generation using renewable energy sources.

22. In order to ensure the transparency of the Party's reporting, the ERT recommends that Belarus report on any changes in its procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress made towards its economy-wide emission reduction target in its next BR.

23. Belarus did not include in its BR2 and CTF table 3 transparent information on the quantitative effects of its mitigation actions for 2020 and any other relevant year. The effects of individual policies and measures (PaMs) or groups of PaMs are presented mostly for periods of years (e.g. 2011–2015) and not for 2020. In addition, the information reported by Belarus in its BR2 and CTF table 3 on the following elements of its mitigation actions is not transparent: implementation status, implementation time frame, and year of the reported estimated mitigation impact.

24. During the review, Belarus informed the ERT that the time frame for the implementation of mitigation actions usually covers a five-year period and each mitigation action includes indicators that allow for the assessment of the aggregated GHG emission reductions achieved during the implementation period. With respect to the implementation status of mitigation actions, Belarus explained that the mitigation actions included in CTF table 3 are those adopted and being implemented; however, the process for their implementation had not been completed by the time of the submission of the BR2.

25. In order to ensure transparency, the ERT recommends that Belarus report all required information on mitigation actions in its next BR and in CTF table 3, including information on the implementation status of mitigation actions (implemented, adopted and planned), the implementation time frame, the year of the reported estimated mitigation impact and, importantly, the effects of individual mitigation actions for 2020 and any other relevant year or relevant explanations as to why these effects have not been estimated. The ERT noted that the transparency of the reporting of the assessment of the effects of individual mitigation actions or groups of actions could benefit from the provision of additional information on the assumptions, methods and data used in the estimation of the mitigation impacts, and the extent to which the mitigation actions have achieved the stated objectives in a given year, with the aim of identifying a possible need for additional actions.

26. The ERT noted that Belarus provided limited information on the assessment of the economic and social consequences of its response measures. In its BR2, Belarus reported that its governmental policies protect the environment and create favourable living conditions for future generations, and Belarus believes that its climate policies do not have any adverse impacts on other Parties.

27. During the review, Belarus explained that it has not elaborated a special methodology for the quantitative assessment of the economic and social consequences of its response measures on developing countries. In order to ensure the transparency of its reporting, the ERT reiterates the encouragement included in the TRR1 that Belarus provide,

to the extent possible, detailed information on the assessment of the economic and social consequences of its response measures in its next BR.

28. The BR2 of Belarus does not include the information required by the UNFCCC reporting guidelines on BRs on the domestic arrangements established for the process of the self-assessment of compliance with emission reductions in comparison with its emission reduction commitments or the level of emission reduction that is required by science.

29. During the review, Belarus explained that the self-assessment of compliance with its emission reduction target is regularly fulfilled as part of the process for the preparation of the annual GHG inventory. This assessment is based on the analysis of both GHG emission trends and revised GHG emission projections and is carried out every year using special funds provided by the Government. In order to ensure the completeness of the Party's reporting, the ERT encourages Belarus to report in its next BR, to the extent possible, information on the domestic arrangements established for the process of the self-assessment of compliance with emission reductions in comparison with emission reduction commitments or the level of emission reduction that is required by science.

30. The BR2 of Belarus does not include the information required by the UNFCCC reporting guidelines on BRs on the progress made in the establishment of national rules for taking local action against domestic non-compliance with emission reduction targets.

31. During the review, Belarus explained that it has not yet established specific rules for taking action against non-compliance in cases where progress towards the emission reduction target is hindered. In order to ensure the completeness of the Party's reporting, the ERT encourages Belarus to provide in its next BR, to the extent possible, the required information on the progress made in the establishment of national rules for taking local action against domestic non-compliance with emission reduction targets.

32. The key overarching cross-sectoral policy reported in the BR2 is the National Programme on Climate Change Mitigation Measures for 2013–2020. In addition, the National Programme on Climate Change Mitigation Measures for 2013–2020 contributes to setting the framework and direction for future climate policy and is aimed at putting Belarus on the path towards reaching its emission reduction target for 2020. The programme envisages an estimated cumulative emission reduction effect of not less than 10,000 kt CO₂ eq for the period 2013–2020, or approximately 1,250 kt CO₂ eq per year. The key policies supporting the Party's climate change goals include the National Strategy for Sustainable Socioeconomic Development of the Republic of Belarus until 2030, and the Environmental Strategy of the Republic of Belarus until 2025.

33. The National Strategy for Sustainable Socioeconomic Development of the Republic of Belarus until 2030 sets the framework and direction for national development based on a low-carbon economy. Its targets for 2030 include a reduction in the energy intensity of GDP of not less than 35.0 per cent below the 2015 level and an increase in the share of expenditures for environmental protection up to 2–3 per cent of GDP. The Environmental Strategy of the Republic of Belarus until 2025 defines the following goals and actions: achieving a GHG emission level not exceeding 110,000 kt CO₂ eq by 2020; achieving a gradual transition to a low-carbon path of development in the energy sector by using renewable energy, biofuel and nuclear energy; introducing the economic stimulation of the production and use of ecologically friendly types of fuel, including non-carbon fuels; introducing best livestock and poultry farming practices, including storage and application of organic fertilizers to soil; developing mechanisms for the economic stimulation of economic entities to reduce GHG emissions; and using the system of insurance and special compensation funds to improve the adaptation capacity of the socioeconomic sphere of the country to climate change.

34. According to CTF table 3, other mitigation actions that have delivered significant emission reductions are: the Strategy on Energy Potential Development in 2011–2015 and until 2020 (included under the mitigation impact of the National Programme on Climate Change Mitigation Measures for 2013–2020); the National Programme on Development of Local and Renewable Energy Sources in 2011–2015 (2,710 kt CO₂ eq in the period 2011–2015, included under the mitigation impact of the National Programme on Climate Change Mitigation Measures for 2013–2020); and the State Programme on Energy System Development until 2016 (2,075 kt CO₂ eq in the period 2011–2016, included under the mitigation impact of the National Programme on Climate Change Mitigation Measures for 2013–2020).

35. The BR2 and CTF table 3 do not highlight mitigation actions that are planned or under development by sector or by gas and their effects, and mitigation actions in the long-term (e.g. by 2030). During the review, Belarus informed the ERT that on 17 March 2016, Resolution No. 205 of the Council of Ministers of the Republic of Belarus approved the State Programme for the Environmental Protection and Sustainable Use of Natural Resources for the period 2016–2020. This programme stipulates the preparation, using State budget funds, of drafts of the Low-carbon Development Strategy of the Republic of Belarus until 2030, and the Assessment of GHG Emissions/Removals in the LULUCF Sector. The work on the above-mentioned policy documents will start during 2016. The ERT considers that the inclusion of information on these (planned and under development) policy documents will increase the completeness of the Party's reporting in its next BR.

36. Table 3 below provides a concise summary of the key mitigation actions and estimates of their mitigation effects reported by Belarus to achieve its target.

Table 3

Summary of information on mitigation actions and their impacts reported by Belarus

<i>Sector affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact in 2020 (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures	National Programme on Climate Change Mitigation Measures for 2013–2020	1 250
	National Strategy for Sustainable Socioeconomic Development of the Republic of Belarus until 2030	NE
	Environmental Strategy of the Republic of Belarus until 2025	NE
Energy, including:		
Transport	State Programme on Automobile Transport Development in 2010–2015	NE
Renewable energy	National Programme on the Development of Local and Renewable Energy Sources in 2011–2015	IE
Energy efficiency	Strategy on Energy Potential Development in 2011–2015 and until 2020	IE
IPPU	State Development Programme of Industrial Complex until 2020	NE
Agriculture	Programme on Construction of Biogas	IE

<i>Sector affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact in 2020 (kt CO₂ eq)</i>
	Energy Sources in 2011–2015	
LULUCF	State Forestry Development Programme for 2011–2015	NE
Waste	State Programme on Housing and Communal Services Development until 2015	IE

Note: The estimates of mitigation impact are estimates of emissions of carbon dioxide or carbon dioxide equivalent avoided in a given year as a result of the implementation of mitigation actions. Estimates reported as “IE” are included under the mitigation impact of the National Programme on Climate Change Mitigation Measures for 2013–2020.

Abbreviations: IE = included elsewhere, IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry, NE = not estimated.

2. Estimates of emission reductions and removals and the use of units from the market-based mechanisms and land use, land-use change and forestry

37. Belarus reported the notation key “NA” in CTF tables 4, 4(a)I, 4(a)II and 4(b) on its use of units from market-based mechanisms under the Convention and the contribution of LULUCF to achieving its target. In its BR2, Belarus reported that it was not in a position to use any market-based mechanisms under the Convention due to the fact that it does not possess any assigned amount, as the amendment to Annex B to the Kyoto Protocol adopted by Parties in decision 10/CMP.2 has not been ratified. In addition, the Party reports in the BR2 that the perspective of the use of international market-based mechanisms is minimal during the period 2013–2020 in the context of Article 3, paragraph 7 ter, of the Doha Amendment adopted by Parties in decision 1/CMP.8, and that its national carbon trading scheme has not been yet set up. In the footnotes to CTF table 4(a)I, Belarus indicated that the notation key “NA” was reported because the LULUCF sector is not included in its emission reduction target. In addition, in the footnotes to CTF table 4(b), Belarus indicated that it does not have access to the Kyoto Protocol mechanisms, and therefore reported the notation key “NA” in relation to the use of units from market-based mechanisms.

38. CTF tables 4 and 4(a)I do not include the information required by the UNFCCC reporting guidelines on BRs on total GHG emissions excluding emissions and removals from the LULUCF sector.

39. During the review, Belarus provided additional information, elaborating on the progress made towards its GHG emission reduction target and providing data on GHG emissions excluding the LULUCF sector for 1990, 2010, 2012 and 2013 from its 2015 GHG inventory submission (not yet submitted to the secretariat). Belarus confirmed that the contribution from the LULUCF sector is not considered in its emission reduction target and that the market-based mechanisms under the Convention are not applicable to the Party, and other market-based mechanisms are not used in Belarus.

40. The ERT recommends that Belarus, in its next BR, report total GHG emissions excluding emissions and removals from the LULUCF sector in CTF tables 4 and 4(a)I.

41. For 2012, Belarus reported in its BR2 annual total GHG emissions excluding LULUCF of 89,283.33 kt CO₂ eq, or 35.8 per cent below the 1990 level. Table 4 below illustrates the total GHG emissions of Belarus, the contribution of LULUCF and the use of units from market-based mechanisms to achieve its target.

Table 4
Summary of information on the use of units from market-based mechanisms and land use, land-use change and forestry as part of the reporting on the progress made by Belarus towards the achievement of its target

<i>Year</i>	<i>Emissions excluding LULUCF (kt CO₂ eq)</i>	<i>Contribution from LULUCF (kt CO₂ eq)</i>	<i>Emissions including contribution from LULUCF (kt CO₂ eq)</i>	<i>Use of units from market-based mechanisms (kt CO₂ eq)</i>
1990	139 151.23	NA	NA	NA
2010	89 425.90	NA	NA	NA
2011	87 499.56	NA	NA	NA
2012	89 283.33	NA	NA	NA
2013	NE	NA	NA	NA
2014	NE	NA	NA	NA

Sources: the second biennial report and common tabular format tables 1, 4, 4(a)I, 4(a)II and 4(b) of Belarus.
Abbreviations: LULUCF = land use, land-use change and forestry, NA = not applicable, NE = not estimated.

42. To assess the progress towards the achievement of the 2020 target, the ERT noted that the Party's emission reduction target under the Convention is 8.0 per cent below the 1990 level (see para. 16 above). As discussed in chapter II.B above, in 2012 the annual total GHG emissions of Belarus, excluding LULUCF, are 35.8 per cent (49,867.90 kt CO₂ eq) below the base year level.

43. The GHG emission trend in Belarus from 1990 to 2012 shows that the level of emissions is well below its quantified economy-wide emission reduction target for 2020. The ERT noted that Belarus is making progress towards its emission reduction target by implementing mitigation actions that are delivering important emission reductions.

3. Projections

44. Belarus reported in its BR2 and CTF table 6(a) updated projections for 2020 and 2030 relative to actual inventory data up to 2012, including 2013 inventory data (not yet submitted to the secretariat) under the 'with measures' (WEM) scenario. Projections are presented on a sectoral basis, using generally the same sectoral categories as those used in CTF table 3 on mitigation actions, with the exception of the LULUCF sector and the transport subsector, which are reported as "NE" (not estimated) and "IE" (included elsewhere), respectively. Projections are provided in an aggregated format for each sector, but not for the Party's total. Emission projections related to fuel sold to ships and aircraft engaged in international transport were not reported separately. Belarus reported on factors and activities influencing emissions for each sector, with the exception of the agriculture and LULUCF sectors. Further information on the projections is provided in chapter 4 of the BR2 and in this report (see paras. 60–64 below).

45. The BR2 and CTF table 6(a) do not include projections presented on a gas-by-gas basis as required by the UNFCCC reporting guidelines on BRs, in consistency with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications" (hereinafter referred to as the UNFCCC reporting guidelines on NCs). During the review, Belarus clarified that the projections were prepared at an aggregated GHG emission level without distinguishing between individual gases. Belarus further informed the ERT that the necessary disaggregation will be conducted as part of the preparation of its next national communication, as required by the UNFCCC reporting guidelines on NCs. The ERT

recommends that Belarus, in its next BR, report GHG emission projections on a gas-by-gas basis.

46. As indicated in paragraph 44 above, in the BR2 and CTF table 6(a), emission projections related to fuel sold to ships and aircraft engaged in international transport were not reported separately. During the review, Belarus clarified that these emission projections are excluded from the projection estimates reported in CTF table 6(a); owing to a lack of data, the Party was not able to provide these emission projections. The ERT recommends that Belarus, in its next BR, to the extent possible, report separately emission projections related to fuel sold to ships and aircraft engaged in international transport and not include those in the totals.

47. The BR2 and CTF table 6(a) do not include national total GHG emission projections including and excluding LULUCF and emission projections for the LULUCF sector. During the review, Belarus acknowledged that this was a misprint in CTF table 6(a). In addition, the values of the emission projections for the transport subsector were not provided (reported as “IE”). The ERT noted that the emission projections for the transport subsector were reported in the BR2, but were not reported in CTF table 6(a). During the review, Belarus informed the ERT that in CTF table 6, the transport subsector is included under the energy sector, and that in its next BR, the CTF tables will be filled in more accurately. The ERT recommends that Belarus, in its next BR, report the national total GHG emission projections including and excluding LULUCF, as well as emission projections for the LULUCF sector, and reiterates the recommendation made in the TRR1 that Belarus report emission projections for the transport subsector separately in its CTF tables.

48. The ERT noted that CTF table 6 provides inventory data up to the year 2013, while in the latest (2014) inventory submission, the latest year reported is 2012. During the review, Belarus clarified that the data for 2013 presented in CTF table 6 are from the preliminary 2015 inventory submission, which was completed but has not yet been submitted to the secretariat and published. The ERT recommends that Belarus improve the transparency of its reporting of projections by ensuring that the emission projections are relative to actual inventory data for preceding years.

49. As indicated in paragraph 44 above, the BR2 does not include the information required by the UNFCCC reporting guidelines on BRs, in accordance with the UNFCCC reporting guidelines on NCs, on factors and activities influencing emissions for the agriculture and LULUCF sectors, which will allow an understanding of the emission trends in these sectors for the years 1990–2020. The ERT recommends that Belarus present relevant information on factors and activities influencing emissions for the agriculture and LULUCF sectors in order to improve the completeness of its reporting of emission projections. The ERT noted inconsistencies in CTF tables 6(a) and 6(c) in relation to the emission trends in the agriculture sector. For 1995, the GHG emissions for the agriculture sector were reported as 30,644.62 kt CO₂ eq, the same as the amount reported for 1990, which is not consistent with the latest 2014 inventory submission of Belarus. The ERT noted that the transparency and accuracy of the Party’s reporting could be improved by providing consistent information in CTF tables 6(a) and 6(c) on trends of GHG emissions and removals for the agriculture sector, according to the latest GHG emission inventory.

50. In addition to the WEM scenario, Belarus reported in the BR2 and CTF table 6(c) the ‘with additional measures’ (WAM) scenario. The projections are presented by sector only, in the same way as for the WEM scenario, for the years 1990–2030. Belarus did not report emission projections for indirect GHGs such as carbon monoxide, nitrogen oxides and non-methane volatile organic compounds, as well as for sulphur oxides. The ERT encourages Belarus to provide, in its next BR, emission projections for indirect GHGs. In addition, Belarus did not provide information on the changes since the submission of its

NC6 and BR1 in the assumptions, methodologies, models and approaches used (see paras. 55–59 below). Further information on the projections is provided in chapter 4 of the BR2 and in paragraphs 60–64 below.

51. The BR2 and CTF table 5 do not include the information required by the UNFCCC reporting guidelines on BRs on the key variables and assumptions used in the preparation of the projection scenarios. The ERT noted that in CTF table 5, only the GDP growth rate was reported. During the review, Belarus provided additional information on the key variables and underlying assumptions used in the WEM scenario. Belarus also provided projected indicators for the period 2015–2030 on: the energy intensity of GDP; the reduction in the energy intensity of GDP (by 16.2 and 25.3 per cent below the 2015 level by 2020 and 2030, respectively); the final consumption of oil products and electricity; the installed capacity of wind turbines; the annual demand for thermal energy; the ratio of output (extraction) of primary energy from renewable energy sources to the gross consumption of fuel and energy resources; and the self-sufficiency of the country's energy resources for transport and other. In addition, Belarus provided the reference source for the assumptions used in the projections under the WAM scenario. The ERT encourages Belarus to report, in its next BR, all key variables and underlying assumptions used in the preparation of the projection scenarios.

52. Belarus did not provide information on the sensitivity analysis in its BR2. The ERT encourages Belarus to provide information on the sensitivity analysis for the projections in its next BR.

Overview of projection scenarios

53. The WEM scenario reported by Belarus includes implemented, adopted and planned PaMs up to 2030. Belarus also reported on a WAM scenario, which includes, in addition, the economically feasible potential for the reduction of emissions based on best practices in energy efficiency. Belarus provided a definition of its scenarios, confirming that its WEM scenario includes policies that are implemented, adopted and planned and that the WEM and WAM scenarios include planned new climate policies, which will be developed during the period 2016–2019. The WEM and WAM scenarios foresee the operation of two units of the future Belarusian nuclear power plant in 2018 and 2020, a reduction in GDP energy intensity by 35.3 per cent below the 2015 level by 2030, and a share of renewable energy sources in the gross energy consumption of 6 and 8 per cent by 2020 and 2030, respectively, while the WAM scenario includes, in addition, the potential for the reduction of emissions based on best practices in energy efficiency, leading to an estimated reduction in total GHG emissions of 25,000–30,000 kt CO₂ eq for the period 2015–2030.

54. The definitions indicate that the scenarios have not been prepared according to the UNFCCC reporting guidelines on NCs. During the review, Belarus clarified that the projections used for the preparation of its intended nationally determined contribution were included in the BR2 under the WEM scenario, which includes developed, implemented and planned PaMs. The ERT recommends that Belarus, in its next BR, improve the transparency and accuracy of its reported projection scenarios by following closely the definitions provided in the UNFCCC reporting guidelines on NCs, ensuring in particular that the WEM scenario encompasses implemented and adopted PaMs only and the WAM scenario, if provided, also encompasses planned PaMs.

Methodology and changes since the previous submission

55. Belarus did not report on changes in the model or methodologies used for the preparation of the projections since its NC6 and BR1. However, the ERT noted that Belarus provided updated emission projections for the WEM and WAM scenarios up to 2030 in its BR2, compared with its NC6 and BR1, in which the Party reported emission projections for

the WEM, WOM and WAM scenarios up to 2020. During the review, Belarus clarified that the same methodologies and models were used in the BR2 for its emission projections as those used in its NC6. With regard to the methodology used for the preparation of the emission projections, the BR2 reports that the Long-range Energy Alternatives Planning System (LEAP) and the Energy and Power Evaluation Program (ENPEP-BALANCE) models were used, as well as econometric modelling and expert judgement. The BR2 explains that the LEAP model was used for the projections in the energy sector, and the ENPEP-BALANCE model was used for the projections in the transport subsector, while a correlations and regression analysis was used for all remaining sectors.

56. The ERT noted that the description of the models and approaches used was not reported fully by Belarus; the following information in particular was missing: the gases covered; the type of model used and its characteristics; the original purpose for which the models were designed and, if applicable, how the models have been modified for climate change purposes; the strengths and weaknesses of the models and approaches; and how the models and approaches account for any overlaps and synergies that may exist between different PaMs. To improve the transparency of the Party's reporting, the ERT encourages Belarus to provide, in its next BR, sufficient information on the models and approaches used, as indicated in paragraph 43 of the UNFCCC reporting guidelines on NCs.

57. In the BR2, the National Strategy for Sustainable Socioeconomic Development of the Republic of Belarus by 2030, adopted in 2015, was the key source used for the assumptions for the emission projections in the WEM and WAM scenarios. In contrast, in the BR1 and NC6, the key indicators and PaMs used for the emission projections in the energy sector were based on the State Programme on Energy System Development until 2016, adopted in 2012, and the Strategy on Energy Potential Development in 2011–2015 and until 2020, adopted in 2010.

58. The ERT noted that the level of GHG emissions in the WEM scenario for the energy sector in 2020 reported in the NC6 and BR1 was higher than the level reported in the BR2 by 12.4 per cent, despite the fact that both projections assume the construction of a nuclear power plant. It also appears that in the BR2, Belarus updated other assumptions with regard to the energy sector, such as the projection of heat energy consumption by 2020, the consumption of electricity, and the installed capacity of wind turbines by 2020. The ERT also noted that in the NC6, the GHG emissions from the waste sector were estimated at 12,735 kt CO₂ eq in 2020 under all three scenarios and no mitigation actions were considered, while in the BR2, the emissions for this sector were estimated to be much lower and accounted for 7,373.91 kt CO₂ eq in 2020 under the WEM scenario, owing to the new adopted policy on waste recycling. Overall, the ERT further noted that Belarus has provided updated GHG emission projections based on updated assumptions and variables, taking into account the latest adopted mitigation policies. The ERT encourages Belarus to report, in its next BR, the main differences and any changes in the assumptions, models and methods employed, and results of its projections since its most recent national communication.

59. In CTF table 5, Belarus reported only the GDP growth rate as the key underlying assumption. During the review, Belarus provided additional information on the key underlying assumptions used to prepare its projections and on projected indicators for the period 2015–2030 (see para. 51 above). However, Belarus did not provide in its BR2 and CTF tables the assumptions used in its projections for population and energy prices. The assumptions used for the projections have been updated on the basis of the most recent economic developments known at the time of the reporting on projections: the GDP projections have been updated compared with the Party's NC6 and BR1 submissions.

Results of projections

60. The total GHG emissions of Belarus, excluding LULUCF, in 2020 and 2030 are projected to be 88,120.09 and 104,027.86 kt CO₂ eq, respectively, under the WEM scenario, which is a decrease of 36.7 and 25.2 per cent, respectively, below the 1990 level. Under the WAM scenario, emissions in 2020 and 2030, amounting to 86,870.09 and 100,278.36 kt CO₂ eq, respectively, are projected to be lower than those in 1990 by 37.6 and 27.9 per cent, respectively. Belarus did not provide total GHG emission projections without LULUCF in CTF tables 6(a) and 6(c), but provided the projections of total emissions by sector, which allowed the ERT to make the calculations provided above.

61. The 2020 projections suggest that Belarus can be expected to overachieve its 2020 target under the Convention (see para. 16 above).

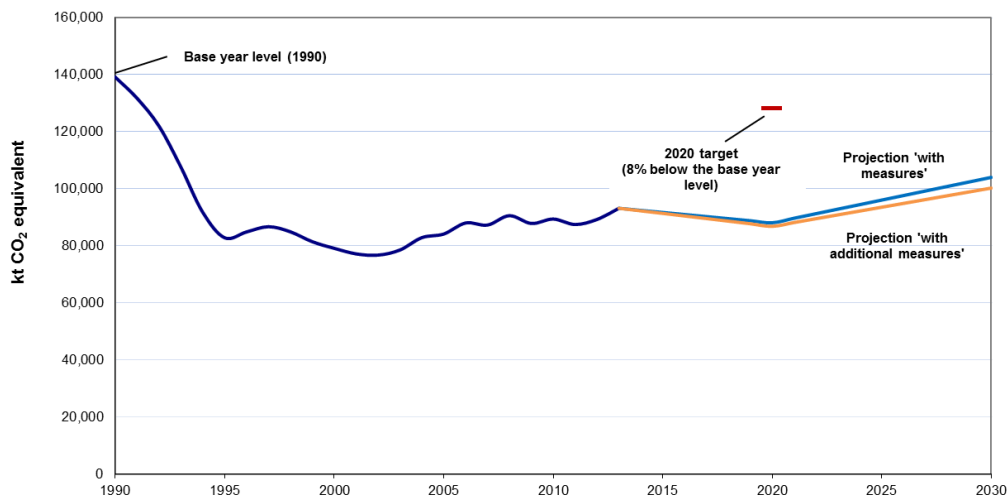
62. According to the projections reported for 2020 under the WEM scenario, the most significant emission reductions are expected to occur in the energy and agriculture sectors, amounting to projected reductions of 51,370.44 kt CO₂ eq (50.2 per cent) and 5,209.39 kt CO₂ eq (17.0 per cent), between 1990 and 2020, respectively. In contrast, the emissions from the waste and industry/industrial processes sectors are projected to increase by 4,799.18 kt CO₂ eq (186.4 per cent) and 749.51 kt CO₂ eq (20.3 per cent), between 1990 and 2020, respectively. The pattern of projected emissions reported for 2030 under the same scenario changes slightly owing to the increase in emissions in all sectors between 2020 and 2030, but maintains the overall level of projected emission reductions in the energy and agriculture sectors and the overall projected emission increases in the waste and industry/industrial processes sectors between 1990 and 2030.

63. According to the BR2, the key underlying assumption for the projected emission reduction in the energy sector is that between 2018 and 2020 a new nuclear power plant will be put into operation, which would lead to emission reductions. In the case of the waste sector, which had a significant increasing emission trend between 1990 and 2012 (143.5 per cent) due to the increase in the number of waste landfills, under the WEM scenario, the Party assumes a slowdown in the growth rate of waste generation and landfilling compared with the historical trend, owing to the implementation of adopted policies on waste recycling.

64. Under the WAM scenario, the patterns of emission reductions by 2020 presented by sector change slightly, owing to higher projected emission reductions in the energy and agriculture sectors amounting to 52,334.28 kt CO₂ eq (51.2 per cent) and 5,479.82 kt CO₂ eq (17.9 per cent) between 1990 and 2020, respectively. By 2020, the total emission reduction under the WAM scenario is 1,250.00 kt CO₂ eq higher than under the WEM scenario. The pattern of projected emissions reported for 2030 under the WAM scenario changes slightly owing to the increase in emissions in all sectors between 2020 and 2030, but maintaining the overall projected emission reductions in the energy and agriculture sectors. By 2030, the total emission reduction under the WAM scenario is 3,749.50 kt CO₂ eq higher than under the WEM scenario.

65. The projected emission levels under the different scenarios and the quantified economy-wide emission reduction target of Belarus are presented in the figure below.

Greenhouse gas emission projections by Belarus



Sources: (1) Data for the years 1990–2012: the 2014 annual inventory submission of Belarus, version 1.2; total GHG emissions excluding land use, land-use change and forestry; (2) Data for the years 2013–2030: the second biennial report of Belarus; total GHG emissions excluding land use, land-use change and forestry.

Abbreviation: GHG = greenhouse gas.

D. Provision of financial, technological and capacity-building support to developing country Parties

66. Belarus is not a Party included in Annex II to the Convention and is therefore not obliged to adopt measures and fulfil obligations as defined in Article 4, paragraphs 3, 4 and 5, of the Convention. However, Belarus reported brief information in its BR2 on its provision of support to developing country Parties. The ERT commends Belarus for reporting this information and suggests that it continue to do so in future BRs.

67. In its BR2, Belarus reported that the country has provided, and will continue to provide, support to developing country Parties, mainly in the fields of education, training, capacity-building, and scientific research and development on issues related to climate change.

68. The ERT noted that CTF tables 8 and 9 on the provision of technology development and transfer support, and capacity-building support, respectively, were not filled in with data or any relevant information. During the review, Belarus did not provide additional information but confirmed that it has no financial liability and no obligation to provide financial resources in accordance with Article 4, paragraphs 3, 4 and 5, of the Convention to developing countries, and that it will continue to provide support to developing country Parties in the fields indicated in paragraph 67 above. The ERT noted that the transparency of the Party’s reporting could be improved by providing relevant information in CTF tables 8 and 9, for example in a footnote to those tables, clarifying that Belarus, as a Party not included in Annex II to the Convention, has no obligation to adopt measures and fulfil obligations as defined in Article 4, paragraphs 3, 4 and 5, of the Convention, and, therefore, information has not reported by Belarus in those tables.

III. Conclusions

69. The ERT conducted a technical review of the information reported in the BR2 and CTF tables of Belarus in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the reported information is partially in adherence with the UNFCCC reporting guidelines on BRs and provides an overview on: 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; progress made by Belarus in achieving its target; and the Party's provision of support to developing country Parties.

70. The total GHG emissions of Belarus, excluding LULUCF, related to its quantified economy-wide emission reduction target were estimated to be 35.8 per cent below its 1990 level, whereas total GHG emissions including LULUCF were 42.3 per cent below its 1990 level for 2012. The emission decrease was driven mainly by structural changes in the national economy in the early 1990s, with a dramatic decrease in consumption of fuel in the energy sector and other energy-intensive activities, followed by an increase in less energy-intensive sectors, a reduction in industrial production, the introduction of energy-saving policies, and a change in the fuel mix.

71. Under the Convention, Belarus committed itself to achieving a quantified economy-wide emission reduction target of 8.0 per cent below the 1990 level by 2020. This target covers the following GHGs: CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, expressed using GWP values from the IPCC SAR, and covers all sources and sectors included in the annual GHG inventory. Emissions and removals from the LULUCF sector are not included in the target and Belarus reported that it does not plan to make use of market-based mechanisms to achieve its target. In absolute terms, this means that under the Convention, Belarus has to reduce emissions from 139,151.23 kt CO₂ eq (in the base year) to 128,019.13 kt CO₂ eq in 2020.

72. The Party's main policy framework relating to energy and climate change is the National Programme on Climate Change Mitigation Measures for 2013–2020. Key policies supporting the climate change goals of Belarus include the National Strategy for Sustainable Socioeconomic Development of the Republic of Belarus until 2030, and the Environmental Strategy of the Republic of Belarus until 2025. The mitigation actions with the most significant mitigation impact are the Strategy on Energy Potential Development in 2011–2015 and until 2020, the National Programme on the Development of Local and Renewable Energy Sources in 2011–2015, and the State Programme on Energy System Development until 2016.

73. For 2012, Belarus reported in the BR2 total GHG emissions excluding LULUCF at 89,283.33 kt CO₂ eq, or 35.8 per cent below the 1990 level. Belarus reported that it will not use the units from the market-based mechanisms and the contribution of LULUCF to achieve its target, since this sector is not included in its target. The ERT noted that Belarus has made progress towards its emission reduction target by implementing its adopted and planned mitigation actions.

74. The GHG emission projections provided by Belarus in its BR2 include those for the WEM and WAM scenarios. Under these two scenarios, emissions are projected to be 36.7 and 37.6 per cent below the 1990 level in 2020, respectively. On the basis of the reported information, the ERT concluded that Belarus expects to overachieve its 2020 target, under the WEM and WAM scenarios.

75. The ERT noted that Belarus is making progress towards its emission reduction target by implementing mitigation actions that deliver important emission reductions. Belarus indicated in its BR2 that it plans to install a nuclear power plant, continue reducing the

energy intensity of GDP and increase the recycling of waste to ensure the achievement of its emission reduction target.

76. As a Party not included in Annex II to the Convention, Belarus is not obliged to adopt measures and fulfil obligations on financial, technological and capacity-building support. Nevertheless, Belarus reported in its BR2 that it has provided, and will continue to provide, support to developing country Parties, mainly in the fields of education, training, capacity-building, and scientific research and development on issues related to climate change.

77. In the course of the review, the ERT formulated the following recommendations for Belarus to improve its adherence to the UNFCCC reporting guidelines on BRs in its next BR:⁵

- (a) Improve the completeness of its reporting by:
 - (i) Reporting total GHG emissions excluding emissions and removals from the LULUCF sector in CTF tables 4 and 4(a)I (see para. 40 above);
 - (ii) Reporting GHG emission projections on a gas-by-gas basis (see para. 45 above);
 - (iii) Reporting separately, to the extent possible, emission projections related to fuel sold to ships and aircraft engaged in international transport and not include those in the totals (see para. 46 above);
 - (iv) Reporting the national total GHG emission projections including and excluding LULUCF, as well as emission projections for the LULUCF sector and emission projections for the transport subsector separately in its CTF tables (see para. 47 above);
 - (v) Presenting relevant information on factors and activities influencing emissions for the agriculture and LULUCF sectors in its reporting of emission projections (see para. 49 above);
- (b) Improve the transparency of its reporting by:
 - (i) Including a consistent and clear description of the sectors and gases covered in its target, and of the emission reduction target relative to the base year (see para. 15 above);
 - (ii) Reporting on any changes in its procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress made towards its economy-wide emission reduction target (see para. 22 above);
 - (iii) Reporting all required information on mitigation actions, including information on the implementation status of mitigation actions (implemented, adopted and planned), the implementation time frame, the year of the reported estimated mitigation impact and, importantly, the effects of individual mitigation actions for 2020 and any other relevant year or relevant explanations as to why these effects have not been estimated (see para. 25 above);
 - (iv) Ensuring that the emission projections are relative to actual inventory data for preceding years (see para. 48 above);

⁵ The recommendations are given in full in the relevant chapters of this report.

(v) Following closely the definitions provided in the UNFCCC reporting guidelines on NCs in its reported projection scenarios, ensuring in particular that the WEM scenario encompasses implemented and adopted PaMs only and the WAM scenario, if provided, also encompasses planned PaMs (see para. 54 above).

Annex

Documents and information used during the review

A. Reference documents

“UNFCCC biennial reporting guidelines for developed country Parties”. Annex to decision 2/CP.17. Available at <<http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4>>.

“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”. Annex to decision 24/CP.19. Available at <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf#page=2>>.

“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/1999/7. Available at <<http://unfccc.int/resource/docs/cop5/07.pdf>>.

“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>>.

FCCC/IDR.6/BLR. Report of the technical review of the sixth national communication of Belarus. Available at <<http://unfccc.int/resource/docs/2015/idr/blr06.pdf>>.

FCCC/TRR.1/BLR. Report of the technical review of the first biennial report of Belarus. Available at <<http://unfccc.int/resource/docs/2015/trr/blr01.pdf>>.

Sixth national communication of Belarus. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/blr_nc6_resubmission.pdf>.

First biennial report of Belarus. Available at <http://unfccc.int/national_reports/biennial_reports_and_iar/submitted_biennial_reports/items/9356.php>.

Common tabular format tables of the first biennial report of Belarus. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/blr_2014_v1.0_formatted.pdf>.

Second biennial report of Belarus. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/br_2_belarus.pdf>.

Common tabular format tables of the second biennial report of Belarus. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/blr_2016_v1.0_formatted.pdf>.

B. Additional information used during the review

Responses to questions during the review were received from Ms. Olga Vavilonskaya (Belarusian scientific research centre “Ecology”), including additional material and the following documents¹ provided by Belarus:

Appendix A: Initial data for Baseline scenario of GHG emissions.

Table P 1.1 - Major retrospective indicators of the development of the Republic of Belarus in 2005–2014.

Table P 1.2 - Basic indicators of the Republic of Belarus in 2015.

Table P 1.3 - Retrospective indicators of heat consumption in the Republic of Belarus in 2005–2013.

Table P.1.4 - Retrospective indicators for heat capacity of GDP in the Republic of Belarus in 1995–2014.

Table P 1.5 - Forecasted indicators of the Republic of Belarus until 2030.

Council of Ministers of the Republic of Belarus. 2009. *Постановление Совета Министров Республики Беларусь от 01.06.2009 N 706 " Об утверждении Комплексной программы по проектированию, строительству и реконструкции энергоэффективных жилых домов в Республике Беларусь на 2009 - 2010 годы и на перспективу до 2020 года "* (Decree of the Council of Ministers of the Republic of Belarus of 01.06.2009 N 706 "On approval of the Integrated program on the design, construction and reconstruction of energy efficient residential buildings in the Republic of Belarus for 2009 - 2010 years and until 2020"). Available at <<http://www.mas.gov.by/ru/energoeffektivnost/>>.

Council of Ministers of the Republic of Belarus. 2010. *Постановление Совета Министров Республики Беларусь от 24.12.2010 N 1882 "Об утверждении Республиканской программы энергосбережения на 2011–2015 годы"* (Decree of the Council of Ministers of the Republic of Belarus of 24.12.2010 N 1882 "On approval of the State Energy Saving Programme for 2011–2015"). Available at <<http://pravo.levonevsky.org/bazaby11/republic03/text570.htm>>.

Council of Ministers of the Republic of Belarus. 2011. *Постановление Совета Министров Республики Беларусь от 10.05.2011 N 586 "Об утверждении Национальной программы развития местных и возобновляемых энергоисточников на 2011 - 2015 годы "* (Decree of the Council of Ministers of the Republic of Belarus of 10.05.2011 N 586 "On approval of the National Programme on the development of local and renewable energy sources for 2011–2015"). Available at <<http://pravo.levonevsky.org/bazaby11/republic02/text003.htm>>.

Council of Ministers of the Republic of Belarus. 2013. *Постановление Совета Министров Республики Беларусь от 21.06.2013 N 510 "Об утверждении Государственной программы мер по смягчению последствий изменения климата на 2013–2020 годы"* (Decree of the Council of Ministers of the Republic of Belarus of 21.06.2013 N 510 "On approval of the State Programme on measures to mitigate the climate change consequences for 2013-2020"). Available at <<http://www.levonevski.net/pravo/norm2013/num00/d00584.html>>.

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