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

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

2. The review took place from 7 to 12 March 2016 in Bonn, Germany, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Xiang Gao (China), Mr. Fredrick Kossam (Malawi), Mr. Bundit Limmeechokchai (Thailand), Mr. Nicolo Macaluso (Canada), Mr. Khanyisa Brian Mantlana (South Africa), Mr. Dylan Muggeridge (New Zealand), Ms. Gherghita Nicodim (Romania), Mr. Marcelo Rocha (Brazil), Mr. Christoph Streissler (Austria) and Mr. Alexander Zahar (Australia). Mr. Gao and Mr. Streissler were the lead reviewers. The review was coordinated by Ms. Ruta Bubniene and Ms. Veronica Colerio (UNFCCC secretariat).

B. Summary

3. The expert review team (ERT) conducted a technical review of the information reported in the BR2 of Latvia 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, Latvia provided the following additional relevant information: the quantified economy-wide emission reduction target; the progress made towards the achievement of the target; and the provision of financial, technological and capacity-building support.

1. Timeliness

4. The BR2 was submitted on 30 December 2015, before the deadline of 1 January 2016 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 30 December 2015. Following questions raised by the ERT during the review on the characteristics of mitigation actions, Latvia resubmitted the BR2 as well as the CTF tables (version 2.0, 13 March 2016). The resubmission included a revised CTF table 3 and a revised description of relevant mitigation actions in the BR2.

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

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.

Table 1

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

<i>Section of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Paragraphs with recommendations</i>
Greenhouse gas emissions and trends	Complete	Transparent	NA
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Mostly transparent	11
Progress in achievement of targets	Mostly complete	Mostly transparent	20, 24, 43, 45
Provision of support to developing country Parties ^a	NA	NA	NA

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

Abbreviation: NA = not applicable.

^a Latvia is not a Party included in Annex II to the Convention and is therefore not obliged to adopt measures and fulfil obligations as defined in Article 4, paragraphs 3, 4 and 5, of the Convention.

II. Technical review of the reported information

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

6. Latvia has provided a summary of information on greenhouse gas (GHG) emission trends for the period 1990–2013 in its BR2 and CTF tables 1 and 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 Latvia’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” that are required by paragraph 3 of the UNFCCC reporting guidelines on BRs. Further, Latvia explained that there were no changes in the national inventory arrangements since its first biennial report (BR1). Regulation no. 217 of the Cabinet of Ministers, adopted on 27 March 2012, defines the responsibilities for and institutional cooperation related to the establishment and maintenance of the national GHG inventory system.

7. The information reported in the BR2 on emission trends is consistent with that reported in the 2015 annual inventory submission of Latvia. To reflect the most recently available data, version 3 of Latvia’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 land use, land-use change and forestry (LULUCF) decreased by 58.3 per cent between 1990 and 2013, whereas total GHG emissions including net emissions and removals from LULUCF decreased by 37.7 per cent over the same period. The decrease in the total GHG emissions

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.

can be attributed mainly to carbon dioxide (CO₂) emissions, which decreased by 62.8 per cent (excluding LULUCF) between 1990 and 2013. Over the same period, emissions of methane (CH₄) decreased by 49.0 per cent, while emissions of nitrous oxide (N₂O) decreased by 44.0 per cent. Emissions of hydrofluorocarbons (HFCs) increased by a factor of 160 and emissions of sulphur hexafluoride (SF₆) increased by a factor of 48 between 1995 (the first year for which data on fluorinated gases (F-gases) are available) and 2013. Emissions of perfluorocarbons (PFCs) and nitrogen trifluoride (NF₃) are reported as “NO” (not occurring). The emission trends were driven mainly by the structural economic changes in the course of the transition to a market economy (1990–1995); the growth of Latvia’s economy (82.0 per cent growth in gross domestic product (GDP) between 2000 and 2007); and the active implementation of climate change policies and measures (2008–2013), such as energy efficiency improvement measures and wider use of renewable energy sources (e.g. hydropower production).

9. The ERT noted that, during the period 1990–2013, Latvia’s population decreased by 24.4 per cent, GDP per capita increased by 64.0 per cent, while GHG emissions per GDP and GHG emissions per capita decreased by 66.4 and 44.8 per cent, respectively. Latvia’s economy grew rapidly in the period 2000–2007, with a GDP increase of 82.0 per cent. Table 2 below illustrates the emission trends by sector and some of the economic indicators relevant to GHG emissions for Latvia.

Table 2

Greenhouse gas emissions by sector and some indicators relevant to greenhouse gas emissions for Latvia 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	19 258.46	7 383.68	8 452.79	7 290.72	7 185.09	–62.7	–1.4	73.5	65.8
A1. Energy industries	6 217.15	2 485.18	2 262.58	1 869.28	1 939.40	–68.8	3.8	23.7	17.8
A2. Manufacturing industries and construction	3 903.90	1 186.11	1 102.35	962.65	792.96	–79.7	–17.6	14.9	7.3
A3. Transport	3 030.67	2 206.18	3 250.65	2 792.16	2 826.58	–6.7	1.2	11.6	25.9
A4.–A5. Other	5 859.15	1 355.56	1 745.60	1 587.02	1 525.14	–74.0	–3.9	22.4	14.0
B. Fugitive emissions from fuels	247.59	150.64	91.61	79.61	101.01	–59.2	26.9	0.9	0.9
C. CO ₂ transport and storage	NO	NO	NO	NO	NO	–	–	–	–
2. IPPU	602.66	158.61	566.74	688.14	668.97	11.0	–2.8	2.3	6.1
3. Agriculture	5 558.66	1 859.64	2 140.57	2 250.52	2 310.12	–58.4	–2.6	21.2	21.2
4. LULUCF	–8 899.50	–7 130.69	881.52	–416.84	–147.78	–98.3	–64.5	–	–
5. Waste	764.59	745.31	736.84	737.27	749.54	–2.0	1.7	2.9	6.9
6. Other	NO	NO	NO	NO	NO	–	–	–	–
Indirect CO ₂	142.11	126.63	114.18	111.89	111.70	–21.4	–0.2		–
Total GHG emissions without LULUCF	26 184.37	10 147.24	11 896.94	10 966.65	10 913.73	–58.3	–0.5	100.0	100.0

Sector	GHG emissions (kt CO ₂ eq)					Change (%)		Share by sector (%)	
	1990	2000	2010	2012	2013	1990–2013	2012–2013	1990	2013
	Total GHG emissions with LULUCF	17 284.87	3 016.55	12 778.46	10 549.81	10 765.95	-37.7	2.0	–
Total GHG emissions without LULUCF, including indirect CO₂	26 326.48	10 273.87	12 011.12	11 078.53	11 025.43	-58.1	-0.5	–	–
Total GHG emissions with LULUCF, including indirect CO₂	17 426.98	3 143.18	12 892.64	10 661.69	10 877.65	-37.6	2.0	–	–
<i>Indicators</i>									
GDP per capita (thousands 2011 USD using PPP)	10.11	8.55	13.82	15.75	16.58	64.0	5.2	–	–
GHG emissions without LULUCF per capita (t CO ₂ eq)	9.83	4.29	5.67	5.39	5.42	-44.8	0.6	–	–
GHG emissions without LULUCF per GDP unit (kg CO ₂ eq per 2011 USD using PPP)	0.97	0.50	0.41	0.34	0.33	-66.4	-4.4	–	–

Sources: (1) GHG emission data: Latvia's 2015 annual inventory submission, version 3; (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, 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), Latvia 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 (1990), the emission reduction target (20 per cent below the 1990 level by 2020), the sectors covered by the target (all sectors except for LULUCF), the use of global warming potential (GWP) values from the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change and the use of market-based mechanisms under the Convention. Further information on the target and the assumptions, conditions and methodologies related to the target is provided in chapter 3 of the BR2.

11. In the BR2 and CTF table 2(b), the base year for HFCs and SF₆ was reported as 1995. In the report of the technical review of the first biennial report, the ERT recommended that Latvia report 1990 as the base year for all gases, in line with the European Union (EU) target. During the review, Latvia provided additional information, explaining that 1990 will be used as the base year for F-gases using the values for 1995.

The ERT reiterates the recommendation of the previous technical review report that Latvia use 1990 as the base year for all gases.

12. For Latvia, the Convention entered into force on 21 June 1995. Under the Convention, Latvia committed to contributing to the achievement of the joint EU economy-wide emission reduction target of 20 per cent below the 1990 level by 2020. The EU offered to move to a 30 per cent reduction on the condition that other developed countries commit to a comparable target and developing countries contribute according to their responsibilities and respective capabilities under a new global climate change agreement.

13. The target for the EU and its member States is formalized in the EU 2020 climate and energy package. This legislative package regulates emissions of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆ using GWP values from the AR4 to aggregate the GHG emissions of the EU up to 2020. Emissions and removals from the LULUCF sector are not included in the quantified economy-wide emission reduction target under the Convention. The EU generally allows its member States to use units from the Kyoto Protocol mechanisms as well as new market mechanisms for compliance purposes, subject to a number of restrictions in terms of origin and type of project and up to an established limit. Companies can make use of such units to fulfil their requirements under the EU Emissions Trading System (EU ETS).

14. The EU 2020 climate and energy package includes the EU ETS and the effort-sharing decision (ESD) (see chapter II.C.1 below). Further information on this package is provided in chapter 3.1 of the BR2. The EU ETS covers mainly point emissions sources in the energy, industrial processes and aviation sectors. For the period 2013–2020, an EU-wide cap has been put in place with the goal of reducing emissions by 21 per cent below the 2005 level by 2020. Emissions from sectors covered by the ESD are regulated by targets specific to each member State, which leads to an aggregate reduction at the EU level of 10 per cent below the 2005 level by 2020.

15. The ESD establishes binding annual emission allocations (AEAs) for EU member States for the period 2013–2020 in the sectors not covered by the EU ETS (non-ETS sectors). Latvia has a target to limit its emissions from sectors covered by the ESD by 17.0 per cent above the 2005 level by 2020. This national emission target for 2020 has been transferred into binding quantified annual emission reduction targets for the period 2013–2020, expressed in AEAs. In absolute terms, this means that under the ESD, Latvia could limit its emission increase following a linear path from 9,260.06 kt of carbon dioxide equivalent (CO₂ eq) in 2013 to 9,898.30 kt CO₂ eq in 2020.³ The ERT noted that in 2013, emissions from the non-ETS sectors were 9.6 per cent⁴ lower than those defined as the ESD target for 2013 by the relevant European Commission decisions.

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

16. This chapter provides information on the review of the reporting by Latvia 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.

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

⁴ European Environment Agency report no. 4/2015, table A3.1.

1. Mitigation actions and their effects

17. In its BR2 and CTF table 3, Latvia reported on its progress in the achievement of its target and the mitigation actions implemented and planned since its sixth national communication (NC6) and BR1 to achieve its target. In CTF table 3, the reported policies and measures (PaMs) are well described, with clearly defined objectives. The information for each PaM is provided by sector and by gas. Latvia has quantified the estimated mitigation impact for several individual PaMs, most of which are included in the energy and transport sectors. Further information on the mitigation actions related to the Party's target is provided in chapter 4 of the BR2.

18. This report highlights the changes made since the publication of the Party's NC6 and BR1, including changes in content and time horizon of the cross-cutting and sectoral PaMs. In its BR2, Latvia did not report information on other changes in its domestic institutional arrangements including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information or evaluation of the progress made towards its economy-wide emission reduction target. Latvia did, however, describe its current institutional arrangements with regards to its economy-wide emission reduction target, stating that the Climate Change Department of the Ministry of Environmental Protection and Regional Development (MEPRD) is responsible for the implementation and development of climate change mitigation and adaptation PaMs.

19. During the review, Latvia informed the ERT of its plans to amend its Law on Pollution (2002) by mid-2016 and define the main institutions responsible for the evaluation of the progress and the achievement of Latvia's climate change commitments. The amendment will lead to the creation of a working group of the State Chancellery to coordinate inter-institutional cooperation. MEPRD, in collaboration with the other relevant ministries, will prepare an annual report to the Cabinet of Ministers, which will include information on the progress made towards implementation of Latvia's climate change commitments and proposals for additional measures to fulfil those commitments.

20. The ERT reiterates the recommendation made in the previous review report that Latvia improve its completeness of reporting by including information in its next biennial report (BR) on changes in its domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting and archiving of information and evaluation of the progress made towards its target.

21. The ERT noted that the information on PaMs reported in CTF table 3 was not always organized according to the sectors provided in the GHG emissions inventory. The ERT also noted that in the full list of PaMs, available in the BR2 and CTF table 3, Latvia did not provide the corresponding year for the reported mitigation impact. Moreover, the mitigation impact on CO₂ emissions for some PaMs was reported as "IE" (included elsewhere) in the BR1, but as "NE" (not estimated) in the BR2, even though the content and time horizon of the PaMs had not changed, and no explanation was provided.

22. During the review, Latvia provided additional information, namely on the assignment of each PaM to either the 'with measures' (WEM) scenario or the 'with additional measures' (WAM) scenario, in accordance with the UNFCCC reporting guidelines on BRs and 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" (hereinafter referred to as the UNFCCC reporting guidelines on NCs). In addition, Latvia provided revised estimates of the quantitative mitigation impact on CO₂ emissions for a number of PaMs, mostly for the energy sector, and for all other PaMs, the mitigation impact was reported as "IE", replacing the notation key "NE"

originally reported (e.g. the PaM “Energy Efficiency Requirements for District Heating Systems”, originally reported as “NE”, was reported as included under the PaM “Investment Support Programme for District Heating Systems”). The Party explained that the main reason for the changes in the mitigation impacts of some PaMs was that between the BR1 and the BR2, the total amount of available financing changed for a number of projects under implementation, with resulting changes in the estimated mitigation impacts.

23. During the review, following questions raised by the ERT on the characteristics of mitigation actions, Latvia resubmitted the BR2 and the CTF tables (version 2.0, 13 March 2016). The resubmission included a revised CTF table 3 and a revised description of the relevant mitigation actions in the BR2.

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

25. Having in place a system and institutional arrangements to periodically assess and monitor progress in the implementation of mitigation actions and their impacts will allow Latvia to determine the extent to which mitigation actions have achieved the stated objectives in a given year, and to identify a possible need for additional actions.

26. In its BR2, Latvia did not include information on the assessment of the economic and social consequences of its response measures and on the domestic arrangements established for the process of self-assessment of compliance with emission reductions in comparison with emission reduction commitments or the level of emission reductions required by science. Further, the Party did not provide information on the progress made in the establishment of national rules for taking local action against non-compliance with emission reduction targets.

27. During the review, Latvia informed the ERT that it strives to minimize adverse social, environmental and economic impacts on developing countries by following the Latvian Energy Development Guidelines 2016–2020, as well as all relevant commitments and decisions under the UNFCCC.

28. During the review, Latvia informed the ERT that the Law on Pollution is due to be amended in order to ensure compliance with the national GHG emission reduction target; additionally, in accordance with the ESD, Latvia has to report, on an annual basis, an approximate GHG emissions inventory for the previous year as an indication of whether the country is on track to achieve its national GHG emission reduction target. The Party reported that in Latvia there are no established national rules for taking local action against domestic non-compliance with emission reduction targets.

29. The ERT therefore reiterates the encouragement made by the previous ERT that Latvia incorporate in its next BR the information related to the assessment of the economic and social consequences of its response measures and, 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 local action against non-compliance with emission reduction targets.

30. The implemented and adopted PaMs with the highest mitigation effect are in the energy sector and include investment support programmes for heat and electricity production, which aim to increase the use of renewable energy and improve energy efficiency, such as the “Investment Support Programme for District Heating Systems”, which will continue into the EU 2014–2020 financial period. In the transport sector, a key PaM is the biofuel mix obligation and the energy efficiency labelling of new passenger cars.

31. The key overarching cross-sectoral policy in the EU is the 2020 climate and energy package adopted in 2009, which includes the revised EU ETS and the ESD. This package is supplemented by renewable energy and energy efficiency legislation and legislative proposals on the 2020 targets for CO₂ emissions from cars and vans, the carbon capture and storage directive, and the general programmes for environmental conservation, namely the 7th Environment Action Programme and the Clean Air Policy Package (see table 3 below).

32. In operation since 2005, the EU ETS is a cap-and-trade system that covers all significant energy-intensive installations (mainly large point emissions sources such as power plants and industrial facilities), which produce 40–45 per cent of the GHG emissions of the EU. It is expected that the EU ETS will guarantee that the 2020 target (a 21 per cent emission reduction below the 2005 level) will be achieved for sectors under the scheme. The third phase of the EU ETS started in 2013 and the system now includes aircraft operations (since 2012) as well as N₂O emissions from chemical industries, PFC emissions from aluminium production and CO₂ emissions from industrial processes (since 2013).

33. The ESD became operational in 2013 and covers sectors outside the EU ETS, including transport (excluding domestic and international aviation, and international maritime transport), residential and commercial buildings, agriculture, waste and other sectors, together accounting for 55–60 per cent of the GHG emissions of the EU. The ESD aims to decrease GHG emissions in the EU by 10 per cent below the 2005 level by 2020, and includes binding annual targets for each member State for 2013–2020, which are underpinned by the national policies and actions of the member States (see para. 15 above).

34. The BR2 highlights the EU-wide mitigation actions that are under development, such as the EU ETS. Among the mitigation actions that provide a foundation for significant additional actions that are critical for Latvia to attain the EU-wide 2020 emission reduction target are the continuation of the “Investment Support Programme for District Heating Systems”, which has an estimated mitigation impact of 67 kt CO₂ eq in 2020, and the “Investment Support Programme to Increase Energy Efficiency in Apartment Buildings”, with an estimated mitigation impact of 22 kt CO₂ eq in 2020.

35. At the national level, Latvia introduced policies to achieve its targets under the ESD and domestic emission reduction targets. The key policies reported in the BR2 are, in the energy sector, the “Investment Support Programme in Renewable Technologies for Heat and Electricity Production to Reduce GHG Emissions”, with an estimated mitigation impact of 105 kt CO₂ eq in 2020 and, in the industrial processes sector, the “Investment Support Programme in Industrial Buildings and Technologies Energy Efficiency to Reduce GHG Emissions”, with an estimated mitigation impact of 38 kt CO₂ eq in 2020. Another policy that has delivered significant emission reductions is the “Investment Support Programmes in Public Sector Energy Efficiency”, with an estimated mitigation impact of 54 kt CO₂ eq in 2020.

36. The BR2 highlights the planned domestic mitigation actions that are under development, such as organic farming, with an estimated mitigation impact of 193 kt CO₂ eq in 2020 and 213 kt CO₂ eq in 2025. Among the planned mitigation actions that provide a foundation for significant additional actions, the Latvia National Renewable Action Plan is

critical for Latvia to attain its 2020 emission reduction target, with an estimated mitigation impact of 192 kt CO₂ eq in 2020.

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

Table 3

Summary of information on mitigation actions and their impacts reported by Latvia

<i>Sector affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact in 2020 (kt CO₂ eq)</i>	<i>Estimate of mitigation impact in 2025 (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures	EU Emissions Trading System	NE	NE
	EU effort-sharing decision	NE	NE
Energy, including:			
Transport	Biofuel mix obligation requirement	81	81
Renewable energy	Investment Support Programme in Renewable Technologies for Heat and Electricity Production to Reduce GHG Emissions	105	105
	Investment Support Programme for District Heating Systems	390	390
Energy efficiency	Investment Support Programmes in Public Sector Energy Efficiency	54	54
	Investment Support Programme to Increase Energy Efficiency in Apartment Buildings	43	43
IPPU	Investment Support Programme in Industrial Buildings and Technologies Energy Efficiency to Reduce GHG Emissions	38	38
Agriculture	Organic farming	193	213
LULUCF	LULUCF accounting (EU decision no. 529/2013/EU)	–	–
Waste	Reduction in the landfilling of biodegradable waste	92	92

Notes: (1) 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; (2) The above mitigation impacts associated with the corresponding national policies and measures are based on the information provided by Latvia during the review and in the revised submission of the CTF.

Abbreviations: EU = European Union, GHG = greenhouse gas, IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry.

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

38. Latvia reported in its BR2 and CTF tables 4 and 4(b) its total emissions in the period 2010–2013 and provided information on its use of units from market-based mechanisms under the Convention and other mechanisms and the contribution of LULUCF to achieving its target. Emissions and removals from the LULUCF sector are not included in the Convention target. The use of units from market-based mechanisms takes place through the EU ETS (as described in the BR2 of the EU) and for the purpose of achieving the ESD emission reduction target. Further relevant information on emissions and removals and the use of units is provided in chapter 3.1 of the BR2.

39. For 2013, Latvia reported in CTF table 4 annual total GHG emissions excluding LULUCF of 11,025.42 kt CO₂ eq, or 58.1 per cent below the 1990 base year level. In 2013, emissions from the non-ETS sectors relating to the target under the ESD were 9.6 per cent below Latvia's 2013 AEA level of 9,260.06 kt CO₂ eq.

40. Table 4 below illustrates Latvia's total GHG emissions, the contribution of LULUCF and the use of units from market-based mechanisms to achieve its target.

Table 4

Summary of information on the use of units from market-based mechanisms and land use, land-use change and forestry as part of the reporting on the progress made by Latvia 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)^c</i>
1990	26 326.48	NA	NA	NA
Base year ^a				
2010	12 011.12	NA	NA	NA
2011	11 244.09	NA	NA	NA
2012	11 078.53	NA	NA	NA
2013	11 025.43	NA	NA	NA

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

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

^a Emissions and removals are reported for a base year, if a year other than 1990 is used as a base year. Latvia has elected to include indirect emissions in the total emissions presented in CTF table 4; consequently, these data are not comparable with the data provided in the context of projections, which do not include indirect emissions.

^b The European Union's unconditional commitment to reduce greenhouse gas emissions by 20 per cent below the 1990 level by 2020 does not include emissions/removals from LULUCF.

^c The use of units from market-based mechanisms takes place through the European Union Emissions Trading System (as described in the second biennial report of the European Union) and for the purpose of achieving the European Union effort-sharing decision target. As the compliance assessment for the first year of the effort-sharing decision (2013) will take place in 2016 only, Latvia is currently not able to quantify the amount of units.

41. To assess the progress towards the achievement of the 2020 target, the ERT noted that Latvia's emission reduction target from sectors not covered by the EU ETS under the ESD is 17.0 per cent above the 2005 base year level (see para. 15 above). As discussed in chapter II.B above, in 2013 Latvia's emissions from the sectors not covered by the EU ETS are 9.7 per cent (880.67 kt CO₂ eq) below the AEAs under the ESD.

42. The ERT noted that Latvia is making progress towards its emission reduction target by implementing mitigation actions.

3. Projections

43. Latvia reported in its BR2 and CTF table 6(a) projections for 2020 and 2030 relative to actual inventory data for 2012 under the WEM scenario. The ERT noted some discrepancies between the values presented in the BR2 and in the CTF tables, in particular for the energy emissions in the base year (1990) and the agriculture emissions in 2012. During the review, Latvia explained that the correct values are those presented in the CTF tables. To increase transparency, the ERT recommends that Latvia consistently report the values in the BR and the CTF tables.

44. 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, HFCs and SF₆ collectively in each case). Projections are also provided in an aggregated format for each sector as well as for a Party total, using GWP values from the AR4. Emission projections related to fuel sold to ships and aircraft engaged in international transport were not reported separately and were not included in the totals. Latvia reported on factors and activities influencing emissions for each sector. Further information on the projections is provided in chapter 5 of the BR2.

45. The BR2 does not include the information required by the UNFCCC reporting guidelines on BRs on emission projections related to fuel sold to ships and aircraft engaged in international transport. During the review, Latvia informed the ERT that those emissions are projected to rise by 2020 compared with the 2013 level. According to Latvia, emissions related to fuel sold to ships and aircraft engaged in international transport will amount to 1,236 kt CO₂ eq in total (402 kt CO₂ eq from aviation and 834 kt CO₂ eq from shipping, which represents an increase of 6.2 and 7.3 per cent above the 2013 level, respectively). The ERT recommends that Latvia report in its next BR, to the extent possible, the emission projections related to fuel sold to ships and aircraft engaged in international transport separately.

46. In addition to the WEM scenario, Latvia reported in the BR2 and CTF table 6(c) the WAM scenario. The projections are presented by sector and by gas in the same way as for the WEM scenario for the years 1990–2030. Latvia informed the ERT that there were no 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. Latvia also provided information on the sensitivity analysis, which investigated the effect of a lower projected rate of economic growth and a doubling of electricity imports compared with the reference scenario (see paras. 51 and 52 below).

47. Latvia briefly explained the models and methodologies used for the energy, agriculture, and industrial processes and product use sectors in chapter 5.3 of the BR2. The information reported by Latvia on the details of the different models used for the projections in each sector are not transparent, in particular for: the gases and sectors covered by the models; the types of models used and their characteristics; the original purpose of the models and changes thereto for climate change related purposes; the strengths and weaknesses of the models used; and any overlap or synergies with PaMs.

48. During the review, Latvia provided additional information in a tabular format on all of the models used, covering all of the issues listed in paragraph 47 above. The ERT encourages the Party to include such information in the next BR.

Overview of projection scenarios

49. The WEM scenario reported by Latvia includes all PaMs that have been adopted and implemented up to 2014. Latvia also reported on a WAM scenario, which includes planned

PaMs. Latvia provided a definition of its scenarios, explaining that its WEM scenario includes PaMs that are defined in government policy documents, including established implementation mechanisms, while its WAM scenario includes planned additional measures that are described in approved government documents only, but for which the related legislation and implementation mechanisms have not yet been elaborated on. During the review, Latvia provided additional information explaining the definitions of its scenarios. Based on these explanations, the ERT concluded that the scenarios have been prepared using the definitions according to the UNFCCC reporting guidelines on NCs.

Methodology and changes since the previous submission

50. The methodology used in the BR2 is identical to that used for the preparation of the emission projections for the NC6/BR1.

51. To prepare its projections, Latvia relied on the following key underlying assumptions: population trends, energy prices, energy consumption indicators, economic development indicators, agriculture indicators and waste indicators, 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. The following models have been used to estimate the emission projections:

(a) The MARKAL model, a partial equilibrium, bottom-up, optimization model originally developed to describe the development of the Latvian energy system over a period of 30 years;

(b) A top-down accounting model, based on a macroeconomic forecast, to estimate emissions of HFCs and SF₆;

(c) Linear and non-linear regressions to estimate CH₄ and N₂O emissions in the agriculture sector;

(d) An accounting model, based on population data, GDP projections and expert assumptions, to estimate CH₄ emissions in the waste sector.

52. Sensitivity analyses were conducted for two important assumptions: economic development indicators (GDP) and energy imports. The results of the sensitivity analysis in the energy sector on the impact of assumptions for lower GDP growth (2.1 per cent instead of 3 per cent) indicate that the emissions in 2020 and 2030 will be lower than those projected under the WEM scenario by 3.8 per cent and 18.2 per cent, respectively. The impact of assumptions for a higher amount of imported electricity (double the amount from 2020 compared with the reference scenario) indicates that the emissions in 2020 and 2030 will be lower than those projected under the WEM scenario by 0.1 per cent and 9.4 per cent, respectively.

53. During the review, Latvia also provided a sensitivity analysis for the agriculture sector, based on the assumption of the development of cattle breeding in the country. Under the WEM scenario, the emissions were calculated based on the assumption that the number of dairy cattle will increase by 40 per cent, while the number of other cattle will increase by 35 per cent above the 2013 level by 2030. This will lead to an increase in total emissions from the agriculture sector of up to 50 per cent above the 2015 level by 2030. A sensitivity analysis was also performed by maintaining the number of cattle at the 2015 level, but increasing productivity, leading to a reduction in total emissions from the agriculture sector of 10 per cent in 2020 and up to 19 per cent in 2030, compared with the WEM scenario. Latvia also informed the ERT that it is planning to undertake a sensitivity analysis for the industrial processes and product use sector in the future.

Results of projections

54. According to the BR2, Latvia's total GHG emissions excluding LULUCF in 2020 and 2030 are projected to be 12,516.23 and 13,989.01 kt CO₂ eq, respectively, under the WEM scenario, which represents a decrease of 52.2 and 46.6 per cent, respectively, below the 1990 level. Under the WAM scenario, Latvia's emissions in 2020 and 2030 are projected to be lower than those in 1990, amounting to 11,083.98 and 11,688.76 kt CO₂ eq, respectively. The projections for 2020 suggest that Latvia will continue contributing to the achievement of the EU target under the Convention (see para. 41 above).

55. Latvia's target for the emissions from sectors covered by the ESD is to limit its total emissions at 17.0 per cent above the 2005 level by 2020. For Latvia, the AEAs reflecting its national emission target for non-ETS sectors follow a linear path from 9,260.06 kt CO₂ eq kt in 2013 to 9,898.30 kt CO₂ eq by 2020 (see para. 15 above). According to the projections under the WEM scenario, emissions from non-ETS sectors are estimated to reach 9,349.62 kt CO₂ eq by 2020. Under the WAM scenario, Latvia's emissions from non-ETS sectors in 2020 are projected to be 8,279.73 kt CO₂ eq.

56. According to the projections reported by sector, the most significant GHG emission reductions under the WEM scenario from 1990 to 2020 will occur in the energy sector (10,781.8 kt CO₂ eq, or 66.4 per cent), followed by the agriculture sector (2,801.4 kt CO₂ eq, or 50.4 per cent) and the waste sector (193.9 kt CO₂ eq, or 25.4 per cent). GHG emissions from the transport subsector are projected to decrease by 170.50 kt CO₂ eq (5.6 per cent) below the 1990 level by 2020. If additional measures are considered (i.e. under the WAM scenario), the pattern of sectoral proportions does not change: the energy sector remains the most prominent source of reductions, followed by the agriculture sector. The projected emission decrease in the transport subsector under the WAM scenario is more prominent (a decrease of 372.50 kt CO₂ eq, or 12.3 per cent below the 1990 level by 2020).

57. According to the projections reported by sector, the most significant GHG emission reductions for 2030 under the WEM scenario will occur in the energy sector (10,159.8 kt CO₂ eq, or 62.6 per cent), followed by the agriculture sector (2,281.30 kt CO₂ eq, or 41.0 per cent) and the waste sector (252.10 kt CO₂ eq, or 33.0 per cent). GHG emissions from the transport subsector are projected to decrease by 16.4 kt CO₂ eq (0.5 per cent) below the 1990 level by 2030. If additional measures are considered (i.e. under the WAM scenario), the pattern of sectoral proportions does not change. The projected emission decrease in the transport subsector under the WAM scenario is much more prominent (a decrease of 246.40 kt CO₂ eq, or 8.1 per cent below the 1990 level by 2030).

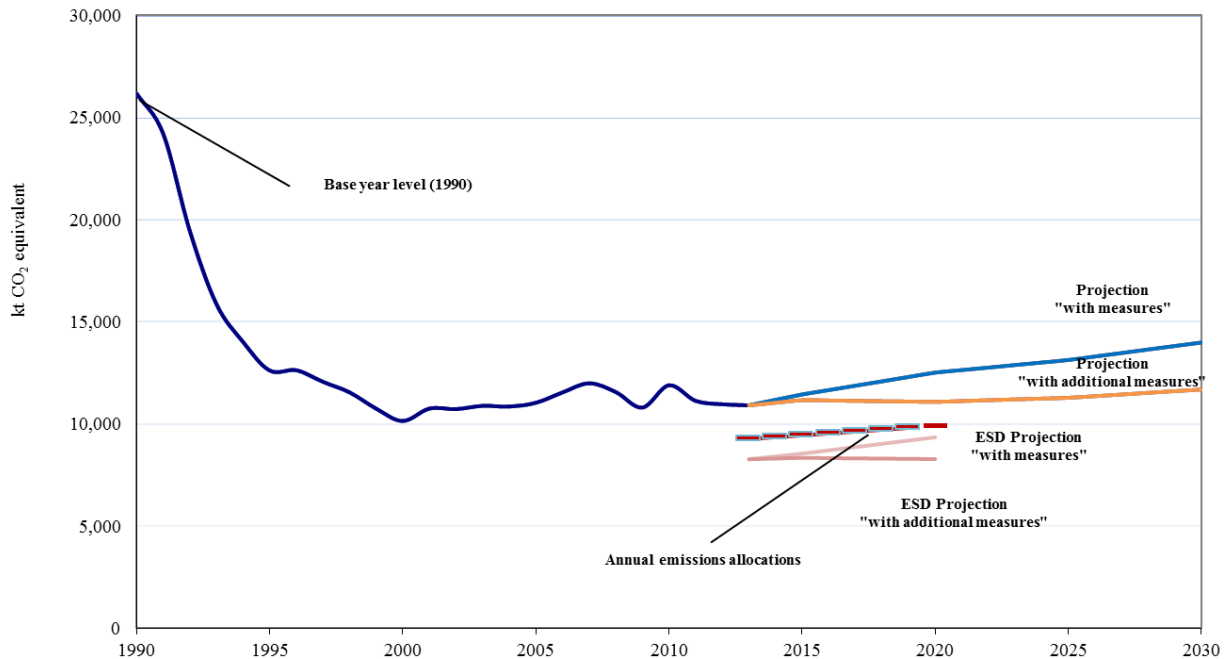
58. According to the projections reported by gas, reductions in CO₂ emissions are expected to contribute the most to the Party's overall emission reductions for all scenarios. Under the WEM scenario, reductions in CO₂ emissions will make up 79.2 per cent (10,831.4 kt CO₂ eq) of the aggregate GHG emission reductions below the 1990 level by 2020, followed by CH₄ with 14.8 per cent (2,017.00 kt CO₂ eq) and N₂O with 7.2 per cent (978.70 kt CO₂ eq). Under the WAM scenario, reductions in CO₂ emissions will make up approximately 79.9 per cent (12,060.30 kt CO₂ eq) of the aggregate GHG emission reductions below the 1990 level by 2020, followed by CH₄ with 14.3 per cent (2,153.00 kt CO₂ eq) and N₂O with 6.9 per cent (1,046.10 kt CO₂ eq).

59. According to the projections reported by gas for 2030 under the WEM scenario, reductions in CO₂ emissions will make up approximately 80.8 per cent (9,857.8 kt CO₂ eq) of the aggregate GHG emission reductions below the 1990 level by 2030, followed by CH₄ with 15.1 per cent (1,844 kt CO₂ eq) and N₂O with 6.1 per cent (743 kt CO₂ eq). Under the WAM scenario, reductions in CO₂ emissions will make up approximately 81.0 per cent (11,741.1 kt CO₂ eq) of the aggregate GHG emission reductions below the 1990 level by

2030, followed by CH₄ with 14.8 per cent (2,143.2 kt CO₂ eq) and N₂O with 5.9 per cent (860.9 kt CO₂ eq).

60. The projected emission levels under the different scenarios and Latvia’s quantified economy-wide emission reduction target are presented in the figure below.

Greenhouse gas emission projections by Latvia



Sources: (1) Data for the years 1990–2013: Latvia’s 2015 annual inventory submission, version 3; total GHG emissions excluding land use, land-use change and forestry; (2) Data for the years 2020 and 2030: Latvia’s second biennial report; total GHG emissions excluding land use, land-use change and forestry; (3) Data on the ESD: European Environment Agency (EEA) report no. 4/2015 and EEA climate and energy country profile 2014.

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

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

61. Latvia is not a Party included in Annex II to the Convention and is therefore not obliged to adopt measures and fulfil obligations as defined in Article 4, paragraphs 3, 4 and 5, of the Convention. However, as reported in its BR2, Latvia provided information on its provision of support to developing country Parties. The ERT commends Latvia for reporting this information and suggests that it continue to do so in future BRs.

62. Latvia reported in its BR2 and in CTF tables 7, 7(a) and 7(b) that it provided financial support of USD 15,788.55 and USD 557,950.07 in 2013 and 2014, respectively. Latvia contributed USD 464,975 to the Green Climate Fund in 2014 and intends to continue providing support to developing countries in the future.

63. Latvia reported in its BR1 and in CTF table 9 that it has provided capacity-building support for a project in Uzbekistan titled “Development cooperation project for sustainable environmental engineering education promotion between Urgench State University and

Riga Technical University”, with the aim of training students and staff of Urganch State University in sustainable environmental engineering.

III. Conclusions

64. The ERT conducted a technical review of the information reported in the BR2 and CTF tables of Latvia 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 Latvia in achieving its target; and Latvia’s provision of support to developing country Parties.

65. Latvia’s total GHG emissions excluding LULUCF and indirect CO₂ emissions decreased by 58.3 per cent between 1990 and 2013. For total GHG emissions including LULUCF and excluding indirect CO₂ emissions, the decrease was less significant, but still amounted to a reduction of 37.7 per cent over the same period. The emission decrease was driven by the structural economic changes in the course of the transition to a market economy (1990–1995); since then, economic growth rates and climatic conditions have been the most important drivers for GHG emissions trends.

66. Under the Convention, Latvia is committed to contributing to the achievement of the joint EU quantified economy-wide target of a 20 per cent reduction in emissions below the 1990 level by 2020. The target covers all sectors and the gases CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, expressed using GWP values from the AR4. Emissions and removals from the LULUCF sector are not included in the quantified economy-wide emission reduction target under the Convention. The EU generally allows its member States to use units from the Kyoto Protocol mechanisms as well as new market mechanisms for compliance purposes, subject to a number of restrictions in terms of origin and type of project and up to an established limit. Companies can make use of such units to fulfil their requirements under the EU ETS.

67. The target will be achieved through the contribution of the sectors covered by the EU ETS, by the EU member States jointly, and through the contribution from domestic emission reductions in accordance with the ESD. Under the ESD, Latvia has a target to limit the emission growth to 17 per cent above the 2005 level by 2020. In absolute terms, this means that Latvia has to limit emission increases from the non-ETS sectors from 9,260.06 kt CO₂ eq in 2013 to 9,898.30 kt CO₂ eq by 2020.

68. Latvia’s main policy framework relating to energy and climate change is the EU ETS on the one hand, in 2013 covering 24.2 per cent of the total national emissions, and the ESD on the other hand, which is influenced by national legislation. Under the ESD, PaMs aimed at increased energy efficiency and at enhanced use of renewable energy sources have been adopted. Among the other PaMs, an important contribution is expected from PaMs promoting organic farming.

69. The ERT noted that Latvia is making progress towards its emission reduction target by implementing mitigation actions. For 2013, Latvia reported in CTF table 4 annual total GHG emissions excluding LULUCF of 11,025.42 kt CO₂ eq, or 58.1 per cent below the 1990 base year level. Latvia reported that it does not envisage using contributions from LULUCF and the units from market-based mechanisms to achieve its target.

70. The GHG emission projections provided by Latvia in its BR2 include those for the WEM and WAM scenarios. While under the WEM scenario, emissions are projected to rise by 14.7 per cent above the 2013 level by 2020, they will remain almost constant under the

WAM scenario, increasing by 1.6 per cent. When comparing the projected values with the 1990 base year emissions, both scenarios show considerable reductions (–52.2 per cent and –57.7 per cent, respectively). Based on this information, the ERT concluded that Latvia is on track to meet its 2020 target under both scenarios. The same conclusion was reached with regard to the achievement of the ESD target.

71. Latvia is not a Party included in Annex II to the Convention and is therefore not obliged to adopt measures and fulfil obligations as defined in Article 4, paragraphs 3, 4 and 5, of the Convention. However, Latvia provided information on its provision of support to developing country Parties, amounting to USD 15,788.55 in 2013 and USD 557,950.07 in 2014. Latvia contributed USD 464,975 to the Green Climate Fund in 2014 and intends to continue providing support to developing countries in the future. The ERT commends Latvia for reporting this information.

72. In the course of the review, the ERT formulated the following recommendations for Latvia to improve its adherence to the UNFCCC reporting guidelines on BRs in its next BR:⁵

- (a) Improve the completeness of its reporting by:
 - (i) Providing information on the changes in its domestic institutional arrangements used for domestic compliance (see para. 20 above);
 - (ii) Reporting, to the extent possible, emission projections related to fuel sold to ships and aircraft engaged in international transport, in order to ensure consistency with inventory reporting (see para. 45 above);
- (b) Improve the transparency of its reporting by:
 - (i) Including the correct base year in the description of the national economy-wide emission reduction target (see para. 11 above);
 - (ii) Specifying all required information on mitigation actions, consistently using the terms to describe the status of implementation of mitigation actions, and explaining the use of notation keys in CTF table 3 (see para. 24 above);
 - (iii) Reporting consistently the mitigation effects in the BR textual part and in the CTF tables (para. 43 above).

⁵ 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 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>.

“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/ARR/2014/LVA. Report on the individual review of the annual submission of Latvia submitted in 2014. Available at <http://unfccc.int/resource/docs/2015/arr/lva.pdf>.

FCCC/IDR.6/LVA. Report of the technical review of the sixth national communication of Latvia. Available at <http://unfccc.int/resource/docs/2014/idr/lva06.pdf>.

FCCC/TRR.1/LVA. Report of the technical review of the first biennial report of Latvia. Available at <http://unfccc.int/resource/docs/2014/trr/lva01.pdf>.

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

Sixth national communication of Latvia. Available at

[http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/lv_nc6_1br_2013_final\[1\].pdf](http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/lv_nc6_1br_2013_final[1].pdf).

First biennial report of Latvia. Available at

[http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/lv_nc6_1br_2013_final\[1\].pdf](http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/lv_nc6_1br_2013_final[1].pdf).

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

http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/lva_2014_v3.0_formatted.pdf.

Second biennial report of Latvia. Available at

http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/br2_latvia_30122015_final__resubmission.pdf.

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

http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/lva_2016_v2.0_resubmission.pdf.

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

EC Decision 2013/162/EU on the effort of member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 pursuant to Decision No 406/2009/EC of the European Parliament and of the Council.

EC Decision 634/2013/EU on the adjustments to Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision 406/2009/EC, using the values based on global warming potential values from the fourth IPCC assessment report.

B. Additional information used during the review

Responses to questions during the review were received from Ms. Kristīne Zommere-Rotčenkova (Ministry of Environmental Protection and Regional Development), including additional material and the following documents¹ provided by Latvia:

Ministry Environmental Protection and Regional Development, 2016. Description of National Systems. Document entitled *Art 13_MMR_Latvia.pdf*.

Ministry Environmental Protection and Regional Development, 2016. List and description of policies and measures. Documents entitled *Policy_measures_corrected.xls* and *Policy_measures_corrected_0903.xls*.

¹ Reproduced as received from the Party.