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

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 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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Contents

I. Introduction and summary

A. Introduction

1. This report covers the centralized technical review of the second biennial report (BR2)[1] of Poland. 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 Poland, which provided comments that were considered and incorporated, as appropriate, into this final version of the report.

2. The review took place from 14 to 19 March 2016 in Bonn, Germany, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Tom Dauwe (Belgium), Mr. Raúl Jorge Garrido Vázquez (Cuba), Ms. Patricia Grobben (Belgium), Mr. Bernard Hyde (Ireland), Mr. Mwangi James Kinyanjui (Kenya), Mr. Giorgi Machavariani (Georgia), Mr. Naoki Matsuo (Japan), Mr. Mark Molnar (Hungary), Mr. Marius Țăranu (Republic of Moldova) and Mr. Shengmin Yu (China). Ms. Grobben and Mr. Țăranu were the lead reviewers. The review was coordinated by Mr. Bernd Hackmann and Ms. Sylvie Marchand (UNFCCC secretariat).

B. Summary

3. The expert review team (ERT) conducted a technical review of the information reported in the BR2 of Poland 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, Poland provided the following additional relevant information on: a number of mitigation actions and how their impacts are assessed; the effectiveness of the currently implemented measures for meeting the 2020 emission reduction target and the reason the Party does not see a need to implement additional mitigation measures; the institutional mechanisms for financial resource tracking; the methodology used to report financial support and underlying assumptions; the total development assistance support provided by Poland in 2013–2014 to Parties not included in Annex I to the Convention (non-Annex I Parties) and to Parties with economies in transition (EIT Parties); and institutional, legal and procedural arrangements in place for assessing and tracking technology transfer and for reporting and archiving information.

1. Timeliness

4. The BR2 was submitted on 31 December 2015, before the deadline of 1 January 2016 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 31 December 2015, and resubmitted on 8 January 2016, due to technical challenges with the CTF reporting software.

[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.

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 Poland in its BR2 is mostly in adherence with the UNFCCC reporting guidelines on BRs as per decision 2/CP.17.

Table 1
Summary of completeness and transparency issues related to mandatory reported information in the second biennial report of Poland

Section of the biennial report	*Completeness*	*Transparency*	*Paragraphs with recommendations*
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	12
Progress in achievement of targets	Mostly complete	Mostly transparent	19, 21, 22, 38, 44
Provision of support to developing country Parties	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.

II. Technical review of the reported information

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

6. Poland has provided a summary of information on greenhouse gas (GHG) emission trends for the period 1990–2013 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 Poland's 2015 annual inventory submission (in section 1). The national inventory arrangements were established in accordance 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" that are required by paragraph 3 of the UNFCCC reporting guidelines on BRs. Further, Poland provided information that no changes had occurred in the national inventory arrangements since its first biennial report (BR1).

7. The information reported in the BR2 and CTF tables 1(a)–(d) on emission trends is consistent with that reported in the 2015 annual inventory submission of Poland.

8. Total GHG emissions[2] excluding emissions and removals from land use, land-use change and forestry (LULUCF) decreased by 16.7 per cent between 1990 and 2013, whereas total GHG emissions including net emissions or removals from LULUCF decreased by 20.2 per cent over the same period. The decrease in the total GHG emissions can be attributed mainly to carbon dioxide (CO_2) emissions, which decreased by 14.9 per cent (excluding LULUCF) between 1990 and 2014. Over the same period, emissions of methane (CH_4) decreased by 37.6 per cent, while emissions of nitrous oxide (N_2O) decreased by 24.7 per cent, but their share remained much smaller compared to the share of the CO_2 emissions. The combined fluorinated gases (F-gases), such as perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF_6), increased by 6,709.5 per cent over the same period.

9. The emission trends were driven mainly by emission reductions in the energy sector of 16.3 per cent between 1990 and 2013 and in the agriculture sector of 36.8 per cent over the same period. Specifically, energy industries (28 per cent reduction between 1990 and 2013) and manufacturing and construction industries (30.5 per cent reduction between 1990 and 2013) were the main drivers of emission reductions in the energy sector, while GHG emissions from transport and industrial processes and product use (IPPU) increased by 113.6 per cent and 19.4 per cent, respectively, over the same period. The ERT noted that emissions from these sectors, if they continue this trend, could potentially undermine Poland's emission reductions in other sectors in the future.

10. The ERT noted that, during the period 1990–2013, Poland's gross domestic product (GDP) per capita increased by 128.6 per cent, while GHG emissions per GDP and GHG emissions per capita decreased by 63.5 and 16.5 per cent, respectively. The emission trends were driven mainly by reductions in the energy sector and the agricultural sector, which resulted from Poland's transition to a market economy, mainly between 1990 and 2000. The ERT further noted that the restructuring and modernization of Poland's economy resulted in continuous economic growth but not in an increase in GHG emissions, and that the decoupling of economic growth from GHG emissions can be attributed at least in part to Poland's mitigation actions. Table 2 below illustrates the emission trends by sector and some of the economic indicators relevant to GHG emissions for Poland.

Table 2

Greenhouse gas emissions by sector and some indicators relevant to greenhouse gas emissions for Poland for the period 1990–2013

	GHG emissions (kt CO_2 eq)					*Change (%)*		*Share by sector (%)*	
Sector	*1990*	*2000*	*2010*	*2012*	*2013*	*1990–2013*	*2012–2013*	*1990*	*2013*
1. Energy	386 536.68	322 702.24	338 562.43	327 734.72	323 470.71	16.3	–1.3	81.6	81.9
A1. Energy industries	236 199.21	177 117.34	172 827.87	169 564.76	170 088.03	–28.0	0.3	49.8	43.1
A2. Manufacturing industries and construction	43 298.15	46 693.14	30 430.95	30 299.32	30 093.08	–30.5	–0.7	9.1	7.6
A3. Transport	20 594.32	27 693.26	47 995.08	46 748.22	43 990.35	113.6	–5.9	4.3	11.1

[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 2015 inventory submission.

	GHG emissions (kt CO_2 eq)					*Change (%)*		*Share by sector (%)*	
Sector	*1990*	*2000*	*2010*	*2012*	*2013*	*1990–2013*	*2012–2013*	*1990*	*2013*
A4.–A5. Other	57 219.96	48 987.99	70 287.49	62 590.42	60 476.04	5.7	–3.4	12.1	15.3
B. Fugitive emissions from fuels	29 225.04	22 210.51	17 021.03	18 531.99	18 823.21	−35.6	1.6	6.2	4.8
C. CO_2 transport and storage	NO	NO	NO	NO	NO	–	–	–	–
2. IPPU	25 372.91	25 788.57	28 038.05	30 000.45	30 290.96	19.4	1.0	5.4	7.7
3. Agriculture	47 608.57	31 347.23	29 962.73	30 086.67	30 100.41	–36.8	0.0	10.0	7.6
4. LULUCF	–26 024.92	–30 942.43	–28 185.50	–34 505.29	–37 586.99	44.4	8.9	–	–
5. Waste	14 390.95	12 961.06	11 546.40	10 990.11	11 029.45	–23.4	0.4	3.0	2.8
6. Other	NO	NO	NO	NO	NO	–	–	–	–
Total GHG emissions without LULUCF	**473 909.11**	**392 799.10**	**408 109.60**	**398 811.96**	**394 891.52**	**–16.7**	**–1.0**	**100.0**	**100.0**
Total GHG emissions with LULUCF	**447 884.19**	**361 856.67**	**379 924.10**	**364 306.67**	**357 304.53**	**–20.2**	**–1.9**	**NA**	**NA**
Indicators									
GDP per capita (thousands 2011 USD using PPP)	10.14	14.64	21.46	22.87	23.18	128.6	1.3		
GHG emissions without LULUCF per capita (t CO_2 eq)	12.44	10.27	10.73	10.48	10.38	–16.5	–0.9		
GHG emissions without LULUCF per GDP unit (kg CO_2 eq per 2011 USD using PPP)	1.23	0.70	0.50	0.46	0.45	–63.5	–2.2		

Sources: (1) GHG emission data: Poland's 2015 annual inventory submission; (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, NO = not occurring, PPP = purchasing power parity.

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

11. In its BR2 and CTF tables 2(a)–(f), Poland 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.

12. The ERT noted that Poland, in its BR2 and CTF tables 2(a)–(f), reported on the joint commitments of the member States of the European Union (EU) under the Convention (see paras. 13–17 below). The ERT further noted that the information reported by Poland in CTF table 2(a), describing the base year of the joint quantified economy-wide emission reduction target, and CTF table 2(b), describing the base years of the gases covered under the joint quantified economy-wide emission reduction target, is not consistent with the information on the joint EU target as communicated to the secretariat and contained in document FCCC/SB/2011/INF.1/Rev.1. The ERT also noted that Poland, in its BR2, reported that emissions of nitrogen trifluoride and from LULUCF are included in the annual emission allocations (AEAs) under the effort-sharing decision (ESD). The ERT therefore recommends that Poland enhance the transparency of its reporting by providing the required information in CTF tables 2(a)–(f) consistent with the information on the joint EU target as communicated to the secretariat and contained in document FCCC/SB/2011/INF.1/Rev.1. The ERT further noted that Poland may enhance the transparency of its reporting by providing information on its national commitment within the EU joint target.

13. For Poland, the Convention entered into force on 26 October 1994. Under the Convention, Poland committed to contributing to the achievement of the joint EU economy-wide emission reduction target of 20 per cent below the 1990 level by 2020, compared with the 1990 level as reflected in document FCCC/SB/2011/INF.1/REV.1. The EU offered to move to a 30 per cent reduction on the condition that other developed countries commit to a comparable target and developing countries contribute according to their responsibilities and respective capabilities under a new global climate change agreement.

14. The target for the EU and its member States is formalized in the EU 2020 climate and energy package. This legislative package regulates emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 using global warming potential (GWP) values from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) to aggregate the GHG emissions of the EU up to 2020. Emissions and removals from the LULUCF sector are not included in the quantified economy-wide emission reduction target under the Convention. The EU generally allows its member States to use units from the Kyoto Protocol mechanisms as well as new market mechanisms for compliance purposes, subject to a number of restrictions in terms of origin and type of project and up to an established limit. Companies can make use of such units to fulfil their requirements under the European Union Emissions Trading System (EU ETS).

15. The EU 2020 climate and energy package includes the EU ETS and the ESD (see chapter II.C.1 below). Further information on this package is provided in sections 2 and 3 of the BR2. The EU ETS covers mainly point emissions sources in the energy, industry and aviation sectors. For the period 2013–2020, an EU-wide cap has been put in place with the goal of reducing emissions by 21 per cent below the 2005 level by 2020. Emissions from sectors covered by the ESD are regulated by targets specific to each Member State, which leads to an aggregate reduction at the EU level of 10 per cent below the 2005 level by 2020.

16. Under the ESD, Poland has a target to limit its emission growth to 14 per cent above the 2005 level by 2020 from sectors covered by the ESD (non-ETS sectors). National

emission targets for non-ETS sectors for 2020 have been translated into binding quantified AEAs for the period 2013–2020. Poland's AEAs change following a linear path from 193,643 kt of carbon dioxide equivalent (CO_2 eq) in 2013 to 202,342 kt CO_2 eq in 2020.[3]

17. The ERT noted that Poland reported in its BR2 that its total GHG emissions (excluding LULUCF) in 2013 amounted to 394,891.52 kt CO_2 eq, with 205,735.40 kt CO_2 eq (about 52 per cent of the total emissions) covered under the EU ETS and 189,007.09 kt CO_2 eq (about 48 per cent of total emissions) covered under the ESD. The ERT further noted that for 2013, Poland's reported emissions under the ESD are below its 2013 AEAs.

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

18. This chapter provides information on the review of the reporting by Poland 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

19. In its BR2 and CTF table 3, Poland reported on its progress in the achievement of its target and the mitigation actions implemented and planned since its sixth national communication (NC6) and BR1 to achieve its target. Poland has provided information on mitigation actions introduced to achieve its target. Poland's BR2 includes information on mitigation actions and the GHGs they affect, organized by sector. However, the reporting of the mitigation actions has not been organized by gas. The ERT recommends that Poland enhance the transparency of its reporting by organizing the reporting of mitigation actions by gas, for example, by organizing mitigation actions first by sector then by GHG affected.

20. This report highlights the changes made since the publication of the Party's NC6 and BR1. In response to a recommendation made in the previous review report, Poland provided in its BR2 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.

21. The ERT noted that Poland included in its CTF table 3 mitigation actions in sectors that are outside the scope of the joint EU quantified economy-wide emission reduction target under the Convention (such as LULUCF). To enhance the transparency of its reporting on progress made towards the achievement of its quantified economy-wide emission reduction target, the ERT recommends that Poland report those mitigation actions that contribute towards achieving the target. Additional mitigation actions in sectors that are not pertinent to the target could be reported in CTF table 3, but with a clear explanation (e.g. using footnotes) that they are not covered under the target or in textual format in separate sections of the biennial report (BR). Further information on the mitigation actions related to the Party's target is provided in section 3 of the BR2 and in this report (see paras. 29, 32 and 33 below).

[3] European Commission decision 2013/162/EU of 26 March 2013 "on determining member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No. 406/2009/EC of the European Parliament and of the Council" and European Commission implementing decision 2013/634/EU of 31 October 2013 "on the adjustments to member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No. 406/2009/EC of the European Parliament and of the Council".

22. CTF table 3 does not include the information required by the UNFCCC reporting guidelines on BRs on the starting year of implementation of some of the reported mitigation actions as well as on the estimated impact of some of the reported mitigation actions. Poland provided this information during the review. The ERT recommends that Poland include this information for its mitigation actions in its next BR submission.

23. Some of the impact estimates of mitigation actions that Poland provided in its CTF table 3 are for groups of mitigation actions and not for individual actions. The ERT noted that these grouped actions have considerable overlaps and that information on synergies and overlaps between mitigation actions and how these have been addressed in the impact assessment are not always thoroughly explained. The ERT further noted that more detailed information on how the impacts of actions are assessed and monitored over time and by whom would enhance Poland's reporting on the estimated impact of mitigation actions.

24. Poland provided information on the assessment of the economic and social consequences of its response measures, referring to the assessment process carried out within the framework of the EU. The ERT noted that detailed information is missing from the BR2 as to what impacts are included under this assessment. To enhance the transparency of its reporting, the ERT encourages Poland to provide more detailed information on the assessment of the economic and social consequences of its response measures in its next BR.

25. Poland reported on the domestic arrangements established for the process of self-assessment of compliance with emission reductions required by science, and on the progress made in the establishment of national rules for taking action against non-compliance with emission reduction targets. As a member State of the EU, Poland monitors its progress towards achieving its emission target in accordance with the European Parliament and European Council Monitoring Mechanism Regulation (525/2013) (repealing EU decision 280/2004/EC) (MMR). This means for instance that GHGs covered by the ESD must be reported annually by Poland.

26. The key overarching cross-sectoral policy in the EU is the 2020 climate and energy package adopted in 2009, which includes the revised EU ETS and the ESD. This package is supplemented by renewable energy and energy efficiency legislation and legislative proposals on the 2020 targets for CO_2 emissions from cars and vans, the carbon capture and storage directive, and the general programmes for environmental conservation, namely the 7th Environment Action Programme and the Clean Air Policy Package (see table 3 below).

27. In operation since 2005, the EU ETS is a cap-and-trade system that covers all significant energy-intensive installations (mainly large point emissions sources such as power plants and industrial facilities), which produce 40–45 per cent of the GHG emissions of the EU. It is expected that the EU ETS will guarantee that the 2020 target (a 21 per cent emission reduction below the 2005 level) will be achieved for sectors under the scheme. The third phase of the EU ETS started in 2013 and the system now includes aircraft operations (since 2012) as well as N_2O emissions from chemical industries, PFC emissions from aluminium production and CO_2 emissions from industrial processes (since 2013).

28. The ESD became operational in 2013 and covers sectors outside the EU ETS, including transport (excluding domestic and international aviation, and international maritime transport), residential and commercial buildings, agriculture, waste and other sectors, together accounting for 55–60 per cent of the GHG emissions of the EU. The ESD aims to decrease GHG emissions in the EU by 10 per cent below the 2005 level by 2020 and includes binding annual targets for each member State for 2013–2020, which are underpinned by the national policies and actions of the member States.

29. At the national level, Poland introduced policies to achieve its targets under the ESD and domestic emission reduction targets. The key policies reported in the BR2 are those

under the National Energy Efficiency Action Plan for Poland 2014 (e.g. a white certificate scheme and energy performance certificates for new and expanded buildings) and the promotion of renewable energy (e.g. through a green certificate scheme and a minimum required share of biofuels in transport). Other policies that have delivered significant emission reductions are the enhanced recycling of municipal waste and policies aimed at reducing energy consumption for road transport. As reported in the BR2 and CTF table 3, the implemented actions have an estimated combined impact of 107,071–107,954 kt CO_2 eq (excluding mitigation actions from LULUCF and maritime transport), which is about 28 per cent of the projected total GHG emissions in 2020.

30. The BR2 does not report on domestic mitigation actions that are planned or currently under development, although the ERT noted that some of the reported policies will require further action in the future (such as those of the Polish nuclear energy programme). In response to questions raised by the ERT during the review, Poland clarified that new additional actions are not planned. Given that projections show that Poland is on track to achieve its 2020 EU targets with existing mitigation actions, additional actions are not needed.

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

Table 3
Summary of information on mitigation actions and their impacts reported by Poland

Sector affected	*List of key mitigation actions*	*Estimate of mitigation impact by 2020 (kt CO_2 eq)*	*Estimate of mitigation impact by 2025 (kt CO_2 eq)*
Policy framework and cross-sectoral measures	Greenhouse gas emission allowance trading scheme (European Union Emissions Trading System)	20 344	29 281
	Effort-sharing decision	12 111	NE
	National Green Investment Scheme	1 274	NE
Energy, including:			
Transport	Package for road transport	3 247	4 983
	Package for rail transport	370	370
	Package for domestic air transport[a]	89	89
Renewable energy	Enhanced use of renewable energy sources, including biofuels	35 396	NE
Energy efficiency	National Energy Efficiency Action Plan for Poland 2014	28 200	NE
IPPU	Fluorinated greenhouse gases	NE	NE
Agriculture	Rationalization of the use of fertilizers, including nitrogen fertilizers	NE	NE
	Farmland management	NE	NE
	Support for adaptation and mitigation measures at farm holdings	NE	NE

Sector affected	*List of key mitigation actions*	*Estimate of mitigation impact by 2020 (kt CO_2 eq)*	*Estimate of mitigation impact by 2025 (kt CO_2 eq)*
Waste	Enhanced recycling of municipal waste	4 000–4 500	NE
	Waste as a source of energy	NE	NE
	Reduction of the quantity of waste	345–728	NE

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.

Abbreviation: IPPU = industrial processes and product use, NE = not estimated.

[a] This package includes measures to improve operating efficiency (optimizing air corridors and taxiway capacity), reducing landing time and implementation of the Single European Sky. See <http://ec.europa.eu/transport/modes/air/single_european_sky/index_en.htm>.

32. Poland's overall climate mitigation policy has been shaped by EU legislation and its domestic energy policy (see para. 33 below). Transposition and implementation of the EU climate and energy package of 2009 provides the legal framework for climate action in Poland. Actions under this package contribute to the achievement of the overall EU 2020 targets on GHG emissions from sectors covered by the EU ETS and the ESD, renewable energy deployment and energy efficiency improvements.

33. "Energy Policy of Poland until 2030" is the main strategic document setting out the direction of the energy sector, and it places emphasis on improving energy efficiency, enhancing security of supply and diversifying energy sources, mainly by introducing nuclear energy and renewable energy sources. This policy will contribute to achieving the EU targets of 15 per cent energy from renewable energy sources and a 10 per cent share of biofuels in transport in 2020 (as per the EU directive on renewable energy (directive 2009/28/EC)) and improvement in energy efficiency by limiting absolute primary energy consumption in Poland to 96.4 Mtoe in 2020 (as per the National Energy Efficiency Action Plan for Poland 2014). "Energy Policy of Poland until 2030" particularly emphasizes the importance of improving energy efficiency and reducing energy intensity (related to GDP) of the Polish economy to close the gap with the most efficient economies in the EU. In this context, several measures have been implemented, of which the white certificate scheme, laid down in the Energy Efficiency Act of 2011, is particularly important. Poland also places emphasis on the construction and housing sector, which has good cost-effective opportunities to reduce GHG emissions.

34. With regard to low carbon energy sources, Poland reports in its BR2 that its policies mostly emphasize an increased share for biomass and wind energy, which are supported by the recently implemented Renewable Energy Sources Act of 2015. Poland is also preparing regulatory and organizational infrastructure for the construction of nuclear power stations in the period 2025–2035. Nuclear power could reduce the projected continued reliance on coal and lignite for electricity and heat production in the longer term (the share of which gradually decreases in the energy mix from about 87 per cent in 2015 to about 82 per cent in 2020 and about 80 per cent in 2030).

35. In its BR2, Poland recognizes that economic growth will increase demand for transport significantly in the medium and long term, and the Party has implemented policies to reduce the impact of road, air and water transport on GHG emissions by improving road and rail infrastructure, increasing the efficiency of vehicles and promoting a modal shift. The pivotal instrument to achieve this is the National Transport Policy for 2006–2025.

36. The key policies in non-energy sectors are the limitation of the use of fertilizers in agriculture, the National Waste Management Plan 2014 and the reduction of F-gas emissions by implementation of the EU F-gas regulation (842/2006) in Poland. This regulation is the only mitigation action targeting emissions from industrial processes and product use (IPPU) alone. F-gases constituted about one third of the total IPPU emissions in 2013. Other IPPU emissions are covered by the EU ETS.

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. Poland reported in its BR2 and CTF tables 4, 4(a)I, 4(a)II and 4(b) that it does not intend to use units from market-based mechanisms under the Convention and the contribution of LULUCF to achieving its target.

38. The ERT noted that in its CTF table 4, Poland reported 1988 as the base year and also reported a contribution from LULUCF towards achieving the target. This is inconsistent with the joint EU target, which uses 1990 as the base year and does not include contributions from LULUCF. To enhance the transparency of its reporting, the ERT recommends that Poland, in its next BR submission, provide information reflecting the joint EU target. The ERT further notes that Poland may also provide information on its national commitment within the EU joint target, either in the main text of the BR submission or as a footnote to CTF table 4.

39. For 2013, Poland reported in CTF table 4 annual total GHG emissions excluding LULUCF of 394,891.52 kt CO_2 eq, or 16.7 per cent below the 1990 level. In 2013, emissions from the non-ETS sectors relating to the target under the ESD were 189,007.09 kt CO_2 eq,[4] which is 2.4 per cent (4,630.00 kt CO_2 eq) below the AEAs under the ESD for 2013 of 193,643 kt CO_2 eq).

40. Table 4 below illustrates Poland's total GHG emissions, 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 Poland towards the achievement of its target

Year	*Emissions excluding LULUCF (kt CO_2 eq)*	*Contribution from LULUCF (kt CO_2 eq)[a]*	*Emissions including contribution from LULUCF (kt CO_2 eq)*	*Use of units from market-based mechanisms (kt CO_2 eq)*
1990	473 909.11	NA	NA	NA
2010	408 109.60	NA	NA	NA
2011	405 151.11	NA	NA	NA
2012	398 811.96	NA	NA	NA
2013	394 891.52	NA	NA	NA

Sources: Poland's second biennial report and common tabular format tables 1, 4, 4(a)I, 4(a)II and 4(b).

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

[4] Trends and Projections in Europe 2015: Tracking Progress Towards Europe's Climate and Energy Targets. Available at <http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2015>.

[a] Poland, in common tabular format table 4, reported a contribution from the LULUCF sector. The expert review team did not include these values in the above table as the Party is a European Union (EU) member State, which is bound by the EU-wide unconditional commitment to reduce greenhouse gas emissions by 20 per cent below the 1990 level by 2020, which does not include emissions/removals from LULUCF.

41. To assess the progress towards the achievement of the 2020 target, the ERT noted that Poland's emission reduction target from sectors not covered by the EU ETS under the EU ESD is 14 per cent above the 2005 level (see paras. 16 and 28 above). As discussed in chapter II.B above, in 2013, Poland's emissions from the sectors not covered by the EU ETS were about 2.4 per cent (4,630 kt CO_2 eq)[5] below the AEAs under the ESD.

42. The ERT noted that, on the basis of the reported information, Poland is making progress towards its emission reduction target by implementing mitigation actions that deliver emission reductions (see para. 29 above). The ERT further noted that its ability to technically assess Poland's progress towards the target could be enhanced if Poland provided further information on how it estimated the effect of its policies and measures (PaMs) (e.g. starting year of implementation, estimated impact, synergies and overlaps) and the emission projections up to 2020 (e.g. description of the models/approaches used, description of changes in methodologies) (see paras. 21–23 above and paras. 47 and 49–52 below).

3. Projections

43. Poland reported in its BR2 and CTF table 6(a) updated projections for 2020 and 2030 relative to actual inventory data for 2013 under the 'with measures' (WEM) scenario. Projections are presented on a sectoral basis, using the same sectoral categories as used in the section on mitigation actions, and on a gas-by-gas basis for the following GHGs: CO_2, CH_4, N_2O, PFCs, HFCs and SF_6 (treating PFCs and HFCs collectively in each case). Projections are also provided in an aggregated format for each sector as well as for a Party total, using GWP values from the IPCC AR4. Poland reported on factors and activities influencing emissions for each sector in CTF table 3. Further information on the projections is provided in section 4 of the BR2.

44. The BR2 and CTF table 6(a) do not include the information required by the UNFCCC reporting guidelines on BRs on emission projections related to fuel sold to ships and aircraft engaged in international transport, which are to be reported separately. The ERT recommends that Poland enhance the completeness of its reporting by providing emission projections related to fuel sold to ships and aircraft engaged in international transport separately in its future BRs.

45. Poland did not report in its BR2 and CTF table 6(b) a 'with additional measures' scenario. In response to a question raised by the ERT during the review, Poland explained that its emission reduction targets can be met without additional measures, which is why this scenario has not been reported. To increase the transparency of reporting, the ERT encourages Poland to provide this explanation in its next BR.

46. The BR2 and CTF table 6(c) do not include the information required by the UNFCCC reporting guidelines on BRs on a 'without measures' scenario as well as diagrams illustrating the projection scenarios. In response to a question raised by the ERT during the review, Poland explained that no specific background information for the entire

[5] *Trends and Projections in Europe 2015: Tracking Progress Towards Europe's Climate and Energy Targets.* Available at <http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2015>.

economy has been available to estimate the baseline scenario. The ERT encourages Poland to provide this information in its next BR submission.

47. The ERT noted that when projecting GHG emissions and estimating the total effect of the PaMs on its emissions and removals, the information provided by Poland related to the models and approaches applied does not always allow the reader to transparently comprehend such models and approaches and hence to gain an understanding of emission trends up to 2020. In particular, the BR2 does not transparently describe, for each model, the type of model/approach used and its characteristics (e.g. top-down model, bottom-up model, accounting model or expert judgement) and explain how the model/approach used accounts for any overlap or synergy that may exist between different PaMs. The ERT encourages Poland to enhance the completeness of its reporting and to provide this information in its next BR submission.

Overview of projection scenarios

48. The WEM scenario reported by Poland includes implemented and adopted PaMs up to 2013. The definition indicates that the scenario has been prepared according to 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".

Methodology and changes since the previous submission

49. The methodology used in the BR2 is different from that used for the preparation of the emission projections for the NC6/BR1. Poland reported supporting information further explaining the methodologies and the changes made since the NC6/BR1, including a shift in using GWP values from the IPCC Second Assessment Report to those of the AR4, and updating projections estimates by moving from the use of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* to the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the 2006 IPCC Guidelines).

50. The ERT noted that unlike in its BR1, where Poland indicated a need to implement additional measures, in its BR2, Poland indicated that it will achieve its 2020 target without implementing additional mitigation measures. The ERT noted that the reported information does not transparently explain the changes made since the last submission that lead to the revised projections. The information reported in the BR2 does not allow the ERT to fully comprehend the emission trends up to 2020.

51. During the review, Poland provided additional information, elaborating on the effectiveness of the currently implemented measures towards meeting the 2020 emission reduction target and on the fact that the Party does not see a need to implement additional mitigation measures. Poland explained that owing to an update of the methodologies for calculating its projections (now using the 2006 IPCC Guidelines) and the use of GWP values from the AR4, attainment of the 2020 targets will be achieved without additional measures. During the review, Poland provided further additional information, elaborating on its activity data generation. Examples of data preparation methods include the Model for Analysis of Energy Demand for energy consumption, the first-order decay method for waste management, and the three-year mean emission factors (2011–2013) and CH_4 emission factors for manure management from animal waste management systems.

52. The ERT encourages Poland to elaborate on the changes since the last submission in the assumptions, methodologies, models and approaches used and on the key variables and assumptions used in the preparation of the projection scenarios, including, for example, specific sectors and gases that were affected by a change in methodologies.

53. To prepare its projections, Poland relied on the following key underlying assumptions: population trends, economic development indicators, energy consumption, electricity production, cattle population, GDP growth rate, municipal waste generation and clinker production, among others, as reported in CTF table 5. These assumptions have been updated on the basis of the most recent economic developments known at the time of the reporting on projections.

54. The BR2 does not contain information on the sensitivity of the projections to underlying assumptions. The ERT encourages Poland to provide this information in its next BR submission.

Results of projections

55. Poland's total GHG emissions excluding LULUCF in 2020 and 2030 are projected to be 386,407.66 and 358,848.93 kt CO_2 eq, respectively, under the WEM scenario, which represents a decrease of 18.5 and 24.3 per cent, respectively, below the 1990 level. The 2020 projections suggest that Poland will continue contributing to the achievement of the EU target under the Convention (see para. 13 above).

56. Poland's target for the emissions from sectors covered by the ESD (non-ETS sectors) is to limit its emission growth at 14.0 per cent above the 2005 level by 2020. For Poland, the AEAs reflecting its national emission target for non-ETS sectors change linearly from 193,643 kt CO_2 eq in 2013 to 202,342 kt CO_2 eq in 2020 (see para. 17 above). According to the projections under the WEM scenario,[6] emissions from non-ETS sectors are estimated to reach 189,000 kt CO_2 eq by 2020, which is an estimated 7 per cent below the 2020 ESD target for Poland. The ERT noted that this suggests that Poland expect to meet the target under the WEM scenario (see paras. 41 and 42 above).

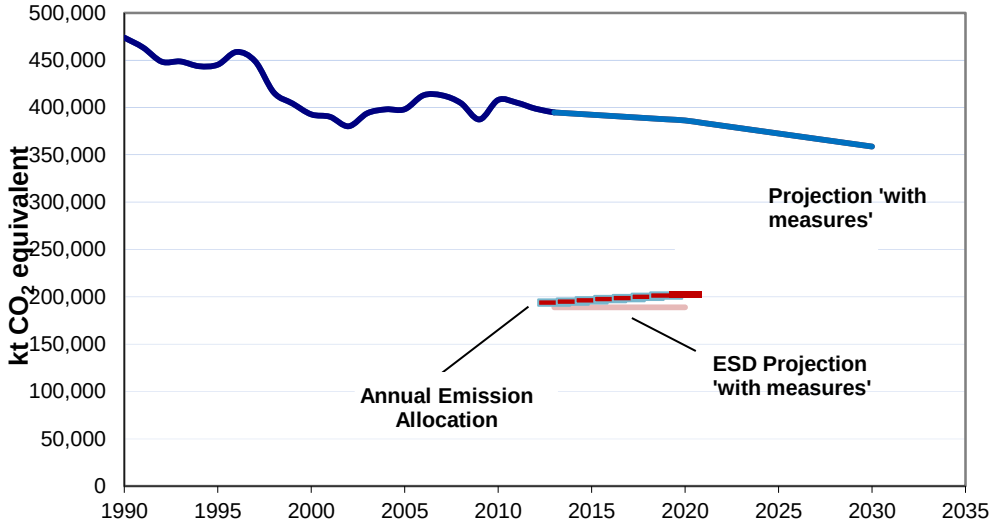
57. According to the projections presented by sector, the most significant GHG emission reductions under the WEM scenario from 1990 to 2020 will occur in the energy sector (108,190.15 kt CO_2 eq or 29.6 per cent), followed by the agriculture sector (14,315.60 kt CO_2 eq or 30.1 per cent) and the waste sector (4,211.56 kt CO_2 eq or 29.3 per cent). Conversely, GHG emissions from the transport subsector are projected to increase by 30,253.77 kt CO_2 eq (146.9 per cent) above the 1990 level by 2020. By 2030, the most significant GHG emission reductions under the WEM scenario will continue to occur in the energy sector (142,916.92 kt CO_2 eq or 39.1 per cent), the agriculture sector (12,780.45 kt CO_2 eq or 26.8 per cent) and the waste sector (4,716.50 kt CO_2 eq or 32.8 per cent), while GHG emissions from the transport subsector are projected to continue to increase by 35,198.69 kt CO_2 eq or 170.9 per cent above the 1990 level.

58. According to the projections presented by gas, reductions in CO_2 emissions are expected to contribute the most to the Party's overall emission reductions. Under the WEM scenario, reductions in CO_2 emissions will make up approximately 77.5 per cent of the aggregate GHG emission reductions below the 1990 level (67,801.92 kt CO_2 eq) by 2020, followed by CH_4 with 27.1 per cent (23,687.58 kt CO_2 eq) and N_2O with 7.4 per cent (6,442.58kt CO_2 eq). By 2030, reductions in CO_2 emissions under the WEM scenario will make up approximately 82.5 per cent of the aggregate GHG emission reductions compared with the 1990 level (94,956.27 kt CO_2 eq), followed by CH_4 with 22.1 per cent (25,484.91 kt CO_2 eq) and N_2O with 5.2 per cent (5,987.53 kt CO_2 eq). In both 2020 and 2030, emissions of F-gases are projected to increase compared with the 1990 level (10,430.63 and 11,368.53 kt CO_2 eq, respectively).

[6] *Trends and Projections in Europe 2015: Tracking Progress Towards Europe's Climate and Energy Targets.* Available at <http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2015>.

59. The projected emission levels under the different scenarios and Poland's quantified economy-wide emission reduction target are presented in the figure below.

Greenhouse gas emission projections by Poland



Sources: (1) Data for the years 1990–2013: Poland's 2015 annual inventory submission; total GHG emissions excluding land use, land-use change and forestry; (2) Data for the years 2013–2030: Poland's second biennial report; total GHG emissions excluding land use, land-use change and forestry.

Abbreviations: ESD = effort-sharing decision, GHG = greenhouse gas.

60. The ERT acknowledged information submitted by Poland on the estimated and expected effects of PaMs in terms of emissions avoided or sequestrated for 2020 and 2030. The ERT noted that meeting the targets will largely depend on the effects of PaMs targeting emissions from the energy sector.

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

61. Poland 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, as reported in its BR2, Poland provided information on its provision of support to developing country Parties and to EIT Parties. The ERT commends Poland for reporting this information and suggests that it to continue to do so in future BRs.

62. The BR2 includes information on the national approach to tracking the provision of support, indicators, delivery mechanisms used and allocation channels. Poland reported a description of the methodology used to report financial support, including underlying assumptions.

63. Poland clarified how its support is new and additional, explaining that when the Party joined the EU in 2004, it took on international commitments related to the level of development cooperation and its quality. Since 2004, Poland has carried out assistance projects, discerning and understanding the need to support sustainable development in developing countries and in countries with economies in transition (EIT countries). Poland provided most of its assistance as a contribution to its general budget. Further information

on the Party's provision of support to developing country Parties is provided in paragraphs 75 and 76 below.

64. Poland reported that its financial support addresses the needs of non-Annex I Parties and provides funding for climate-related activities, and that the Party recognizes the capacity-building elements of such support. During the review, Poland provided additional information on how it has refined its approach to tracking climate support. It also provided information on the methodology that it adopted for tracking finance for adaptation and mitigation actions.

65. Since 2014, Poland has provided information on climate action to the European Commission (EC) on an annual basis, following the MMR, which is a mechanism for monitoring and reporting GHG emissions and for reporting other information relevant to climate change at the national and EU levels. The MMR constitutes the legal basis for reporting on support delivered in accordance with the obligation under the Convention.

66. The Ministry of Environment is responsible for the implementation of the MMR. Within its competences, the Ministry collects data on climate support from stakeholders and prepares information for the EC by 30 September of year X for the X – 1 reporting period. The data reported by Poland in its BR2 are exactly the same as those provided to the EC under the MMR.

67. The majority of funds dedicated for bilateral cooperation projects comes from the national budget, within the development cooperation framework. Contribution to multilateral institutions is covered by different ministries, within their competences. Performance assessment is carried out within the development cooperation framework.

68. Poland's development assistance provided through the Ministry of Foreign Affairs is set out on the basis of the Development Cooperation Act of 2011. The objectives of development cooperation are defined in the Multiannual Development Cooperation Programme for 2012–2015. The implemented annual development cooperation programmes and projects or groups of projects are thoroughly analysed and subjected to an evaluation process.

69. The evaluation of programmes and projects implemented by the Polish Development Cooperation is based on development evaluation standards and principles set out in the *Quality Standards for Development Evaluation* (2010)[7] and *Principles for Evaluation of Development Assistance* (1991),[8] both from the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC). Evaluation is also consistent with the methodology drawn up by the Evaluation Unit of the EC. Moreover, the evaluation incorporates the standards utilized by the National Evaluation Unit of the Ministry of Development and the Polish Evaluation Society. Evaluation is carried out after a project or a programme is completed. It is done by external companies selected through a public tender process, pursuant to the Public Procurement Act and the internal rules and procedures of the Ministry of Foreign Affairs.

70. Poland become a member of OECD DAC on 22 October 2013. Since that time Poland has been striving to implement the regular OECD DAC reporting system (CRS). Poland also intends to use Rio markers in its reports to OECD DAC. While reporting to the EC on climate support under the MMR, the Rio markers methodology was useful in terms of mitigation, adaptation, capacity-building categorization as well as for sector attribution. For the latter, the list of CRS purpose codes was applied.

[7] Available at <http://www.oecd.org/development/evaluation/qualitystandards.pdf >.
[8] Available at <http://www.oecd.org/development/evaluation/2755284.pdf>.

1. Finance

71. In its BR2 and CTF tables 7, 7(a) and 7(b), Poland reported information on the provision of financial support required under the Convention, including on financial support provided, allocation channels and annual contributions (see paras. 75–80 below). The summary information was reported for 2013–2014.

72. Poland described how its resources address the adaptation and mitigation needs of non-Annex I Parties and EIT Parties. It also described how those resources assist non-Annex I Parties and EIT Parties to mitigate and adapt to the adverse effects of climate change, facilitate economic and social response measures, and contribute to technology development and transfer and capacity-building related to mitigation and adaptation (see chapters II.D.2 and II.D.3 below).

73. Poland provided information on the types of instrument used in the provision of its assistance (see para. 79 below). In addition, Poland reported information on its private financial flows from bilateral sources directed towards mitigation and adaptation activities in non-Annex I Parties and EIT Parties.

74. With regard to the most recent financial contributions aimed at enhancing the implementation of the Convention by developing countries and EIT countries, Poland reported that its climate finance has been allocated on the basis of the Multiannual Development Cooperation Programme for 2012–2015.

75. Poland reported on its climate-specific public financial support provided in 2013 and 2014, totalling USD 3.33 million in 2013 and USD 4.88 million in 2014. During the reporting period, Poland placed a particular focus on supporting Eastern European States (Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine), African States (Ethiopia, Guinea, Kenya and Uganda), and other regions and countries (e.g. Democratic People's Republic of Korea, Peru and State of Palestine).

76. The BR2 includes detailed information on the financial support provided through multilateral channels, and bilateral and regional channels in 2013 and 2014. More specifically, Poland contributed through multilateral channels, as reported in its BR2 and in CTF table 7(a), USD 2.99 and 2.90 million for 2013 and 2014, respectively. These contributions were made to specialized multilateral climate change funds, such as the Green Climate Fund and other United Nations bodies. The BR2 and CTF table 7(b) also include detailed information on the total financial support provided though bilateral channels (USD 0.34 and 1.98 million) in 2013 and 2014, respectively. Table 5 includes some of the information reported by Poland on its provision of financial support.

Table 5
Summary of information on provision of financial support in 2013–2014 by Poland
(Millions of United States dollars)

	Years of disbursement	
Allocation channel of public financial support	*2013*	*2014*
Official development assistance[a]	487.12	451.87
Climate-specific contributions through multilateral channels, including:	2.99	2.90
Green Climate Fund	–	0.11
United Nations bodies	1.34	2.79
Other	1.65	–

Allocation channel of public financial support	*Years of disbursement*	
	2013	*2014*
Climate-specific contributions through bilateral, regional and other channels	0.34	1.98

[a] *Source*: Query Wizard for International Development Statistics, available at<http://stats.oecd.org/qwids/>.

77. The BR2 provides information on the types of support provided. In terms of the focus of public financial support, as reported in CTF table 7 for 2013, the shares of total public financial support allocated for adaptation and cross-cutting projects corresponding to these channels were 1.5 and 98.5 per cent, respectively. 89.7 per cent of the total public financial support was allocated through multilateral channels and 10.3 per cent of it was through bilateral channels. In 2014, the shares of total public financial support allocated for mitigation, adaptation and cross-cutting projects corresponding to these channels were 7.3, 4.2 and 88.5 per cent, respectively. 59.4 per cent of the total public financial support was allocated through multilateral channels and 40.6 per cent of it was through bilateral channels.

78. The ERT noted that, in the period 2013–2014, all financial contributions made through multilateral channels were allocated to cross-cutting projects, as reported in CTF table 7(a). In 2013, 14.6 per cent of the financial contributions made through bilateral channels was allocated to adaptation, while the rest was provided to cross-cutting projects across mitigation and adaptation. In 2014, 18.0 per cent was allocated to mitigation, 10.2 per cent to adaptation and 71.7 per cent to cross-cutting projects across mitigation and adaptation, as reported in CTF table 7(b).

79. CTF tables 7(a) and 7(b) include information on the types of financial instrument used in the provision of assistance to developing countries, which include only grants.

80. In its BR2, Poland clarified that private finance is related to exports of goods, technologies and services, mostly in the energy, transport and buildings sectors. It also reported on how it promotes the provision of financial support to developing countries from the private sector through public funds, which it sees as pivotal to effectively increasing both mitigation and adaptation efforts in developing countries and EIT countries, by using GreenEvo, a green technology accelerator scheme and market-based tool that serves in the transfer of Polish green technologies. GreenEvo supports the identification of the technological needs of developing countries and EIT countries and the assessment of the capacity of Polish suppliers to meet these needs, and mediates between broker contacts of technological companies and potential foreign customers or partners.

2. Technology development and transfer

81. In its BR2 and CTF table 8, Poland provided information on measures and activities related to technology transfer, access and deployment benefiting developing countries and EIT countries, including information on activities undertaken by the public and private sectors.

82. As mentioned in paragraph 80 above, GreenEvo is used to build relationships between Polish and foreign entrepreneurs operating in the field of environmental protection, on win–win principles. Under this scheme, the Ministry of Environment screens the market for green technologies that are Polish, commercialized and transferable. Companies selected in a competition, with subsequent verification by government and external experts, were entitled to the support offered by GreenEvo, including training and trade missions, where they had an opportunity to meet with potential partners in many developing countries and to experience the reality of foreign markets. On average, 10 to 12

missions were organized every year. Destinations were chosen on the basis of market analyses, prepared yearly.

83. In the course of six editions of the GreenEvo competition, 72 proven Polish green technologies were selected for promotion worldwide. The ERT noted, however, that GreenEvo was suspended by the Government of Poland on 15 December 2015 as a result of a lack of funding.

84. The ERT took note of the information provided in CTF table 8 on recipient countries, target areas, measures and focus sectors of technology transfer programmes. Of the 10 projects included in CTF table 8, 4 projects have been implemented, while 6 projects are in the planning phase. The focus is on mitigation projects, and the activities relate to energy efficiency and renewable energy use, including biomass for energy generation.

3. Capacity-building

85. In its BR2 and CTF table 9, Poland supplied information on how it provided capacity-building support for mitigation, adaptation, technology transfer and environmental education that responds to the existing and emerging needs identified by non-Annex I Parties and EIT Parties, by referencing examples of specific activities to support capacity-building in its CTF table 7(b).

86. Poland also reported that it responded to the existing and emerging capacity-building needs of non-Annex I Parties by following the principles of national ownership, stakeholder participation, country-driven demand, cooperation between donors and across programmes, and impact assessment and monitoring.

87. The BR2 includes information describing a number of individual capacity-building measures and activities carried out during the reporting period. Examples include expert and technical support for: the development of climate-related technical and institutional knowledge in Eastern European States (Armenia, Azerbaijan, Belarus, Republic of Moldova and Ukraine); awareness-raising activities in waste management and environment protection in Ethiopia, Peru, the Republic of Moldova and Uganda; and the promotion of renewable energy sources and innovative technologies to improve energy efficiency in Ukraine.

III. Conclusions

88. The ERT conducted a technical review of the information reported in the BR2 and CTF tables of Poland in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the reported information is mostly 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 Poland in achieving its target; and the Party's provision of support to developing country Parties.

89. Poland's total GHG emissions excluding LULUCF related to its quantified economy-wide emission reduction target were estimated to be 16.7 per cent below its 1990 level, whereas total GHG emissions including LULUCF were 20.2 per cent below its 1990 level for 2013. The emission decrease was driven by the economic decline in the late 1980s following the transition to a market-based economy, and the subsequent decoupling of economic growth from GHG emissions stemming from the restructuring and modernization of the economy.

90. Under the Convention, Poland is committed to contributing to the achievement of the joint EU quantified economy-wide target of a 20 per cent reduction in emissions below

the 1990 level by 2020. The target covers all sectors and the gases CO_2, CH_4, N_2O, HFCs, PFCs and SF_6, expressed using GWP values from the AR4. Emissions and removals from the LULUCF sector are not included in the quantified economy-wide emission reduction target under the Convention and Poland does not plan to make use of market-based mechanisms to achieve the target, although companies can use such mechanisms to fulfil their requirements under the EU ETS.

91. Under the ESD, Poland has a target to limit the emission growth to 14 per cent above the 2005 level by 2020. National emission targets under the ESD for 2020 have been translated into binding quantified AEAs for the period 2013–2020. For Poland, the AEAs reflecting its national emission target for non-ETS sectors change linearly from 193,643 kt CO_2 eq in 2013 to 202,342 kt CO_2 eq in 2020.

92. Poland's main policy framework relating to energy and climate change is the "Energy Policy of Poland until 2030" adopted in 2009. Key legislation supporting Poland's climate change goals includes the Energy Efficiency Act of 2011, the Renewable Energy Sources Act of 2015 and the National Transport Policy for 2006–2025. The mitigation actions with the most significant mitigation impact are the implementation of the EU ETS in Poland and the actions included in the National Energy Efficiency Action Plan for Poland 2014.

93. For 2013, Poland reported in CTF table 4 total GHG emissions excluding LULUCF at 394,891.52 kt CO_2 eq. Poland reported that it is not currently using units from market-based mechanisms to achieve its target. The ERT noted that, on the basis of the reported information, Poland is making progress towards its emission reduction target by implementing mitigation actions that deliver emission reductions (see para. 29 above). The ERT further noted that its ability to technically assess Poland's progress towards the target could be enhanced if Poland provided further information on how it estimated the effect of its PaMs (e.g. starting year of implementation, estimated impact, synergies and overlaps) and the emission projections up to 2020 (e.g. description of the models/approaches used and description of changes in methodologies) (see paras. 21–23, 47 and 49–52 above).

94. The GHG emission projections provided by Poland in its BR2 include those for the WEM scenario. Under this scenario, emissions are projected to be 18.5 per cent and 24.3 per cent below the 1990 level in 2020 and 2030, respectively. On the basis of this information, the ERT concluded that Poland will continue contributing to the achievement of the EU target under the Convention (see para. 13 above). On the basis of the reported additional information that emissions from non-ETS sectors are estimated to reach about 189,000 kt CO_2 eq by 2020, which is an estimated 7 per cent below the 2020 ESD target for Poland (see para. 16 above), the ERT concluded that Poland expects to meet its target for non-ETS sectors.

95. Poland continues to allocate climate financing in line with its Multiannual Development Cooperation Programme for 2012–2015 in order to assist developing country Parties and EIT Parties to implement the Convention. Its climate-specific public financial support in 2013 and 2014 totalled USD 3.33 and 4.88 million per year, respectively. For these years, Poland's support provided for cross-cutting projects across mitigation and adaptation was higher than support provided for stand-alone mitigation and adaptation actions. The highest level of financial support provided for mitigation actions went to projects in the energy, transport and building sectors.

96. Poland reported on GreenEvo, a green technology accelerator scheme and market-based tool, which was used for transferring Polish green technologies and for supporting the identification of the technological needs of developing countries and EIT countries. Poland also reported that it responded to the existing and emerging capacity-building needs of non-Annex I Parties by, for example, by providing expert and technical support for: the

development of climate-related technical and institutional knowledge; awareness-raising activities in waste management and environment protection; and the promotion of renewable energy sources and innovative technologies to improve energy efficiency.

97. In the course of the review, the ERT formulated the following recommendations for Poland to improve its adherence to the UNFCCC reporting guidelines on BRs in its next BR:[9]

(a) Improve the completeness of its reporting by providing separate emission projections related to fuel sold to ships and aircraft engaged in international transport (see para. 44 above);

(b) Improve the transparency of its reporting by:

(i) Providing the required information in CTF tables 2(a)–(f) consistent with the information on the joint EU target, as communicated to the secretariat and contained in document FCCC/SB/2011/INF.1/Rev.1 (see para. 12 above);

(ii) Organizing the reporting of mitigation actions by gas (see para. 19 above);

(iii) Reporting those mitigation actions that contribute towards achieving the target (see para. 21 above);

(iv) Providing information on the starting year and impact of all mitigation actions in CTF table 3 (see para. 22 above);

(v) Providing information reflecting the joint EU target (see para. 38 above).

[9] The recommendations are given in full in the relevant chapters of this report.

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/POL. Report of the technical review of the sixth national communication of Poland. Available at <http://unfccc.int/resource/docs/2015/idr/pol06.pdf>.

FCCC/TRR.1/POL. Report of the technical review of the first biennial report of Poland. Available at <http://unfccc.int/resource/docs/2015/trr/pol01.pdf>.

2015 greenhouse gas inventory submission of Poland. Available at <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8812.php>.

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 the first biennial report of Poland. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/pol_2014_v2.0.pdf>.

Second biennial report of Poland. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/br2_pol_en.pdf>.

Common tabular format tables of the second biennial report of Poland. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/copy_of_pol_2016_v1_0_resubmission.pdf>.

B. Additional information used during the review

Responses to questions during the review were received from Ms. Monika Bejnar-Bejnarowicz (Ministry of Environment), including additional material and the following documents[1] provided by Poland:

European Environment Agency. 2015. *Trends and Projections in Europe 2015: Tracking Progress Towards Europe's Climate and Energy Targets.* Available at <http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2015>.

Ministry of Economy of Poland. 2014. *National Energy Efficiency Action Plan for Poland 2014.* Available at <https://ec.europa.eu/energy/sites/ener/files/documents/NEEAP_Poland_ENG_2014_ENER-2014-1003-0-0-EN-TRA-0.pdf>

[1] Reproduced as received from the Party.