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Framework Convention on Climate Change

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# Report of the technical review of the first biennial report of Portugal

Developed country Parties are requested, in accordance with decision 2/CP.17, to submit their first biennial report to the secretariat by 1 January 2014. This report presents the results of the technical review of the first biennial report of Portugal conducted by an expert review team in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention".







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### I. Introduction and summary

#### A. Introduction

1. For Portugal, the Convention entered into force on 21 March 1994. Under the Convention, Portugal made a commitment to contribute to the joint European Union (EU) economy-wide emission reduction target of reducing its greenhouse gas (GHG) emissions by 20 per cent by 2020 below the 1990 level.

2. This report covers the in-country technical review of the first biennial report  $(BR1)^1$  of Portugal, coordinated by the secretariat, in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention" (decision 23/CP.19).

3. The review took place from 7 to 12 April 2014 in Lisbon, Portugal, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Ms. Gabriela Fischerova (Slovakia), Mr. Naoki Matsuo (Japan), Mr. Walter Oyhantcabal (Uruguay) and Mr. Newton Paciornik (Brazil). Mr. Matsuo and Mr. Paciornik were the lead reviewers. The review was coordinated by Mr. Javier Hanna Figueroa (secretariat).

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

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

#### **B.** Summary

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

7. During the review, Portugal provided further relevant information; for example, GHG inventory emission values for 2012; a detailed explanation of each sector's policies and measures (PaMs), especially for the land use, land-use change and forestry (LULUCF) sector; updated and revised projections; and detailed information on financial resources and technology transfer.

#### 1. Completeness and transparency of reporting

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

#### 2. Timeliness

9. The BR1 was submitted on 31 December 2013, before the deadline of 1 January 2014 mandated by decision 2/CP.17. Portugal resubmitted its BR1 on 7 February 2014 and on 20 March 2014. The common tabular format (CTF) tables were submitted on 6 March 2014. Portugal resubmitted its CTF tables on 25 April 2014. Portugal has informed the

<sup>&</sup>lt;sup>1</sup> The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables have been subject to the technical review.

secretariat about its difficulties with the timeliness of submitting electronically its CTF tables. The ERT noted the delay in the submission of the CTF tables.

#### 3. Adherence to the reporting guidelines

10. The information reported by Portugal in its BR1 is mostly in adherence to the UNFCCC reporting guidelines on BRs as per decision 2/CP.17 (see table 1).

Table 1

# Summary of completeness and transparency issues of reported information in the first biennial report of Portugal<sup>a</sup>

Sections of the biennial report	Completeness	Transparency	Reference to paragraphs
Greenhouse gas emissions and trends	Complete	Transparent	
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Mostly transparent	16, 17
Progress in achievement of targets	Mostly complete	Mostly transparent	22, 25, 26
Projections	Complete	Transparent	
Provision of support to developing country Parties	Partially complete	Partially transparent	33–35, 39, 42

<sup>*a*</sup> A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in chapter III below (conclusions).

## II. Technical review of the reported information

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

11. Portugal has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. This information is fully consistent with the 2013 annual GHG inventory submission.

12. Total GHG emissions<sup>2</sup> excluding emissions and removals from LULUCF increased by 14.8 per cent between 1990 and 2011, whereas total GHG emissions including net emissions or removals from LULUCF decreased by 6.9 per cent over the same period. The overall trend in GHG emissions in Portugal is mainly determined by emissions from transport and electricity generation. The 1990–2005 period was characterized by a strong increase in GHG emissions (44.4 per cent), driven by carbon dioxide (CO<sub>2</sub>) emissions from the energy sector with strong economic development (gross domestic product (GDP) growth of 2.3 per cent per year). In contrast, the 2005–2011 period shows a decrease in GHG emissions (25.8 per cent), with a sharp decline in energy-related CO<sub>2</sub> emissions and stagnant GDP growth (0.2 per cent per year) under the economic crisis from 2008. Key drivers after 2005 were a shift in energy sources resulting from the introduction of natural gas and renewable energy sources (RES). Further information on the review of emissions and emission trends is provided in chapter II.A of the report of the technical review of the sixth national communication (IDR/NC6).

<sup>&</sup>lt;sup>2</sup> In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding LULUCF, unless otherwise specified.

13. During the review, Portugal provided additional information; including on the 2014 annual GHG inventory submission and several key data for 2012.

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

14. In its BR1 and CTF tables 2, Portugal reported a description of its quantified economy-wide emission reduction target, including associated conditions and assumptions. Portugal does not have a country-specific target as it participates in achieving the EU quantified economy-wide target of a 20 per cent reduction of emissions by 2020 below the base year (1990) level. This target also includes legally binding linear trajectories for each year in the period 2013–2020. The target for the EU and its member States is based on the EU climate and energy package, which includes the European Union Emissions Trading System (EU ETS) and the effort-sharing decision (ESD). This legislative package regulates emissions of  $CO_2$ , methane, nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride using global warming potential (GWP) values from the Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) to aggregate the EU GHG emissions up to 2020.

15. In that sense, the EU target is divided into two: one target for sectors covered by the EU ETS and one for sectors not covered by the EU ETS (non-EU ETS covered sectors). The target for EU ETS covered sectors is 21 per cent below 2005 level by 2020 with no country-specific targets assigned. The target for non-EU ETS covered sectors is 10 per cent below 2005 level by 2020 with country-specific targets assigned. Under the ESD, the effort-sharing target for Portugal is 1 per cent above 2005 level by 2020. Net emissions in the LULUCF sector are excluded for the base year and the target. International aviation is covered within the scope of the EU ETS. Market-based mechanisms can be used for acquiring certified emission reductions, emission reduction units and assigned amount units (AAUs) within the EU. The surplus of AAUs carried over from the first commitment period of the Kyoto Protocol will not be used.

16. The ERT noted that the BR1 and related CTF tables lack several details and contain a number of internal inconsistencies (including inconsistencies in information reported by the EU) in the assumptions, conditions and methodologies related to the definition and description of the target, which is limited in the textual part of the BR1. These issues are related to, for example, the reference source of the GWP values applied (the Second and Fourth Assessment Reports of the IPCC are both mentioned), the exclusion or inclusion of the LULUCF sector and its role, the possible use and scale of the contributions of marketbased mechanisms, the inclusion of nitrogen trifluoride (NF<sub>3</sub>), and the base year for the fluorinated gases (F-gases). The ERT recommends that Portugal clarify and correct, when necessary, the above-mentioned elements of the definition and description of the target, in a transparent and complete manner in its next biennial report (BR).

17. Portugal, as one of the EU member States, will also be bound by the quantified commitment under the second commitment period of the Kyoto Protocol (2013–2020); however, the BR1 did not mention the relationship between this commitment and the quantified economy-wide emission reduction target, since there are some differences, such as how the target is to be achieved: a gradual reduction of emissions each year to reach the 20 per cent reduction in 2020 or an eight-year aggregated target with an average of a 20 per cent reduction for the period. The ERT also noted that the relationship between the EU target and its breakdown for the member States is not easy to understand. Therefore, the ERT encourages Portugal to consider providing more detailed and clearer explanations on these issues in its next BR, including, if possible, the annual target pathway for 2013–2020 and the starting year information.

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

In its BR1 and CTF tables 3 and 4, Portugal reported information on its mitigation 18. actions implemented and planned since its fifth national communication (NC5) to achieve its target. Portugal also reported on the use of units from market-based mechanisms and LULUCF to achieve its target. The ERT noted the efforts made by Portugal to develop and implement its climate mitigation PaMs, which address all relevant sectors and GHGs, except F-gases. The ERT took note of the progress made by Portugal to achieve its commitment to limit its GHG emissions for the first commitment period of the Kyoto Protocol because of its wide implications to the progress made towards the achievement of the quantified economy-wide emission reduction target under the Convention. In its 2014 annual GHG inventory submission, the reported total GHG emissions for 2008-2012 were 361,588 kt CO<sub>2</sub> eq, while Portugal's assigned amount for this period is 381,938 kt CO<sub>2</sub> eq. The average total GHG emissions for 2008–2012 (72,318 kt CO<sub>2</sub> eq) were well below the target levels on annual basis (76,388 kt  $CO_2$  eq) and 20.2 per cent above the base year level (60,148 kt CO<sub>2</sub> eq), which is also well below Portugal's target of 27 per cent above the base year level. In addition, Portugal holds Kyoto Protocol units from Kyoto Protocol mechanisms (estimated at 6,800 kt CO<sub>2</sub> eq) and removal units resulting from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol (estimated at 50,350 kt CO<sub>2</sub> eq). However, an unspecified amount of unused EU emission allowances owned by Portugal's private companies (estimated at 26,510 kt CO<sub>2</sub> eq) might be subtracted from this amount. Therefore, Portugal is expected to hold an excess of Kyoto Protocol units (50,990 kt CO<sub>2</sub> eq) equivalent to 13.35 per cent of its assigned amount. Based on these values and assessment, Portugal is expected to meet its Kyoto Protocol target for the first commitment period (27 per cent above the base year level).

19. The ERT reviewed the reported information and provided its assessment of progress made towards achieving the target. The ERT noted significant progress made by Portugal, supported by the fact that total GHG emissions in 2012 (68,752 kt CO<sub>2</sub> eq) were 13.1 per cent above the 1990 level and below the 2012 value for the 'with measures' scenario. The projection under the 'with measures' scenario reported by Portugal indicates that the total GHG emissions would be 0.8 per cent below the 1990 level (31.5 per cent below the 2005 level) in 2020 as a continuation of the current decreasing trend seen since 2005. Taking into account its non-EU ETS target (1 per cent above 2005 level by 2020), Portugal is expected to meet the target in 2020.

20. The challenge to meet the target by 2020 is to maintain the decline in intensity of the  $CO_2$  emissions from the energy sector against GDP. In that sense, the domestic target of RES-based power generation (15,824 MW by 2020) is a challenge for Portugal. In order to meet this target, Portugal should increase the share of RES in total power generation by a rate of 3 per cent per year on average. On the other hand, RES support measures, such as feed-in tariff, are supposed to take into account its maturity, relative costs of each technology and the national added value of each option providing a positive impact in the further consolidation of RES in the power sector.

#### 1. Mitigation actions and their effects

21. Portugal has provided in its BR1 comprehensive and well-organized information on its package of mitigation actions introduced to achieve its target. The BR1 provided information on mitigation actions organized by sector and by gas with the exception of F-gases. A detailed review of the reported information is provided in chapter II.B of the IDR/NC6.

22. The BR1 does not include information required by the UNFCCC reporting guidelines on BRs on PaMs covering F-gases, nor does it explain whether these policies exist or are planned to be implemented in the future. During the review, Portugal explained to the ERT that F-gases are regulated directly by EU legislation (e.g. the new regulation 517/2014) and that Portugal is committed to implement all related measures accordingly. The ERT recommends that Portugal include this information in its next BR to improve the completeness of the report. The ERT encourages Portugal to clarify which PaMs have been added since submission of the NC5.

23. Taking into account the information presented on PaMs and their estimated impacts, Portugal is on track to achieve its 2020 target. The set of PaMs implemented and planned by Portugal covers a range of actions in different sectors, combining measures with GHG emissions reduction as their primary target with measures where the primary objectives contribute to the mitigation of GHG emissions. The information reported in CTF table 3 gives an overview of the key mitigation actions taken by Portugal in the different sectors with their impacts on emission reductions in 2020. The progress made in the implementation of PaMs is monitored in an innovative way through the system CumprirQuioto.pt,<sup>3</sup> a web-based, publicly available tool that is updated every six months. In this system, each measure has its specific target every year and the performance indicator is shown in per cent as the annual deviation from the target.

24. The ERT noted that key PaMs which contribute to large GHG emission reductions and carbon sequestration in Portugal are packages of programmes, such as the National Action Plan for Renewable Energy (PNAER 2020), the National Action Plan for Energy Efficiency (PNAEE 2016) and the forestry programmes, as well as the EU ETS (coordinated at the EU level). Table 2 provides a concise summary of the key mitigation actions implemented by Portugal to achieve its target.

Sectors affected	List of key policies and measures	Estimate of mitigation impact (kt CO <sub>2</sub> eq)
Policy framework and cross- sectoral measures		
Energy	EU ETS	NE
Energy supply	EU ETS	NE
Renewable energy	Renewable Energy Strategy – PNAER 2020	NE
Energy efficiency <sup>a</sup>	Energy Efficiency Strategy – PNAEE 2016	443
Residential and commercial	Home and Office Renewal	331
sectors	Energy Efficiency System in Buildings	
	Thermal Solar Energy	312
Transport	Eco-car	NE
	Urban Mobility	NE
	Energy Efficiency System in Transport	323
Industrial sectors	Energy Efficiency System in Industry	343
Agriculture	Energy Efficiency in the Agrarian Sector	362
Forestry	Forest Policy Act (law 33/96)	NA

# Table 2 Summary of information on mitigation actions reported by Portugal

<sup>3</sup> <http://www.cumprirquioto.pt>.

Sectors affected	List of key policies and measures	Estimate of mitigation impact (kt CO <sub>2</sub> eq)
	Sustainable Development Plan for Portuguese Forests (resolution 27/99)	NA
	National Forest Strategy (resolution 144/2006)	NA
Waste management	National Waste Management Plan	74.7
	Strategic Plan for Municipal Solid Waste	NE

*Note*: The greenhouse gas reduction estimates given for some measures are reductions in carbon dioxide or carbon dioxide equivalent for 2020.

*Abbreviations*: EU ETS = European Union Emissions Trading System, NA = not applicable, NE = not estimated, PNAEE = National Action Plan for Energy Efficiency, PNAER = National Action Plan for Renewable Energy.

<sup>*a*</sup> Primary energy savings that allow a reduction of 25 per cent in energy consumption by 2020 compared with 2007.

25. In its BR1, Portugal provided limited information on changes in its domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its target. The BR1 refers to the NC6, which briefly mentions the change in institutional arrangements since the NC5, however, it does not elaborate on the current cooperative mechanism and arrangements for compliance, monitoring, reporting and evaluation of the progress made towards the target. The Ministry of Environment, Spatial Planning and Energy (MAOTE) is responsible for implementing the climate policy in Portugal with the purpose of achieving a competitive, resilient and low-carbon economy. In addition, the new Portuguese Environment Agency (APA) was established as a public entity with indirect dependency from MAOTE. APA has particular responsibilities regarding coordination of climate change policies, promoting articulation with other sectoral policies within a framework of institutional cooperation.

26. During the review, Portugal provided additional information and an explanation on this matter. The ERT recommends that Portugal provide more factual information on the administrative structure and institutional arrangements in place at the time of the preparation of the next BR in order to improve transparency.

27. The ERT noted that in its BR1 Portugal did not provide explicit information on the assessment of the economic and social consequences of response measures. The ERT noted that the national inventory report of the 2013 annual GHG inventory submission does include mostly transparent information on the minimization of adverse impacts of response measures to climate change. The ERT encourages Portugal to provide detailed information on the assessment of the economic and social consequences of response measures in its next BR.

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

28. Portugal reported in its BR1 and CTF tables 4 on its plans to use market-based mechanisms under the Convention to achieve its target. Portugal also reported on the contribution from LULUCF to achieve its target in its BR1 and CTF tables 4. Figures on planned use of market-based mechanisms were provided during the review and are described in the IDR/NC6 (chapter II.C.2). Table 3 illustrates how Portugal reported on the use of units from market-based mechanisms and LULUCF to achieve its target.

Year	Emissions excluding LULUCF (kt CO2 eq)	LULUCF emissions/removals (kt CO2 eq) <sup>a</sup>	Emissions including LULUCF (kt CO2 eq) <sup>a</sup>	Use of units from the market-based mechanisms (kt CO <sub>2</sub> eq) <sup>b</sup>
1990 <sup>c</sup>	60 952.39	NA	NA	NA
2010	71 382.42	NA	NA	NR
2011	69 986.45	NA	NA	NR
2012	68 752.89	NA	NA	NR

#### Table 3

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

*Note*: Greenhouse gas emissions data for 2012 were provided by Portugal during the review and are as reported in the 2014 GHG inventory submission. All other emissions data are as provided in the first biennial report.

*Abbreviations*: LULUCF = land use, land-use change and forestry, NA = not applicable, NR = not reported. <sup>*a*</sup> Portugal, in common tabular format table 4, reported a contribution from the LULUCF sector of -9,990 kt carbon dioxide equivalent in 2010, 2011 and 2012 as part of information on progress made towards the target. The expert review team did not include these values in the table above as Portugal is a member State of the European Union, which has an unconditional commitment to reduce greenhouse gas emissions by 20 per cent by 2020 compared with 1990 that does not include emissions/removals from LULUCF.

 $b^{\tilde{b}}$  Use of Kyoto Protocol mechanisms will be determined in the true-up period, thus data is not yet available.

<sup>c</sup> Emissions and removals for 1990 shall be reported, if a base year other than 1990 is used.

#### 3. Projections

29. Portugal has provided in its BR1 and CTF tables 5 and 6 comprehensive information on its updated 'with measures' projections for 2020 and 2030. A detailed review of the reported information is provided in chapter II.C of the IDR/NC6.

30. The ERT noted that CTF tables 6 contain incorrect values for the GHG emission projections. During the review, Portugal provided corrected tables 6 for the latest updated version of the projections simulation (including a high 'with measures' scenario for 2030). The ERT noted that some values may still be incorrect (e.g.  $N_2O$  emissions in 2005). The ERT encourages Portugal to improve its quality control measures and ensure that reported values on GHG emission projections do not contain mistakes in its next BR and CTF tables submission. In its BR1, Portugal reported that the methodologies used for the preparation of projections are identical to those used for the NC5. The ERT noted that the GDP growth assumption was set as -1.0 per cent per year for 2011–2015 and 1.8 per cent per year for 2015–2020, which seems reasonable.

31. The ERT noted the updated/revised information provided by Portugal on projected emission trends by 2030. According to this information, the projected GHG emission trends are 0.8 per cent below 1990 level in 2020 (equivalent to 31.5 per cent below the 2005 level) and 11.0 per cent below 1990 level in 2030 (high scenario) (equivalent to 38.6 per cent below the 2005 level). Although there is no country-specific overall target for Portugal, the ERT notes that Portugal is expected to meet the target for non-EU ETS covered sectors (1 per cent above the 2005 level) based on the EU ETS and non-EU ETS sector breakdown projections provided during the review, which show that in 2020 the EU ETS covered sectors will be 41 per cent below the 2005 level and the non-EU ETS covered sectors will be 24 per cent below the 2005 level.

32. On the other hand, Portugal's current position regarding the 2030 EU climate and energy package is "40 per cent GHG reductions by 2030 (EU-wide)", "40 per cent binding

renewables target by 2030 (EU-wide)", "30 per cent binding energy efficiency target by 2030 (EU-wide)" and "25 per cent grid-interconnection target by 2030 (for all member States)". The ERT encourages Portugal to prepare a 'with additional measures' scenario in order to assess the implications of its current position for the 2030 EU climate and energy package and the planning of possible new PaMs for its next BR.

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

#### 1. Provision of financial support to developing country Parties

33. In its BR1 and CTF tables 7, Portugal reported information on the provision of financial, technological and capacity-building support required under the Convention. In the BR1, Portugal reported its financial support as part of its official development assistance (ODA) for the years 2011 and 2012. Resources are classified by channel (bilateral and multilateral), goal (mitigation, adaptation, cross-cutting) and recipient country. Climate change related ODA is also classified by "significant objective" and "main objective" of the support. However, the ERT noted that the information reported is not well structured and does not allow for ease of understanding of the flow of resources and how the reported components add to the total ODA. During the review, Portugal provided more detailed information and clarified the definitions used in its reporting. The ERT recommends that Portugal increase the transparency of its reporting by providing more details on and definitions of its climate change related financial support to developing countries in its next BR.

34. The ERT noted that the required information on financial support provided in CTF tables 7, 7(a) and 7(b) is not complete. In these tables, the values are presented in either euros or United States dollars and not in both currencies as required. In CTF table 7(a), the columns "funding source", "financial instrument", "type of support" and "sector" are not completed and the values provided to the specialized United Nations bodies (United Nations Development Programme, United Nations Environment Programme) are missing. In CTF table 7(b), the columns "funding source", "financial instrument" and "additional information" are incomplete. Moreover, the ERT identified inconsistencies between the values reported in the NC6, the BR1 and the CTF tables. In response to questions raised by the ERT during the review, Portugal clarified the information and corrected the values presented in the BR1 and officially resubmitted the CTF tables. The ERT acknowledges that the new information improved and mostly resolved the inconsistency issues and the gaps identified in the CTF tables. However, the CTF tables still do not fully adhere to the reporting requirements established in decision 19/CP.18, as the total multilateral ODA reported in table 7(a) is lower than the value reported in the BR1. The ERT recommends that Portugal improve the completeness of the CTF tables and its quality control procedures in order to ensure the correctness and consistency of the values reported in the BR and the CTF tables, and include the information provided during the review in its next BR in order to increase the transparency of the report.

35. In its BR1, Portugal did not report on what 'new and additional' financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention and did not clarify how it has determined such resources as being 'new and additional'. Nevertheless, it identified that the resources included in its fast-start finance, a programme agreed under the UNFCCC aiming to support developing countries on climate change measures, are considered to be additional. Under this agreement, the EU agreed on a joint contribution. In response to questions raised by the ERT during the review, Portugal informed the ERT that it has institutionalized the Portuguese Carbon Fund as a new source of funding for climate change cooperation with developing countries from 2010. The financial flows provided are

additional to previous sources, meaning that Portugal has not redirected previously existing flows. The financial contribution of the Portuguese Carbon Fund counts towards ODA but is an independent source relying entirely on the Fund's autonomous income. The ERT recommends that Portugal clearly indicate what ;new and additional' financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention and clarify how it has determined that such resources are 'new and additional' in its next BR.

Most of the financial support reported by Portugal refers to public funds. Portugal 36. did not describe how its resources address the adaptation and mitigation needs of developing country Parties. During the review, Portugal clarified that it is the beneficiary country that promotes the programmes, projects and activities and presents them to the Portuguese cooperation for financing, which then has to explain in detail how the project will contribute to addressing the needs and problems of the beneficiary and to what extent it is aligned with the strategies of the beneficiary. Little information is provided in the BR1 on if and how Portugal promotes private investment in mitigation and adaptation activities in developing country Parties. Portugal remarked in the BR1 that under its fast-start finance initiative, it was possible to mobilize an additional amount of funding (public and private) through co-financing of some projects, but it did not provide details. The ERT encourages Portugal to report on private financial flows leveraged by bilateral public climate finance towards mitigation and adaptation activities in developing country Parties, and on PaMs that promote the scaling up of private investment in mitigation and adaptation activities in developing country Parties. The ERT also encourages Portugal to provide more information on how the financial resources provided address the needs of developing country Parties in its next BR.

37. Table 4 includes some of the information reported by Portugal on its provision of financial support.

	Years of disbursement		
Allocation channel of public financial support	2011	2012	
Official development assistance	707 821 591	580 782 597	
ODA contributions through multilateral channels, including:	230 659 066	183 502 571	
Contributions through United Nations bodies	1 002 736	667 992	
Climate-specific contributions through multilateral channels, including:	0	0	
Contribution to the Global Environment Facility	0	0	
Contribution to the Green Climate Fund	0	0	
ODA contributions through bilateral, regional and other channels	477 162 525	397 280 026	
Climate-specific contributions through bilateral, regional and other channels, including:	21 635 862	18 643 581	
Contributions to mitigation	21 371 481	18 529 060	
Contributions to adaptation	264 381	114 521	

# Table 4

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

Abbreviation: ODA = official development assistance.

#### 2. Approach used to track support provided

38. Between 2010 and 2012, Portugal's ODA decreased by 10.4 per cent, largely owing to the financial situation of the country. Bilateral ODA is the main channel of support (68.4 per cent of the total ODA in 2012). Portugal reported that ODA for the environment has a limited significance when compared with the total value of bilateral ODA (6.3 per cent in 2011 and 5.2 per cent in 2012). In particular, the share of climate change related bilateral ODA amounted to 5.5 per cent in 2011 and 4.9 per cent in 2012. This is a function of the strategic priorities (education, health, security and justice) established by Portugal for its ODA. The multilateral ODA intended for climate change has been reduced since 2010 as Portugal has not formally established any commitment regarding a contribution to the fifth replenishment of the Global Environment Facility. Portugal's ODA is mainly directed towards African countries using Portuguese as an official language (PALOPs) and Timor-Leste.

39. Portugal provided in its BR1 information on the methodology used for reporting information on provision of financial support it has provided. Portugal does not provide in its BR1 a description of its national approach for tracking the provision of financial, technological and capacity-building support to developing countries, including information on indicators and delivery mechanisms used, and allocation channels tracked. During the review, Portugal informed the ERT that the approach used to track the provision of financial support follows the provisions of the Creditor Reporting System of the Organisation for Economic Co-operation and Development. This system established markers to track the 'Rio markers', including the climate change related aid that is classified in accordance with the objective of the aid (mitigation or adaptation). The ERT recommends that Portugal provide details of the tracking system applied to climate change financing in its next BR.

40. The vast majority of climate change related support is directed towards mitigation objectives (98.8 per cent in 2011 and 99.4 per cent in 2012). The programmes and projects of support are mainly related to the energy sector, in particular to promoting the use of RES (see para. 43 below). Despite the focus on mitigation to date, Portugal has reported that among the already approved future projects, the share of adaptation projects will rise to 14.8 per cent when the approved projects under fast-start finance are implemented.

41. With regard to the most recent financial contributions to enhance the implementation of the Convention by developing countries, Portugal has committed itself to provide EUR 36 million under its fast-start finance. Under this provision, EUR 14.3 million has been allocated to approved projects and up to December 2012 payments were made amounting to EUR 5.7 million.

#### 3. Technology development and transfer

42. In its BR1 and CTF table 8, Portugal has provided information on activities related to the transfer of technology to developing countries. Portugal highlighted that most projects and activities in the context of ODA involve technology transfer and that in the approval process the identification of technologies is taken into consideration. However, the BR1 did not distinguish between activities undertaken by the public or private sectors as required by the UNFCCC reporting guidelines on BRs. During the review, Portugal made presentations on various projects, detailing the participation of the private sector in the deployment of technology. The ERT recommends that Portugal include in its next BR details of the private sector involvement/participation in the provision of technology support to developing countries.

43. The focus of the technology support provided by Portugal has been the energy sector and particularly RES. In the BR1 and in CTF table 8, Portugal presented two examples of

projects in the area of technology transfer: photovoltaic microgrid systems for electrification of 50 villages in Mozambique, and the atlas of renewable resources in Mozambique.

44. During the review, Portugal made presentations and provided more information on other projects with a technology support component, both 'soft' and 'hard' technologies. These included a project entitled 'Support plan for urban drainage' in Mozambique, and a biogas project and a renewable energy project in Timor-Leste. The ERT encourages Portugal to include details of the technology transfer component of such projects in its next BR. The ERT also encourages Portugal to include follow-up information and analyses on the impact of the above-mentioned and future projects in its next BR.

#### 4. Capacity-building

45. In its BR1 and CTF table 9, Portugal has provided information on how it has provided capacity-building support for mitigation, adaptation and technology transfer, highlighting that it pays special attention to capacity-building at the institutional level. Portugal informed the ERT during the review that in presenting a project proposal in these areas the proponents must explain how the project addresses the needs of the recipient country. The ERT noted that table 9 of the CTF lists a number of projects classified by country and target area (mitigation or adaptation) that include a significant capacity-building component. The ERT encourages Portugal to describe in more detail the capacity-building needs as identified by the recipient Party are taken into consideration in the approval process, in its next BR. The ERT also encourages Portugal to include information on and lessons learned from the experiences of capacity-building practices.

### **III.** Conclusions

46. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of Portugal in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 and CTF tables provide a good overview of information on: emissions and removals related to the quantified economy-wide emission reduction target, a description of the target, progress made by Portugal to achieve its target, and provision of support to developing country Parties. During the review, Portugal provided additional information; for example, on GHG emission values for 2012; a detailed explanation of each sector's PaMs, especially for the LULUCF sector; updated and revised projections; and detailed information on financial resources and technology transfer.

47. Portugal's GHG emissions related to the target for 2011 were estimated to be 4.8 per cent above its 1990 level excluding LULUCF and 6.9 per cent below including LULUCF. Portugal has two notably different phases in its GHG emission trends in the period 1990–2011: 1990–2005 and 2005–2011. The first phase is characterized by a strong increase in GHG emissions, especially in  $CO_2$  emissions from the energy sector, driven by economic growth with almost no energy saving and fuel switching measures. However, the second phase shows a sharp decline in  $CO_2$  emissions from the energy sector as well as a decline in their intensity against GDP. For the latter phase, both energy saving (in most energy subsectors) and energy switching (mainly from oil to wind power and hydropower) have been the main drivers of the GHG emission reductions.

48. Portugal reported a description of its quantified economy-wide emission reduction target, including associated conditions, assumptions and methodologies related to the definition of the target. Portugal provided information on GWP values applied, the LULUCF sector and its role, the possible use and scale of the contributions of market-based

mechanisms, the inclusion of NF<sub>3</sub>, and the base year for the F-gases – but with some lack of detail and internal inconsistencies. The ERT noted that Portugal does not have a country-specific target as it participates in achieving the EU quantified economy-wide target of 20 per cent reduction of emissions by 2020 below the base year (1990) level. The target for the EU and its member States is based on the EU ETS and the ESD. The target for the EU ETS sectors is 21 per cent below 2005 level by 2020 with no country-specific targets assigned. The target for the non-EU ETS sectors is 10 per cent below 2005 level by 2020 and the effort-sharing target for Portugal is 1 per cent above 2005 level by 2020. Net emissions in the LULUCF sector are excluded for the base year and the target.

49. The ERT noted significant progress made by Portugal towards achieving the target, supported by the fact that total GHG emissions in 2012 (68,751.89 kt  $CO_2$  eq) were 13.1 per cent above the 1990 level and below the 2012 value for the 'with measures' scenario. The projection under the 'with measures' scenario reported by Portugal indicates that as a continuation of the current decreasing trend seen since 2005, the total GHG emissions would be 0.8 per cent below the 1990 level (31.5 per cent below the 2005 level) in 2020 and 11.0 per cent below the 1990 level (38.6 per cent below the 2005 level) in 2030 (high scenario). Taking into account its non-EU ETS target (1 per cent above 2005 level by 2020), Portugal is expected to meet the target in 2020.

50. Portugal has provided in its BR1 comprehensive and well-organized information on its package of mitigation actions implemented and planned to achieve its target. The information on mitigation actions is organized by sector and by gas with the exception of F-gases. The ERT noted that key PaMs which contribute to large GHG emission reductions and carbon sequestration in Portugal are packages of programmes, such as PNAER 2020, PNAEE 2016 and the forestry programmes, as well as the EU ETS (coordinated at the EU level). Taking into account the information presented on PaMs and their estimated impacts, Portugal is on track to achieve its 2020 target. Portugal also reported in its BR1 and CTF tables on the possibility of using market-based mechanisms under the Convention and on the contribution from LULUCF to achieve its target.

51. Between 2010 and 2012, Portugal's ODA decreased by 10.4 per cent, largely owing to the financial situation of the country. ODA for the environment has a limited significance when compared with the total value of bilateral ODA, which is the main channel of support provided by the country. This is a function of the strategic priorities (education, health, security and justice) established by Portugal. In particular, the share of climate change related bilateral ODA amounted to 4.9 per cent in 2012. Portugal's ODA is mainly directed towards the community of PALOPs and Timor-Leste.

52. The vast majority of climate change related support is directed towards mitigation objectives (99.4 per cent in 2012). The programmes and projects of financial and technological support are mainly related to the energy sector, in particular to promoting the use of RES. Despite the focus on mitigation to date, Portugal has reported that among the already approved future projects, the share of adaptation projects will rise to 14.8 per cent when the approved projects under the fast-start finance initiative are implemented.

53. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of Portugal's reporting under the Convention. The key recommendations<sup>4</sup> are that Portugal:

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

(i) Provide information on PaMs for F-gases;

<sup>&</sup>lt;sup>4</sup> The recommendations are given in full in the relevant sections of this report.

(ii) Provide complete and consistent financial support information in the BR and the CTF tables;

(iii) Indicate what 'new and additional' financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention and clarify how it has determined that such resources are 'new and additional';

(iv) Provide details of the tracking system applied to climate change financing;

(v) Provide information on private-sector involvement/participation in the provision of technology support to developing countries;

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

(i) Provide more detailed and clearer information on the EU target for 2020 and its relationship with Portugal's corresponding targets, as well as the GWP values applied and the role of LULUCF and carbon credits from market based mechanisms;

(ii) Provide more detailed and updated information on institutional arrangements in place at the time of preparation of the next BR and any changes since the BR1;

(iii) Provide more detailed information on and definitions of its climate change related financial support, to allow for ease of understanding of the flow of resources and how the reported components add to the total ODA.

### 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 <a href="http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4">http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4</a>>.

"Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention". Annex to decision 23/CP.19. Available at <a href="http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20">http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20</a>>.

FCCC/ARR/2012/PRT. Report of the individual review of the annual submission of Portugal submitted in 2012. Available at <a href="http://unfccc.int/resource/docs/2013/arr/prt.pdf">http://unfccc.int/resource/docs/2013/arr/prt.pdf</a>>.

FCCC/IDR.5/PRT. Report of the in-depth review of the fifth national communication of Portugal. Available at <a href="http://unfccc.int/resource/docs/2011/idr/prt05.pdf">http://unfccc.int/resource/docs/2011/idr/prt05.pdf</a>>.

FCCC/IDR.5/PRT/Corr.1. Report of the in-depth review of the fifth national communication of Portugal. Corrigendum. Available at <a href="http://unfccc.int/resource/docs/2011/idr/prt05c01.pdf">http://unfccc.int/resource/docs/2011/idr/prt05c01.pdf</a>>.

Sixth national communication of Portugal. Available at <a href="http://unfccc.int/files/national\_reports/annex\_i\_natcom/submitted\_natcom/application/pdf">http://unfccc.int/files/national\_reports/annex\_i\_natcom/submitted\_natcom/application/pdf</a> /prt\_6cn\_2ressubmission\_final.pdf>.

Sixth national communication of Portugal. Addendum. Available at <a href="http://unfccc.int/files/national\_reports/annex\_i\_natcom/submitted\_natcom/application/pdf">http://unfccc.int/files/national\_reports/annex\_i\_natcom/submitted\_natcom/application/pdf</a> /prt\_nc6\_addendum.pdf>.

First biennial report of Portugal. Available at <a href="http://unfccc.int/files/national\_reports/annex\_i\_natcom/submitted\_natcom/application/pdf">http://unfccc.int/files/national\_reports/annex\_i\_natcom/submitted\_natcom/application/pdf</a> /prt\_6cn\_2ressubmission\_final.pdf>.

Common tabular format tables of Portugal. Available at <a href="http://unfccc.int/files/national\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_biennial\_reports/biennial\_reports\_and\_iar/submitted\_bie

2013 GHG inventory submission of Portugal. Available at <a href="http://unfccc.int/national\_reports/annex\_i\_ghg\_inventories/national\_inventories\_submissi">http://unfccc.int/national\_reports/annex\_i\_ghg\_inventories/national\_inventories\_submissi ons/items/7383.php>.</a>

2014 GHG inventory submission of Portugal. Available at <a href="http://unfccc.int/national\_reports/annex\_i\_ghg\_inventories/national\_inventories\_submissions/items/8108.php">http://unfccc.int/national\_reports/annex\_i\_ghg\_inventories/national\_inventories\_submissions/items/8108.php</a>>.

### B. Additional information provided by the Party

Responses to questions during the review were received from Mr. Eduardo Santos and Mr. Jose Paulino (Portuguese Environment Agency), including additional material on updated policies and measures, greenhouse gas projections, the national registry and recent climate policy developments in Portugal. The following documents<sup>1</sup> were also provided by Portugal:

National Action Plan for Energy Efficiency (Energy Efficiency Strategy – PNAEE 2016): Resolução do Conselho de Ministros n.º 20/2013, 28 de fevereiro de 2013.

National Action Plan for Renewable Energy (Renewable Energy Strategy – PNAER 2020): Resolução do Conselho de Ministros n.º 20/2013, 28 de fevereiro de 2013.

OECD-DAC. 2013. Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire. Paris: Organisation for Economic Co-operation and Development.

<sup>&</sup>lt;sup>1</sup> Reproduced as received from the Party.