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Report on the technical review of the third biennial report of Austria

Developed country Parties were requested by decision 2/CP.17 to submit their third biennial report to the secretariat by 1 January 2018. This report presents the results of the technical review of the third biennial report of Austria, conducted by an expert review team in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention".

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Contents

Abbreviations and acronyms

ADC	Austrian Development Cooperation
AEA	annual emission allocation
Annex I Party	Party included in Annex I to the Convention
AR4	Fourth Assessment Report of the Intergovernmental Panel on Climate Change
BR	biennial report
CH_4	methane
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
CTF	common tabular format
ERT	expert review team
ESD	effort-sharing decision
EU	European Union
EU ETS	European Union Emissions Trading System
F-gases	fluorinated gases
GDP	gross domestic product
GHG	greenhouse gas
HFC	hydrofluorocarbon
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
IPPU	industrial processes and product use
LULUCF	land use, land-use change and forestry
NA	not applicable
NC	national communication
NF_3	nitrogen trifluoride
NIR	national inventory report
NO	not occurring
non-Annex I Party	Party not included in Annex I to the Convention
non-ETS sectors	sectors not covered by the European Union Emissions Trading System
N_2O	nitrous oxide
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OECD DAC	Organisation for Economic Co-operation and Development Development Assistance Committee
PaMs	policies and measures
PFC	perfluorocarbon
SF_6	sulfur hexafluoride
UNFCCC reporting guidelines on BRs	"UNFCCC biennial reporting guidelines for developed country Parties"
UNFCCC reporting guidelines on NCs	"Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications"
WAM	'with additional measures'
WEM	'with measures'
WOM	'without measures'

I. Introduction and summary

A. Introduction

1. This is a report on the in-country technical review of the BR3[1] of Austria. 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).

2. In accordance with the same decision, a draft version of this report was transmitted to the Government of Austria, which provided comments that were considered and incorporated, with revisions into this final version of the report.

3. The review was conducted from 28 January to 2 February 2019 in Vienna by the following team of nominated experts from the UNFCCC roster of experts: Ms. Marcela Olguin-Álvarez (Mexico), Ms. Karima Oustadi (Italy), Mr. Orlando Rey (Cuba), Mr. Adrian Schilt (Switzerland) and Ms. Tian Wang (China). Mr. Rey and Mr. Schilt were the lead reviewers. The review was coordinated by Ms. Ruta Bubniene and Ms. Kirsten Macey (UNFCCC secretariat).

B. Summary

4. The ERT conducted a technical review of the information reported in the BR3 of Austria in accordance with the UNFCCC reporting guidelines on BRs (annex I to decision 2/CP.17).

Timeliness

5. The BR3 was submitted on 28 December 2017, before the deadline of 1 January 2018 mandated by decision 2/CP.17. The CTF tables were submitted on 28 December 2017. The BR3 was resubmitted on 8 February 2018. Austria resubmitted the CTF tables on 12 February 2019 in response to the findings made by the ERT during the review.

6. Issues and gaps identified by the ERT related to the reported information are presented in table 1. The information reported by Austria in its BR3 mostly adheres to the UNFCCC reporting guidelines on BRs.

Table 1
Summary of completeness and transparency of mandatory information reported by Austria in its third biennial report

Section of BR	*Completeness*	*Transparency*	*Reference to description of recommendations*
GHG emissions and trends	Complete	Transparent	NA
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Transparent	NA
Progress in achievement of targets	Mostly complete	Mostly transparent	Issues 1 and 2 in table 4, and issue 4 in table 9

[1] The BR submission comprises the text of the report and the CTF tables, which are both subject to the technical review.

Section of BR	*Completeness*	*Transparency*	*Reference to description of recommendations*
Provision of support to developing country Parties	Mostly complete	Mostly transparent	Issues 1 and 2 in table 10, issues 1 and 2 in table 13, issue 1 in table 14 and issue 1 in table 15

Note: A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in chapter III below. The assessment of completeness and transparency by the ERT in this table is based only on the "shall" reporting requirements.

II. Technical review of the information reported in the third biennial report

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

Information on greenhouse gas inventory arrangements, emissions, removals and trends

(a) Technical assessment of the reported information

7. Total GHG emissions[2] excluding emissions and removals from LULUCF increased by 1.2 per cent between 1990 and 2016, whereas total GHG emissions including net emissions or removals from LULUCF increased by 13.1 per cent over the same period. Table 2 illustrates the emission trends by sector and by gas for Austria.

Table 2
Greenhouse gas emissions by sector and by gas for Austria for the period 1990–2016

	GHG emissions (kt CO_2 eq)					*Change (%)*		*Share (%)*	
Sector	*1990*	*2000*	*2010*	*2015*	*2016*	*1990–2016*	*2015–2016*	*1990*	*2016*
1. Energy	52 914.08	55 322.36	59 752.28	53 352.45	54 336.38	2.7	1.8	67.2	68.2
A1. Energy industries	14 075.55	12 318.99	13 989.19	10 757.24	10 577.63	–24.9	–1.7	17.9	13.3
A2. Manufacturing industries and construction	9 889.48	10 080.54	11 424.21	10 742.12	10 820.67	9.4	0.7	12.6	13.6
A3. Transport	13 973.42	18 817.14	22 533.91	22 591.60	23 488.20	68.1	4.0	17.8	29.5
A4. and A5. Other	14 273.83	13 609.22	11 337.14	8 837.11	9 058.05	–36.5	2.5	18.1	11.4
B. Fugitive emissions from fuels	701.81	496.47	467.83	424.39	391.83	–44.2	–7.7	0.9	0.5
C. CO_2 transport and storage	NO	NO	NO	NO	NO	–	–	–	–
2. IPPU	13 662.30	14 639.68	15 925.86	16 669.37	16 468.38	20.5	–1.2	17.4	20.7
3. Agriculture	8 188.65	7 506.39	7 094.75	7 177.66	7 286.42	–11.0	1.5	10.4	9.1
4. LULUCF	–11 981.89	–16 364.09	–5 877.96	–4 445.35	–4 208.44	–64.9	–5.3	–	–
5. Waste	3 925.02	2 963.11	2 157.95	1 656.22	1 581.46	–59.7	–4.5	5.0	2.0
6. Other	NO	NO	NO	NO	NO	–	–	–	–

Gas[a]

[2] In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of CO_2 eq excluding LULUCF, unless otherwise specified. Values in this paragraph are calculated based on Austria's 2018 annual submission, version 3.

CO_2	62 292.23	66 261.74	72 383.14	66 703.99	67 402.08	8.2	1.0	79.2	84.6
CH_4	10 405.49	8 433.83	7 255.02	6 631.78	6 567.07	–36.9	–1.0	13.2	8.2
N_2O	4 336.50	4 349.44	3 391.18	3 527.07	3 613.51	–16.7	2.5	5.5	4.5
HFCs	2.44	713.63	1 483.45	1 620.32	1 640.61	67 205.5	1.3	0.0	2.1
PFCs	1 182.79	87.87	78.05	49.55	50.39	–95.7	1.7	1.5	0.1
SF_6	470.61	574.53	335.87	309.55	392.84	–16.5	26.9	0.6	0.5
NF_3	NO, NA	10.51	4.12	13.46	6.14	–	–54.4	–	0.0
Total GHG emissions without LULUCF	**78 690.05**	**80 431.54**	**84 930.84**	**78 855.71**	**79 672.64**	**1.2**	**1.0**	**100.0**	**100.0**
Total GHG emissions with LULUCF	**66 708.16**	**64 067.45**	**79 052.88**	**74 410.36**	**75 464.20**	**13.1**	**1.4**	**–**	**–**

Source: GHG emission data: Austria's 2018 annual submission, version 3.
[a] Emissions by gas without LULUCF and without indirect CO_2.

8. A number of opposing factors account for the slight increase in total emissions. On the one hand, emissions from transport and industrial processes and product use increased, predominantly driven by increased transport volumes and increases in metal production. On the other hand, emissions from buildings decreased, owing to improvements of energy efficiency, fuel shifts and increased use of district heating and heat pumps. Overall, Austria's total emissions approximately stabilized between 1990 and 2016, despite strong increases in GDP, population, living area, electricity and heating demand and transport volume.

9. To reflect the most recently available data, version 3 of Austria's 2018 annual submission has been used as the basis for discussion in chapter II.A of this review report. The ERT noted that the report on the individual review of the annual submission of Austria submitted in 2018[3] was published on 16 January 2019, immediately before the review week for the NC; however, that inventory was not considered during the review. The ERT also noted that there are no substantive differences between the trends presented in the 2018 GHG inventory and the 2017 inventory reported in the BR3. Total GHG emissions excluding LULUCF, as reported in the BR3, increased by 0.2 per cent between 1990 and 2015, while according to the latest available annual submission they increased by 1.2 per cent between 1990 and 2016.

10. Austria's national inventory arrangements were established in accordance with the Environmental Control Act (Federal Law Gazette I No. 152/1998). This law designates the Austrian Environment Agency as the single national entity with overall responsibility for inventory preparation. Austria has developed a high-quality management system for estimating emissions in its national inventories. The Austrian Environment Agency has been accredited as the inspection body for emission inventories since 2005. Austria's quality management system is accredited according to the International Standard EN ISO/IEC 17020 General Criteria. Austria outlined during the review that the criteria developed in order to comply with the International Standard demonstrate a high level of confidence in the national inventory system. There were no changes of the inventory system since the last BR.

(b) Assessment of adherence to the reporting guidelines

11. The ERT assessed the information reported in the BR3 of Austria and recognized that the reporting is complete, transparent and adhering to the UNFCCC reporting guidelines on BRs. No issues relating to the topics discussed in this chapter were raised during the review.

[3] https://unfccc.int/sites/default/files/resource/aut.pdf.

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

(a) Technical assessment of the reported information

12. For Austria the Convention entered into force on 29 May 1994. Under the Convention Austria 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 target 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. The legislative package regulates emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 using global warming potential values from the AR4 to aggregate the GHG emissions of the EU until 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 ETS.

14. The EU 2020 climate and energy package includes the EU ETS and the ESD (see chapter II.C.1(a) below). The EU ETS covers mainly point emissions sources in the energy and industry sectors as well as aviation. An EU-wide emissions cap has been put in place for the period 2013–2020 with the goal of reducing emissions by 21 per cent below the 2005 level by 2020. Emissions from non-ETS sectors are regulated through member State specific targets that add up to a reduction at the EU level of 10 per cent below the 2005 level by 2020.

15. During the review Austria stated that, under the ESD, it has a target of reducing its total emissions to 16 per cent below the 2005 level by 2020 for non-ETS sectors. National emission targets for non-ETS sectors for 2020 have been translated into binding quantified AEAs for the period 2013–2020. Austria's AEAs decrease linearly with adjustments from 52,625.04 kt CO_2 eq in 2013 to 47,750.11 kt CO_2 eq in 2020.[4]

16. During the review, Austria provided information to show that the provisions relating to the EU ETS and how it is implemented at the national level have not changed for the 2013–2020 commitment period. The data for Austria show that free allocations amounted to around 70 per cent of total emissions in the EU ETS, requiring installations to buy allowances to cover their remaining emissions.

17. For non-ETS sectors Austria incorporated the ESD target in its Climate Change Act and laid down sectoral targets for 2020, including six sectors (agriculture, energy and industry not covered by the EU ETS, F-gases, heating, transport and waste management).[5] During the review Austria provided further information on the annual sectoral targets from 2013 to 2020 and on the monitoring and evaluation of annual progress and mid-term implementation. The ERT noted that Austria may need to implement additional PaMs in order to meet its annual target under the ESD.

(b) Assessment of adherence to the reporting guidelines

18. The ERT assessed the information reported in the BR3 of Austria and recognized that the reporting is complete and transparent. No issues relating to the topics discussed in this chapter were raised during the review.

[4] European Commission decision 2017/1471 of 10 August 2017 amending decision 2013/162/EU of 26 March 2013 to revise member States' AEAs for the period from 2017 to 2020.

[5] See annex 2 of the Climate Change Act, available at https://www.bmnt.gv.at/english/environment/Climateprotect/The-Austrian-Climate-Change-Act.html.

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

1. Mitigation actions and their effects

(a) Technical assessment of the reported information

19. Austria provided information on its package of PaMs implemented since the last BR, by sector and by gas, in order to fulfil its commitments under the Convention and its Kyoto Protocol. Austria reported on its policy context and legal and institutional arrangements put in place to implement its commitments and monitor and evaluate the effectiveness of its PaMs.

20. Austria provided information on a set of PaMs similar to those previously reported, with a few exceptions. Austria did not provided information on changes made since the previous submission to its institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress made towards its target. During the review, Austria outlined that following a revision to the Climate Change Act in 2017 the Committee and the Council were merged into a new single Committee to avoid overlap between membership and functions of the two bodies.

21. Austria reported on its self-assessment of compliance with emission reduction targets and national rules for taking action against non-compliance. To assess compliance with member States' contribution towards the EU target, a universal monitoring and review process is already in place for all EU member States (Monitoring Mechanism Regulation; EU Regulation No. 525/2013), which is described in detail in the BR3 of the EU.[6] Under that regulation, the monitoring process for the EU ETS is harmonized for all member States. Regarding the national target under the ESD, Austria reported that the administrative procedures for implementation and monitoring are different across the various measures.

22. The key overarching related 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. The package is supplemented by renewable energy and energy efficiency legislation and legislative proposals on the 2020 targets for CO_2 emissions from cars and vans, the carbon capture and storage directive, and the general programmes for environmental conservation, namely the 7th Environment Action Programme and the clean air policy package.

23. In operation since 2005, the EU ETS is a cap-and-trade system that covers all significant energy-intensive installations (mainly large point emissions sources such as power plants and industrial facilities), which produce 40–45 per cent of the GHG emissions of the EU. It is expected that the EU ETS will guarantee that the 2020 target (a 21 per cent emission reduction below the 2005 level) will be achieved for sectors under the scheme. The third phase of the EU ETS started in 2013 and the system now includes aircraft operations (since 2012) as well as N_2O emissions from chemical industries, PFC emissions from aluminium production and CO_2 emissions from some industrial processes that were not covered in the previous phases of the EU ETS (since 2013).

24. 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 and waste, together accounting for 55–60 per cent of the GHG emissions of the EU. The aim of the ESD is to decrease GHG emissions in the EU by 10 per cent below the 2005 level by 2020 and it includes binding annual targets for each member State for 2013–2020.

25. Austria introduced national-level policies to achieve its targets under the ESD and domestic emission reduction targets. One of the key policies reported is the Austrian Climate and Energy Fund, which aims to support innovation projects to reduce GHG

[6] http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/459381_european_union-nc7-br3-1-nc7_br3_combined_version.pdf.

emissions. The Fund focuses on research and development of renewable energy systems, testing new transport systems and market penetration of mitigation actions. During the review Austria indicated that the Fund has disbursed EUR 1.2 billion in the period 2007–2018 and supported around 120,000 projects. The Fund aims to achieve success through demonstrating best practice and innovation.

26. Another measure where Austria provides financial support is the Domestic Environmental Support Scheme. This scheme provides financial support for projects on reducing GHG emissions, improving energy efficiency, promoting the use of renewable energy sources, decreasing waste and promoting sustainable transport. During the review Austria explained that the financial support provided through this scheme amounts to EUR 70 million each year.

27. Other policies that have delivered significant emission reductions include the Austrian Fuel Ordinance to increase the share of biofuels and the Mineral Oil Tax Act, which is a fuel consumption-based tax to discourage the use of high-fuel consumption vehicles, and the Green Electricity Support Scheme, which uses a feed-in tariff to increase the share of renewable energy in the supply mix.

28. Austria explained in its BR that, although work had started on developing its Climate and Energy Strategy for 2030, an election in autumn 2017 temporarily stopped that work and therefore Austria was not able to report on any adopted or planned PaMs. During the review, Austria provided detailed information on the planned PaMs included in the integrated Climate and Energy Strategy which was adopted in May 2018. The strategy includes 12 flagship projects to achieve three main objectives, namely environmental sustainability, competitiveness/affordability and energy security. Austria has set ambitious targets of reducing emissions by 36 per cent below 2005 levels for the non-ETS sectors; achieving a 45–50 per cent share of renewable energy consumption (gross domestic) and 100 per cent of electricity from renewable energy sources (import/export balanced); and a 25–30 per cent reduction in primary energy intensity below the 2015 level. Specific targets have been set for GHG emission reductions (including sectoral targets for the transport and building sectors) and energy supply and renewable energy, which will be achieved by a more specific National Energy and Climate Plan. Austria is now developing a National Energy and Climate Plan towards 2030 with a new "PaMs package" encompassing the longer-term perspective to realize the targets and objectives in the 2030 strategy. Table 3 provides a summary of the reported information on the PaMs of Austria.

Table 3
Summary of information on policies and measures reported by Austria

Sector	*Key PaMs*	*Estimate of mitigation impact by 2020 (kt CO_2 eq)*	*Estimate of mitigation impact by 2030 (kt CO_2 eq)*
Policy framework and cross-sectoral measures	EU ETS	NA	NA
	Domestic Environmental Support Scheme		
	Austrian Climate and Energy Fund		
Energy	Green Electricity Support Scheme	NA	
Transport	Austrian Fuel Ordinance		4 800
	Mineral Oil Tax Act (a fuel consumption-based tax)		1 300
	Federal and regional programmes to encourage environmentally friendly transport modes		500
Renewable energy	Green Electricity Act 2012	4 200	
	Climate and Energy Fund and Domestic Environment Support Scheme to increase the share of renewable energy for heating	590	1 320
Energy efficiency	Energy Efficiency Act, Combined Heat and	NA	

Sector	*Key PaMs*	*Estimate of mitigation impact by 2020 (kt CO_2 eq)*	*Estimate of mitigation impact by 2030 (kt CO_2 eq)*
	Power Act		
	Construction standards for energy efficiency and heat demand	440	610
IPPU	F-gas regulations	NA	
Agriculture	Austrian Agri-Environmental Programme	NA	
LULUCF	Forest Act and Austrian LULUCF Action Plan	NA	
Waste	Austrian Waste Management Act (2002)	NA	
	Austrian Landfill Ordinance		

Note: The estimates of mitigation impact are estimates of emissions of CO_2 or CO_2 eq avoided in a given year as a result of the implementation of mitigation actions.

29. Austria reported in its BR that there is no unified framework for monitoring PaMs, thus it faces difficulties in providing quantified emission reduction impacts for individual PaMs. During the review Austria explained that the monitoring and evaluation process is conducted annually for its achievement of sectoral targets set under the Climate Change Act but not for individual PaMs. Additionally, an evaluation process for the Climate and Energy Strategy is envisaged for 2023, which will be done in conjunction with the evaluation and update of the National Energy and Climate Plan under the EU Governance Regulation. Regarding individual PaMs, the Party explained that more information on assumptions, methodologies and results was provided in the *GHG Projection and Assessment Report*[7] because quantified emission reduction impacts for some PaMs were calculated along with the projection modelling process. For monitoring non-GHG impacts there is a national impact assessment system in place, and evaluation and cost–benefit analysis is conducted for certain sectors (e.g. buildings sector) in the form of an annual progress report.

(b) Policies and measures in the energy sector

30. **Energy supply.** The primary energy supply in Austria in 2015 comprised 29 per cent from renewable energy sources (9 per cent from hydropower and 20 per cent from other renewables, mainly biomass), 36 per cent from oil products, 20 per cent from natural gas and 10 per cent from coal products. Total gross consumption increased by 37 per cent from 1990 to 2005 and decreased by 2 per cent from 2005 to 2015. Around 60 per cent of gross energy consumption is imported. There is a clear trend of decoupling GHG emissions from GDP and energy consumption since 2005. Gross energy consumption per GDP has decreased by 16 per cent since 1996.

31. PaMs in energy supply include projects implemented through cross-cutting policies, such as the Domestic Environmental Support Scheme and the Austrian Climate and Energy Fund, which are partially aimed at increasing the use of renewable energy sources.

32. **Renewable energy sources.** The Green Electricity Act 2012 has set quantitative targets until 2020 for increasing installed capacity and production of electricity in order to provide for further growth of renewable resources achieved by fixed feed-in tariffs. Tariff support is provided for a limited period for plants installed up to 2020. The four main renewable energy sources are hydropower, wind power, biomass and biogas, and photovoltaics. During the review the Party explained that, by 2015, installed hydropower reached 5,213 GWh, more than 1 TWh above the target, and for wind power an increase of 10,000 to 11,000 GWh of installed capacity is expected by 2020. In addition, Austria provided information on the operation of its Green Electricity Support Scheme, which includes obligatory contracts among the electricity trader, end user, renewable energy

[7] http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0610.pdf.

supplier and processing centres to ensure the fixed feed-in tariff and to avoid market price risk.

33. For biomass-based district heating systems investment support is granted under the Domestic Environmental Support Scheme and this serves to increase the share of biomass in the heat supply. Additional information provided by Austria during the review stated that a total of EUR 30 million was provided for projects in 2017, including 39 district heating systems, 44 projects extending heat distribution networks, 26 projects for micro-grids and more than 200 individual plants.

34. During the review, Austria also highlighted its new targets for renewable energy in the Climate and Energy Strategy. Austria aims to increase the share of renewable energy in gross energy consumption by 45–50 per cent by 2030 and 100 per cent of electricity from renewable energy sources by 2030. To reach this 100 per cent target, Austria needs to increase renewable electricity by 22–27 TWh and therefore PaMs are planned to increase the share of renewables in heat systems and the transport sector, as well as a rooftop photovoltaics programme. These targets are driven by the dual goals of economic opportunities and protection of nature.

35. **Energy efficiency.** Austria has implemented, through federal laws, the EU energy efficiency legislation which introduces requirements for annual improvements of 1.5 per cent in energy efficiency across EU member States. In addition, Austria provides financial support for cogeneration of power and heat to improve the efficiency of primary energy for electricity production. During the review Austria explained that, through the Climate and Energy Strategy, it has a target to improve energy efficiency by 25–30 per cent by 2030.

36. **Residential and commercial sectors.** Emissions from the residential and commercial sectors have been decreasing since 1990. PaMs in the residential and commercial sectors are largely focused on construction standards with respect to the energy demand of new buildings and criteria for the renovation of buildings, based on the EU directive on the energy performance of buildings. In addition to the mandatory standards, funding is granted for the construction of residential buildings with advanced efficiency standards. The mitigation impact is estimated to amount to 440 kt CO_2 eq in 2020 and 610 kt CO_2 eq in 2030. Financial support is also provided for the use of renewable energy sources for space heating and hot water supply (solar power, biomass, ambient heat, connection to district heating systems).

37. **Transport sector.** Energy demand for transport has more than doubled in the past three decades and is now the dominant sector in terms of final energy consumption (35 per cent in 2015). This is owing to the geographical position of Austria within the EU, the increasing share of fuel sold in Austria and used abroad ("fuel export in the vehicle tank") along with increasing volumes of both passenger and freight transport. Austria has set various sectoral targets for transport under the Climate Change Act and implements various PaMs to increase the share of clean energy sources in road transport, increase fuel efficiency of road transport and shift to environmentally friendly transport modes. To increase the share of clean energy sources, Austria integrated the EU directive on biofuels into the Austrian Fuel Ordinance, which stipulates minimum targets for the share of biofuels in diesel and gasoline sold. In addition, there is an initiative to increase the share of both electric vehicles and plug-in hybrid vehicles from less than 0.1 per cent in 2013 to about 1 per cent in 2020.

38. Other policies that have delivered significant emission reductions are the Mineral Oil Tax Act (taxation of fuel sales) and the fuel consumption-based car registration levy. To increase fuel efficiency in road transportation, the rate of the levy increases parallel to the standard fuel consumption, penalizing cars with high consumption, while cars with CO_2 emissions below 90g per kilometre and electric vehicles are exempt from the registration tax. Other instruments, such as awareness-raising and training programmes for fuel-efficient driving to improve performance, speed limits and the mileage-based lorry toll on highways, also contribute to reduced fuel consumption.

39. To shift to more environmentally friendly transport modes, considerable investments have been made in railway infrastructure in the past decade and an extension of the public transport network in Vienna is also under way. Austria also undertakes mobility

management and awareness-raising programmes, and the Länder pay for certain train and bus services to provide public transport services.

40. During the review, Austria highlighted three good practices in the transport sector: the National Programme for Clean Mobility ("klimaaktiv mobil"), promotion of e-mobility with renewable energy, and the Master Plan for Cycling and Walking. A strong increase in newly registered electric vehicles was observed owing to the implemented PaMs. Austria also provided information on its 2030 transport target to cut GHG emissions by 36 per cent, which will reduce emissions by around 7.2 Mt CO_2 eq. By 2050 Austria aims for zero-emission vehicles, extensive decarbonization and clean mobility. To reach the 2030 sectoral target, planned PaMs will promote zero-emission vehicles, expansion of rail and public transport, use of renewable energy and doubling of the share of cycling in 2025. During the review, Austria provided results of its "klimaaktiv mobil" project for 2007–2017, highlighting that 11,600 projects with annual savings of 500,000 kt CO_2 eq led to some 6000 green jobs being created or secured, with 77,500 children or young people being involved in the projects. The co-benefits of increased health and reduced GHG emissions helped to ensure the success of this project.

41. The BR3 includes information on how Austria actively supports the EU work on promoting and implementing the decisions of ICAO and IMO to limit emissions from aviation and marine bunker fuels. During the review, Austria explained that, since 2012, the EU ETS includes aviation emissions and that the EU has been a driving force behind the ICAO agreement on a global market-based mechanism to limit GHG emissions from international aviation. Austria outlined that it plans to participate in the voluntary pilot phase of the ICAO mechanism, which starts in 2021.

42. Although Austria does not have a significant share of inland aviation travel, during the review the Party highlighted that it has been involved in a number of collective actions throughout Europe, with the aim of reducing GHG emissions from aviation, including aircraft-related technology development, alternative fuels, improved air traffic management and infrastructure use, economic/market-based measures, EU initiatives and support to voluntary actions. Austria explained during the review that there are ongoing political and technical discussions to develop standards and recommended practices, involving key experts from the Austrian Environment Agency. Austria also reports annually its international aviation CO_2 emissions and submits to ICAO annual action plans for CO_2 emission reductions,[8] including preparing a baseline scenario and estimating benefits of its implemented measures.

43. During the review, with regard to IMO, the Party highlighted that even though Austria is a landlocked country, it holds membership of IMO and its legal instruments continue to be relevant, but the practical effect of implementing actions to reduce maritime emissions is limited in scope.

44. **Industrial sector.** Most of Austria's industrial sector is covered by the EU ETS, including ceramics, steel, minerals, cement, lime and gas industry. However, Austria has PaMs relating to energy efficiency in place and implemented in this sector and the Domestic Environmental Support Scheme helps to provide financial support to the industrial sector to reduce GHG emissions.

(c) Policies and measures in other sectors

45. **Industrial processes.** While mitigation of CO_2 and N_2O from industrial processes and product use is mainly covered by the EU ETS and the Domestic Environmental Support Scheme there are key domestic measures mainly focusing on prohibiting the use of F-gases. Austria has a long history in reducing emissions from F-gases, with national bans enacted since 2002, which were later complemented by EU laws. During the review, Austria provided further information on the EU quota system for producers and consumers on the use of HFCs from 2015 to 2030, on Austria's training and certification programmes and on the reduction plan for HFCs until 2030.

[8] https://www.icao.int/environmentalprotection/Lists/ActionPlan/Attachments/78/CO2%20Reduction%20Action%20Plan_Austria_July%202018.pdf.

46. **Agriculture.** Austria has a number of programmes on agricultural policy with a key focus on environmental farming practices for Austria's largely small-scale agricultural system. The long-running Agri-Environmental Programme has been extended for the 2014–2020 period and includes initiatives to reduce GHG emissions through organic farming policies, restrictions on the use of mineral fertilizers, greening of arable land, maintenance of grassland, low-impact tilling practices, low-loss applications of manure, and education and training to enhance soil fertility. Austria stated in its BR3 that it is among the European countries with the highest number of organic farms.

47. **LULUCF.** Austria has significant forest cover which is steadily increasing. For over 100 years Austrian forest management policy has been guided by sustainable forest management, and since 1975 this has been applied through the Austrian Forest Act. Austria considers its forest as multifunctional, focusing on production, protection, recreation and environmental functions. The Austrian Programme for Rural Development 2014–2020 provides support measures to increase forest cover through actions that prevent forest fires and natural disasters and to increase the resilience of forest ecosystems. Austria also has a LULUCF Action Plan which states that the emissions/removals from the LULUCF sector have contributed by far the largest share in total emissions/removals. During the review Austria provided information on the Austrian Forest Strategy 2020+, which was launched in August 2018 and aims to ensure and optimize all dimensions of sustainable forest management in a balanced way and to help ensure the multifunctional services that forests provide for present and future generations.

48. **Waste management.** Solid waste disposal has dominated emissions in the waste sector and, as a result of the Austrian Landfill Ordinance, the deposition of untreated biodegradable waste has been banned since 2009. During the review Austria explained that it is capturing CH_4 from old landfill sites and has a number of waste-to-energy incineration plants.

(d) Response measures

49. Austria did not report on the assessment of the economic and social consequences of response measures in its BR3 nor did it include a cross reference to information in the NC7. During the review, Austria explained that the information was included in the NC7 and further information was contained in the NIR of the EU. At the national level in Austria there have been mandatory impact assessments since 2013, which cover economic, environmental and social consequences of proposed legislation, as appropriate, but only for domestic PaMs.

(e) Assessment of adherence to the reporting guidelines

50. The ERT assessed the information reported in the BR3 of Austria and identified issues relating to completeness and transparency to the UNFCCC reporting guidelines on BRs. The findings are described in table 4.

Table 4
Findings on mitigation actions and their effects from the review of the third biennial report of Austria

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in paragraph 7	Austria did not provide information on the changes in its domestic institutional arrangements. The ERT noted that the inter-ministerial bodies are different from those reported in the Party's BR2.
	Issue type: completeness Assessment: recommendation	During the review Austria explained that after a revision to the Austrian Climate Change Act in 2017, the National Climate Change Committee and the National Climate Change Council, founded by the Climate Change Act (2011), were merged into a new single National Climate Change Committee to avoid overlap between membership and functions of the two bodies. The ERT recommends that Austria include in its next BR information on any changes to the domestic institutional arrangements for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its economy-wide emission reduction target.

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
2	Reporting requirement specified in CTF Table 3 Issue type: transparency Assessment: recommendation	Austria reported on the effects of only some of its individual mitigation actions for 2020. During the review Austria explained that there are no uniform regulations for monitoring and reporting the effect of PaMs, which makes reliable calculation of the mitigation impact of policies very difficult. The ERT recommends that Austria improve the transparency of its reporting by including in its next BR information on the effects of its individual mitigation actions for 2020 or clearly explain why it was not able to do so owing to its national circumstances.
3	Reporting requirement specified in paragraph 8 Issue type: completeness Assessment: encouragement	Austria did not report information on the assessment of the economic and social consequences of response measures. During the review Austria explained that the information was included in the NC7 and further information was contained in the NIR of the EU. The ERT encourages the Party to include in its next BR information on the assessment of the economic and social consequences of response measures or explain why it was not able to do so.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete, transparent and adhering to the UNFCCC reporting guidelines on BRs.

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

(a) Technical assessment of the reported information

51. For 2014 Austria reported in CTF table 4 annual total GHG emissions excluding LULUCF of 76,381.33 kt CO_2 eq, which is 3.1 per cent below the 1990 level. In 2014 emissions from non-ETS sectors relating to the target under the ESD amounted to 48.21 Mt CO_2 eq.

52. For 2015 Austria reported in CTF table 4 annual total GHG emissions excluding LULUCF of 78,850.81 kt CO_2 eq, which is 0.06 per cent above the 1990 level. In 2015 emissions from non-ETS sectors relating to the target under the ESD amounted to 49.30 Mt CO_2 eq.

53. Austria reported that LULUCF was not part of its target under the Convention. Austria did not report whether it intends to use units from market-based mechanisms under the Kyoto Protocol to meet the target under the Convention. During the review Austria explained that its intention is to reach its 2020 mitigation target under the ESD by domestic measures alone; however, it stated that it could not exclude the possibility that this position may be revised in the future. Table 5 illustrates Austria's total GHG emissions, the contribution of LULUCF and the use of units from market-based mechanisms to achieve its target.

Table 5
Summary of information on the use of units from market-based mechanisms and land use, land-use change and forestry by Austria to achieve its target

Year	*Emissions excluding LULUCF (kt CO_2 eq)*	*Contribution of LULUCF (kt CO_2 eq)[a]*	*Emissions including contribution of LULUCF (kt CO_2 eq)*	*Use of units from market-based mechanisms (kt CO_2 eq)*
1990	78 804.65	NA	78 804.65	NA
2010	85 059.02	NA	85 059.02	NA
2011	82 696.89	NA	82 696.89	NA
2012	80 037.93	NA	80 037.93	NA
2013	80 150.24	NA	80 150.24	NA

Year	Emissions excluding LULUCF ($kt\ CO_2\ eq$)	Contribution of LULUCF ($kt\ CO_2\ eq$)[a]	Emissions including contribution of LULUCF ($kt\ CO_2\ eq$)	Use of units from market-based mechanisms ($kt\ CO_2\ eq$)
2014	76 381.33	NA	76 381.33	NA
2015	78 850.81	NA	78 850.81	NA

Sources: Austria's BR3 and CTF tables 1, 4, 4(a)I, 4(a)II and 4(b).

[a] The EU's unconditional commitment to reduce GHG emissions by 20 per cent below the 1990 level by 2020 does not include emissions/removals from LULUCF.

54. In assessing the progress towards the achievement of the 2020 target, the ERT noted that Austria's emission reduction target for non-ETS sectors is 16 per cent below the 2005 level (see para. 15 above). As discussed above, in 2015 Austria's emissions from non-ETS sectors were 11 per cent below the 2005 level.

55. The ERT noted that Austria is making progress towards its emission reduction target by implementing mitigation actions that are delivering some emission reductions, which contribute to the EU target under the Convention. However, on the basis of the results of the projections under the WEM scenario, the ERT also noted that Austria may face challenges in the achievement of its target under the ESD and would need to further strengthen mitigation actions. During the review, Austria also acknowledged this challenge and indicated that it may use the domestic "banking" flexibility (use of emission rights from previous years) provided for in the ESD to meet the mitigation requirements until 2020.

56. During the review, Austria also outlined that it is facing challenges in meeting national sectoral targets, especially for the transport sector, and it is currently evaluating the implemented PaMs. If sectoral targets are not fulfilled for a given year, additional PaMs will be triggered according to the Climate Change Act. In addition, Austria is developing its National Energy and Climate Plan towards 2030 and working on a new "PaMs package" which will encompass the longer-term perspective.

(b) Assessment of adherence to the reporting guidelines

57. The ERT assessed the information reported in the BR3 of Austria and recognized that the reporting is complete, transparent and adhering to the UNFCCC reporting guidelines on BRs. No issues relating to the topics discussed in this chapter of the review report were raised during the review.

3. Projections overview, methodology and results

(a) Technical assessment of the reported information

58. Austria reported updated projections for 2020, 2025, 2030 and 2035 relative to actual inventory data for 2015 under the WEM scenario. The WEM scenario reported by Austria includes implemented and adopted PaMs launched by June 2016.

59. Austria provided a definition of its WEM scenario, explaining that it includes climate change mitigation measures that were implemented and adopted before June 2016. The definition indicates that the scenario was prepared according to the UNFCCC reporting guidelines on NCs.

60. Austria explained that it did not report a WAM scenario because consensus on a set of planned PaMs to meet the 2030 target had not yet been reached at the time of preparation of the BR3. Austria also explained that preparations for the Climate and Energy Strategy for 2030 had begun, but that the early election of the Parliament in autumn 2017 temporarily stopped that work. During the review, Austria pointed out that the preparation of an updated WAM scenario is at an advanced state.

61. The projections are presented on a sectoral basis, using the same sectoral categories as those used in the reporting on mitigation actions, and on a gas-by-gas basis for CO_2, CH_4, N_2O, PFCs, HFCs (treating PFCs and HFCs collectively in each case), SF_6 and NF_3 for

2020, 2025, 2030 and 2035. The projections are also provided in an aggregated format for each sector as well as for a Party total using global warming potential values from the AR4.

62. Emission projections related to fuel sold to ships and aircraft engaged in international transport were reported separately and were not included in the totals. In this regard, the ERT noted that Austria implemented a recommendation made in the previous review report, namely to report separate information on emission projections related to fuel sold to ships and aircraft engaged in international transport. Austria reported on some factors and activities affecting emissions for each sector.

(b) Methodology, assumptions and changes since the previous submission

63. The ERT noted that Austria has a well-established national system in place that facilitates the compilation and regular update of projections in a sound and efficient way. The excellent collaboration between the various institutions responsible for calculating projections for particular sectors ensures consistent results across all sectors as well as models applied.

64. The methodology used for the preparation of the projections is identical to that used for the preparation of the emission projections for the BR2. Austria reported supporting information further explaining the methodologies and the changes made since the BR2. To project GHG emissions, Austria applied the same methodologies as for the national GHG inventory, using sectoral forecasts of activities based on several models and methods. Austria summarized these models and methods in the BR3, providing a more detailed description in an annex to the NC7 as well as in an accompanying report ("GHG Projections and Assessment of Policies and Measures in Austria"). Differences compared with previous submissions mainly concern changes in the base data, revised assumptions for activities, updates of emission factors and changes to some models (i.e. the economic model and the model for the LULUCF sector).

65. To prepare its projections, Austria relied on the following key underlying assumptions: GDP growth rate (remaining constant at about 1.5 per cent per year from 2015 to 2030), population (increasing by almost 8 per cent from 2015 to 2030), number of households (increasing by about 11 per cent from 2015 to 2030), heating degree days (decreasing by about 3 per cent from 2020 to 2030), exchange rate USD/EUR (remaining constant at a value of 1.2 USD/EUR from 2015 to 2030), international energy prices for oil, coal and gas (increasing, per fuel, in a range from 45 to 110 per cent between 2015 and 2030) as well as prices for CO_2 certificates (increasing by a factor of about 3.5 between 2015 and 2030). These variables and assumptions were reported in CTF table 5. The assumptions were updated on the basis of the most recent economic developments known at the time of the preparation of the projections.

66. Austria provided information in its BR3 and in CTF table 5 on methodologies, models and approaches used as well as on the key variables and assumptions underlying the projection scenarios. Austria provided information on sensitivity analyses in the BR3. Austria also referred to the report "Energieszenarien bis 2050: Wärmebedarf der Kleinverbraucher" containing additional information regarding the assumptions made with regard to the projections in the energy sector.

67. Sensitivity analyses, while limited to the energy sector, were conducted for a number of important assumptions, such as economic growth, energy prices, subsidies and prices for CO_2 certificates. As these assumptions are interdependent, Austria provided the following two sensitivity scenarios. First, a scenario with a higher GDP growth rate of 2.5 per cent per year (and higher prices for fuels and CO_2 certificates), leading to 9 per cent higher emissions in 2030 compared with the WEM scenario. Second, a scenario with a lower GDP growth rate of 0.8 per cent per year (and lower prices for fuels and CO_2 certificates), leading to 4 per cent lower emissions in 2030 compared with the WEM scenario.

(c) Results of projections

68. The projected emission levels under the WEM scenario and information on the Kyoto Protocol targets and the quantified economy-wide emission reduction target are

presented in table 6 and the figure below. Austria's projected emissions under the ESD and AEAs under the ESD are also presented in the figure below.

Table 6
Summary of greenhouse gas emission projections for Austria

	GHG emissions (kt CO_2 eq per year)	*Changes in relation to base-year level (%)*	*Changes in relation to 1990 level (%)*
Quantified economy-wide emission reduction target under the Convention[a]	NA	NA	NA
Inventory data 1990[b]	78 804.65	–	–
Inventory data 2015[b]	78 850.81	0.06	0.06
WEM projections for 2020[c]	75 392.77	–4.3	–4.4
WEM projections for 2030[c]	69 766.99	–11.5	–11.5

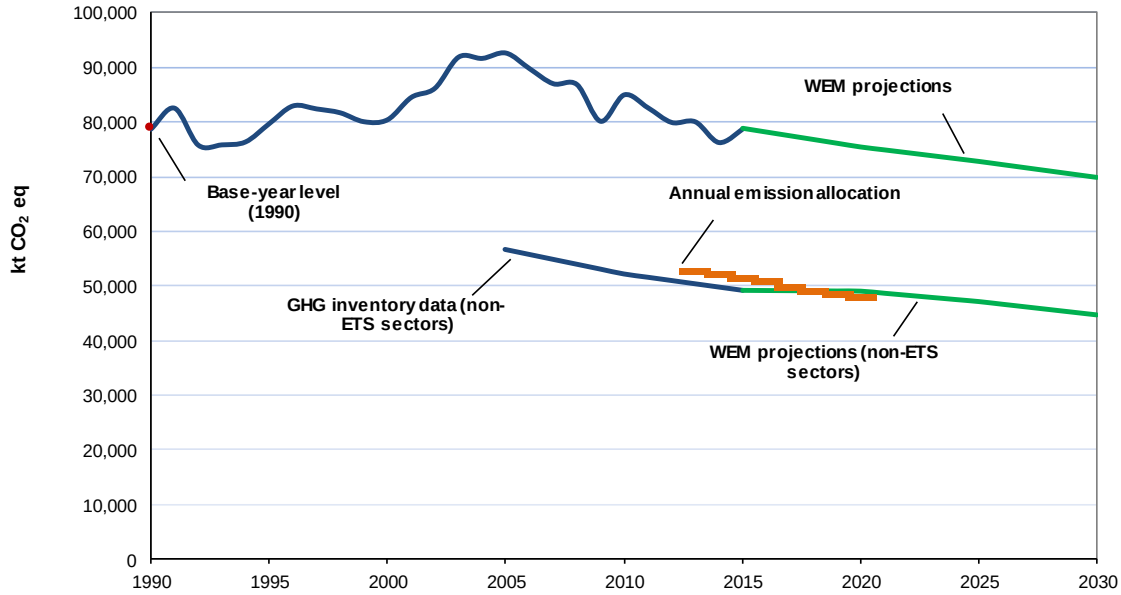
Note: The projections are for GHG emissions without LULUCF.

[a] The quantified economy-wide emission reduction target under the Convention is a joint target of the EU and its 28 member States. The target is to reduce emissions by 20 per cent compared with the base-year (1990) level by 2020.

[b] From Austria's BR3, CTF table 6.

[c] From Austria's NC7 and BR3.

Greenhouse gas emission projections reported by Austria



Sources: (1) data for the years 1990–2015: Austria's 2017 annual submission, version 1; total GHG emissions excluding LULUCF; (2) data for the years 2016–2030: Austria's NC7 and BR3; total GHG emissions excluding LULUCF.

69. Austria's total GHG emissions excluding LULUCF in 2020 and 2030 are projected to be 75,392.77 and 69,766.99 kt CO_2 eq, respectively, under the WEM scenario, which represents a decrease of 4.3 and 11.5 per cent, respectively, below the 1990 level. The 2020 projections suggest that Austria will continue contributing to the achievement of the EU target under the Convention by reducing its emission levels by 2020.

70. Austria's target for non-ETS sectors is to reduce its total emissions by 16 per cent below the 2005 level by 2020 (see para. 15 above). Austria's AEAs, which correspond to its national emission target for non-ETS sectors, decrease from 52,625.04 kt CO_2 eq in 2013 to 47,750.11 kt CO_2 eq for 2020. According to the projections under the WEM scenario, emissions from non-ETS sectors are estimated to reach 49,142.00 kt CO_2 eq by 2020. The projected level of emissions under the WEM scenario is 2.9 per cent above the AEAs for 2020. The ERT noted that this suggests that Austria may face challenges in meeting its target for non-ETS sectors under the WEM scenario.

71. In addition to its target under the EU ETS and ESD, Austria defined national annual emission ceilings by sector for 2013 and 2020 in its Climate Change Act. For 2020, the cumulative national emission ceiling for all sectors is 48,800.00 kt CO_2 eq in 2020. The projections indicate that Austria may face challenges in achieving its national emission ceilings across all sectors.

72. Austria presented the WEM scenario by sector for 2020 and 2030, as summarized in table 7.

Table 7
Summary of greenhouse gas emission projections for Austria presented by sector

	GHG emissions and removals (kt CO_2 eq)			*Change %*	
		2020	*2030*	*1990–2020*	*1990–2030*
Sector	*1990*	*WEM*	*WEM*	*WEM*	*WEM*
Energy (not including transport)	39 052	28 520	25 705	–27.0	–34.2
Transport	13 976	22 708	21 466	62.5	53.6
Industry/industrial processes	13 663	15 512	14 308	13.5	4.7
Agriculture	8 189	7 342	7 357	–10.3	–10.2
LULUCF	–12 139	–7 747	–4 608	–36.2	–62.0
Waste	3 925	1 312	930	–66.6	–76.3
Total GHG emissions without LULUCF	**78 805**	**75 393**	**69 767**	**–4.3**	**–11.5**

Source: Austria's BR3, CTF table 6 (LULUCF as provided in Austria's NC7).

73. According to the projections reported for 2020 under the WEM scenario, the most significant emission reductions are expected to occur in the energy (not including transport) and waste sectors, amounting to projected reductions of 10,532.23 kt CO_2 eq (27.0 per cent) and 2,613.30 kt CO_2 eq (66.6 per cent) between 1990 and 2020, respectively. The pattern of projected emissions reported for 2030 under the same scenario remains the same. Transport is the single most important sector. While this sector showed increasing emissions in the past, projections indicate that emission trends will stabilize and then start to decrease between 2020 and 2030.

74. Austria presented the WEM scenario by gas for 2020, as summarized in table 8.

Table 8
Summary of greenhouse gas emission projections for Austria presented by gas

	GHG emissions and removals (kt CO_2 eq)			*Change (%)*	
		2020	*2030*	*1990–2020*	*1990–2030*
Gas	*1990*	*WEM*	*WEM*	*WEM*	*WEM*
CO_2	62 293	63 562	59 525	2.0	–4.4
CH_4	10 514	6 312	5 920	–40.0	–43.7
N_2O	4 342	3 544	3 440	–18.4	–20.8
HFCs	2	1 442	659	59 011.5	26 911.1
PFCs	1 183	34	21	–97.1	–98.2
SF_6	471	476	159	1.1	–66.2
NF_3	NO, NA	23	42	–	–
Total GHG emissions without LULUCF	**78 805**	**75 393**	**69 767**	**–4.3**	**–11.5**

Source: Austria's BR3, CTF table 6.

75. For 2020 the most significant reductions are projected for CH_4 and PFC emissions: 4,202.11 kt CO_2 eq (40.0 per cent) and 1,148.97 kt CO_2 eq (97.1 per cent; i.e. only minor

emissions of PFCs remain) between 1990 and 2020, respectively. N_2O emissions are projected to decrease by 797.66 kt CO_2 eq (18.4 per cent) between 1990 and 2020. Over the same period, CO_2, HFC and SF_6 emissions are projected to increase by 1,268.82 kt CO_2 eq (2.0 per cent), 1,439.88 kt CO_2 eq (59,011.5 per cent) and 5.34 kt CO_2 eq (1.1 per cent), respectively. Projections for NF_3 emissions indicate that they remain of minor importance.

76. Between 2020 and 2030 emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 are projected to decrease, with CO_2 contributing 4,036.31 kt CO_2 eq to the total decrease of 5,625.78 kt CO_2 eq of all gases. For 2030 the most significant reductions are projected for CH_4 and CO_2: 4,594.09 kt CO_2 eq (43.7 per cent) and 2,767.49 kt CO_2 (4.4 per cent) between 1990 and 2030, respectively. PFC, N_2O and SF_6 emissions are projected to decrease by 1,161.94 (98.2 per cent), 901.35 kt CO_2 (20.8 per cent) and 311.50 kt CO_2 eq (66.2 per cent) between 1990 and 2030, respectively. HFC emissions are projected to increase by 656.63 kt CO_2 eq (26,911.1 per cent) between 1990 and 2030.

77. The ERT noted that in the BR2 submission, Austria reported, under the WEM scenario, projected total GHG emissions excluding LULUCF of 79,066.98 kt CO_2 eq for 2020 and 75,957.16 kt CO_2 eq for 2030, which represents an increase of 0.5 per cent and a decrease of 3.5 per cent, respectively, compared with the 1990 level. Austria's projections as presented in the BR3 (see tables 7 and 8), under the WEM scenario, show stronger decreases of 4.3 per cent and 11.5 per cent for 2020 and 2030, respectively (for further details regarding changes since the previous submission see para. 64 above).

(d) Assessment of adherence to the reporting guidelines

78. The ERT assessed the information reported in the BR3 of Austria and identified issues relating to completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 9.

Table 9
Findings on greenhouse gas emission projections reported in the third biennial report of Austria

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement[a] specified in paragraph 28 Issue type: completeness Assessment: encouragement	Austria did not report a WOM or a WAM scenario in its BR3. Austria outlined in its BR3 why it did not report a WAM scenario but it did not provide any explanations for why it did not report a WOM scenario. Austria stated in its BR3 that it did not report a WAM scenario because the early election of the Parliament in autumn 2017 had temporarily stopped the work on the Climate and Energy Strategy for 2030 and, accordingly, consensus on a set of planned PaMs to meet the 2030 target has not yet been reached. During the review, Austria pointed out that a WAM scenario was provided in most of the previous submissions. Austria also explained that a WAM scenario will be available, at the latest for the final National Energy and Climate Plan, enabling it to report this scenario in future submissions. However, Austria confirmed that the calculation of a WOM scenario cannot be justified for budgetary reasons. The ERT encourages Austria to report WOM and WAM scenarios in its next BR3 and the corresponding CTF tables.
2	Reporting requirement[a] specified in paragraph 35 Issue type: completeness Assessment: encouragement	Austria did not report projections for the indirect GHGs carbon monoxide, nitrogen oxides and non-methane volatile organic compounds, or for sulfur oxides. During the review, Austria explained that it does not calculate projections for carbon monoxide. However, it informed the ERT that projections for nitrogen oxides, non-methane volatile organic compounds and sulfur oxides have been reported under the Convention on Long-Range Transboundary Air Pollution. The ERT encourages Austria to report projections for indirect GHGs in its next submission.
3	Reporting requirement[a] specified in paragraph 38	Austria reported diagrams illustrating the projections for the most important sectors in its BR3. However, the ERT noted that the diagrams do not completely illustrate the information addressed in paragraphs 34–37 of the UNFCCC reporting guidelines

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
	Issue type: completeness	on NCs because diagrams for, among others, LULUCF, international transport and minor source categories are missing.
	Assessment: encouragement	During the review, Austria showed the ERT additional diagrams in its presentations.
		The ERT encourages Austria to include, in its next submission, diagrams illustrating all the information addressed in paragraphs 34–37 of the UNFCCC reporting guidelines on NCs (such as those for LULUCF, international transport and minor source categories).
4	Reporting requirement[a] specified in paragraph 48	Austria reported information on factors and activities for each sector. However, the ERT noted that this information did not include the necessary details to enable understanding of the emission trends for each sector, such as how and why they evolve over time, the shares of different fuels, the economic development in relevant industry branches, relevant factors in the transport and buildings sector and the evolution of factors driving the projections in agriculture.
	Issue type: transparency	
	Assessment: recommendation	During the review, Austria presented insightful information, highlighting the most relevant factors and activities underlying the emission trends. The ERT also acknowledged that the report "GHG Projection and Assessment of Policies and Measures in Austria" contains detailed information to provide the reader with an understanding of the emission trends.
		The ERT reiterates the recommendation made in the previous review report that Austria provide further information on the key factors and activities for each sector.

Note: The reporting on the requirements not included in this table is considered to be complete, transparent and adhering to the UNFCCC reporting guidelines on NCs and on BRs.

[a] Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on NCs.

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

1. Approach and methodologies used to track support provided to non-Annex I Parties

(a) Technical assessment of the reported information

79. In the BR3 Austria reported information on the provision of financial, technological and capacity-building support required under the Convention.

80. Austria provided details on what "new and additional" support it has provided and clarified how this support is "new and additional". Austria defines new and additional as a gradual scaling up of support over the years since the Convention and its Kyoto Protocol entered into force, with new programmes, projects and focus areas supplementing and/or extending existing initiatives over time, with the overall volume of support provided increasing in the longer term.

81. Austria reported the public financial support that it has provided to countries eligible for ODA, even including support provided to some Annex I Parties, in particular Ukraine. Austria distinguished between support for mitigation and adaptation activities and recognized the capacity-building elements of such support. Austria outlined the efforts exerted to strike a balance between support for adaptation and mitigation in its bilateral cooperation. As previously explained in the BR2, Austria reported in its BR3 on how the Climate Finance Strategy, adopted by Austria in 2013, established an inter-ministerial working group dedicated to climate finance. During the review, Austria informed the ERT that the strategy was updated in 2016.[9]

[9] https://www.bmnt.gv.at/dam/jcr:eb0ecc2a-e7b8-4a4c-9692-ffc6f32eb351/Revision%20der%20Klimafinanzierungsstrategie_2017.pdf.

82. The BR3 includes information on the national approach to tracking the provision of financial support, indicators, delivery mechanisms used and allocation channels tracked. Austria reported that a broad range of actors are involved in the delivery and provision of climate finance, among them its national development bank, ADC and ministries. Austria included information on how it has refined its approach to tracking climate finance and related methodologies. In particular, in its BR3 Austria elaborated on the process of data collection, which is jointly supervised by the Austrian Development Agency and the Ministry of Sustainability and Tourism. In addition, the BR3 clarifies that the monitoring and reporting of project implementation is a requirement under the strategy, thus ensuring that funds deliver on the objectives defined for individual projects. However, Austria did not include information on its national approach for tracking technological and capacity-building support to non-Annex I Parties.

83. Austria described in its BR3 the methodology and underlying assumptions used for collecting and reporting information on financial support, including underlying assumptions, guidelines, indicators and eligibility criteria. Austria explained in its BR3 that the Climate Finance Strategy contains guidelines for tracking the provision of climate finance by using OECD DAC methodologies to ensure consistency with Austria's ODA figures. The methodology used for preparing information on international climate support is based on OECD DAC Rio markers for mitigation and adaptation. In particular, as described in the BR2, for projects marked with a Rio marker value "1", amounts reported as climate finance are discounted by 50 per cent, and no double counting is ensured.

(b) Assessment of adherence to the reporting guidelines

84. The ERT assessed the information reported in the BR3 of Austria and identified issues relating to completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 10.

Table 10
Findings on the approach and methodologies used to track support provided to non-Annex I Parties from the review of the third biennial report of Austria

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in paragraph 13 Issue type: transparency Assessment: recommendation	Austria reported in its BR3 that it provides financial, technological and capacity-building support to non-Annex I Parties, referring to the OECD DAC list of countries eligible for ODA; however, the ERT noted that Austria included the support that it provided to some Annex I Parties that are classified as economies in transition. During the review Austria explained that the identification of eligible countries is done referring to the OECD DAC list of ODA recipients in order to ensure consistency with Austria's ODA reporting. The ERT recommends that Austria provide information on the provision of financial, technological and capacity-building support to non-Annex I Parties only, in accordance with the requirements contained in chapter VIII of the UNFCCC Annex I reporting guidelines on NCs.
2	Reporting requirement specified in paragraph 14 Issue type: completeness Assessment: recommendation	In its BR3 Austria provided complete information on the tracking system in place and the methodologies used to track financial support. However, this did not include information on the national approach for tracking technological and capacity-building support to non-Annex I Parties, if appropriate. During the review Austria explained the difficulties it faced in tracking support other than financial support, in particular the capacity development approach, in a systematic way because such support is often an integral component of projects and there is a lack of guidance on definitions. Austria explained that specific OECD DAC codes that relate to the type of aid provided have been used, and that qualitative assessment through incorporating key words has also been used to track projects. The ERT reiterates the recommendation made in the previous review report that Austria improve its reporting by providing a description of its national approach for

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
		tracking the provision of technological and capacity-building support to non-Annex I Parties.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete, transparent and adhering to the UNFCCC reporting guidelines on BRs.

2. Financial resources

(a) Technical assessment of the reported information

85. Austria reported information on the provision of public financial support required under the Convention and its Kyoto Protocol, including on financial support provided, committed and pledged, allocation channels and annual contributions.

86. Austria indicated what "new and additional" financial resources it has provided and clarified how it has determined such resources as being "new and additional" (see para 80 above). Moreover, Austria outlined the efforts exerted to strike a balance between support for adaptation and mitigation in its bilateral cooperation.

87. Austria described its general approach on how its resources address the adaptation and mitigation needs of non-Annex I Parties, highlighting that all bilateral programmes, projects and initiatives are developed and implemented in close cooperation with partner countries, through jointly developed country strategies or responding to individual requests from government agencies in partner countries. During the review Austria explained that cooperation between Austria and partner countries is based on the internationally agreed principles of the Busan Partnership for Effective Development Cooperation and provided comprehensive information on how it implements this in practice.[10] The ERT noted that Austria provided complete and transparent information in tabular format showing a significant improvement since its BR2. Austria used the CTF for delivering information on the provision of public financial support in both the BR3 and the NC7, outlining consistent information between the two reports.

88. With regard to the most recent financial contributions aimed at enhancing the implementation of the Convention by developing countries, Austria reported that its climate finance has been allocated across a broad range of actors involved in the process, including ADC, the Development Bank of Austria, the Federal Ministry of Finance and the Ministry of Sustainability and Tourism. Austria made a reference to the work of the inter-ministerial working group which regularly takes stock of developments related to climate finance, including the tracking of support. During the review, Austria provided information on its Development Cooperation Act and the three-year programme on the Austrian Development Policy 2016–2018,[11] which identified 11 priority countries for development cooperation. Austria specified that priority countries for cooperation in the field of environment and climate change are chosen according to several criteria, an important one being similarities in geography and morphology. In particular, the case of Bhutan[12] was one in which the recipient country actively sought Austria as partner in developing climate change adaptation measures, in REDD-plus[13] and in the use of the mitigation potentials of the main forest types. Table 11 includes some of the information reported by Austria on its provision of financial support.

[10] https://www.entwicklung.at/en/ada/funding/country-and-regional-strategies.

[11] https://www.entwicklung.at/fileadmin/user_upload/Dokumente/Publikationen/3_JP/Englisch/2016-2018_3-YP_UPDATE_2017.pdf.

[12] https://www.entwicklung.at/fileadmin/user_upload/Dokumente/Publikationen/Landesstrategien/CS_Bhutan_2015-2018.pdf.

[13] Reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70).

Table 11
Summary of information on provision of financial support by Austria in 2015–2016
(Millions of United States dollars)

	Year of disbursement	
Allocation channel of public financial support	*2015*	*2016*
Official development assistance	828.54	1 076.79
Climate-specific contributions through multilateral channels, including:	66.23	74.23
Global Environment Facility	19.57	9.77
Least Developed Countries Fund	–	–
Special Climate Change Fund	–	–
Adaptation Fund	–	–
Green Climate Fund	6.64	12.83
Trust Fund for Supplementary Activities	–	–
Financial institutions, including regional development banks	38.47	50.14
United Nations bodies	1.55	1.48
Other	0.24	0.14
Climate-specific contributions through bilateral, regional and other channels	121.39	135.21

Sources: (1) Query Wizard for International Development Statistics, available at http://stats.oecd.org/qwids/; (2) BR3, CTF tables.

89. Austria described in its BR3 report that the Climate Finance Strategy contains guidelines for tracking the provision of climate finance by using OECD DAC methodologies to ensure consistency with Austria's ODA figures. The methodology used for preparing information on international climate support is based on OECD DAC Rio markers for mitigation and adaptation. In particular, for projects marked with a Rio marker value "1", amounts reported as climate finance are discounted by 50 per cent, and no double counting is ensured. In its NC7, Austria also described its efforts to track publicly mobilized private climate finance, both at the national level through ADC business partnerships and at the international level through active participation in the OECD Research Collaborative on Tracking Private Climate Finance.

90. Austria reported on its climate-specific public financial support, totalling USD 187.6 million in 2015 and USD 209.4 million in 2016. Austria did not report any future financial pledges aimed at enhancing the implementation of the Convention by developing countries, apart from reiterating its commitment to providing this support. The ERT noted that Austria reported in CTF table 7(b) its bilateral support allocated to Annex I Parties in 2015 and 2016. Information on financial support from the public sector provided through multilateral and bilateral channels and the allocation of that support by priority is presented in table 12.

Table 12
Summary of information on channels of financial support used in 2015–2016 by Austria
(Millions of United States dollars)

Allocation channel of public financial support	*Year of disbursement*				*Share (%)*	
	2015	*2016*	*Difference*	*Change (%)*	*2015*	*2016*
Support through bilateral and multilateral channels allocated for:						
Mitigation	109.82	104.25	–5.56	–5.1	58.5	49.8
Adaptation	7.88	6.40	–1.48	–18.8	4.2	3.1
Cross-cutting	69.92	98.78	28.86	41.3	37.3	47.2
Other	–	–	–	–	–	–
Total	**187.62**	**209.43**	**21.82**	**11.6**	**100.0**	**100.0**

Allocation channel of public financial support	*Year of disbursement*			*Share (%)*		
	2015	*2016*	*Difference*	*Change (%)*	*2015*	*2016*
Detailed information by type of channel						
Multilateral channels						
Mitigation	1.30	1.34	0.41	3.2	2.0	1.8
Adaptation	–	–	–	–	–	–
Cross-cutting	64.93	72.88	7.96	12.3	98.0	98.2
Other	–	–	–	–	–	–
Total	**66.23**	**74.23**	**8.00**	**12.1**	**100.0**	**100.0**
Bilateral channels						
Mitigation	108.51	102.91	–5.60	–5.2	89.4	76.1
Adaptation	7.88	6.40	–1.48	–18.8	6.5	4.7
Cross-cutting	4.99	25.89	20.90	418.7	4.1	19.2
Other	–	–	–	–	–	–
Total	**121.38**	**135.21**	**13.82**	**11.4**	**100.0**	**100.0**
Multilateral compared with bilateral channels						
Multilateral	66.23	74.23	8.00	12.1	35.3	35.4
Bilateral	121.39	135.21	13.82	11.4	64.7	64.6
Total	**187.62**	**209.43**	**21.82**	**11.6**	**100.0**	**100.0**

Source: CTF tables 7, 7(a) and 7(b) of the BR3 of Austria.

91. The BR3 includes detailed information on the financial support provided through multilateral, bilateral and regional channels in 2015 and 2016. More specifically, Austria contributed through multilateral channels, as reported in the BR3 and in CTF table 7(a), USD 66.23 and 74.23 million for 2015 and 2016, respectively. The contributions to specialized multilateral climate change funds have been channelled through the Green Climate Fund and the Global Environment Facility.

92. The BR3 and CTF table 7(b) also include detailed information on the total financial support provided though bilateral and regional channels (USD 121.38 and 135.21 million) in 2015 and 2016, respectively. Significant core contributions have been channelled through the World Bank, and contributions to the African Development Bank, the Asian Development Bank and the Inter-American Development Bank have been made in both 2015 and 2016.

93. The BR3 provides information on the types of support provided. In terms of the focus of public financial support, as reported in CTF table 7 for 2015, the shares of the total public financial support allocated for mitigation, adaptation and cross-cutting projects were 58.5, 4.2 and 37.3 per cent, respectively. In addition, 35.3 per cent of the total public financial support was allocated through multilateral channels and 64.7 per cent through bilateral, regional and other channels. In 2016, the shares of total public financial support allocated for mitigation, adaptation and cross-cutting projects were 49.8, 3.1 and 47.2 per cent, respectively. Furthermore, 35.4 per cent of the total public financial support was allocated through multilateral channels and 64.6 per cent through bilateral, regional and other channels.

94. CTF tables 7(a) and 7(b) include information on the types of financial instrument used in the provision of assistance to developing countries, which include ODA in the form of grants, shares in collective investment vehicles and interest subsidies, other official flows in the form of non-concessional and subordinated loans and public insurances, and Officially Supported Export Credits in the form of loan guarantees. The ERT noted that the loans provided in both 2015 and 2016 accounted for most of the total public financial support, and contributions in the form of grants over the biennium have been around 25 per cent. ODA climate finance increased from 2015 to 2016 and reported shares in collective investment vehicles substantially decreased.

95. In the BR3 Austria reiterated its commitment to mobilizing private climate finance and improving the scope and methodology it uses for tracking financial contributions. Austria explained in the BR3 that private finance is mobilized through ADC business partnerships, which allow for co-financing of up to 50 per cent of a given business investment. However, Austria did not elaborate on PaMs aiming to scale up mobilization, apart from the reference to the ADC partnerships.

(b) Assessment of adherence to the reporting guidelines

96. The ERT assessed the information reported in the BR3 of Austria and identified issues relating to completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 13.

Table 13
Findings on financial resources from the review of the third biennial report of Austria

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in paragraph 16 Issue type: transparency Assessment: recommendation	While Austria reported in its BR3 that existing and emerging needs of non-Annex I Parties are met through the development of programmes and projects in close cooperation with partner countries, either in line with priorities identified in jointly developed country strategies or responding to individual requests from government agencies. However, the information provided did not allow the ERT to gain an understanding of how these programmes worked to ensure that existing and emerging needs of non-Annex I Parties are met. During the review Austria explained that cooperation between Austria and partner countries is based on the internationally agreed principles of the Busan Partnership for Effective Development Cooperation and provided comprehensive information on how Austria implements this in practice (see https://www.entwicklung.at/en/ada/funding/country-and-regional-strategies/). The ERT recommends that Austria describe, to the extent possible, how it seeks to ensure that the resources it provides effectively address the needs of non-Annex I Parties regarding climate change adaptation and mitigation.
2	Reporting requirement specified in paragraph 18 Issue type: completeness Assessment: recommendation	Austria reported information in tabular format in its BR3 on the annual financial support it has provided for the purpose of assisting non-Annex I Parties. However, Austria did not report any summary information in textual format on the above-mentioned information in its BR3, apart from indicating what new and additional resources it has provided. During the review Austria explained that, owing to its efforts to ensure that the reports were kept as concise as possible, some information may have been excluded and acknowledged that improvements could be made to its reporting. The ERT reiterates the recommendation made in the previous review report that Austria report clearly on how its financial resources assist non-Annex I Parties and include in its next BR summary information in textual format on annual financial support provided for the purpose of assisting non-Annex I Parties.
3	Reporting requirement specified in paragraph 19 Issue type: transparency Assessment: encouragement	Austria reported in its BR3 on its effort of tracking mobilized private climate finance through the ADC business partnerships. However, Austria did not provide information on the private financial flows leveraged by bilateral climate finance or on the PaMs that promote the scaling up of private investments in mitigation and adaptation activities in developing country Parties. During the review Austria explained that, for the period 2015–2016, ADC business partnerships were the only Austrian activities tracked that promote the scaling up of private investment in mitigation and adaptation activities in developing countries. The ERT encourages Austria to report on private financial flows leveraged by bilateral climate finance and on PaMs that promote the scaling up of private investment.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete, transparent and adhering to the UNFCCC reporting guidelines on BRs.

3. Technology development and transfer

(a) Technical assessment of the reported information

97. Austria provided information on steps, measures and activities related to technology transfer, access and deployment benefiting developing countries, including information on activities undertaken by the public and private sectors. Austria is committed to a range of actions to advance technology development and transfer. Technology for mitigation and adaptation is a component of many of the programmes and projects supported by Austria's climate finance commitments.

98. In particular, ADC has a strong focus on sustainable energy, in particular hydropower and solar power, as well as on the dissemination of decentralized renewable energy solutions. Another important actor is the Development Bank of Austria. The national designated entity for the Climate Technology Centre and Network, located in the Ministry of Sustainability and Tourism, undertakes cooperation projects in partner countries. Austria is also a member of institutions and initiatives that focus on transfer of technology developments. For example, Austria is a key player, as both an initiator and a supporter, in the Global Forum on Sustainable Energy. The Forum is a multi-stakeholder platform facilitating international dialogue on energy for sustainable development, which takes into account the special interests and challenges of developing countries.

99. The ERT took note of the information provided in CTF table 8 on recipient countries, target areas, measures and focus sectors of technology transfer programmes. Austria reported actions on mitigation and adaptation that are being implemented in several non-Annex I countries in Africa, Asia, Central America and the Caribbean. Activities undertaken by the public and private sectors, and by international organizations, include projects related to solar power, clean energies, management of waste-to-energy projects, low-emission development, biological agriculture and food security.

100. The ERT noted that Austria reported on its PaMs, as well as success stories, in relation to technology transfer, and in particular on measures taken to promote, facilitate and finance the transfer and deployment of climate-friendly technologies for both adaptation and mitigation. Austria described the implemented activities and projects in different regions of the world in which its expertise and best practice, especially in the energy sector, was used. In its reporting, Austria specified the implementation period of every project in tabular format and specified whether the public and/or the private sector had been involved. For example, Austria highlighted its project "Contribution to the Energy and Environment Programme in Southern and Eastern Africa", which provided EUR 4 million in financial support together with contributions from other EU member States, to increase access to modern, affordable and reliable energy services through increased use of renewable energy technologies. Nearly 600,000 households have benefited from the project with 1.3 MW of installed renewable energy generation capacity (mostly photovoltaics) leading to a potential annual GHG emission reduction of 700,000 t CO_2 eq.

(b) Assessment of adherence to the reporting guidelines

101. The ERT assessed the information reported in the BR3 of Austria and identified issues relating to completeness and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 14.

Table 14
Findings on technology development and transfer from the review of the third biennial report of Austria

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in paragraph 21 Issue type: completeness Assessment: recommendation	Austria did not report information in its BR3 on steps taken by the government to support development and enhancement of endogenous technologies of developing countries. During the review Austria explained that projects and activities are often developed jointly with the partner countries, and the work relies upon local experts and consultants. Austria provided an example of how it does this through its Pacific Centre for Renewable Energy and Energy Efficiency programme. Support to regional centres is based on the involvement of local actors and building local knowledge and capacities; programmes include addressing barriers and drivers for sustainable energy markets through enhancing the productivity and competitiveness of industries with high value and job creation potential. The ERT recommends that Austria include information in its next BR on how the government supports the development and enhancement of endogenous technologies of developing countries.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete, transparent and adhering to the UNFCCC reporting guidelines on BRs.

4. Capacity-building

(a) Technical assessment of the reported information

102. In the BR3 and CTF table 9 Austria supplied information on how it has provided capacity-building support in the areas of mitigation, adaptation and technology development and transfer. Austria described individual measures and activities related to capacity-building support in tabular format. Examples include the Water, Climate and Development Programme in Africa, the overall objective of which is to support the integration of water security and climate resilience in development planning and decision-making processes, through enhanced technical and institutional capacity and predictable financing and investment in water security and climate adaptation. The BR3 also included information on projects and activities in Burkina Faso, China and Ghana.

103. Austria reported that it has supported climate-related capacity development activities relating to adaptation, mitigation, climate financing and other sectors. Austria also reported that its bilateral programmes, projects and initiatives are developed and implemented in close cooperation with partner countries, and therefore it understands that such programmes and projects meet existing and emerging needs and interests expressed by partner countries.

(b) Assessment of adherence to the reporting guidelines

104. The ERT assessed the information reported in the BR3 of Austria and identified issues relating to completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 15.

Table 15
Findings on capacity-building from the review of the third biennial report of Austria

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in paragraph 23 Issue type: transparency Assessment:	While Austria reported in its BR3 that its bilateral projects are developed and implemented in close cooperation with partner countries, the ERT noted that the information provided did not allow it to gain an understanding of how these programmes responded to the existing and emerging capacity-building needs identified by non-Annex I Parties. During the review Austria explained that cooperation between Austria and partner countries is based on the internationally agreed principles of the Busan Partnership

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
	recommendation	for Effective Development Cooperation and provided comprehensive information on how Austria implements this in practice (see https://www.entwicklung.at/en/ada/funding/country-and-regional-strategies/). The ERT reiterates the recommendation made in the previous review report that Austria provide information in its next BR, to the extent possible, on how it has provided capacity-building support that responds to the existing and emerging capacity-building needs identified by non-Annex I Parties in the areas of mitigation, adaptation and technology development and transfer.
2	Reporting requirement specified in paragraph 23 Issue type: completeness Assessment: encouragement	Austria reported in tabular format on a selection of projects with a specific focus on capacity-building using CTF table 9. However, Austria did not report a description of individual measures and activities in textual format in its BR3. During the review Austria provided extensive and substantiated information on projects in which a capacity-building component is key, with a strong focus on local communities especially in the areas of forestry and REDD-plus, including specific workshops. The ERT encourages Austria to report in its next BR, in textual format, information on individual capacity-building measures and activities.

Note: Paragraph number listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs. The reporting on the requirements not included in this table is considered to be complete, transparent and adhering to the UNFCCC reporting guidelines on BRs.

III. Conclusions and recommendations

105. The ERT conducted a technical review of the information reported in the BR3 and CTF tables of Austria in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the reported information mostly adheres to the UNFCCC reporting guidelines on BRs and provides an overview of emissions and removals related to Austria's quantified economy-wide emission reduction target; assumptions, conditions and methodologies related to the attainment of the target; progress made by Austria in achieving its target; and Austria's provision of support to developing country Parties.

106. Austria's total GHG emissions excluding LULUCF were estimated to be 1.2 per cent above its 1990 level, whereas total GHG emissions including LULUCF were 13.1 per cent above its 1990 level in 2016. Emissions excluding LULUCF stabilized, in part owing to improvements in the efficiency of energy supply and use, as well as the growing use of renewables, in particular in the buildings sector. However, strong economic and population growth, along with increased transport volumes and increases in metal production poses challenges to emission reductions.

107. Under the Convention, Austria committed to contributing to the achievement of the joint EU quantified economy-wide emission reduction target of a 20 per cent reduction in emissions below the 1990 level by 2020. The target covers all sectors and CO_2, CH_4, N_2O, HFCs, PFCs and SF_6, expressed using global warming potential values from the AR4. Emissions and removals from the LULUCF sector are not included. The EU generally allows its member States to use units from the Kyoto Protocol mechanisms and new market mechanisms for compliance purposes up to an established limit and subject to a number of restrictions on the origin and the type of project. Companies can make use of such units to fulfil their requirements under the EU ETS.

108. The EU 2020 climate and energy package includes the EU ETS and the ESD. An EU-wide emissions cap has been put in place for the period 2013–2020 with the goal of reducing emissions by 21 per cent below the 2005 level by 2020. The 2015–2020 progression in Austria AEAs (its national emission target for non-ETS sectors) is 52,625.04–47,750.11 kt CO_2 eq. Under the ESD, Austria has a domestic target of reducing its total emissions to 16 per cent below the 2005 level by 2020 for non-ETS sectors.

109. Austria's main policy framework relating to climate change is the Austrian Climate Change Act (2011). This Act sets individual emission target paths for the relevant sectors to meet the 2020 targets. During the review Austria provided detailed information on planned PaMs included in the integrated Climate and Energy Strategy, which was adopted in May 2018. The strategy includes 12 flagship projects to achieve three main objectives, namely environmental sustainability, competitiveness/affordability and energy security. Austria has set ambitious targets of reducing emissions by 36 per cent below the 2005 level for the non-ETS sectors; achieving a 45–50 per cent share of renewable energy consumption; and a 25–30 per cent reduction in primary energy intensity below the 2015 level. The mitigation actions with the most significant mitigation impact are the Green Electricity Support Scheme and the Austrian Fuel Ordinance. During the review, Austria also highlighted its overarching support programme, the Climate and Energy Fund, which aims to cultivate innovation and research on sustainability projects and promote green transport.

110. Austria reported in its BR that it will not use units from the market-based mechanisms or the LULUCF sector to achieve its target.

111. The GHG emission projections provided by Austria in the BR3 correspond to the WEM scenario. Under this scenario, total GHG emissions excluding LULUCF are projected to be 4.3 per cent below the 1990 level in 2020. On the basis of the reported information, the ERT concludes that Austria will continue contributing to the achievement of the EU target under the Convention by reducing its emission levels by 2020. According to the projections under the WEM scenario, emissions from non-ETS sectors are estimated to reach 49,142.00 kt CO_2 eq by 2020. The projected level of emissions under the WEM scenario are 2.9 per cent above Austria's AEAs for 2020. On the basis of the reported information, the ERT concludes that Austria may face challenges in meeting its target for non-ETS sectors under the WEM scenario.

112. The ERT noted that although Austria has made progress in reducing its emissions to date, it continues to face challenges in meeting its 2020 emission reduction targets. On the basis of the results of the projections for 2020 under the WEM scenario, the ERT noted that Austria may face challenges in achieving its target. In this regard, Austria would need to further strengthen its mitigation actions or use the market-based mechanisms, particularly given that it has indicated that it will not use emission reductions from LULUCF. During the review Austria highlighted the measures already under way to ensure that the 2030 target will be met, such as the integrated Climate and Energy Strategy, which includes additional targets to be achieved by 2030.

113. Austria continued to provide climate financing to developing countries in line with its climate finance programmes such as the Climate Finance Strategy and with the work of the inter-ministerial working group which regularly takes stock of developments related to climate finance, including the tracking of support. A broad range of Austrian ministries are involved in providing climate finance. Austria has increased its contributions by 11.6 per cent since the BR3; its public financial support totalled USD 187.62 in 2015 and USD 209.43 million in 2016. For those years, Austria provided more support for mitigation than for adaptation.

114. Austria is committed to a range of actions to advance technology development and transfer. Technology for mitigation and adaptation is a component of many of the programmes and projects supported by Austria's climate finance commitments. ADC has a strong focus on sustainable energy, in particular hydropower and solar power as well as the dissemination of decentralized renewable energy solutions. Austria provides capacity-building support mostly through financial systems, including a project in Africa to support the integration of water security and climate resilience into development planning and decision-making processes.

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

(a) To improve the completeness of its reporting by:

(i) Including information on any changes to the domestic institutional arrangements for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its economy-wide emission reduction target (see issue 1 in table 4);

(ii) Providing a description of its national approach for tracking the provision of technological and capacity-building support to non-Annex I Parties (see issue 2 in table 10);

(iii) Providing information on how its financial resources assist non-Annex I Parties and including summary information in textual format on annual financial support provided for the purpose of assisting non-Annex I Parties (see issue 2 in table 13);

(iv) Including information on how the government supports the development and enhancement of endogenous technologies of developing countries (see issue 1 in table 14);

(b) To improve the transparency of its reporting by:

(i) Including information on the effects of its individual mitigation actions for 2020 or clearly explain why it was not able to do so owing to its national circumstances (see issue 2 in table 4);

(ii) Including an additional summary for projections on the key factors and activities for each sector (see issue 4 in table 9);

(iii) Specifying information on the provision of financial, technological and capacity-building support to non-Annex I Parties only, in accordance with the UNFCCC requirements (see issue 1 in table 10);

(iv) Elaborating on how it seeks to ensure that the resources it provides effectively address the needs of non-Annex I Parties regarding climate change adaptation and mitigation see issue 1 in table 13);

(v) Providing more detailed information on how it has provided capacity-building support that responds to the existing and emerging capacity-building needs identified by non-Annex I Parties (see issue 1 in table 15).

Annex

Documents and information used during the review

A. Reference documents

2017 GHG inventory submission of Austria. Available at https://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/aut-2017-nir-12apr17.zip.

2018 GHG inventory submission of Austria. Available at https://unfccc.int/sites/default/files/resource/aut-2018-nir-12apr18.zip.

BR3 of Austria. Available at https://unfccc.int/sites/default/files/resource/27135408_Austria-BR3-2-AT_BR3-v2.pdf.

BR3 CTF tables of Austria. Available at http://unfccc.int/files/national_reports/national_communications_and_biennial_reports/application/vnd.openxmlformats-officedocument.spreadsheetml.sheet/4892351_austria-br3-1-aut_2018_v1.0.xlsx.

"Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories". Annex to decision 24/CP.19. Available at http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf.

"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 preparation of the information required under Article 7 of the Kyoto Protocol". Annex to decision 15/CMP.1. Available at http://unfccc.int/resource/docs/2005/cmp1/eng/08a02.pdf.

"Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol". Annex III to decision 3/CMP.11. Available at http://unfccc.int/resource/docs/2015/cmp11/eng/08a01.pdf.

"Guidelines for review under Article 8 of the Kyoto Protocol". Annex to decision 22/CMP.1. Available at http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.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.

NC7 of Austria. Available at https://unfccc.int/sites/default/files/resource/69823015_Austria-NC7-1-AT_NC7.pdf.

Report of the technical review of the second biennial report of Austria. FCCC/TRR.2/AUT. Available at http://unfccc.int/documentation/documents/advanced_search/items/6911.php?priref=600009046.

Revisions to the guidelines for review under Article 8 of the Kyoto Protocol. Annex I to decision 4/CMP.11. Available at http://unfccc.int/resource/docs/2015/cmp11/eng/08a01.pdf.

"UNFCCC biennial reporting guidelines for developed country Parties". FCCC/SBSTA/2014/INF.6. Annex I to decision 2/CP.17. Available at http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.

B. Additional information provided by Austria

Responses to questions during the review were received from Mr. Martin Kriech, Federal Ministry for Sustainability and Tourism, including additional material. The following documents[1] were provided by Austria:

Austria. 2018. *The climate and energy strategy of the Federal Government has been adopted May 2018*. Available at https://mission2030.info/wp-content/uploads/2018/10/Klima-Energiestrategie.pdf. A translated version is available at https://mission2030.info/wp-content/uploads/2018/10/Klima-Energiestrategie_en.pdf

Austria. 2018. *The draft of the National Energy and Climate Plan according to the Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action*. Available at https://www.bmnt.gv.at/dam/jcr:25575560-8cba-489a-94dc-9109e9ae7648/Entwurf%20NEKP_%C3%96sterreich_20.12.2018_pdf.pdf (in German only).

Kronberger-Kießwetter, B., Balas, M. Prutsch, A. 2017. *The Austria Strategy for the Adaptation to Climate Change.* The Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management. Available at: https://www.bmnt.gv.at/service/publikationen/umwelt/austrian-strategy-adaption-to-climate-change.html

"GHG Projections and Assessment of Policies and Measures in Austria" from March 2017 http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0610.pdf

Energieszenarien bis 2050: Wärmebedarf der Kleinverbraucher: https://eeg.tuwien.ac.at/eeg.tuwien.ac.at_pages/research/downloads/PR_470_EnSzen_2017_Endbericht.pdf

Information on LULUCF Actions Austria https://www.bmnt.gv.at/dam/jcr:6449432b-022a.../LULUCF%20Aktionsplan.pdf

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