



United Nations

FCCLC/TRR.2/AUS



Framework Convention on
Climate Change

Distr.: General
20 July 2016

English only

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

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 Australia, 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”.

GE.16-12529(E)



* 1 6 1 2 5 2 9 *

Please recycle



Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Introduction and summary	1–5	3
A. Introduction	1–2	3
B. Summary.....	3–5	3
II. Technical review of the reported information	6–71	4
A. All greenhouse gas emissions and removals related to the quantified economy-wide emission reduction target	6–9	4
B. Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	10–12	6
C. Progress made towards the achievement of the quantified economy-wide emission reduction target	13–46	7
D. Provision of financial, technological and capacity-building support to developing country Parties.....	47–71	16
III. Conclusions	72–79	21
Annex		
Documents and information used during the review.....		23

I. Introduction and summary

A. Introduction

1. This report covers the centralized technical review of the second biennial report (BR2)¹ of Australia. 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 Australia, which provided comments that were considered and incorporated with revisions 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: Ms. Irina Atamuradova (Turkmenistan), Mr. William Blyth (United Kingdom of Great Britain and Northern Ireland), Ms. Patricia Iturregui (Peru), Ms. Awassada Phongphiphat (Thailand), Mr. Adrian Schilt (Switzerland), Mr. Yusuf Serengil (Turkey), Ms. Anna Sikharulidze (Georgia), Mr. Koen Smekens (Belgium), Ms. Tatiana Tugui (Republic of Moldova) and Ms. Andreja Urbancic (Slovenia). Mr. Smekens and Ms. Tugui were the lead reviewers. The review was coordinated by Mr. Daniel Hooper and Mr. Javier Hanna (UNFCCC secretariat).

B. Summary

3. The expert review team (ERT) conducted a technical review of the information reported in the BR2 of Australia 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, Australia provided the following additional relevant information:

- (a) Clarifications on its intended use of market-based mechanism units and contributions from land use, land-use change and forestry (LULUCF);
- (b) Projections of emissions from international bunkers;
- (c) A more detailed description of the activities undertaken by the public and private sectors.

1. Timeliness

4. The BR2 was submitted on 23 December 2015, before the deadline of 1 January 2016 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 23 December 2015. The ERT noted the timeliness of the submission of the BR2 and associated CTF tables compared with the submission of its CTF tables alongside the Party’s first biennial report (BR1).

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 Australia 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 Australia

<i>Section of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Paragraphs with recommendations</i>
Greenhouse gas emissions and trends	Complete	Complete	
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Transparent	
Progress in achievement of targets	Mostly complete	Mostly transparent	16, 30, 31
Provision of support to developing country Parties	Complete	Mostly transparent	49

Note: A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in chapter III.

II. Technical review of the reported information

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

6. Australia has provided a summary of information on greenhouse gas (GHG) emission trends under the Convention accounting framework 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 Australia’s 2015 annual inventory submission (in chapter 1.2). 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” (hereinafter referred to as the UNFCCC Annex I inventory reporting guidelines) that are required by paragraph 3 of the UNFCCC reporting guidelines on BRs. Further, Australia provided information on changes in the national inventory arrangements since its BR1. The changes included moving the responsibility for the national inventory from the Department of Industry, Climate Change, Science, Research and Tertiary Education to the Department of the Environment, as well as the changes resulting from the mandatory application of the Intergovernmental Panel on Climate Change (IPCC) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, the application of the global warming potential (GWP) values from the IPCC Fourth Assessment Report (AR4), updates to the National Greenhouse and Energy Reporting (Measurement) Determination 2008 legislation in response to the repeal of the Clean Energy Act (2011) and the provision of new methods for reporting fugitive emissions associated with carbon dioxide (CO₂) capture and storage.

7. The information reported in the BR2 on emission trends is fully consistent with that reported in the 2015 annual inventory submission of Australia. To reflect the most recently available data, version 3.0 of the Party's 2015 annual inventory submission has been used as the basis for discussion in chapter II.A of this review report.

8. Total GHG emissions² excluding emissions and removals from LULUCF increased by 26.5 per cent between 1990 and 2013 (113,632.10 kt CO₂ eq), whereas total GHG emissions including net emissions and removals from LULUCF increased by 1.2 per cent (6,372.26 kt CO₂ eq) over the same period. The increase in the total GHG emissions can be attributed mainly to CO₂ emissions, which increased by 43.2 per cent (excluding LULUCF) between 1990 and 2013. Over the same period, emissions of methane (CH₄) decreased by 12.9 per cent, while emissions of nitrous oxide (N₂O) increased by 33.3 per cent. The combined fluorinated gases, such as perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF₆), increased by 64.7 per cent over the same period. The emission trends between 1990 and 2013 were driven mainly by the increase in emissions from energy industries (66,542.55 kt of carbon dioxide equivalent (CO₂ eq), or 46.5 per cent), transport (31,264.46 kt CO₂ eq, or 50.9 per cent), manufacturing industries and construction (11,889.57 kt CO₂ eq, or 32.8 per cent) and consumption of ozone-depleting substance substitutes (9,964.79 kt CO₂ eq). Decreases in emissions from the LULUCF sector (107,259.84 kt CO₂ eq, or 103.8 per cent), enteric fermentation in the agriculture sector (10,601.36 kt CO₂ eq, or 15.8 per cent) and the waste sector (7,433.51 kt CO₂ eq, or 35.7 per cent) offset some of these emission increases.

9. The ERT noted that, during the period 1990–2013, Australia's gross domestic product (GDP) per capita increased by 49.9 per cent, while GHG emissions per GDP and GHG emissions per capita, both excluding LULUCF, decreased by 37.7 and 6.6 per cent, respectively. The decrease of these GHG indicators was driven by an increase in GDP (by 103.1 per cent) and an increase in population (by 35.5 per cent) over the same period, whereas GHG emissions increased at a slower pace, namely by 26.5 per cent from 1990 to 2013 (see para. 8 above). Table 2 below illustrates the emission trends by sector and some of the economic indicators relevant to GHG emissions for Australia.

Table 2

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

Sector	GHG emissions (kt CO ₂ eq)					Change (%)		Share by sector (%)	
	1990	2000	2010	2012	2013	1990–2013	2012–2013	1990	2013
	1. Energy	292 820.72	362 751.70	415 556.06	418 815.37	411 012.01	40.4	–1.9	68.4
A1. Energy industries	143 061.24	192 156.26	226 155.64	221 383.94	209 603.79	46.5	–5.3	33.4	38.7
A2. Manufacturing industries and construction	36 256.41	38 952.37	40 571.66	44 328.00	48 145.98	32.8	8.6	8.5	8.9
A3. Transport	61 417.89	74 165.25	87 974.25	92 389.85	92 682.35	50.9	0.3	14.3	17.1

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, version 3.0.

Sector	GHG emissions (kt CO ₂ eq)					Change (%)		Share by sector (%)	
	1990	2000	2010	2012	2013	1990–2013	2012–2013	1990	2013
	A4.–A5. Other	16 034.04	18 859.23	21 665.57	22 068.03	22 375.06	39.5	1.4	3.7
B. Fugitive emissions from fuels	36 051.15	38 618.60	39 188.94	38 645.55	38 204.84	6.0	–1.1	8.4	7.0
C. CO ₂ transport and storage	NO	NO	NO	NO	NO	–	–	–	–
2. IPPU	26 108.52	26 751.98	35 537.81	33 110.42	32 528.21	24.6	–1.8	6.1	6.0
3. Agriculture	88 569.10	90 642.72	78 897.66	83 718.67	85 023.74	–4.0	1.6	20.7	15.7
4. LULUCF	103 300.49	57 809.00	28 095.08	–5 079.42	–3 959.35	–103.8	–22.1	NA	NA
5. Waste	20 793.15	16 835.58	16 408.44	14 111.07	13 359.64	–35.7	–5.3	4.9	2.5
6. Other	NO	NO	NO	NO	NO	–	–	–	–
Indirect CO ₂	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	–	–	NA	NA
Total GHG emissions without LULUCF	428 291.49	496 981.99	546 399.98	549 755.53	541 923.59	26.5	–1.4	100.0	100.0
Total GHG emissions with LULUCF	531 591.98	554 790.99	574 495.06	544 676.11	537 964.24	1.2	–1.2	NA	NA
<i>Indicators</i>									
GDP per capita (thousands 2011 USD using PPP)	28.57	35.24	41.36	42.54	42.83	49.9	0.7		
GHG emissions without LULUCF per capita (t CO ₂ eq)	25.10	25.95	24.80	24.19	23.43	–6.6	–3.1		
GHG emissions without LULUCF per GDP unit (kg CO ₂ eq per 2011 USD using PPP)	0.88	0.74	0.60	0.57	0.55	–37.7	–3.8		

Sources: (1) GHG emission data: Australia's 2015 annual inventory submission, version 3.0; (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, NE = not estimated, NO = not occurring, PPP = purchasing power parity.

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

10. In its BR2 and CTF tables 2(a)–(f), Australia reported a description of its target, including associated conditions and assumptions. CTF tables 2(a)–(f) contain the required

information in relation to the description of the Party's emission reduction target, such as: the base year; the gases and sectors covered; the GWP values; the emission reduction target; the period in which to achieve its target (2013–2020); and the approach to counting emissions and removals from the LULUCF sector. Further information on the target and the assumptions, conditions and methodologies related to the target is provided in chapters 3 and 5 of the BR2 and in this report (see para. 11 below).

11. For Australia, the Convention entered into force on 21 March 1994. Under the Convention, Australia made a commitment to reduce its cumulative GHG emissions by 5.0 per cent below the 2000 level by 2020. Australia assesses its progress towards its quantified economy-wide emission reduction target using a carbon budgeting approach. A trajectory to achieve the carbon budget is calculated by taking a linear decrease from 2009–2010 to 2019–2020, beginning from the target level under the first commitment period of the Kyoto Protocol and finishing at 5 per cent below the 2000 emission level in 2020. This target includes all GHGs included in the UNFCCC Annex I inventory reporting guidelines, namely CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and nitrogen trifluoride (NF₃). It also includes all IPCC sources and sectors included in the annual GHG inventory. The GWP values used are those from the IPCC AR4. Emissions and removals from the LULUCF sector are included in the target, whereby net emissions from deforestation, afforestation, reforestation, forest management, cropland management, grazing land management and revegetation in the reporting year are compared to net emissions from the same activities in the base year (2000). Australia reported that it plans to make use of market-based mechanisms to achieve its target (see para. 26 below). To increase transparency, the ERT suggests that Australia provide absolute values for key elements included in the definition of the target, such as the target level under the first commitment period of the Kyoto Protocol and the estimated carbon budget, in its next biennial report (BR).

12. In response to a question raised by the ERT during the review, Australia also explained why it had not reported a conditional target in its BR2, which had been reported in its BR1. The Party explained that in 2015 the Australian Government reviewed all of its international emission reduction targets, including its 2020 and post-2020 targets. This review determined that Australia would continue to strengthen its long-term climate action, building on the unconditional 2020 target by setting a 2030 target to reduce emissions by between 26 to 28 per cent below the 2005 level. These targets set the long-term direction for Australia's emission reduction policies and measures (PaMs). To increase completeness, the ERT suggests that Australia report on its intended 2030 target in its next BR.

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

13. This chapter provides information on the review of the reporting by Australia 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

14. In its BR2 and CTF table 3, Australia reported on its progress in the achievement of its target and the mitigation actions implemented and planned since its sixth national communication (NC6) and its BR1 to achieve its target. Australia has provided information on mitigation actions introduced to achieve its target. The BR2 includes information on mitigation actions organized by sector and by gas, to the extent appropriate. Further information on the mitigation actions related to the Party's target is provided in chapter 4 of

the BR2, in the report of the technical review of the first biennial report (TRR/BR1) and in this report (see para. 16 below).

15. This report highlights the changes made since the publication of the Party's NC6 and BR1. In its BR2, Australia provided 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. Since Australia's BR1, domestic climate change policy responsibilities have been moved to the Department of the Environment as a result of a change of Government. The Department of the Environment, through the Office of Climate Change and Renewables Innovation, brings together a number of independent statutory agencies in the Environment Minister's portfolio, each with legislated mandates, including the Clean Energy Regulator and the Climate Change Authority. In 2015, reforms to Australia's Renewable Energy Target (RET) were adopted, following consideration of the recommendations from two separate reviews conducted in 2014 by the Climate Change Authority and an expert panel. Australia also decided to undergo a comprehensive climate policy review in 2017 to examine whether further policy action or reform is needed. To increase transparency, the ERT suggests that Australia include the results of its planned comprehensive climate policy review in 2017 in its next BR.

16. The ERT noted that Australia has improved its reporting since the BR1 by including a wider range of mitigation actions in its BR2 and CTF table 3. The ERT commends Australia for implementing the recommendation made in the TRR/BR1 to provide comprehensive textual descriptions of a wider range 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.

17. Australia provided, to the extent possible, detailed information on the assessment of the economic and social consequences of its response measures. Australia explained in its BR2 that it routinely considers the impacts of its climate change response measures in the framework of decision-making processes. This is achieved via: consultation processes enabling affected Parties to participate in the decision-making process; using the impact assessment as an integral part of policy development; incorporating regulatory impact statements as part of legislation development; having mandatory safeguard requirements that apply to all of Australia's aid investments; and ensuring that potential adverse social and environmental impacts are identified and adequately addressed.

18. Australia reported, to the extent possible, 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. In its BR2, Australia discussed its National Greenhouse Accounts³ and emission projections reporting at the national, state

³ In addition to the national inventory report, Australia publishes a range of emission estimates that provide further information on the Party's emissions on a regional and industry basis. Together, these publications constitute the Australian National Greenhouse Accounts.

and territory levels and across different industrial sectors, which underpin the assessments of progress towards national emission reduction commitments. In addition, the Climate Change Authority conducts periodic reviews of climate change measures and reports on Australia's progress in meeting its national emission reduction targets. At the policy level, the Clean Energy Regulator monitors compliance with climate change laws, including the Emission Reduction Fund (ERF), to determine the level of compliance, identify possible non-compliance and assess the education or enforcement action that may be required.

19. The key overarching cross-sectoral policy reported in the BR2 is the Direct Action Plan, which includes the ERF administered by the Clean Energy Regulator – the most significant measure in terms of planned mitigation impact. Australia estimates that the cumulative impact of the ERF in the period 2015–2020 will be 92,000 kt CO₂ eq. The ERF consists of three mechanisms: crediting and purchasing (which are already in place), and safeguarding (starting in 2016). Under the crediting mechanism, the Clean Energy Regulator credits eligible abatement projects that are certified in accordance with approved methods; and under the purchasing mechanism, abatement from approved projects can be purchased by the Clean Energy Regulator through auctions. The ERF safeguarding mechanism will affect more than half of the national GHG emissions by setting emission limits (baselines) for sectors and facilities.

20. The most significant measures in the energy sector, which is the sector with the highest share of Australia's GHG emissions, are the RET, the Emissions Technology Demonstration Fund and the above-mentioned ERF mechanisms. As stated in CTF table 3, the RET is expected to deliver a reduction in emissions of 17,900 kt CO₂ eq in 2020. In the transport sector, which is the sector with the second highest share of Australia's GHG emissions, Australia has implemented standards for new vehicles, and a ministerial forum was established to examine the existing vehicle standards and testing, and options for new measures. Regarding energy efficiency, one of Australia's key measures is the Energy Efficiency Grant programme, which stimulates investment in industrial energy efficiency and is particularly important because the increase in emissions from fuel use in manufacturing industries and construction has risen more quickly than other sectors in recent years.

21. In its BR2, Australia did not discuss the repeal of its emissions trading system (ETS), which was the key measure reported in Australia's BR1. The repeal of the ETS significantly affected the expected impact of Australia's mitigation measures. To improve transparency, the ERT suggests that Australia include information relating to changes or repeals of its measures in its next BR.

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

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

<i>Sector affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact by 2020 (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures	Emission Reduction Fund	NE
	Clean Energy Finance Corporation	NE
	Carbon Neutral Programme	NE

<i>Sector affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact by 2020 (kt CO₂ eq)</i>
Energy, including:	Emissions Technology Demonstration Fund	NE
Transport	Ministerial Forum on Vehicle Emissions Standards and Vehicle Testing	NE
Renewable energy	Renewable Energy Target	17 900
	Australian Renewable Energy Agency (research funding)	NE
Energy efficiency	Energy productivity and efficiency programmes (e.g. Energy Appliance Efficiency, Energy Efficiency Grant programme, Community Energy Efficiency programme)	NE
	National Construction Code	NE
	National Australian Built Environment Rating System/National House Energy Rating Scheme	NE
IPPU		
Agriculture		
LULUCF		

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.

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

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

23. Australia reported in its BR2 and CTF tables 4, 4(a)I and 4(b) its use of units from market-based mechanisms under the Convention and the contribution of LULUCF to achieving its target. The information in CTF table 4 was provided for the base year and for the period 2010–2013. Further relevant information on emissions and removals and the use of units is provided in chapter 4.7 of the BR2 and in this report (see para. 26 below).

24. Australia used CTF table 4(a)I to report on its mitigation actions relevant to the contribution of the LULUCF sector. In CTF table 4(a)I, Australia completed each LULUCF classification field under the Convention using net emission data according to the LULUCF classifications under the Kyoto Protocol. The ERT noted that Australia used CTF table 4(a)I to present its LULUCF estimates, as it is a better option for its reporting purposes than using CTF table 4(a)II.

25. For 2013, Australia reported in CTF table 4 annual total GHG emissions excluding the contribution from LULUCF of 541,923.59 kt CO₂ eq, or 9.0 per cent above the 2000 level. Total GHG emissions including the contribution from LULUCF in 2013 are reported to be 549,445.84 kt CO₂ eq, or 2.0 per cent below the 2000 level (560,789.53 kt CO₂ eq).

26. Regarding the contribution from LULUCF activities, Australia reported in CTF tables 4 and 4(a) that in 2012 and 2013 net emissions of 12,943.77 kt CO₂ eq and 7,522.25

kt CO₂ eq, respectively, are to be taken into account in estimating the progress made towards its target. These represent a decrease of 79.7 per cent and 88.2 per cent, respectively, in net emissions from LULUCF compared to the 2000 level. Australia also reported in CTF table 2(e) that it intends to use units from market-based mechanisms, including carry-overs from the first commitment period of the Kyoto Protocol and voluntary waste industry international units. The ERT noted that Australia reported “0” values for the use of market-based mechanisms in CTF table 4(b) for 2013 and 2014. In response to a question raised by the ERT during the review, Australia explained that it understands ‘surrender’ as distinct from ‘holding’, stating that: “Surrender is when an entity or Party retires a unit for compliance purposes. No units had been surrendered by the end of 2014”. Table 4 below illustrates Australia’s total GHG emissions, the contribution of LULUCF and the use of units from market-based mechanisms to achieve its target.

Table 4

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

<i>Year</i>	<i>Emissions excluding LULUCF (kt CO₂ eq)</i>	<i>Contribution from LULUCF (kt CO₂ eq)^b</i>	<i>Emissions including contribution from LULUCF (kt CO₂ eq)</i>	<i>Use of units from market-based mechanisms (kt CO₂ eq)</i>
1990	428 291.40			
2000 ^a	496 990.79	63 798.74	560 789.53	
2010	546 399.98	34 498.84	580 898.82	
2011	549 075.37	3 624.76	552 700.13	
2012	549 755.54	12 943.77	562 699.31	
2013	541 923.59	7 522.25	549 445.84	0
2014				0

Sources: Australia’s second biennial report and CTF tables 1, 4, 4(a)I, 4(a)II and 4(b).

Abbreviations: CTF = common tabular format, LULUCF = land use, land-use change and forestry.

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

^b Information reported by the Party in CTF table 4.

27. 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 (see para. 11 above). As discussed in paragraph 25 above, in 2013 Australia’s annual total GHG emissions including the contribution from LULUCF are 2.0 per cent (549,445.84 kt CO₂ eq) below the base year level. The ERT noted that in 2013 the contribution from LULUCF was 7,522.25 kt CO₂ eq.

28. 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 effort⁴ to meet its target.

3. Projections

29. Australia reported in its BR2 and CTF table 6(a) updated projections for 2020 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: CO₂, CH₄, N₂O, PFCs, HFCs and SF₆ (treating PFCs and HFCs collectively in each case). Current emissions of NF₃ are reported to be negligible and were therefore not projected. Projections are also presented in an aggregated format for each sector as well as for a Party total, using GWP values from the IPCC AR4. Australia reported on factors and activities influencing emissions for each sector. Further information on the projections is provided in chapter 5 of the BR2 and in this report (see para. 37 below).

30. In its BR2 and CTF table 6(a), Australia did not include emission projections for 2030. In response to a question raised by the ERT during the review, Australia indicated that the Department of the Environment is currently undertaking modelling of emission projections for 2030, which will be available in 2016. To increase completeness, the ERT recommends that Australia include emission projections for 2030 in its next BR. In addition, based on the information contained in CTF table 6(a) and the BR2, the ERT could not assess the starting year of the emission projections. During the review, Australia clarified that the starting year for the emission projections was 2015. To increase transparency, the ERT encourages Australia to clearly report the starting year of the emission projections compared with historical emission years and include the emission projections for 2015 in its next BR. The ERT also suggests that Australia include emission projections for additional years other than 2020 and 2030, such as 2025, in its next BR.

31. Australia did not report emission projections related to fuel sold to ships and aircraft engaged in international transport separately in its BR2. In response to a question raised by the ERT during the review, Australia provided information on these emission projections separate from the national GHG emissions total. To increase completeness, the ERT recommends that Australia include separate emission projections related to fuel sold to ships and aircraft engaged in international transport, not included in the national total, in its next BR.

32. In its BR2, Australia did not transparently describe how the PaMs listed in CTF table 3 have been included in the emission projection scenarios and in the sectoral models used to prepare the emission projections. In response to a question raised by the ERT during the review, Australia clarified which PaMs were included in the emission projections, as well as how they were accounted for in the corresponding sectoral models. To increase transparency, the ERT encourages Australia to distinguish which listed PaMs are included in the emission projections, and under which sectoral model, in its next BR.

33. In its BR2 and CTF tables 6(b) and 6(c), Australia did not report the ‘with additional measures’ (WAM) or ‘without measures’ (WOM) scenarios. In response to a question raised by the ERT during the review, Australia explained that the Department of the Environment has not taken planned PaMs into account in the projections because their final policy design and estimated emission reductions have not yet been finalized. To increase

⁴ In its BR2, Australia referred to this as “abatement task”. In this report, “mitigation effort” is used instead. It is defined as the cumulative amount of abatement (emission reductions) required to meet a given target, compared to current estimates of future emissions.

completeness, the ERT encourages Australia to include a WAM scenario (even if the final policy designs have not yet been finalized) and a WOM scenario in its next BR.

34. Australia did not provide transparent information on the changes since the submission of its NC6/BR1 in the assumptions, methodologies, models and approaches used and on the key variables and assumptions used in the preparation of the projection scenarios using CTF table 5. In response to a question raised by the ERT during the review, Australia explained that the differences between the reported assumptions and variables in the BR1 and the BR2 were due to a change in its modelling approach: an integrated modelling approach was used in the BR1 and a sectoral modelling approach was used in the BR2. To increase transparency, the ERT encourages Australia to report on changes in its modelling approaches and assumptions used in its next BR. In addition, Australia did not include transparent information on: the modelling approach, including on the original purpose for which the model or approach was designed, and, if applicable, how it has been modified for climate change purposes; the strengths and weaknesses of the model or approach used; and how the model or approach used accounts for any overlaps or synergies that may exist between different PaMs. To increase transparency, the ERT encourages Australia to include this information in its next BR.

35. In its CTF table 6, Australia reported on its inventory data starting in 1990, while in the BR2 it presented its emission projections diagram with inventory data starting from 2000. As outlined in the UNFCCC reporting guidelines on BRs, such diagrams should present inventory data from 1990 onwards. To increase completeness, the ERT encourages Australia to include diagrams showing emission projections including inventory years from 1990 onwards.

36. In addition, Australia did not provide information on: (i) a sensitivity analysis of its emission projections; or (ii) emission projections for the indirect GHGs carbon monoxide (CO), non-methane volatile organic compounds (NMVOCs), nitrogen oxides (NO_x) and sulphur oxides (SO_x). In response to a question raised by the ERT during the review, Australia clarified that it is considering providing a sensitivity analysis of its emission projections in the future. To increase completeness, the ERT encourages Australia to include a sensitivity analysis of its emission projections, as well as emission projections for the indirect GHGs CO, NMVOCs, NO_x and SO_x in its next BR.

Overview of projection scenarios

37. The WEM scenario reported by Australia includes all PaMs that have been implemented up to 2015. The definition provided by the Party 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”. The main PaMs included in the WEM scenario are: the ERF, aiming at a cumulative reduction of 92,000 kt CO₂ eq over the period 2015–2020; and the Large-scale Renewable Energy Target (LRET)⁵ aiming at 33,000 GWh electricity production from renewable energy by 2020. Other significant PaMs include the Energy Efficiency Grant programme and the Emissions Technology Demonstration Fund, which impact the projections of electricity generation and fugitive emissions. Australia reported during the review that planned policies, such as the NEPP, should have a significant impact on emission reductions. Once such policies are implemented, their impacts will be modelled and, as such, will appear in future emission projections.

⁵ The RET operates as two schemes – the LRET and the Small-scale Renewable Energy Scheme (SRES).

Methodology and changes since the previous submission

38. The methodology used in the BR2 is different from that used for the preparation of the emission projections for the NC6/BR1. Australia reported supporting information further explaining the methodologies and the changes made since the NC6/BR1 in chapter 5 of its BR2. Australia also provided additional information on its modelling approach and future emission projection plans during the review. Between the BR1 and the BR2, Australia moved from an integrated modelling system used for its BR1 to a sectoral system used for its BR2. The sectoral classification consists of electricity generation, direct combustion, transport, fugitives, industrial processes and product use (IPPU), agriculture, waste and LULUCF.

39. To prepare its projections, Australia relied on the following key underlying assumptions: population trends, economic development indicators, exchange rates and labour costs, 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. Chapter 5.4 of the BR2 contains the main underlying assumptions and data sources used for the sectoral projections.

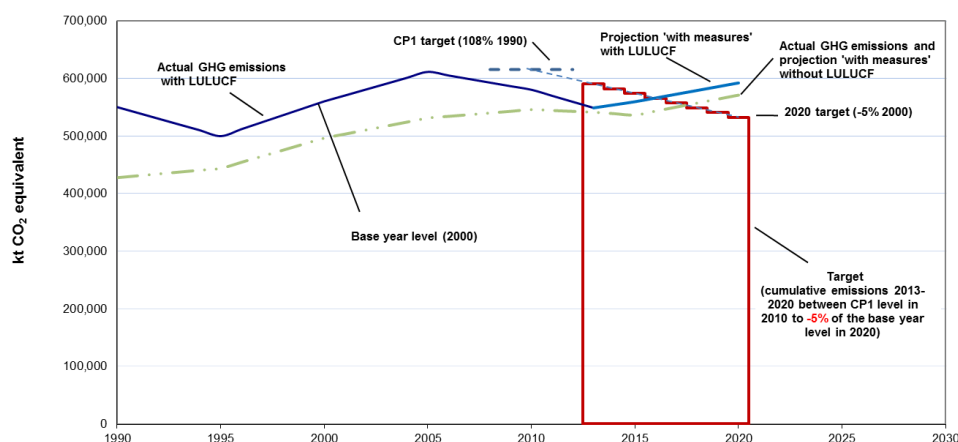
Results of projections

40. Under the WEM scenario, Australia's total GHG emissions excluding LULUCF are projected to be 571,623.80 kt CO₂ eq in 2020, which is an increase of 33.5 per cent compared with the 1990 level. Total GHG emissions including LULUCF in 2020 are projected to be 592,790.86 kt CO₂ eq, which is an increase of 11.5 per cent compared with the 1990 level under the Convention accounting framework.

41. In its BR2, Australia states that it expects a net cumulative mitigation effort of 28,000 kt CO₂ eq over its target period 2013–2020, which includes the use of units from market-based mechanisms and units from voluntary schemes. Therefore, the current projections for 2020 suggest that Australia can be expected to exceed its 2020 target under the Convention by 28,000 kt CO₂ eq (see para. 11 above).

42. According to the projections presented by sector, the most significant GHG emission increases under the WEM scenario from 1990 to 2020 will occur in the energy sector (114,179.85 kt CO₂ eq, or an increase of 49.3 per cent), followed by the transport sector (41,585.06 kt CO₂ eq, or an increase of 67.7 per cent) and the IPPU sector (7,795.90 kt CO₂ eq, or an increase of 29.9 per cent). Over the same time period, GHG emission reductions are projected to occur in the LULUCF sector (101,319.20 kt CO₂ eq, or a reduction of 82.7 per cent), the agriculture sector (8,974.13 kt CO₂ eq, or a reduction of 10.1 per cent) and the waste sector (11,253.89 kt CO₂ eq, or a reduction of 54.1 per cent).

Greenhouse gas emission projections by Australia



Sources: (1) Data for the years 1990–2013: Australia’s second biennial report CTF table 6; total GHG emissions including land use, land-use change and forestry; (2) Data for the years 2014–2020: Australia’s second biennial report CTF table 6; total GHG emissions including land use, land-use change and forestry. As Australia includes contributions from LULUCF in its target, the historic emissions presented in this figure include LULUCF contributions as reported by Australia in its overview table of projections (CTF table 6).

Abbreviations: CP1 = first commitment period of the Kyoto Protocol, CTF = common tabular format, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

43. According to the projections presented by gas, increases in CO₂ emissions (including LULUCF) are expected to contribute the most to the Party’s overall emission increases. Under the WEM scenario, the increase in CO₂ emissions amounts to 13.4 per cent above the 1990 level by 2020 (52,429.56 kt CO₂ eq), followed by HFCs with a 776.2 per cent increase (11,058.41 kt CO₂ eq) and N₂O emissions (including LULUCF) with a 23.7 per cent increase (4,807.33 kt CO₂ eq). Over the same time period, CH₄ emissions (including LULUCF) show a decrease of 16.5 per cent (21,753.87 kt CO₂ eq), PFCs a decrease of 96.8 per cent (4,457.64 kt CO₂ eq) and SF₆ emissions a decrease of 33.5 per cent (70.69 kt CO₂ eq).

44. The projected emission levels under the WEM scenario and Australia’s quantified economy-wide emission reduction target are presented in the figure below.

45. In its BR2, Australia included a detailed analysis of the changes in its cumulative mitigation effort in 2020 since its BR1 (see chapter 5.2.1 of the BR2). Major changes in the estimated cumulative mitigation effort between the BR1 and the BR2 include updates in the 2014–2015 emission projections and the projected mitigation impact of the LRET and the ERF. The ERT commends Australia for providing this additional analysis on the impact of the change in projection results.

46. The ERT noted that Australia did not submit the estimated and expected effects of PaMs in terms of emissions avoided or sequestered, by gas, for 2020 and 2030.

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

47. In its BR2, Australia reported information on the provision of financial, technological and capacity-building support required under the Convention. The BR2 includes information on the national approach to tracking the provision of support, delivery mechanisms used and allocation channels tracked. Australia reported a description of the methodology used to report financial support, including underlying assumptions. The funds indicated in the CTF tables are reported in millions of Australian dollars and millions of United States dollars. The currency conversion rates indicated in CTF table 7 are based on the average annual rates published by the Australian Taxation Office for the relevant financial year.

48. Australia provided details on what new and additional support it has provided and clarified how this support is new and additional. Further information on the Party's provision of support to developing country Parties is provided in chapter 6 of its BR2. In its BR2, Australia explained how it determines how much of its support is new and additional; specifically, that it sources its climate finance from the new and additional aid budget appropriations passed by the Australian Parliament on an annual basis, and that Australia's fiscal year runs from 1 July to 30 June.

49. Chapter 6 of Australia's BR2 (titled "Provision of financial, technological and capacity-building support to developing countries") was not presented in a transparent manner. In response to a question raised by the ERT during the review, Australia informed the ERT that many of the subsections elaborating on its support to developing countries were included within the chapter incorrectly. For example, some information relating to how the country seeks to ensure that the resources provided effectively address the needs of Parties not included in Annex I to the Convention (non-Annex I Parties); a description of its national approach for tracking the provision of financial, technological and capacity-building support to non-Annex I Parties; and allocation channels was delineated as a subset of the capacity-building section. To increase transparency, the ERT recommends that Australia improve the structure of the chapter on the provision of financial, technological and capacity-building support to developing countries in its next BR.

50. Australia reported that its financial support addresses the needs of non-Annex I Parties and provides funding for mitigation and adaptation activities, recognizing the capacity-building elements of such support.

51. Australia included in its BR2 information on how it has refined its approach to tracking climate support and methodologies, including through its eligibility criteria when collecting and reporting information. It provided information on the methodology that it adopted for tracking finance for adaptation and mitigation through multilateral, bilateral and other channels. Different methodological approaches were used for tracking Australia's fast-start climate finance and post-start finance over the financial years 2012/13 and 2013/14. Australia's climate support is largely drawn from its official development assistance (ODA) programme that is tracked through the Department of Foreign Affairs and Trade's Aidworks tracking system. Aidworks tracks ODA in line with the guidelines set out by the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee. A portion of Australia's climate support is drawn from other official flows outside its ODA programme, and this is tracked on an investment-by-investment basis by the relevant administering agency.

1. Finance

52. In its BR2 and CTF tables 7, 7(a) and 7(b), Australia reported information on the provision of financial support required under the Convention, including on financial support provided, allocation channels and annual contributions (see paras. 57 and 58 below). The summary information was reported for two Australian fiscal years (2012/13 and 2013/14), which run from 1 July to 30 June.

53. Australia described how its resources address the adaptation and mitigation needs of non-Annex I Parties. It also described how those resources assist non-Annex I Parties to mitigate and adapt to the adverse effects of climate change, facilitate economic and social response measures, and contribute to capacity-building and technology transfer related to mitigation and adaptation (see chapters II.D.2 and II.D.3 below). Australia takes a country-driven approach to the delivery of support, acknowledging that climate finance investments are more sustainable and effective when owned by partner governments. In line with this approach, its bilateral climate support relationships are administered through partnership agreements. Through this process, partner countries work with Australia to ensure its assistance supports their priorities and climate finance needs. Mainstreaming climate considerations in its aid programme also allows Australia to identify and support climate-related needs and opportunities above and beyond what would otherwise have been considered.

54. Australia provided information on the types of instrument used in the provision of its assistance (see para. 61 below).

55. The BR2 does not include information on private financial flows from bilateral sources directed towards mitigation and adaptation activities in non-Annex I Parties. However, in its BR2, Australia clarified that it is continuing to work with developed country partners to improve the methodologies used for tracking leveraged private sector investment, including through its contribution of 100,000 Australian dollars (AUD) to the OECD Research Collaborative on Tracking Private Climate Finance in the 2012/13 fiscal year. The ERT reiterates the suggestion made in the previous review report that the Party use the tool/methodology being developed to track and report private climate finance in its next BR, or provide information on the status of the methodology being developed and time frames of its finalization.

56. With regard to the most recent financial contributions aimed at enhancing the implementation of the Convention by developing countries, Australia reported that its climate finance has been allocated on the basis of priority areas towards adaptation (60 per cent) and programmes prioritized towards countries that are most vulnerable to climate change, including over one third of bilateral support going to small island developing States and the least developed countries.

57. Australia reported on its climate-specific public financial support provided over the reporting period, totalling USD 236.35 million in the 2012/13 fiscal year and USD 142.09 million in the 2013/14 fiscal year. In its BR2, Australia reported that its climate finance was reduced in the 2013/14 financial year, because projects from the fast-start period concluded, but rose to USD 199.57 million in the 2014/15 fiscal year because climate change activities were mainstreamed through Australia's aid programme and contributions were made to the Green Climate Fund (GCF) (AUD 200 million over four years). The ERT noted that all the resources reported in Australia's CTF tables 7(a) and 7(b) have the status "provided", meaning that funds have been transferred from the Australian Government to the recipient. During the reporting period, Australia placed a particular focus on the countries of the Pacific and South-Eastern Asia, for which it allocated around USD 115 million and USD 57 million in the 2012/13 and 2013/14 fiscal years, respectively.

58. The BR2 includes detailed information on the climate-specific financial support provided through multilateral channels, and bilateral and regional channels over the reporting period. More specifically, Australia contributed through multilateral channels, as reported in its BR2 and in CTF table 7(a), USD 37.64 million and 67.86 million for the 2012/13 and 2013/14 fiscal years, respectively. These contributions were made to specialized multilateral climate change funds, such as the Global Environment Facility (GEF), the Least Developed Countries Fund, the Trust Fund for Supplementary Activities and other multilateral climate change funds. The BR2 and CTF table 7(b) also include detailed information on the total financial support provided through bilateral channels (USD 83.16 million and 38.49 million in the 2012/13 and 2013/14 fiscal years, respectively) and regional channels (USD 115.55 million and 35.74 million in the 2012/13 and 2013/14 fiscal years, respectively). Over the reporting period, the major funding allocated through multilateral channels includes USD 15.87 million to the Least Developed Countries Fund, USD 10.15 million through the GEF, USD 28.83 million through the Asian Development Bank, USD 24.88 million through the World Bank, and USD 5.29 million to the Global Green Growth Institute. Table 5 includes some of the information reported by Australia on its provision of financial support.

Table 5

Summary of information on provision of financial support in 2013–2014

(Millions of United States dollars)

<i>Allocation channel of public financial support</i>	<i>Years of disbursement</i>	
	<i>2012/13</i>	<i>2013/14</i>
Official development assistance	(310.44) ^a (236.35) ^b	(325.59) ^a (142.09) ^b
Climate-specific contributions through multilateral channels, including:	37.64	67.86
Global Environment Facility		10.68
Least Developed Countries Fund	15.87	
Special Climate Change Fund		
Adaptation Fund		
Green Climate Fund		
Trust Fund for Supplementary Activities	1.59	
Financial institutions, including regional development banks		53.71
United Nations bodies	9.51	4.0
Other	0.51	3.02
Climate-specific contributions through bilateral, regional and other channels	198.71	74.23
Other		

^a Core official development assistance funds reported by Australia in common tabular format (CTF) table 7.

^b Climate-specific funds through official development assistance reported by Australia in CTF table 7.

59. 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 the 2012/13 fiscal year, the shares of total public financial support allocated for mitigation, adaptation and cross-cutting projects corresponding to these channels were 21.4, 27.1 and 51.5 per cent, respectively. In total, 15.9 per cent of the total public financial support was allocated through multilateral

channels and 84.1 per cent of it was through bilateral, regional and other channels. In the 2013/14 fiscal year, the shares of total public financial support allocated for mitigation, adaptation and cross-cutting projects corresponding to these channels were 2.1, 27.1 and 70.8 per cent, respectively. Altogether, 48.4 per cent of the total public financial support was allocated through multilateral channels and 51.6 per cent of it was through bilateral, regional and other channels.

60. The ERT noted that, in the 2012/13 fiscal year, 1.4 per cent of financial contributions made through multilateral channels were allocated to energy activities, 91.4 per cent to funding for activities that are cross-cutting across mitigation and adaptation, and the remaining 7.2 per cent to funding for other activities, as reported in CTF table 7(a). The corresponding figures for the 2013/14 fiscal year were 19.4 and 80.6 per cent for sectors such as cross-cutting and other sectors, respectively. Hence, most of the multilateral funding is being allocated to cross-cutting activities. In relation to bilateral and regional support provided over the reporting period, the highest level of financial support went to cross-cutting projects, followed by the energy, agriculture and forestry sectors, as reported in CTF table 7(b).

61. Consistent with its BR2, which states that Australia's climate finance support is entirely grant-based, CTF tables 7(a) and 7(b) only include information on grants as the type of financial instrument used in the provision of assistance to developing countries.

62. In its BR2, Australia clarified that it is focused on using public funds to leverage far greater private sector flows to help developing countries undertake mitigation and adaptation action. The Party is supporting business and industry in developing countries to take direct and practical action to reduce emissions in ways that create jobs and economic opportunities. However, in its BR2, Australia does not include private sector investment leveraged by public interventions towards its climate finance contribution (see para. 55 above).

63. In its BR2, Australia highlighted its success stories in leveraging private sector financial flows for the needs of developing countries. During the reporting period, Australia supported 10 developing country governments to engage their private sectors in green initiatives that will reduce emissions and improve business productivity through its contribution to the United Nations Development Programme Low Emission Capacity Building Programme.

64. In its BR2, Australia emphasized that its core and climate-specific contribution to the GEF, the World Bank and the Asian Development Bank in the 2012/13 fiscal year was not reflected in its fast-start climate finance reporting (the fiscal years 2010/11, 2011/12 and 2012/13). Therefore, to maintain consistency, the climate-specific component of Australia's core contribution to the GEF (USD 11.3 million), the World Bank (USD 54.0 million) and the Asian Development Bank (USD 65.6 million) is not reflected in its BR2.

2. Technology development and transfer

65. In its BR2 and CTF table 8, Australia provided information on measures and activities related to technology transfer, access and deployment benefiting developing countries, including information on activities undertaken by the public and private sectors. The Party also provided examples of support for the deployment and enhancement of the endogenous capacities and technologies of non-Annex I Parties (see para. 67 below).

66. In its BR2 and CTF table 8, Australia listed measures to support technology development and transfer, but the ERT noted that the list is not exhaustive. Two of the activities towards meeting the mitigation needs of non-Annex I countries listed in CTF table 8 have been implemented jointly by the public and private sectors. In response to a question raised by the ERT during the review, Australia provided additional detailed

information, elaborating on distinct actions undertaken by the private and public sectors for the two activities. To increase transparency, the ERT suggests that Australia provide additional information when projects are implemented jointly by the public and private sectors.

67. The ERT noted that, in its BR2, including CTF table 8, Australia reported on its success stories in relation to technology transfer, and in particular on measures taken to promote, facilitate and finance the transfer and deployment of climate-friendly technologies. During the review, Australia informed the ERT that none of the reported projects designed to bolster mitigation and adaptation in developing countries have a “failed” status. However, some Australian agencies that have been responsible for managing reported projects have identified challenges, including adjusting project plans to meet the needs of recipient countries and the lack of technical expertise in recipient countries. The lesson learned by Australia is the need for flexibility in project design. To increase transparency and knowledge-sharing, the ERT suggests that Australia include information on any stories related to technology transfer projects that failed and/or challenges encountered during their implementation in its next BR.

68. In its BR2, Australia provided information on measures taken to support the development and enhancement of the endogenous capacities and technologies of non-Annex I Parties. For example, during the reporting period, Australia provided around AUD 9 million for students from developing countries to undertake renewable energy research at the renewable energy research institutions based in Australia. Such opportunities helped developing countries build their endogenous capacity for clean technology, ensuring that they have the human resources necessary to support domestic clean technology innovation and development. Regarding the transfer of Australia’s innovative land-sector technologies and know-how to developing countries, Australia established the International Savanna Fire Management Initiative, which shares Australia’s unique savannah fire management emissions abatement methodology and project experience with developing countries.

69. The ERT took note of the information provided in CTF table 8 on the recipient countries, the target areas of mitigation and adaptation, the sectors involved and the sources of technology transfer from the public sector. The ERT noted that the activities indicated in CTF table 8 are distributed almost evenly between multilateral and bilateral technology cooperation initiatives aimed at various sectors such as industry, energy, agriculture, forestry and cross-cutting issues.

3. Capacity-building

70. In its BR2 and CTF table 9, Australia supplied information on how it provided capacity-building support for mitigation, adaptation and technology that responds to the existing and emerging needs identified by non-Annex I Parties. Australia mainly focused its efforts on bolstering the institutional and technical capacity of countries in the region around Australia to support their domestic climate change activities. By sharing its expertise and supporting country-level efforts, it was able to help countries to create mitigation and adaptation policies and build systems to measure and report on emissions. In its BR2, Australia also stated that it responds to the existing and emerging capacity-building needs of non-Annex I Parties by country-driven demand.

71. Australia described individual measures and activities related to capacity-building support in textual and tabular format. Specifically, the BR2 and CTF table 9 include information describing examples of Australia’s capacity-building support activities during the reporting period, but the ERT noted that the list is not exhaustive. Examples include the Climate and Oceans Support Program in the Pacific, through which Australia helped regional national meteorological services to build capacity to generate seasonal forecasts

and utilize climate science data. This programme supports planning across a number of sectors, including agriculture, water security and health. Another example is Australia's investment in building capacity for measurement, reporting and verification. As a part of the investment, Australia supported Indonesia, Kenya and South Africa to establish their endogenous capacity to develop and maintain land-sector emission measurements, reporting and verification systems.

III. Conclusions

72. The ERT conducted a technical review of the information reported in the BR2 and CTF tables of Australia 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 Australia in achieving its target; and the Party's provision of support to developing country Parties.

73. Australia's total GHG emissions excluding LULUCF under the Convention accounting framework were estimated to be 26.5 per cent above its 1990 level, whereas total GHG emissions including LULUCF are 1.2 per cent above its 1990 level for 2013. The emission increase was driven by the increase in emissions from the energy, transport and IPPU sectors. Some of these increases were offset by decreases in emissions from the agriculture and waste sectors.

74. Under the Convention, Australia made a commitment to reduce its cumulative GHG emissions by 5.0 per cent below the 2000 level by 2020. Australia assesses its progress towards its quantified economy-wide emission reduction target using a carbon budgeting approach. A trajectory to achieve the carbon budget is calculated by taking a linear decrease from 2009–2010 to 2019–2020, beginning from the target level under the first commitment period of the Kyoto Protocol and finishing at 5 per cent below the 2000 emission level in 2020. This target covers the following GHGs: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃, expressed using GWP values from the IPCC AR4, and covers all sources and sectors included in the annual GHG inventory. Emissions and removals from the LULUCF sector are included in the target and Australia reported that it plans to make use of market-based mechanisms to achieve its target.

75. Australia's main policy framework relating to energy and climate change is the Direct Action Plan, which includes the ERF administered by the Clean Energy Regulator – the most significant measure in terms of planned mitigation impact. Australia estimates that the cumulative impact of the ERF in the period 2015–2020 will be 92,000 kt CO₂ eq. Another mitigation action with a significant mitigation impact is the RET, which is expected to deliver a reduction in emissions of 17,900 kt CO₂ eq in 2020. The NEPP 2015–2030 is expected to bring significant carbon savings in the future.

76. For 2013, Australia reported in CTF table 4 total GHG emissions including the contribution from LULUCF at 549,445.84 kt CO₂ eq, or 2.0 per cent below the 2000 level (560,789.53 kt CO₂ eq). Australia reported on its intended use of units from the market-based mechanisms and on the contribution of LULUCF to achieve its target. The ERT noted that Australia is making progress towards its emission reduction target by implementing mitigation actions.

77. The GHG emission projections provided by Australia in its BR2 consist of a WEM scenario. Under the WEM scenario, Australia's total GHG emissions including LULUCF are projected to be 592,790.86 kt CO₂ eq in 2020, which is an increase of 11.5 per cent above the 1990 level under the Convention accounting framework. Total GHG emissions

excluding LULUCF are projected to be 571,623.80 kt CO₂ eq, which is an increase of 33.5 per cent above the 1990 level. Australia estimates the mitigation effort over its target period 2013–2020 to be around –28,000 kt CO₂ eq, including the intended use of market-based mechanisms and the contribution from LULUCF. Based on this information, the ERT concluded that Australia can be expected to exceed its 2020 target by 28,000 kt CO₂ eq under the WEM scenario.

78. Australia continues to allocate climate financing through its aid programme in order to assist developing country Parties to implement the Convention. Australia has reduced the level of its financial support since its NC6/BR1, and its public financial support in the 2012/13 and 2013/14 fiscal years totalled USD 236.35 and 142.09 million per year, respectively. For these years, Australia's support provided for mitigation action was lower than support provided for adaptation, while the majority of financial support has been dedicated to cross-cutting actions across mitigation and adaptation. The highest level of financial support went to cross-cutting projects, followed by projects in the energy, agriculture and forestry sectors. However, the Party's climate finance increased to USD 199.57 million in the 2014/15 fiscal year because climate change activities were mainstreamed through Australia's aid programme and contributions were made to the GCF. Australia also provided detailed information on measures taken to support the development and enhancement of the endogenous capacities and technologies of non-Annex I Parties, which are distributed almost evenly between multilateral and bilateral technology cooperation initiatives aimed at various sectors such as industry, energy, agriculture, forestry and cross-cutting, and across both mitigation and adaptation. In its BR2, Australia reported a number of individual capacity-building measures and activities carried out during the reporting period.

79. In the course of the review, the ERT formulated the following recommendations for Australia to improve its adherence to the UNFCCC reporting guidelines on BRs in its next BR:⁶

- (a) Improve the completeness of its reporting by:
 - (i) Providing emission projections for 2030 (see para. 30 above);
 - (ii) Including separate emission projections related to fuel sold to ships and aircraft engaged in international transport, not included in the national total (see para. 31 above);
- (b) Improve the transparency of its reporting by:
 - (i) Improving the structure of the chapter on the provision of financial, technological and capacity-building support to developing countries (see para. 49 above);
 - (ii) Providing either the mitigation impacts of the mitigation actions in CTF table 3 or an explanation as to why the mitigation impacts are not estimated (see para. 16 above).

⁶ 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/AUS. Report of the technical review of the sixth national communication of Australia. Available at <<http://unfccc.int/resource/docs/2015/idr/aus06.pdf>>.

FCCC/TRR.1/AUS. Report of the technical review of the first biennial report of Australia. Available at <<http://unfccc.int/resource/docs/2015/trr/aus01.pdf>>.

2015 greenhouse gas inventory submission of Australia. Available at

<http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8812.php>.

Sixth national communication of Australia. Available at

<http://unfccc.int/files/national_reports/annex_i_natcom_/application/pdf/aus_nc6.pdf>.

First biennial report of Australia. Available at

<http://unfccc.int/files/national_reports/annex_i_natcom_/application/pdf/aus_nc6.pdf>.

Common tabular format tables of the first biennial report of Australia. Available at

<http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/aus_2014_v1.0_formatted.pdf>.

Second biennial report of Australia. Available at

<http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/australia_second_biennial_report.pdf>.

Common tabular format tables of the second biennial report of Australia. Available at

<http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/aus_2016_v2.0_formatted.pdf>.

B. Additional information used during the review

Responses to questions during the review were received from Mr. Anthony Bennie (Ministry of the Environment), including additional material and the following documents¹ provided by Australia:

Australia. November 2012. *Submission under the Kyoto Protocol: Quantified Emission Limitation or Reduction Objective (QELRO)*. Available at <http://unfccc.int/files/meetings/ad_hoc_working_groups/kp/application/pdf/awgkp_australia_qelro_26112012.pdf>.

¹ Reproduced as received from the Party.