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REVIEW PRACTICE GUIDANCE



Assessing Progress by Developed Country Parties Towards their Emission Reduction Targets

Background paper for the 4th lead reviewers meeting, 6 and 7 March 2017, Bonn, Germany

Assessing progress by developed country Parties towards their emission reduction targets

Contents

I.	Bac	ekground			
II.	Pur	ırpose			
III.	Rev	view of information provided in the second biennial reports on progress to			
	targ	get			
	A.	Reporting requirements relating to progress to target			
	B.	Assessment of progress to target based on the UNFCCC reporting			
		guidelines on BRs			
	C.	Overview of the review recommendations on progress to target			
	D.	Reporting issues related to mitigation actions			
	E.	Reporting issues related to the use of units from market-based mechanisms			
	F.	Reporting issues related to the use of units from land use, land-use change			
		and forestry			
	G.	Cross-cutting issue: Consistency between biennial reports and common			
		tabular format tables			
	H.	Cross-cutting issue: Use of notation keys			
IV.	Ass	sessing the progress to target in future biennial reports			
	A.	Approaches to assessment of the progress to target			
	B.	Assessing the progress to target by the European Union and its member			
		States			
	C.	Assessing the progress to target when the 2020 target is already reached			
X					
_		fied economy-wide emission reduction targets, associated assumptions, ons and accounting			

Acronyms and abbreviations

AEA assigned emission allowances

Annex I Parties Parties included in Annex I to the Convention

BRs biennial reports first biennial reports BR1s second biennial reports BR2s third biennial reports BR3s fourth biennial reports BR4s BR5s fifth biennial reports BR6s sixth biennial reports **CTF** common tabular format COP Conference of the Parties

CO₂ carbon dioxide
ERTs expert review teams
ESD effort-sharing decision
EU European Union

EU ETS European Union Emissions Trading System

GHG greenhouse gas

LULUCF land use, land-use change and forestry

MBMs market-based mechanisms

NA not applicable

NC national communication

NE not estimated

non-Annex I Parties Parties not included in Annex I to the Convention

PaMs policies and measures

QERTs quantified emission reduction targets
RPG Draft Review Practice Guidance 2017

TRR technical review report

TRR2s second technical review reports
TRR3s third technical review reports
TRR4s fourth technical review reports
TRR5s fifth technical review reports
TRR6s sixth technical review reports

UNFCCC United Nations Framework Convention on Climate Change

UNFCCC reporting

guidelines on BRs "UNFCCC biennial reporting guidelines for developed

country Parties"

I. Background

- 1. The COP, by decision 1/CP.16, decided that developed country Parties should, building on existing reporting and review guidelines, processes and experiences, enhance the reporting in their NCs and submit BRs, which outline their progress made in achieving emission reductions and provide information on their provision of financial, technology and capacity-building support to non-Annex I Parties.
- 2. The COP, by decision 23/CP.19, adopted the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention". The technical review of the BRs is the first step in the international assessment and review process. The purpose of the technical review of the BRs and NCs of Annex I Parties is to ensure that the requirements of the reporting guidelines have been fulfilled, to promote consistency among Parties' reports, to help Parties to improve their reporting, to examine Parties' progress in achieving their targets and to ensure that the COP has reliable information on the implementation of Parties' commitments under the Convention.

II. Purpose

3. Building on the experience of the reporting and review of the BR1s and BR2s of developed country Parties and the 2017 RPG,¹ this background paper provides guidance to ERTs on the assessment of the progress to target and discusses the approaches used to review information reported on the progress made in the BR2s with respect to the contribution of mitigation actions, LULUCF and units from MBMs to achieving the target.² This paper also provides the insights on how the assessment of progress by ERTs should evolve in future review cycles before 2020 and beyond. Relevant examples from the TRR2s are presented throughout the paper in order to enhance the ERTs understanding of the issues and proposed approaches to resolve them.

III. Review of information provided in the second biennial reports on progress to target

A. Reporting requirements relating to progress to target

- 4. Chapter IV of the UNFCCC reporting guidelines on BRs focuses on the progress made by Parties in achieving their QERTs and requests Parties to discuss their progress in achieving their targets, highlighting in particular the relevant mitigation actions and the contribution of the MBMs and LULUCF.
- 5. Assessment of progress is linked to the conditions and assumptions associated with the QERTs defined in chapter III of the guidelines. The UNFCCC reporting guidelines on BRs stipulate in paragraph 5(e) of chapter III that: "The description of the Party's economy-wide emission reduction target shall include the following information, taking into consideration any relevant decisions of the Conference of the Parties (COP): ...(e) Use of international market-based mechanisms in achieving its emission reduction target, taking into consideration any relevant decisions adopted by the COP, including a description of each source of international units and/or allowances from market based mechanisms and the possible scale of the

¹ http://unfccc.int/national_reports/biennial_reports_and_iar/items/10059.php>.

Detailed information on the 2020 targets by developed country Parties is provided in document FCCC/SBSTA/2014/INF.6.

contributions of each. Information on the scale of contribution of MBMs is to be presented in CTF tables 2(e)I and 2(e)II, as applicable. "

- 6. Paragraph 6 of the UNFCCC reporting guidelines on BRs stipulates that: "Each Annex I Party shall provide information on its mitigation actions, including on the policies and measures it has implemented or plans to implement since its last national communication or biennial report to achieve its economy-wide emission reduction target. To the extent appropriate, Parties shall organize the reporting of mitigation actions by sector (energy, industrial processes and product use, agriculture, LULUCF, waste and other sectors) and by gas (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride)."
- 7. In this respect, Parties are also required to complete CTF table 3 which requires the following information: name of mitigation action, sector(s) affected, GHG(s) affected, objective and/ or activity affected, type of instrument, status of implementation, brief description, start year of implementation, implementing entity or entities, estimate of mitigation impact (not cumulative, in kt CO₂ eq).
- 8. The UNFCCC reporting guidelines on BRs further stipulate in paragraph 9 of chapter IV that: "For the base year, information reported on the emission reduction target shall include the following: (b) Emissions and/or removals from the LULUCF sector based on the accounting approach applied taking into consideration any relevant decisions of the COP and the activities and/or lands that will be accounted for". Information on LULUCF is to be presented in CTF tables 4, 4(a)I and 4(a)II, and this information needs to be consistent between the three tables and between the BR and the CTF tables.
- 9. Finally, paragraph 10 of chapter IV stipulates that: "For each reported year, information reported on progress made towards the emission reduction targets shall include, in addition to the information noted in paragraph 9(a–c) above, information on the use of units from market-based mechanisms". Information on the use of units from MBMs is to be presented in CTF tables 4 and 4(b), and this information needs to be consistent between the two tables as well as between the BR and CTF tables. All of these reporting requirements mentioned above are mandatory (i.e. "shall" reporting requirements).

B. Assessment of progress to target based on the UNFCCC reporting guidelines on BRs

10. Developed country Parties have three main "means" to reach the 2020 QERTs. These are the implementation of mitigation actions, the use of MBMs and accounting for the contribution of LULUCF. All developed country Parties are required to implement mitigation actions while with regard to the use of MBMs and accounting for emissions from LULUCF, Parties could define their conditions when they submitted their 2020 QERTs in 2010. The essence of the accounting approach is presented in figure 1 below.

Base year emissions

Target year emissions

PaMs
MBMs
MBMs
LULUCF
Add. Measures
LULUCF

Figure 1

Accounting approach towards achieving the 2020 quantified emission reduction target

Abbreviations: LULUCF = land use, land-use change and forestry, MBMs = market-based mechanisms, PaMs = policies and measures.

1. Accounting for market-based mechanisms

11. With regard to the MBMs, currently the only existing mechanisms are those defined under the Kyoto Protocol. Thus the type of units that will be used by Parties to reach their Convention target will be the same as those used under the Kyoto Protocol. The difference is that Parties that have targets under both the Kyoto Protocol and the Convention do not necessarily apply the same rules with regard to the Convention target and the Kyoto Protocol target. For example, the EU will apply the Kyoto Protocol rules to the units under the Kyoto Protocol, while with regard to the Convention it has internally established its own qualitative and quantitative criteria, which determine which units can be accounted for.

2. Accounting for land use, land-use change and forestry

- 12. There are two approaches used by Parties to account for LULUCF in the targets: land-based and activity-based approaches. A land-based approach in essence reflects GHG emissions from LULUCF as reported in the annual GHG inventory thus Parties that selected a land-based approach need to ensure that the information provided in CTF table 4 is the same as in CTF table 1 (see example 8 below). However, under the Convention there are no agreed accounting rules defining how these emissions and removals could contribute to the target. Among the nine Parties that included LULUCF in their targets,³ the United States of America and Liechtenstein have selected a land-based approach.
- 13. An activity based-approach is based on an effort to reflect only those emissions and removals that are linked to direct human-induced activities. Accounting was mandatory for some activities under Article 3, paragraph 3, of the Kyoto Protocol and voluntary for activities under Article 3, paragraph 4, of the Kyoto Protocol for the first commitment period under the Kyoko Protocol. Afforestation, reforestation and deforestation and forest management for the second commitment period of the Kyoto Protocol are mandatory. Other activities (such as cropland management, grazing land management, wetland, drainage and rewetting) can be accounted on a voluntary basis, but have to be accounted continuously in the future, once a decision to include these activities has been made.
- 14. Iceland, Japan, New Zealand, Norway and Switzerland selected the activity-based approach to report on emissions and removals from LULUCF. New Zealand includes emissions and removals from afforestation, reforestation and deforestation; and Switzerland uses the rules

³ Australia, Canada, Iceland, Japan, Liechtenstein, New Zealand, Norway, Switzerland and the United States of America included LULUCF in their 2020 targets.

of the Kyoto Protocol for its target under the Convention. The Parties that choose an activity-based approach in accordance with Kyoto Protocol rules should complete CTF table 4(a)II.

15. Australia also uses an activity-based approach; however, it uses the Kyoto Protocol classification system for reporting estimates from the LULUCF sector, where emission estimates in the reporting period may be compared with estimates in the base year, which is 2000 for Australia. Canada has yet to develop an approach for accounting for its LULUCF emissions (see example 21 below).

C. Overview of the review recommendations on progress to target

16. In the TRR2s a majority of the recommendations are linked to the information reported on the progress to target. The reporting and review on the progress to target have proven the most challenging for Parties and ERTs. ⁴ Table 1 below provides an overview of the recommendations received by Parties in the TRR2s with regard to their reporting on mitigation actions, contribution of LULUCF and MBMs to achieve their QERTs.

Table 1
Recommendations in the second technical review reports on mitigation actions and contribution of units from land use, land-use change and forestry, and market-based mechanisms to achieving progress to the 2020 targets

	Mitigation actions	Contribution of land use, land-use change and forestry		Contribution of market-based mechanisms		
Party	Recommendations in TRR2s (para. 6 of BR GL)	Included in the 2020 target	Recommendations in TRR2s (paras. 9 and 10 of BR GL)	Included in the 2020 target	Use of units as per BR2/TRR2 ^a	Recommendations in TRR2s (paras. 5(e), 9 and 10 of BR GL)
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
Australia	Y (1 rec.)	Y	N	Y	NE	N
Austria	N	N	N	\mathbf{Y}^a	N^b	N
Belarus	Y (1 rec.)	N	Y (1 rec.)	N	NA	N
Belgium	N	N	Y (1 rec.)	\mathbf{Y}^a	NE	N
Bulgaria	Y (2 recs.)	N	Y (1 rec.)	\mathbf{Y}^a	NE	Y (3 recs.)
Canada	Y (1 rec.)	Y	Y (1 rec.)	\mathbf{N}^c	NA	Y (1 rec.)
Croatia	Y (1 rec.)	N	N	\mathbf{Y}^a	NE	Y (1 rec.)
Cyprus	Y (3 recs.)	N	Y (1 rec.)	\mathbf{Y}^a	NE	Y (2 recs.)
Czechia	Y (2 recs.)	N	N	\mathbf{Y}^a	N^b	N
Denmark	Y (1 rec.)	N	N	\mathbf{Y}^a	N^b	N
Estonia	Y (1 rec.)	N	N	\mathbf{Y}^a	NE	N
European Union	Y (1 rec.)	N	Y (1 rec.)	Y	Y	Y (1 rec.)
Finland	Y (1 rec.)	N	N	\mathbf{Y}^a	NE	N
France	Y (1 rec.)	N	Y (1 rec.)	\mathbf{Y}^a	N^b	Y (1 rec.)

Detailed information on the share of the recommendations on the progress to target in all the recommendations provided during the review of the BR2s is presented in the background paper titled "2017 update of the analysis of the assessment of completeness and transparency of information reported in biennial reports". Available at

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http://unfccc.int/files/national_reports/annex_i_parties/application/pdf/backgroundpaperanalysismostlypartially_published.pdf.

	Mitigation actions	Contribution of land use, land-use change and forestry		Contribution of market-based mechanisms		
Party	Recommendations in TRR2s (para. 6 of BR GL)	Included in the 2020 target	Recommendations in TRR2s (paras. 9 and 10 of BR GL)	Included in the 2020 target	Use of units as per BR2/TRR2 ^a	Recommendations in TRR2s (paras. 5(e), 9 and 10 of BR GL)
Germany	Y (1 rec.)	N	Y (1 rec.)	\mathbf{Y}^a	N^b	Y (1 rec.)
Greece	Y (1 rec.)	N	N	\mathbf{Y}^a	N^b	N
Hungary	Y (4 recs.)	N	Y (1 rec.)	\mathbf{Y}^a	NE	Y (1 rec.)
Iceland	Y (2 recs.)	Y	Y (2 recs.)	Y	NE	Y (1 rec.)
Ireland	Y (2 recs.)	N	Y (1 rec.)	\mathbf{Y}^a	NE	Y (2 recs.)
Italy	Y (1 rec.)	N	N	\mathbf{Y}^a	NE	N
Japan	Y (2 recs.)	Y	N	Y	Y	N
Kazakhstan	Y (3 recs.)	N	Y (1 rec.)	N	NA	Y (2 recs.)
Latvia	Y (2 recs.)	N	N	\mathbf{Y}^a	NE	N
Liechtenstein	Y (4 recs.)	Y	N	Y	Y	N
Lithuania	Y (1 rec.)	N	N	\mathbf{Y}^a	NE	Y (2 recs.)
Luxembourg	Y (2 recs.)	N	N	\mathbf{Y}^a	Y	N
Malta	N	N	Y	\mathbf{Y}^a	NE	Y (2 recs.)
Monaco	Y (2 recs.)	N	Y (2 recs.)	Y	Y	Y
Netherlands	Y (1 rec.)	N	Y	\mathbf{Y}^a	N^b	N
New Zealand	Y (1 rec.)	Y	Y	Y	NE	N
Norway	Y (2 recs.)	Y	N	Y	Y	N
Poland	Y (3 recs.)	N	N	\mathbf{Y}^a	NE	N
Portugal	Y (1 rec.)	N	N	\mathbf{Y}^a	NE	Y (1 rec.)
Romania	Y (1 rec.)	N	Y	\mathbf{Y}^a	N^b	Y (1 rec.)
Russian Federation	Y (1 rec.)	N	N	N	NA	Y (1 rec.)
Slovakia	Y (1 rec.)	N	N	\mathbf{Y}^{a}	\mathbb{N}^b	N
Slovenia	Y (1 rec.)	N	Y	\mathbf{Y}^a	N^b	Y (2 recs.)
Spain	Y (1 rec.)	N	Y	\mathbf{Y}^a	NE	Y
Sweden	Y (2 recs.)	N	N	\mathbf{Y}^a	N^b	N
Switzerland	Y (2 recs.)	Y	Y (2 recs.)	Y	NE	Y (1 rec.)
Turkey	N	No target	NA	No target	No target	NA
Ukraine	BR2 not submitted	N	BR2 not submitted	Y	Y	BR2 not submitted
United Kingdom of Great Britain and Northern Ireland	Y (2 recs.)	N	Y	Y^a	NE	Y (1 rec.)
United States	Y (2 recs.)	Y	N	N	NA	N

Notes: The EU and many of its member States, such as Belgium, Estonia, Finland, Hungary, Latvia, Poland, Portugal and Spain, were not in a position to report information on the use of MBMs under the ESD and stated in their BR2s: "As the compliance assessment for the first year (2013) under the ESD will

only take place in 2016, any potential use of units for 2013 will only take place in 2016. Thus, for the year 2013 no data are currently available to report on".

Abbreviations: BR = biennial report, BR GL = "UNFCCC biennial reporting guidelines for developed country Parties", BR2 = second biennial report, ESD = effort-sharing decision, EU = European Union, MBMs = market-based mechanisms, N = no, NA = not applicable, NE = not estimated (due to absence of information or to be decided in future), rec. = recommendation, TRR2 = second technical review report, Y = yes.

- ^a All EU member States contribute to achieving the joint EU-wide emission reduction target. The EU includes the use of units from MBMs in its target, thus each EU member State can make use of such units as it deems necessary and in accordance with the relevant EU legislation.
- ^b Parties that indicated that they do not plan to make use of the units from MBMs. (Eleven EU member States, such as Austria, Czechia, Denmark, France, Germany, Greece, Netherlands, Romania, Slovakia, Slovenia and Sweden, reported in their BR2s that, at least as emissions currently stand, they did not plan to make use of units from MBMs.)
- ^c Canada does not assume or provide for the significant use of the Kyoto Protocol mechanisms for its 2020 target. However, in its BR2, Canada reported that it may consider using international mechanisms to meet its QERT, while there are no decisions taken on potential approaches at this time.
- 17. An analysis of the recommendations provided on mitigation actions demonstrates that a majority of the recommendations relate to the lack of estimated effects or the relevant explanations as to why their effects were not quantified (see para. 20 below).
- 18. With regard to the contribution of LULUCF and the use of units from MBMs, the recommendations provided were overwhelmingly on transparency of reporting. Specifically, on the use of MBMs, the recommendations were primarily linked to the lack of information on the use of MBMs, the lack or erroneous reporting of information or notation keys in the CTF tables (see example 1 below), the lack of relevant explanations, and to inconsistencies between the CTF tables and the BR text (see paras 24-Error! Reference source not found. below).

Example 1

TRR2 of Germany (transparent reporting in common tabular format table 4)

"In order to increase transparency, the ERT recommends that Germany fill in the relevant parts of CTF table 4 in accordance with the assumptions related to the target, for example by using the notation key 'NA' (not applicable) if the requested information is not applicable, such as for LULUCF or units from market-based mechanisms, or the value '0' (zero) in cases where units from market-based mechanisms are not used in a particular year for the progress made towards the target."

19. It is to be noted that in many cases Parties received recommendations related to the contribution of LULUCF or the use of MBMs, even though these Parties did not elect to account for LULUCF (see example 2 below) or the use of MBMs in their target.

Example 2

TRR2 of Belgium (reporting on land use, land-use change and forestry)

"In CTF table 4 on reporting on progress, the numerical value of the contribution from the LULUCF sector is reported for 2010–2012, but it is not provided for the base year and is reported as 'NA' (not applicable) for 2013. The BR2 provides the explanation that, although the LULUCF sector is not included in the Convention target, its contribution is reported in CTF table 4 for 2010–2012 for transparency purposes. The ERT, however, notes that the information on the contribution of LULUCF reported by Belgium in CTF table 4 is not fully transparent because it is not consistent with the assumptions related to the EU target, which does not include the contribution from LULUCF. The ERT recommends that, in its next BR submission, Belgium report the information related to the contribution of LULUCF in CTF table 4 as 'NA' for all relevant years in accordance with the assumptions related to the EU target, in order to increase the transparency of its reporting."

D. Reporting issues related to the mitigation actions

- 20. In the BR2s, the most frequently raised recommendations were in relation to the following issues:
- (a) The majority of the Parties were not able to provide information on the estimated impacts of many mitigation actions. In most of such cases, Parties also failed to provide relevant explanations as to why these impacts were not quantified (see examples 3 and 4 below);

Example 3

Second technical review report of Australia (impacts of mitigation actions)

"However, in CTF table 3, only one of the listed mitigation actions was quantified. In response to a question raised by the ERT during the review, Australia stated that some of the mitigation actions have not been separately quantified owing to the complexity of the work required. In addition, Australia explained that future policies, such as the National Energy Productivity Plan (NEPP), will have significant impact on emission reductions and, after implementation, their impacts will be modelled in the future emission projections. To increase transparency, the ERT recommends that Australia either provide the mitigation impacts of its mitigation actions in CTF table 3, or provide an explanation as to why the mitigation impacts are not estimated in the next BR."

Example 4

TRR2 of Hungary (impacts of mitigation actions)

"The ERT also noted that throughout the BR is not clear which are the key mitigation actions with the higher mitigation impacts. Furthermore, the ERT noted that CTF table 3 does not include an estimation of the mitigation impact for most of the reported individual mitigation actions. Hungary did not provide an explanation as to why these estimates were not provided in CTF table 3 of the BR2, although the BR1 had included quantification of the impacts for most of the mitigation actions reported. The ERT further noted that other information in CTF table 3 was not fully provided, such as the 'Start year of implementation' and 'Type of instrument', which are not available for some of the mitigation actions. In addition, Hungary did not provide an indication of the reason for this missing information. To improve the completeness of reporting, the ERT recommends that Hungary, in its next BR, include all the required information in CTF table 3, in particular on estimates of the impacts of its mitigation actions, or if Hungary is not able to provide such estimates and information, it should provide relevant explanations as

to why the quantification of those impacts was not possible and the reasons why the required information was not provided."

(b) Several Parties failed to provide the descriptive information on PaMs required in CTF table 3, (e.g., start date of implementation, implementing entity, etc.). In some cases, Parties also did not provide information on PaMs divided by sector and by gas, and/or their planned PaMs (see example 5 below);

Example 5

TRR2 of Liechtenstein (missing planned policies and measures)

"While the BR2 provides some information on the planned measures required by the UNFCCC reporting guidelines on BRs in the chapter on projections, CTF table 3 does not include the planned measures, such as environmental levies, direct payments for agriculture and others included in the 'with additional measures' (WAM) scenario. To improve the transparency of its reporting, the ERT recommends that Liechtenstein list the planned measures in CTF table 3 alongside the implemented and adopted measures, and include the corresponding descriptions as well as their emission estimates, if available."

- (c) Inconsistencies between CTF table 3 and the BR2 as well as the erroneous use of notation keys in CTF table 3 were additional issues noted by ERTs (see paras. 31-35 below);
- (d) A number of Parties, which do not include LULUCF in their target, reported on mitigation actions in the LULUCF sector often without providing the relevant caveats. The UNFCCC reporting guidelines on BRs stipulate that Parties need to report on mitigations actions they implement to achieve their target.

Suggested approach to reviewing information on mitigation actions

- 21. To address the most frequent issues raised in the TRR2s, it is suggested to consult the RPG 2017⁵, but in case there are no solutions provided in the 2017 RPG, the experts could follow the suggested approaches provided below.
- 22. With regard to reporting the effects of PaMs in the LULUCF sector when LULUCF is not accounted for in the Party's target, the ERT should recommend to the Party that it provide a footnote to CTF table 3 clearly stating that these effects do not contribute towards the Party's progress to target (see example 6 below).

Example 6

TRR2 of Czechia

"As an EU member State, the Czech Republic excludes the use of LULUCF to reach its Convention target for 2020. However, the ERT notes that there are LULUCF actions listed in CTF table 3, which should only reflect information on mitigation actions and their effects related to the Party's progress in achieving their quantified economy-wide emission reduction target. Therefore, to increase transparency, the ERT recommends that the Czech Republic clearly indicate, for example in a footnote in CTF table 3, that mitigation actions reported in the LULUCF sector are not part of actions to achieve its target in its next BR."

23. Lastly, the ERT should also reflect in the TRR whether the Party consistently presented information in the BR and CTF table 3. In cases of missing information or reporting "NE" in CTF table 3, and of inconsistent reporting, the relevant recommendations need to be provided. The ERT should recommend that the Party clearly explain any missing information and

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⁵ The approach to the issue included in paragraphs 19(a) is discussed in the 2017 RPG.

inconsistencies and justify the use of "NE" and provide any relevant clarifications (see paras. 31-35).

E. Reporting issues related to the use of units from market-based mechanisms

24. Most developed country Parties (such as Australia, EU, Iceland, Japan, Liechtenstein, Monaco, New Zealand, Norway, Switzerland and Ukraine) retain the right to use units from MBMs to achieve their 2020 targets. Canada has not yet reached a decision on this issue (see example 7 below). Belarus, Kazakhstan, the Russian Federation and the United States chose not to use the units from MBMs (see the annex below for more detailed information on the 2020 targets and associated conditions and assumptions).

Example 7

TRR2 of Canada

"The ERT reiterates the recommendation in the previous review report that Canada improve the completeness of its reporting by including, in its next BR, estimates of the contribution from LULUCF and the use of market-based mechanisms. If the information required to complete the CTF tables is not available, for example due to a pending decision about the use of market-based mechanisms or ongoing work on methodological improvements to the reporting on the LULUCF sector, in order to increase transparency the ERT recommends that Canada provide transparent explanations not only in the BR but also in the CTF tables using a custom footnote or notation key."

25. Among the Parties that chose to use MBMs, only Norway and Liechtenstein reported on the amount of units from MBMs in the CTF tables of the BR2 (Norway up to 2012 and Liechtenstein up to 2013 (see example 8 below)). Australia, Japan and New Zealand reported "0" for their use of MBMs for 2013 and 2014; while the EU, Iceland and Switzerland left CTF table 4 blank. This is largely due to the fact that Parties want to first assess whether they will be able to reach their targets through the implementation of mitigation actions alone. It is likely that Parties will provide more information on the use of units from MBMs in future submissions as we move closer to the target year of 2020.

Example 8

Common tabular format table 4 as reported by Liechtenstein in its second biennial review report

Year	Emissions excluding LULUCF (kt CO ₂ eq)	Contribution from LULUCF (kt CO ₂ eq)	Emissions including contribution from LULUCF (kt CO ₂ eq)	Use of units from market-based mechanisms (kt CO ₂ eq)
1990	229.39	4.58	233.97	NA
2010	233.71	14.81	248.52	18.50
2011	220.61	11.55	232.16	4.99
2012	230.31	11.75	242.06	14.17
2013	236.53	11.73	248.26	51.71

Sources: Liechtenstein'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.

- 26. In the case of the EU, information on the use of units from MBMs was not reported as data was not available due to the different timetable established internally compared to that under the Convention. The compliance assessment for 2013 and the determination of the potential use of units from MBMs for that year were to take place in 2016, hence no estimates were provided in the BR2.⁶ Eleven EU member States (i.e. Austria, Czechia, Denmark, France, Germany, Greece, Netherlands, Romania, Slovakia, Slovenia and Sweden) reported in their BR2s that currently they do not plan to make use of the units from MBMs.
- 27. With regard to the use of units, the following challenges were encountered during the review of the BR2s:
- (a) Some Parties that include the use of MBMs in their target failed to provide information on the expected scale of contribution from these mechanisms;
- (b) A majority of Parties that include the use of MBMs in their target did not clearly state whether they expect to use them and, if yes, under which conditions, if any;
- (c) A majority of Parties (mostly EU member States) that intend to use MBMs were not able to provide information in CTF tables 4 and 4(b) on the respective use of units for the reporting period. Parties either left the relevant cells in the tables blank or reverted to the use of notation keys, a practice which was, however, highly inconsistent from one Party to the next (see example 16 below);
- (d) In some cases where Parties were not able to provide the required information, they also failed to provide relevant explanations as to why this information had not been provided.

Suggested approach to reviewing information on market-based mechanisms

- 28. The suggested approaches to resolve most of the issues listed above are described in the 2017 RPG and further explained below as a step-by-step approach for ERTs:
- (a) The first step is to review the description of a Party's target reported in its BR and CTF tables 2(e)I and 2 (e)II. If a Party did not clearly state in the description of its target whether the use of MBMs is included, the ERT should provide a relevant recommendation;
- (b) The second step is to assess whether the Party has provided relevant information in the BR and CTF tables 2(e)I and 2 (e)II on the possible scale of contribution of different MBM units towards its target, if not, then the ERT will need to provide a second recommendation to this effect;
- (c) The third step is to assess whether the Parties that include MBMs in their target definition actually plan on using those and under which conditions, if any. If a Party that includes MBMs in its target did not clearly state whether it plans to make use of them, the ERT should provide a relevant recommendation. The inclusion of MBMs in the target does not automatically mean that a Party will make use of units from MBMs, it rather signifies that a Party retains the right to use such units if it considers it necessary;
- (d) The fourth step is to check the BRs and CTF tables 4 and 4(b) and ensure that the relevant estimates are provided on the progress to target. If a Party has used units from MBMs but did not complete the CTF tables, then the ERT should recommend that the Party complete the CTF tables (see example 9 below) or, if not feasible, that it at least provide the relevant explanations in the BR and in a footnote to the CTF tables.

⁶ For more information on the 2020 EU target see the background paper titled "Biennial reports and reporting on the use of market-based mechanisms by the European Union and its member States". Available at http://unfccc.int/files/adaptation/application/pdf/backgroundpaper_on_market-based_mechanisms_published.pdf.

Example 9

TRR2 of Switzerland

"The BR2 and CTF table 4(b) do not include the information on quantity of units from market-based mechanisms under the Convention or other market-based mechanisms as required by the UNFCCC reporting guidelines on BRs. In response to a question raised by the ERT during the review, Switzerland stated that it will account for contributions from the market-based mechanisms at the end of the commitment period and therefore no annual quantity of units was provided. In this regard, the ERT reiterates the recommendation made in the report of the technical review of its BR1 that Switzerland, in its next BR, reports the amount of units from market-based mechanisms on the Swiss state accounts in the national registry at the end of every year as a provisional estimate, to increase the transparency of its reporting."

F. Reporting issues related to the use of units from land use, land-use change and forestry

- 29. Among the nine Parties that account for LULUCF in their target⁷ only some reported complete and transparent information on the contribution of the LULUCF sector. In the BR2s, the most frequent recommendations relating to the contribution of LULUCF touched on the following two issues:
- (a) Parties that do not account for the LULUCF sector in their target in some cases erroneously reported information related to this sector in the relevant CTF tables or failed to clearly note in the BR and the CTF tables that the LULUCF sector is not relevant to the achievement of their target;
- (b) Reporting inconsistencies were observed with regard to the use of notation keys by Parties and to how these inconsistencies were addressed by the ERTs (see examples 10–12 below).

Example 10

TRR2 of Iceland

"The ERT noted that the contribution from LULUCF is counted towards reaching Iceland's target, while the use of market-based mechanisms is kept as an option but not yet estimated. The ERT therefore **recommends that Iceland transparently report on the contribution from LULUCF** as well as on the quantity of units from market-based mechanisms under the Convention or from other market-based mechanisms in CTF tables 4, 4(a)I and 4(b), in its next BR submission. **The ERT noted that Iceland may use notation keys to transparently report in CTF tables 4, 4(a)I and 4(b), provided that these are transparently explained in a footnote or in the main text of the BR."**

"Iceland provided in CTF table 4(a)II information on emissions and removals from the LULUCF sector in relation to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol. The ERT noted that the values reported show an inconsistent calculation of the accounting amounts for forest management and revegetation, and it is not transparently reported how these values relate to the contribution from LULUCF towards Iceland's target. ...

"The ERT recommends that Iceland transparently report on emissions and removals from the LULUCF sector in relation to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol in CTF table 4(a)II. The ERT noted that Iceland may use notation keys to transparently report in CTF table 4(a)II, provided that these are transparently explained in a footnote or in the main text of the BR."

⁷ Australia, Canada, Iceland, Japan, Lichtenstein, New Zealand, Norway, Switzerland and United States.

Example 11

TRR2 of Kazakhstan

"On its use of units from LULUCF activities, Kazakhstan reported in CTF tables 4 and 4(a) that in 2012 and 2013, it did not use any units to offset its total GHG emissions by indicating '0' and 'NA'. In CTF table 4, Kazakhstan reported values for 'Contribution from LULUCF', although it had been stated that Kazakhstan does not include LULUCF in its target. In addition, Kazakhstan left CTF table 4(b) completely blank with no footnotes or notation keys. To increase the transparency of reporting, the ERT recommends that Kazakhstan ensure consistency in its reporting in CTF tables 4, 4(a) and 4(b), by for example indicating 'NA' for contributions from LULUCF and units from market-based mechanisms and by providing explanatory footnotes in its next BR."

Example 12

TRR2 of the European Union

"The EU reported in its BR2 and CTF tables 4, 4(a)I, 4(a)II and 4(b) total emissions excluding LULUCF. This information was provided for the base year and for each reported year such as 2010–2013. The EU did not include any values in the information requested in the UNFCCC reporting guidelines on BRs on the contribution from LULUCF and units from market-based mechanisms under the Convention and other mechanisms. While an explanation for excluding the information on LULUCF was provided in the footnote to table 4, no explanation was provided for not reporting units from market-based mechanisms. The EU reported in its BR2 and in the footnote to table 4 that the values for LULUCF are not reported because this sector is not included under the Convention target."

"In order to increase transparency, the ERT recommends that the EU complete all relevant parts of CTF table 4 in accordance with the assumptions related to the target. This can be done, for example, by using the notation key 'NA' (not applicable) if the requested information is not applicable, such as for LULUCF, or the value '0' (zero) in cases where units from market-based mechanisms are not used in a particular year for the progress towards the target, and by providing explanations in the footnote to the CTF table."

Suggested approach to reviewing information on land use, land-use change and forestry

30. The approach to reviewing information on the contribution of the LULUCF is included in the 2017 RPG.

G. Cross-cutting issue: consistency between the biennial reports and common tabular format tables

31. In addition to the textual information that Parties report in their BRs in relation to their targets, Parties also have to complete the respective CTF tables. During the review of the BR2s, it became apparent that in some cases, the textual information provided by Parties in the BR2s was not consistent with the information provided in the CTF tables on the progress to target (see examples 13 and 14 below).

Example 13

TRR2 of Japan

"In its BR2, Japan presented information on its mitigation actions, grouped by sector and by gas, in line with the structure required by the UNFCCC reporting guidelines on BRs.

However, Japan also provided the information required in CTF table 3 for groups of PaMs per sector rather than for each individual PaM. As a result of this approach, it is difficult to extract the specific objective, type of instrument used and starting year of implementation for each individual PaM. ...

"The ERT recommends that, in its next BR submission, Japan improve the transparency of the information reported by providing in CTF table 3 the required information for each individual PaM while ensuring consistency with the textual information included in the BR."

Example 14

TRR2 of Cyprus

"In CTF table 3, Cyprus includes the planned F-gas recovery mitigation action. However, Cyprus does not provide information regarding the description, start year and implementing entity or entities. In response to a question raised by the ERT during the review, Cyprus explained that a description of the F-gas recovery mitigation action is provided in section 5.1.4 of the BR2 and its impact is presented in tables 14 and 18 of the BR2. To increase transparency, the ERT recommends that Cyprus include, in its next BR, consistent information on its mitigation actions in the textual portion of the BR and CTF table 3."

Suggested approach to reviewing consistency between the biennial report and the common tabular format tables

32. In cases where inconsistencies are noted between the information presented in the BR and CTF tables on the progress to target, the ERTs should always provide a recommendation to the Party to ensure consistency in reporting with a view to increasing its transparency. Further information is provided in the 2017 RPG.

H. Cross-cutting issue: use of notation keys

33. The information provided in the CTF tables not only needs to be consistent with the textual information provided in the BRs, the way the information is presented in the CTF tables needs to be consistent among Parties as well. In the BR2s, there were significant inconsistencies observed in how Parties completed the CTF tables, in particular with regards to the use of notation keys. Inconsistencies were also noted in how ERTs assessed the use of the notation keys included in the CTF tables and reflected the issues in the resulting recommendations (see examples 15–17 below).

Example 15

TRR2 of Latvia

"To increase the transparency of reporting, the ERT recommends that, in its next BR, Latvia clearly specify in CTF table 3 all of the information required by the UNFCCC reporting guidelines on BRs, including the corresponding year of the mitigation impact of PaMs, and consistently use the terms to describe the status of implementation of mitigation actions. The transparency of the reporting could also be improved by explaining the use of the notation keys 'NE' and 'IE', including by specifying where the mitigation impact is included if it has not been estimated, and consistently allocating PaMs to the relevant sector, including across multiple sectors, where applicable (e.g. for the EU ETS and the ESD)."

Example 16

TRR2 of the European Union

"In order to increase transparency, the ERT recommends that the EU complete all relevant parts of CTF table 4 in accordance with the assumptions related to the target. This can be done, for example, by using the notation key 'NA' (not applicable) if the requested information is not applicable, such as for LULUCF, or the value '0' (zero) in cases where units from market-based mechanisms are not used in a particular year for the progress towards the target, and by providing explanations in the footnote to the CTF table."

Example 17

TRR2 of the Russian Federation

"The Russian Federation reported in its BR2 and CTF tables 4, 4(a)I, 4(a)II and 4(b) that it does not plan to make use of market-based mechanisms to achieve its target. In CTF table 4, the notation key 'NO' (not occurring) is used to report the quantity of units from market-based mechanisms. The ERT considers that the transparency of the Party's reporting would be increased by explaining the meaning of the notation key and for example by reporting the notation key 'NA' instead."

Suggested approach to reviewing the use of notation keys

- 34. The use of notation keys is not prescribed in the UNFCCC reporting guidelines on BRs, thus the ERTs in assessing the information reported in the CTF tables should not recommend the use of notation keys. The RPG includes a few examples of how the ERT could capture this issue in the TRRs. The ERT could suggest how notation keys could best be used so that Parties could increase the transparency of their reporting. For example, the ERT could suggest to use:
- (a) The notation key "NA", if a Party does not plan to make use of units from MBMs or from LULUCF under the Convention;
- (b) The notation key "NE", if a Party made use of units from LULUCF or MBMs but for some reason was unable to estimate the amount for a specific year, or if a Party was unable to estimate the effects of a particular mitigation action;
- (c) The value "0" (zero) for the years that no MBM units are used although the Party has declared that it is making use of such units.
- 35. However, where a Party has used notation keys without providing the relevant explanations/clarifications, the ERT should provide a recommendation on transparency.

IV. Assessing the progress to target in future biennial reports

A. Approaches to assessment of the progress to target

- 36. When assessing the progress towards the target, it is important to differentiate between two main questions which are often mixed up in the TRRs:
 - (a) How much a Party has progressed towards meeting its target?
 - (b) How likely is a Party to reach its target, given its progress to date?
- 37. In this context it is important to note that the timelines at which various pieces of information (e.g. use of units from MBMs or GHG inventory data) become available is not always aligned with the timetable for the submission of the BRs. It becomes clear that the ERTs

need to exercise particular caution when assessing the progress to target or the likelihood that a Party will reach its target and that they provide in their assessment all relevant caveats.

38. In this respect, it should also be noted that GHG emissions for 2020 will only become available in 2022, thus too late for inclusion in the BR5s (due by 1 January 2022), which means that the final inventory information on the achievement of the targets for all Annex I Parties will be reported in the BR6s to be submitted by 1 January 2024.

Suggested general approach to assessing the progress to target

- 39. In accordance with the UNFCCC reporting guidelines on BRs, the ERT assessment of a Party's progress towards its emission reduction target has to be based on the estimated mitigation impacts of PaMs (historic and projected by 2020), the level of emissions in a base year or period and reported years, the contribution of LULUCF and the use of units from MBMs (historic years). This information is captured in CTF tables 3 and 4 and in qualitative information complementing the tables in the textual part of the BR.
- 40. Thus to answer the first question, the ERTs can use the **Error! Reference source not found.** presented below, which in essence reflects the information in CTF table 4 to estimate where the Party stands in terms of each emissions in the latest year (X) for which data is available. The ERT can then compare this value to the base reference that the Party is using and also to the Party's target and assess how far the Party has come in terms of reducing its emissions and what is the remaining required effort in the allotted time (see examples 18 and 19 below). As the target year approaches the result of the below equation should ideally be closer to the target year emissions.
- 41. In case of Parties with a linear target such as the EU, the "Emissions relevant to target in year X" can also be compared to the Party's target for that particular year. If a Party has not provided estimates for the different elements of the equation below, then the ERT should note this when providing its assessment on the progress made.

Equation 1 GHG emissions accounting Emissions relevant to target in year X = (Total emissions excluding LULUCF (kt CO₂ eq)) + (Contribution from LULUCF (kt CO₂ eq)) (Quantity of units from MBMs under the Convention (number of units and kt CO₂ eq)) (Quantity of units from other MBMs (number of units and kt CO₂ eq))

Abbreviations: LULUCF = land use, land-use change and forestry, MBMs = market-based mechanisms, X = latest year.

42. In order to answer the second question and provide a forward-looking outlook, the ERTs will need to check additional information provided by Parties such as planned PaMs, the expected effects of PaMs versus the realized effects, the expected contribution of the LULUCF sector and the use of units from MBMs. The ERTs will also need to check the Parties' projected levels of emissions by 2020 under different emission scenarios and the underlying assumptions and conditions (see examples 18 and 19 below).

Example 18

TRR2 of the United States of America

"The ERT noted that the United States is making progress towards its emission reduction target by implementing domestic mitigation actions that are delivering emission reductions and through the contribution of LULUCF. In 2013 the United States' GHG emissions including LULUCF were 5,791,223.73 kt CO₂ eq. This represents an approximate 10.0 per cent reduction below the 2005 level. Despite continued economic growth, annual net emissions have decreased by 1.3 per cent on average since 2005 – a reversal of past trends of annual increases of 1.1 per cent from 1990 to 2005. If the reduction trend continues, it will be sufficient to achieve the United States' 2020 target. However, the ERT noted that, as reported in the Party's national inventory report for 2016, annual GHG emissions have had an increasing trend since 2012 and increased by 1.1 per cent from 2013 to 2014. Based on the results of the projections, the ERT also noted that the Party may face challenges in the achievement of its target under the Convention and would need to further strengthen domestic mitigation actions, including the expected contribution of the so-called 'high' sequestration scenario in relation to LULUCF."

Example 19

TRR2 of Norway

"The ERT noted that Norway is making progress towards its emission reduction target by implementing mitigation actions; however, on the basis of the results of the projections, the ERT also noted that the Party may face challenges in the achievement of its target under the Convention and the Kyoto Protocol, and would need to further strengthen domestic mitigation actions and/or acquire units from market-based mechanisms in the period 2013–2020. In this regard, Norway reported in its BR2 that it is in the process of purchasing approximately 60 million units from market-based mechanisms, which should be delivered in the aforementioned period."

Suggested specific approach to assessing the progress to target in future biennial reports

- 43. Taking into consideration the information on the timeline above, it would be advisable for ERTs in the TRR3s (2018) and TRR4s (2020) to continue the established approach for documenting the progress to target.
- 44. The ERTs could provide factual information on actual GHG emission data, the effects of PaMs and the contribution of LULUCF and MBMs, to the extent possible, based on the available information, and then proceed with either noting that the Party is making the progress towards its target or that the Party is facing challenges (see examples 20 and 21 below; see also TRR template, V11, p.15).

Example 20

TRR2 of Australia

"To assess the progress towards the achievement of the 2020 target, the ERT noted that Australia's emission reduction target under the Convention is to reduce its cumulative GHG emissions by 5.0 per cent below the 2000 level by 2020. As discussed above, in 2013 Australia's annual total GHG emissions including the contribution from LULUCF are 2.0 per cent (549,445.84 kt CO_2 eq) below the base year level. The ERT noted that in 2013 the contribution from LULUCF was 7,522.25 kt CO_2 eq.

"The ERT noted that **Australia is making progress towards its emission reduction target by implementing mitigation actions**. The ERT noted that Australia plans to

include the use of units from market-based mechanisms to estimate its mitigation effort to meet its target."

Example 21

TRR2 of Canada

"The ERT noted that Canada's GHG emissions excluding LULUCF have decreased by a relatively small amount compared with its target. The ERT further noted that Canada's GHG emissions excluding LULUCF have risen considerably since 1990 and have also followed an upward trend in recent years (GHG emissions excluding LULUCF increased by 1.6 per cent in the period 2013–2014). In the limited time remaining until 2020, Canada faces the challenge of putting in place mitigation actions that deliver the emission reductions necessary to make progress towards its target. The ERT noted that Canada's ability to achieve its target will depend on several factors, including: how rapidly its major PaMs are able to achieve results; the contribution of LULUCF quantified using the methodology currently under development; Canada's decision on the use of units from market-based mechanisms; and future changes in the national economy, in particular the oil and gas industry."

- 45. The ERTs should also take note of the 'with measures' and 'with additional measures' projections reported by the Parties and again take note of the projected estimates that suggest that either the Party will achieve its target or that it may face challenges (see TRR template, V11, pp.18 and 19). However, it should be highlighted that already, starting with the BR3s, the projections 'with additional measures' will be increasingly less important as these include measures that are only planned and not adopted or implemented, thus the likelihood that they will be able to significantly contribute to the achievement of the target in such a limited time is rather low.
- 46. In the TRR5s which will reflect actual GHG emissions for 2019, it will be already fairly clear whether Parties will meet the QERTs and through what means. The projected 2020 emission estimates will no longer be relevant. For Parties that seem to still have a long way to go to reach their target, the ERT will need to focus on any information provided in their BRs where these Parties indicate how they plan on bridging the existing gap. For the TRR5s, it would be advisable to revise the template language in order to provide the ERTs with more flexibility in assessing the planned measures and the availability of funds to purchase MBM units to meet the target.
- 47. In the TRR6s, the ERTs will be in a position to clearly state if a Party has reached its target or not and with what means. The focus of the review will be on the comprehensiveness and transparency of the information provided by Parties, on how they achieved their targets or on what actions they plan on undertaking if they were unable to meet their goals.

Table 2

Review challenges and suggested way forward

Review challenge

How should the ERT assess the progress to target in future BRs?

Suggested approach

BR3s and BR4s:

The ERTs should continue to follow the same approach as in the BR2s and assess the
information reported on LULUCF, the use of MBM units, the implemented and
planned PaMs and take into account projected emission estimates

Review challenge

 The ERTs should present the results of its assessment as follows (see also an extract from the TRR template below):

"The ERT noted that the Party [is making progress] [faces challenges in making progress] towards its emission reduction target by [implementing mitigation actions that deliver [significant][some] emission reductions][and][making use of the units from the market-based mechanisms under the Convention] [and] [through the contribution of LULUCF]. [However,] On the basis of the results of the projections for 2020 under the [WEM] [and WAM] scenario[s], the ERT noted that [Party] may [achieve [or overachieve] its emission reduction target by 2020.] [face challenges in achieving its target even, if all additional PaMs are implemented by 2020[, including further strengthening of existing PaMs.] [In this regard, [Party] indicated in its BR2 that it plans to [use the units from market-based mechanisms] [introduce new PaMs] in order to achieve its emission reduction target.]"

BR5s:

• The ERTs should focus on assessing the information provided by Parties on how they plan to bridge any existing gaps to reaching their emission reduction targets through, for example, the purchase of MBM units

BR6s:

- The ERTs should clearly state if a Party has reached its target or not and with what means;
- The ERTs should focus on the completeness and transparency of the information provided by Parties with regard to the attainment of their targets;
- If a Party has failed to meet its target, the ERTs will need to focus on assessing the actions that the Party plans on undertaking as a consequence

Abbreviations: BR2s = second biennial reports, BR3s = third biennial reports, BR4s = fourth biennial reports, BR5s = fifth biennial reports, BR6s = sixth biennial reports, ERT = expert review team, LULUCF = land se, land-use change and forestry, MBM = marked-based mechanism, PaMs = policies and measures, TRR =technical review report, WAM = 'with additional measures', WEM = 'with existing measures'.

B. Assessing the progress to target by the European Union and its member States

48. The EU member States represent a special case because they plan to jointly fulfil the EU-wide 2020 target, which is enshrined in the EU 2020 climate and energy package. This package includes the EU ETS and the EU effort-sharing decision.⁸

Suggested approach to assessing the progress to target by the European Union and its member States

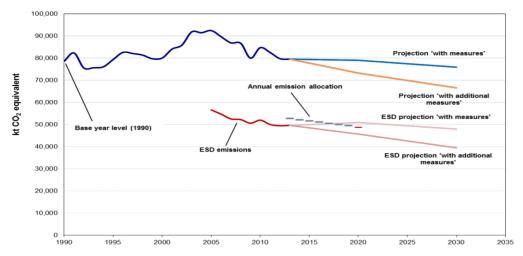
49. The EU maintains the responsibility for reporting on progress towards its target under the Convention (EU ETS target + ESD target = Convention target). Each EU member State is responsible for describing its progress towards its individual national target under the ESD. For example, Sweden reported in its BR2: "For further information on the EU ETS see the second Biennial Report from EU".

⁸ For more information on the EU target, see the background paper titled "Biennial reports and reporting on the use of market-based mechanisms by the European Union and its member States". Available at

 $[\]underline{<} http://unfccc.int/files/adaptation/application/pdf/backgroundpaper_on_market-based_mechanisms_published.pdf>.$

50. The ERTs in order to assess the progress of the EU should compare the annual emission allowances for a particular year with the "Emissions relevant to target in year X" (see equation 1 above). The presentation of GHG emission projections in the TRRs should continue to reflect the AEAs by 2020 (see Figure 2 below).

Figure 2
Greenhouse gas emission projections as presented in the second technical review report of Austria



Abbreviation: ESD = effort-sharing decision.

51. The ERTs can continue to comment on the extent that each EU member State manages to contribute to the overarching EU target through fulfilling their domestic targets under the ESD (see examples 22, 23 and 24 below).

Example 22

TRR2 of Luxembourg

"To assess the progress towards the achievement of the 2020 target, the ERT noted that Luxembourg's emission reduction target from sectors not covered by the EU ETS under the ESD is 20 per cent below the 2005 level. As discussed in chapter II.B above, in 2013 and 2014 Luxembourg's emissions from the sectors not covered by the EU ETS are 1.9 per cent (180 kt CO₂ eq) and 5.2 per cent (490 kt CO₂ eq), respectively, below the AEAs under the ESD for the same years. The ERT noted that Luxembourg is making progress towards its emission reduction target under the ESD by implementing mitigation actions that delivered some emission reductions during the period 2013–2014. The ERT took note of information provided by Luxembourg which indicates that beyond this period the Party may face challenges in meeting the ESD target by 2020. A combination of additional PaMs and the use of units from market-based mechanisms may be needed for Luxembourg to achieve the target."

Example 23

TRR2 of Denmark

"To assess the progress towards the achievement of the 2020 target, the ERT noted that Denmark's emission reduction target from sectors under the ESD is 20 per cent below the 2005 level. During the review, Denmark provided additional information that was not originally reported in its BR2 on historical and projected emissions for the split of emissions between the EU ETS and the ESD. According to this information and as

discussed in chapter II.B above, in 2013, Denmark's emissions from the sectors not covered by the EU ETS amounted to 32,841.66 kt CO₂ eq, which is below Denmark's amount of AEAs under the ESD for 2013 (36,829.16 kt CO₂ eq). The ERT noted that **Denmark is making progress towards its emission reduction target under the ESD by implementing mitigation actions**. In addition, the ERT noted that Denmark will not account for the contribution from LULUCF and does not foresee a need to use units from the market-based mechanisms under the Convention to achieve its target."

Example 24

TRR2 of the Netherlands

"The GHG emission projections provided by the Netherlands in its BR2 include those for the WEM and WAM scenarios. Under these two scenarios, emissions are projected to be 17.6 and 18.7 per cent below the 1990 level in 2020, respectively. Emissions from the non-ETS sectors are projected to reach 100,000.00 kt CO₂ eq by 2020 under both the WEM FCCC/TRR.2/NLD 26 and WAM scenarios compared with its AEA for 2020 of 107,042.71 kt CO₂ eq. The cumulative emissions of the Netherlands for 2013–2020 are projected to be 819,000.00 kt CO₂ eq compared with its aggregate AEAs of 919,963.37 kt CO₂ eq. On the basis of the reported information, the ERT concluded that **the Netherlands expects to contribute towards the achievement of the EU target for 2020."**

52. As for the EU targets on renewable energy and energy efficiency, although they can contribute towards the achievement of the overarching GHG emission reduction target, they are not prerequisites as such (see example 25 below). Thus these targets need to be treated as any other mitigation action presented by the EU or its member States. The ERTs should continue to assess the actions underpinning these targets in the TRRs in the same manner as all other mitigation actions while noting the anticipated GHG emission reductions.

Example 25

TRR2 of France

"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 CO_2 capture and storage directive, and the general programmes for environmental conservation, namely the Environment Action Programme and the Clean Air Policy Package."

C. Assessing the progress when the 2020 target is already reached

53. The emissions levels reported in the BR2s by Belarus (for 2012), Kazakhstan (for 2013), the Russian Federation (for 2013) and Ukraine (for 2012) were already lower than their respective 2020 targeted emission levels. However, this does not automatically imply that these Parties will meet their 2020 target.

Suggested approach to reviewing Parties that have already reached their targets

54. In cases when Parties' emissions are already lower than their target, the ERT can focus in the TRRs on: describing the underlying reasons for the observed emission reductions; presenting concrete examples of success; and discussing sectors where the emission reductions might not have been as impressive as in others and exploring the reasons why. Finally, the ERTs should pay particular attention to and note the extent to which the current emission trends evolve (see examples 26 and 27 below).

TRR2 of the Russian Federation

"Based on the information provided, the ERT noted that the Russian Federation is making progress towards its emission reduction target without using units from the market based mechanisms under the Convention and other mechanisms, and without the contribution of LULUCF. The ERT also noted that while most of the GHG emission reductions since 1990 resulted from the economic decline in the early 1990s and the subsequent economic restructuring, part of this reduction was also due to the implementation of PaMs. However, the extent of the contribution of PaMs towards the attainment of the economy-wide emission reduction target could not be assessed, as their impacts have not been quantified by the Party."

Example 27

TRR2 of Kazakhstan

"The ERT noted that Kazakhstan's GHG emissions for 2014 were 4.4 per cent below its target, and that after the initial GHG emission decline in the 1990s, the GHG emission growth from 2000 onwards was slower than the GDP growth. However, as Kazakhstan's GHG emissions have continued to increase since 2000, it may face challenges in achieving its 2020 target. This is further supported by Kazakhstan's emission projections for 2020, which suggest that Kazakhstan can be expected to achieve its target under the Convention only under the 'with additional measures' (WAM) scenario)."

Annex

Quantified economy-wide emission reduction targets, associated assumptions, conditions and accounting

A. Targets, assumptions and conditions

- 1. Each target communicated by most developed country Parties is generally not represented as a single unconditional value, but as a single conditional value or a range of values. Two Parties (Kazakhstan⁹ and Monaco) presented a single unconditional target, six Parties (Australia, European Union (EU), Liechtenstein, Norway, Russian Federation and Switzerland) presented their lower targets as unconditional, five Parties (Canada, Croatia, Japan, Ukraine and United States of America) presented single targets linked to certain conditions and assumptions, and three Parties (Belarus, Iceland and New Zealand) presented ranges of values linked to the conditions and assumptions. In most cases, the conditions and assumptions presented by Parties relate to an effective set of rules for land use, land-use change and forestry (LULUCF), the use of market-based mechanisms (MBMs) and the extension of certain provisions relevant for specific Parties.¹⁰
- 2. Norway noted as a condition of its target, the availability of MBMs. Australia noted that meeting the more stringent targets (of 15 per cent and 25 per cent) is conditional on access to deeper, broader and fully functional carbon markets, the EU acknowledged that the rules for the use of MBMs and LULUCF considerably influence the stringency of their targets. Similarly, New Zealand referred to a full recourse to broad and effective international markets as a condition of its target. Some Parties, for example, Belarus, Iceland, New Zealand and the Russian Federation, specifically noted that their targets are conditional on the set of rules and appropriate accounting for LULUCF. Overall, there is recognition that the use of carbon credits from MBMs is essential in order to achieve cost efficiency of the mitigation effort in order to attain the targets and to enhance their stringency. However, there is little clarity on the anticipated use of such credits or on their sources and scale of contribution to attaining the targets.
- 3. The detailed description of the quantified emission reduction targets by developed country Parties is provided in the technical paper prepared by the secretariat in 2013. Figure 3 provides summary information on the base year, target level of emission reductions by 2020 and the use of units from MBMs and LULUCF.

⁹ Kazakhstan did not provide information on conditions and assumptions.

¹⁰ FCCC/TP/2013/7.

¹¹ As footnote 2 above.

5

Use of units from LULUCF and MBM Y• No 10

JPN USA • o CAN • o AUS • • NZL ● ● BLR oo KAZ o o UKR CHE • • LIE • • ISL • • EU 0 • RUS O O NOR MON

Figure 3
Summary information on quantified emission reduction targets by Annex I Parties

Abbreviations: AUS = Australia, BLR = Belarus, CAN = Canada, CHE = Switzerland, EU = European Union, ISL = Iceland, JPN = Japan, KAZ = Kazakhstan, LIE = Liechtenstein, LULUCF = land use, land-use change and forestry, MBM = market-based mechanism, MON = Monaco, NOR = Norway, NZL = New Zealand, RUS = Russian Federation, UKR = Ukraine, USA = United States of America = effort-sharing decision, Y = yes.

% reduction by 2020

4. Currently, seven Parties (Australia, Japan, Iceland, Liechtenstein, New Zealand, Norway and Switzerland) expect to meet their targets through potentially using MBMs, while taking into account contributions from the LULUCF sector. Three Parties (Belarus, Kazakhstan and Russian Federation) do not include the LULUCF sector nor do they plan to use units from MBMs to reach their targets. Two Parties (United States and Canada)¹² include the LULUCF sector but do not plan to make use of MBMs and finally, three Parties (EU, Ukraine and Monaco) do not include the LULUCF sector but do plan on potentially making use of MBMs (see figure 4 below) to reach their targets.

26

¹² In its BR2 Canada states: "Canada may consider using international mechanisms to meet its emission reduction targets. No decisions have been taken on potential approaches at this time."

Australia, Japan, Iceland, Liechtenstein, EU, Monaco, Ukraine New Zealand, Norway, Switzerland LULUCF ■ MBMs **■** MBMs Exist. Measures PaMs Exist. Measures Add. Measures Add. Measures Belarus, Kazakhstan, the Russian USA, Canada **Federation** LULUCF **PaMs** Exist. Measures PaMs Add. Measures Add. Measures

Figure 4
Means to achieve progress towards the target elected by developed country Parties

Abbreviations: Add. Measures = additional measures, EU = European Union, Exist. Measures = existing measures, LULUCF = land use, land-use change and forestry, MBMs = market-based mechanisms, PaMs = policies and measures.