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Report of the technical review of the first biennial report of Poland

Developed country Parties are requested, in accordance with decision 2/CP.17, to submit their first biennial report to the secretariat by 1 January 2014. This report presents the results of the technical review of the first biennial report of Poland 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. For Poland, the Convention entered into force on 28 July 1994 and the Kyoto Protocol on 16 February 2005. Under the Convention, Poland made a commitment to contribute to the joint European Union (EU) economy-wide emission reduction target of a 20.0 per cent reduction in greenhouse gas (GHG) emissions by 2020 compared with the 1990 level.

2. This report covers the in-country technical review of the first biennial report $(BR1)^1$ of Poland, coordinated 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" (decision 23/CP.19).

3. The review took place from 8 to 13 September 2014 in Warsaw, Poland, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Amr Osama Abdel-Aziz (Egypt), Ms. Emily Massawa (Kenya), Mr. Mark Molnar (Hungary) and Ms. Karin Simonson (Canada). Ms. Massawa and Mr. Molnar were the lead reviewers. The review was coordinated by Ms. Barbara Muik and Mr. Nalin Srivastava (secretariat).

4. During the review, the expert review team (ERT) reviewed each section of the BR1.

5. In accordance with decision 23/CP.19, a draft version of this report was communicated to the Government of Poland, which provided comments that were considered and incorporated, as appropriate into this final version of the report.

B. Summary

6. The ERT conducted a technical review of the information reported in the BR1 of Poland according to the "UNFCCC biennial reporting guidelines for developed country Parties" (hereinafter referred to as the UNFCCC reporting guidelines on BRs).

7. During the review, Poland provided further relevant information on factors underlying emission trends, assumptions and conditions related to the quantified economywide emission reduction target, the progress made towards achieving the target and on provision of financial support to developing country Parties.

1. Completeness and transparency of reporting

8. Gaps and issues related to the reported information identified by the ERT are presented in table 1 below.

2. Timeliness

9. The BR1 was submitted on 7 February 2014, after the deadline of 1 January 2014 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted

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 have been subject to the technical review.

on 7 February 2014 and a revised version was resubmitted on 11 April 2014. The ERT noted the delay in the submission of the BR1 and CTF tables.

3. Adherence to the reporting guidelines

10. The information reported by Poland in its BR1 is partially in adherence to the UNFCCC reporting guidelines on BRs as per decision 2/CP.17 (see table 1). Poland did not include any textual elements in addition to the CTF tables, in the BR1. During the review, Poland explained that it did not consider it necessary to include a textual description to avoid repetition, as the BR1 was submitted as an annex to the NC6.

Table 1

Summary of completeness and transparency issues of reported information in the first biennial report of Poland^a

Sections of the biennial report	Completeness	Transparency	Reference to paragraphs
Greenhouse gas emissions and trends	Partially complete	Transparent	13
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Partially complete	Partially transparent	16
Progress in achievement of targets	Partially complete	Partially transparent	20, 28, 30
Projections	Partially complete	Mostly transparent	31
Provision of support to developing country Parties ^b	NA	NA	

Abbreviation: NA = not applicable.

^{*a*} A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in the chapter on conclusions.

^b Poland is a Party not 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

11. Poland has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. This information is consistent with the 2013 national GHG inventory submission. During the review, the ERT took note of the 2014 annual submission and reflected the relevant information in this report.

12. Total GHG emissions² excluding emissions and removals from land use, land-use change and forestry (LULUCF) decreased by 14.4 per cent between 1990 and 2012 and by 29.9 per cent between 1988³ and 2012. Further information on the review of emissions and emission trends is provided in chapter II.A of the report of the technical review of the sixth national communication (IDR/NC6).

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.

³ Base year of Poland under the Convention.

13. As there were no textual elements included in addition to the CTF tables, Poland has not provided summary information in the BR1 on national inventory arrangements and on changes to these, as well as descriptions of the factors underlying emission trends, either at an overall economy level or at a sectoral level. The ERT noted that information on national inventory arrangements is included in the NC6, but no reference was made in the BR1 to this information. The ERT recommends that Poland, in its next biennial report (BR) submission, provide such summary information.

14. During the review, Poland provided additional information, elaborating on emissions from agriculture, waste, transport, forestry and maritime sources. The information provided highlighted, among others, some of the important distinctive characteristics of the Polish car fleet and subsidies on liquefied petroleum gas and compressed natural gas for road uses, and helped to improve the transparency of the report. Moreover, the change in the activity level of agricultural production was emphasized, together with waste generation, to provide a broader scope for the understanding of emission trends. The ERT encourages Poland to provide this information on factors underlying emission trends in its next BR.

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

15. In its BR1, which was submitted as annex 3 to the NC6, Poland has not included information on its quantified economy-wide emission reduction target. However, this information was included in CTF table 2. Poland reported a description of its quantified economy-wide emission reduction target, referred to henceforth as the target, including associated conditions and assumptions. Poland reported the base year as 1988, its target as a 20.0 per cent reduction compared with the base year level, the period for reaching the target as 2013–2020, and covered all GHGs except nitrogen trifluoride (NF₃). All sectors are covered, except for LULUCF. The global warming potential (GWP) values come from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). No mechanisms are expected to be used.

16. The BR1 includes information required by the UNFCCC reporting guidelines on BRs only in the CTF tables. There is no textual element in the report, which would provide further information on, for example, the approach to counting emissions from LULUCF, or explaining the context of the target reported by Poland as part of the EU quantified economy-wide emission reduction target. Some missing elements can be located in the NC6. The ERT considers that this information is essential for understanding the conditions and assumptions that are relevant to the attainment of the target and strongly recommends that Poland provide information in a transparent and complete manner in its next BR submission.

17. Under the Convention, Poland participates in the EU quantified economy-wide emission reduction target to achieve a 20.0 per cent reduction in emissions by 2020 compared with the 1990 (base year) level. The target for the EU and its member States is formalized in the EU 2020 climate and energy package. This includes the European Union Emissions Trading System (EU ETS) and the effort-sharing decision (ESD). This legislative package regulates emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (SF₆) using GWP values from the Fourth Assessment Report⁴ of the IPCC to aggregate EU GHG emissions up to 2020.

⁴ The quantified economy-wide emission reduction target by Poland is expressed using the GWP values from the Fourth Assessment Report of the IPCC, while emission levels are assessed using the

18. The regulation of the emissions covered by the EU ETS entered into force on 1 January 2005, and the new period started in 2013, based on a yearly reduction equal to 1.74 per cent of the average allocation in the period 2008–2012, extrapolated starting in 2010, leading to a 21.0 per cent GHG emission reduction by 2020 compared with the 2005 level. As of 2013, emissions of sectors not covered by the EU ETS are regulated by member State specific targets, based on average emissions from 2008 to 2010 and on the gross domestic product, which leads to a collective reduction by all the member States of 10.0 per cent by 2020 compared with the 2005 level at the EU level. Under the ESD, Poland can increase its emissions by 14.0 per cent by 2020 compared with the 2005 level for emissions from sectors covered by the ESD. In line with the EU approach to its target, Poland does not include emissions or removals from the LULUCF sector in defining its quantified economy-wide target. Poland does not plan to use market-based mechanisms under the Convention to achieve the target.

C. Progress made towards the achievement of the quantified economywide emission reduction target

19. In its BR1, which was submitted as annex 3 to the NC6, Poland has not reported textual information on its mitigation actions implemented and planned since its fifth national communication to achieve its target. However, in CTF table 3, Poland did report information on its mitigation actions. In CTF table 4, Poland also reported on the use of units from market-based mechanisms (not planned) and LULUCF (excluded) to achieve its target.

20. The BR1 includes information required by the UNFCCC reporting guidelines on BRs only in the CTF tables. There is no textual element in the report, which provides further information on domestic institutional arrangements (see para. 28 below). Also, the ERT noted that the information provided in CTF tables 3 and 4 is not sufficient to assess the progress of Poland in the achievement of the target, as no explanatory description is provided, and therefore recommends that Poland provide more accurate information (e.g. on its use of units from market-based mechanisms (see para. 30 below)) in its next BR submission. The ERT also encourages the Party to provide a description of its progress in the context of the EU legislation. During the review, Poland provided additional information on this subject concerning the breakdown of emissions to the EU ETS and ESD sectors.

21. The ERT reviewed the reported information and the additional information provided during the review and provided its assessment of progress made towards achieving the target. Across the EU, it is expected that the market mechanism of the EU ETS will guarantee that emissions from sectors under this scheme (mainly large point sources such as power plants and industrial facilities) will achieve the 2020 target of 21.0 per cent below the 2005 level. Under the EU ESD, Poland can increase its emissions from sectors not covered under the EU ETS by +14 per cent by 2020 compared with the 2005 level. Altogether, the total target (emission limit) including emissions under the EU ETS and the ESD amounts to 369,483.07 kt carbon dioxide equivalent (CO_2 eq) in 2020. The total annual emissions in 2012 were 399,267.97 kt CO_2 eq and the projected value for 2020 is 377,655.28 kt CO_2 eq. This might make it necessary for Poland to consider introducing additional measures to tackle increasing emissions.

values from the IPCC Second Assessment Report, as per 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".

22. However, according to the information provided by Poland during the review, the Party can increase emissions under the EU ESD from 171,037.49 kt CO_2 eq in 2005 to 194,982.74 kt CO_2 eq in 2020. For 2012 and 2020, data on emissions from sectors not covered under the EU ETS were approximately estimated by the Party by applying the historical share of ESD emissions in total emissions of 49 per cent. According to this information, ESD emissions amounted to 202,631.69 kt CO_2 eq in 2012 and are projected to amount to 175,469.90 kt CO_2 eq in 2020. The ERT notes that while emissions in 2012 were higher than the target, the Party projects to achieve emission reductions below the target in 2020. The ERT notes that this assessment is very preliminary, because it is based on the historical share of EU ETS and ESD emissions, which is likely to change, and on total GHG emissions calculated with GWP values from the IPCC Second Assessment Report and not the Fourth Assessment Report.

23. The ERT further notes that meeting emission targets could be challenging for Poland due to a multitude of reasons. Primarily, the introduction of nuclear energy seems insufficient to satisfy the energy needs of the emerging economy, and an increase in the use of fossil fuels is projected. Moreover, the exploitation of renewable energy sources (RES) seems to be quite conservative compared to their full potential in Poland. The transport sector appears to show a constant growth, and agriculture also slowly recovers from its decrease during the economic transition.

1. Mitigation actions and their effects

24. Poland has provided in CTF table 3 of its BR1 information on its package of mitigation actions introduced to achieve its target. The BR1 provided information on mitigation actions organized by sector and by gas. Information on the start year of implementation for mitigation actions was provided during the review. A detailed review of the reported information is provided in chapter II.B of the IDR/NC6. The ERT noted that the information provided on the agricultural policy and measure (PaM) involving the rationalization of energy management was not consistent between the NC6 and the BR1. Detailed estimates of the production of energy from biomass for the years 2010 and 2015 presented in the NC6 are not reflected in CTF table 3. The ERT encourages Poland to ensure that the information in the BR1 is consistent with that reported in the NC6.

25. Based on the information reported in CTF table 3, it is difficult to assess whether Poland's existing and planned PaMs are sufficient to achieve the target, as limited information is provided on the estimated impact of each individual PaM. Identifying synergies and overlaps between the PaMs is also difficult, as only brief descriptions are provided for each PaM. As a result, the ERT encourages Poland to provide an estimate of the mitigation impact for each PaM, any additional information on synergies and overlaps (including at the national, subnational and regional levels), and information on how the effects of actions are monitored over time and by whom in order to enhance the transparency and completeness of the reporting on this item. Table 2 provides a concise summary of the key mitigation actions implemented by Poland to achieve its target.

26. Poland's overall climate change policy framework has been shaped by its national development strategy. The strategy is aligned with the 2008 EU climate and energy package, which provides the legal framework for climate change action. Poland has to implement PaMs to achieve several EU targets for 2020, including the target under the EU ETS, the ESD (which regulates member State emissions that are not covered under the EU ETS) and the renewable energy target. At the national level, the main legislation is the energy policy of Poland until 2030, which outlines Poland's energy priorities, including energy efficiency, energy security, diversification of electricity generation through nuclear power, development of RES, competitive fuel and energy markets, and reduced environmental impacts. Key targets related to this policy include zero-energy economic

growth and reducing the energy intensity of the Polish economy to the level of the 15 member States that formed the European Community at the time of ratification of the Kyoto Protocol. Key policies in non-energy sectors are the rural development programme 2007–2013, the strategy for sustainable rural development, agriculture and fisheries, the national programme for the augmentation of forest cover, the national forest policy and the national waste management plan 2014.

27. Poland continues to place emphasis on the construction and housing sector, as it has a high potential for cost-effective emission reductions in the long term. Key PaMs are related to "near zero-energy" building standards for construction, certificates for efficient energy performance of buildings, awareness campaigns on energy efficiency and incentives to promote thermo-modernization of buildings. With its measures to increase the share of renewable energy and measures to improve energy efficiency with the modernization of heating networks and sources and cogeneration (heat and power), Poland is pursuing its goal to ensure stable and reasonably priced fuel and energy supplies to meet national demand, while simultaneously diversifying the source fuels.

Table 2

Sectors affected	List of key policies and measures	Estimate of mitigation impact (kt CO ₂ eq)
Policy framework and cro	ss-sectoral measures	
	National development strategy 2020, including the strategy for energy security and the environment	
	National programme for the development of a low-emission economy	
	National reform programme for the implementation of the European Union 2020 strategy	
	European Union climate and energy package, including the European Union Emissions Trading System and effort- sharing decision	
Energy	Energy policy of Poland until 2030 (currently being updated to 2050)	
	National green investment scheme	
Energy supply	Industrial use of methane from mines for electricity and heat	265.32 (2010)
Renewable energy	National action plan on energy from renewable sources	
	Measures to increase the share of renewable energy sources; tax incentives; and a certification programme for companies using electricity from renewable energy sources	163.85
Energy efficiency	Cogeneration using combined heat and power	30.01
	Modernization of local heating networks	127.14
	Modernization of heat sources	96.60
Residential and	Implementation of new energy efficiency	

Summary of information on mitigation actions reported by Poland

Sectors affected	List of key policies and measures	Estimate of mitigation impact (kt CO ₂ eq)	
commercial sectors	standards for buildings		
Transport	National transport policy 2006–2025		
	Transport development strategy until 2020		
	Measures to reduce exhaust emissions	3 246.50	
Industrial processes	Measures to monitor and control fluorinated gases		
	Implementation of best available techniques/best environmental practices		
Agriculture	Rural development programme 2007–2013		
	Measures to ensure efficient use of fertilizers		
	Cultivation of high CO ₂ sequestering crops	16.64 (2025)	
	Improvements in animal feeding and feed management	2.90 (2025)	
Forestry	Measures to prevent land-use change		
	Afforestation		
Waste management	National waste management plan 2014		
	Enhanced recycling of municipal waste	4 250.00	
	Cogeneration using waste materials	271.00 (2010)	
	Reduced landfilling of waste (including biodegradable waste)	345.00-728.00	

Note: The greenhouse gas emission reduction estimates given for some measures are reductions in carbon dioxide or carbon dioxide equivalent for 2020, unless stated otherwise.

28. In its BR1, Poland did not provide any 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 towards its target. Although some missing elements can be located in the NC6, the ERT noted that this information is neither complete nor transparent and that the Party did not include any reference to this information in its BR1. During the review, the Party informed the ERT that no changes in its domestic arrangements have been made recently. The ERT recommends that Poland provide complete and transparent information to fulfil this reporting requirement in its next BR.

29. Poland did not provide, to the extent possible, detailed information on the assessment of the economic and social consequences of response measures. The ERT encourages Poland to provide this information in its next submission.

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

30. Poland reported in its BR1 that it is not planning to use market-based mechanisms under the Convention and other mechanisms to achieve its target and that it does not account for the contribution of LULUCF to its progress to its target. Poland erroneously reported in CTF table 4 on its use of mechanisms in the progress made towards achieving its target under the Kyoto Protocol, while it should have reported on the use of mechanisms under the Convention. The ERT recommends that Poland present, in CTF table 4,

information on its use of units from market-based mechanisms in the progress made towards achieving its target under the Convention.

Table 3

Summary 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 towards achievement of the target by Poland

Year	Emissions excluding LULUCF (kt CO2 eq)	LULUCF ^b emissions/removals (kt CO ₂ eq)	Emissions including LULUCF (kt CO2 eq)	Use of units from the market-based mechanisms ^c (kt CO2eq)
Base year	563 442.77	NA	NA	NA
1990 ^a	466 371.96	NA	NA	NA
2010	407 474.65	NA	NA	NA
2011	405 741.44	NA	NA	NA
2012	399 267.97	NA	NA	NA

Abbreviations: LULUCF = land use, land-use change and forestry, NA = not applicable.

^a Emissions and removals for 1990 are reported if a base year other than 1990 is used.

^b The unconditional commitment of the European Union to reduce greenhouse gas emissions by 20 per cent by 2020 compared with the 1990 level does not include emissions/removals from land use, land-use change and forestry.

^{*c*} In common tabular format table 4, Poland reported on units that it intends to use to achieve the target (200,110.16 kt carbon dioxide equivalent (CO₂ eq) in 2011 and 1.00 kt CO₂ eq in 2012). As Poland does not use these units to achieve its target under the Convention, the values are not reflected in this table.

3. Projections

31. Poland has provided in its BR1 and CTF tables 5 and 6 comprehensive and wellorganized information on its updated projections for 2020 and 2030. The BR1 includes information required by the UNFCCC reporting guidelines on BRs only in the CTF tables; thus, the ERT recommends that Poland also include textual elements providing further information on in its projections, consistent 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" in its next BR. A detailed review of the reported information is provided in chapter II.C of the IDR/NC6. The key recommendations are that Poland report the total effect of its PaMs by gas and provide explanations of which PaMs are included and how they have been considered in the projections.

32. Poland has provided an extensive list of its main assumptions used for the projections and a 'with measures' scenario in CTF tables 5 and 6(a). No additional scenario was provided. The ERT encourages Poland to provide 'without measures' and 'with additional measures' scenarios in its future projections.

33. In its BR1, Poland has not provided information on the changes since the previous NC in the methodologies used for the preparation of projections. This, however, is included in chapter 5 of the NC6 of Poland. Based on this information, the methodology and the main assumptions remained unchanged. The ERT encourages the Party to include this information in its next BR.

34. The ERT noted information reported by Poland on projected emission trends by 2020 and 2030. Overall, Poland's reported projections of total GHG emissions until 2020 show a decreasing trend, which changes into an increasing trend after 2020 and results in

projected emissions in 2030 that are around the level of the starting year of the projections (2011). Total emissions in 2020 are expected to be at a level that is 19.0 per cent below the 1990 level in the 'with measures' scenario. For 2030, the difference decreases to 14.5 per cent below the 1990 level.

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

1. Provision of financial support to developing country Parties

35. In its BR1 and CTF table 7, Poland reported information on the provision of financial, technological and capacity-building support required under the Convention. Poland is commended for providing this information when it is not a Party included in Annex II to the Convention (i.e. it is not an Annex II Party). In its BR1, Poland provided details on what "new and additional" financial resources it has provided. During the review, Poland provided additional information, elaborating on fast-start finance and the GreenEvo mechanisms. Table 4 includes some of the information reported by Poland on its provision of financial support.

Table 4

Summary of information on provision of financial support in 2011–2012
(millions of United States dollars)

	Years of disbursement	
Allocation channel of public financial support	2011	2012
Climate-specific contributions through multilateral channels, including:	1.33	NR
Contributions through United Nations bodies	1.13	NR
Other multilateral climate change funds	0.20	NR
Climate-specific contributions through bilateral, regional and other channels	11.69	NR

Abbreviation: NR = not reported.

2. Approach used to track support provided

36. With regard to the most recent financial contributions to enhance the implementation of the Convention by developing countries, Poland reported during the review that the global amount of financial support in fast-start climate finance increased from EUR 3.2 million in 2010 to EUR 7.5 million in 2012. Climate change became a significant objective in the 2012 goals, and from the funds disbursed in 2012, the majority were disbursed through bilateral channels, with the focus being mostly on adaptation measures. In the case of bilateral subsidies, China was the largest beneficiary, and other countries (Armenia, Autonomous Republic of Crimea, Azerbaijan, Democratic People's Republic of Korea, Egypt, Ethiopia, Kenya, Kyrgyzstan, Nigeria, Palestine, Republic of Moldova, Ukraine and United Republic of Tanzania) received amounts that were smaller by one or two magnitudes. Multilateral aid is not dominant, and is directed mostly to the Eastern Europe Energy Efficiency and Environment Partnership Fund.

3. Technology development and transfer

37. In its BR1 and CTF table 8, Poland has provided information on activities related to the transfer of technology to developing countries, including information on the public and

private sectors. For all reported projects, the sources of funding come from the private and public sectors, whereas activities are undertaken by the private sector. Half of the projects have already been implemented. The climate change related aspect is mitigation, and the activities involved are energy use rationalization, biomass firing, wastewater treatment and waste for energy generation.

III. Conclusions

38. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of Poland in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 and CTF tables provide a general overview of information on emissions and removals related to the quantified economy-wide emission reduction target, a description of the target, progress made by Poland to achieve its target and provision of support to developing country Parties. However, the BR1 does not include any textual explanation of the prescribed topics. During the review, Poland provided additional information on its target and the progress made towards achievement of the target, the methodology used for the projections, provision of financial support and a breakdown of PaMs by gas and by sector.

39. Poland's emissions in 2012 were estimated to be 14.4 per cent below its 1990 level excluding LULUCF. Emission decreases were driven by the economic decline in the late 1980s following the transition to a market economy. Furthermore, an important factor was the decoupling of economic growth from emissions through the restructuring and modernization of the economy. These factors are not outweighed by the continuous economic growth that Poland experienced in the last 20 years. However, a rigid structure of energy supply with projected continued reliance on fossil fuel sources, despite the possible introduction of nuclear energy, means that in the next two decades, there will be a higher risk for a sharper increase in the emissions of Poland.

40. Poland is committed to contributing to the joint EU quantified economy-wide target to achieve a 20.0 per cent reduction in emissions by 2020 compared with the 1990 level. The target for the EU and its member States will be achieved through the EU 2020 climate and energy package, which sets separate targets for emissions covered by the EU ETS and member State specific targets under the EU ESD. In line with the EU approach to its target, Poland does not include emissions or removals from the LULUCF sector in defining its quantified economy-wide target. Poland does not plan to use market-based mechanisms under the Convention to achieve the target.

41. Across the EU, it is expected that the EU ETS will guarantee that the sectors that fall under this scheme (mainly large point sources such as power plants and industrial facilities) will achieve a 21.0 per cent emission reduction compared with the 2005 level by 2020. For the sectors not included in the EU ETS (non-ETS), through the EU ESD, the 2020 EU target for Poland has been translated to a +14.0 per cent allowed increase (compared with the 2005 level). In absolute terms, this means that Poland can increase emissions from non-ETS sectors from 171,037.49 kt CO₂ eq in 2005 to 194,982.74 kt CO₂ eq in 2020. In 2012, emissions from non-ETS sectors amounted to approximately 202,631.69 kt CO₂ eq and are projected to amount to 175,469.90 kt CO₂ eq in 2020. While emissions in 2012 were higher than the target for the non-ETS sectors, the Party projects to achieve emission reductions below the target in 2020, although this assessment is very preliminary because it is based on the historical share of EU ETS and ESD emissions, which is likely to change.

42. According to the reported information, total emissions are projected to amount to 377,655.28 kt CO_2 eq by 2020, which is 19.0 per cent below the 1990 level. Emissions by 2030 are projected to further increase to 398,565.31 kt CO_2 eq, or 14.5 per cent below the

1990 level. Meeting emission targets could be challenging for Poland for a multitude of reasons. Primarily, the introduction of nuclear energy seems insufficient and rather uncertain to satisfy the energy needs of the emerging economy. In addition, the current and expected rate of utilization of RES seems to be quite conservative compared to their full potential in Poland. Hence, growing energy needs are likely to be met by a further increase in fossil fuel use, as shown in the projections. Moreover, emissions from the transport sector appear to show a constant growth, and emissions from the agriculture sector also slowly recover from their decrease during the economic transition; thus, these two sectors are expected to also contribute to the increasing future emission levels.

43. At the national level, the energy policy of Poland until 2030 outlines Poland's energy priorities, including energy efficiency with modernization of heating networks and sources and cogeneration (heat and power), energy security, diversification of electricity generation through nuclear power, development of RES, competitive fuel and energy markets, and reduced environmental impacts, with implications on climate policy. Also, Poland continues to place emphasis on the construction and housing sector, as it has a high potential for cost-effective emission reductions in the long term, through building standards, certificates for efficient energy performance and incentives to promote thermomodernization. Key policies in non-energy sectors are the rural development programme 2007–2013, the strategy for sustainable rural development, agriculture and fisheries, the national programme for the augmentation of forest cover, the national forest policy and the national waste management plan 2014.

44. Despite not being an Annex II Party, Poland did provide information on financial and technological support to developing countries, including details on what "new and additional" financial resources it has provided, its focus on bilateral support, with the sources of funding coming from the private and public sectors, and its focus on support to mitigation projects.

45. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of Poland's reporting under the Convention. The key recommendations⁵ are that Poland:

(a) Improve the completeness of reporting by including in the next BR the following information:

(i) Required textual elements and chapters in written form in addition to the CTF tables;

(ii) Summary information on national inventory arrangements and on changes therein;

(iii) Changes in domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting and archiving of information, and evaluation of the progress made towards achievement of its target;

(iv) All required elements regarding conditions and assumptions relevant to the attainment of its quantified economy-wide emission reduction target;

(v) The total effect of PaMs by gas;

(b) Improve the transparency of reporting by including in the next BR the following information:

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

(i) A more comprehensive description of conditions and assumptions relevant to the attainment of the target, in particular the context of the target reported by Poland as part of the EU quantified economy-wide emission reduction target;

(ii) A consistent reporting of the progress made towards achievement of the target, including only elements that are used to achieve the target;

(iii) Explanations of which PaMs are included and how they have been considered in the projections.

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 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 23/CP.19. Available at < http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20>.

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<http://unfccc.int/documentation/documents/advanced_search/items/3594.php?rec=j&priref =600006435#beg>.

Sixth national communication of Poland. Available at http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf /pol_nc6.pdf>.

First biennial report of Poland. Available at http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf /pol_nc6.pdf>.

Common tabular format tables of Poland. Available at <a href="http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/biennial_reports_and_iar/submitted_biennial_reports/biennial_reports_and_iar/submitted_biennial_reports/biennial_reports_and_iar/submitted_bi

2013 GHG inventory submission of Poland. Available at http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/pol-2013-nir-25may.zip.

2014 GHG inventory submission of Poland. Available at http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/pol-2014-nir-27may.zip>.

B. Additional information provided by the Party

Responses to questions during the review were received from Mr. Adam Pogorzelski (Ministry of the Environment), including additional material on updated policies and measures, greenhouse gas projections, the national registry and recent climate policy developments in Poland. The following documents¹ were also provided by Poland:

Ministry of Economy. 2014. Polish Nuclear Power Programme. Warsaw: MoE.

¹ Reproduced as received from the Party.

McKinsey&Company. 2009. Assessment of Greenhous Gas Emissions Abatament Potential in Poland by 2030. McKinsey&Company.

Ministry of Economy. 2009. Energy Policy of Poland until 2030. Warsaw: MoE.

Centre For Climate Policy Analysis. 2014. *Economic effects of the proposed 2030 climate and energy policy framework on Poland and other EU regions- Results based on the PLACE global CGE model.* Warsaw: KOBiZE.