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

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 Belgium, 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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Abbreviations and acronyms

AEA	annual emission allocation
AR4	Fourth Assessment Report of the Intergovernmental Panel on Climate Change
BR	biennial report
CHP	combined heat and power
CH_4	methane
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
CTF	common tabular format
EEA	European Environment Agency
ERT	expert review team
ESD	effort-sharing decision
EU	European Union
EU ETS	European Union Emissions Trading System
F-gas	fluorinated gas
GDP	gross domestic product
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
LDCF	Least Developed Countries Fund
LULUCF	land use, land-use change and forestry
Mtoe	million tonnes of oil equivalent
NA	not applicable
NC	national communication
NE	not estimated
NECP	National Energy and Climate Plan
NF_3	nitrogen trifluoride
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
PaMs	policies and measures
PFC	perfluorocarbon
RES	renewable energy sources
SCCF	Special Climate Change Fund
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 Belgium. 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 decisions, a draft version of this report was transmitted to the Government of Belgium, which provided comments that were considered and incorporated, as appropriate, into this final version of the report.

3. The review was conducted from 25 to 30 March 2019 in Brussels by the following team of nominated experts from the UNFCCC roster of experts: Ms. Nura Al-Otaibi (Saudi Arabia), Mr. Bernd Gugele (EU), Mr. Julius Madzore (Zimbabwe), Mr. Asger Strange Olesen (Denmark) and Ms. Yasna Rojas Ponce (Chile). Mr. Olesen and Ms. Rojas Ponce were the lead reviewers. The review was coordinated by Mr. James Howland (UNFCCC secretariat).

B. Summary

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

1. Timeliness

5. The BR3 was submitted on 20 December 2017, before the deadline of 1 January 2018 mandated by decision 2/CP.17. The CTF tables were submitted on 20 December 2017.

2. Completeness, transparency of reporting and adherence to the reporting guidelines

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

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

Section of BR	*Completeness*	*Transparency*	*Reference to description of recommendations*
GHG emissions and trends	Complete	Transparent	
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Transparent	
Progress in achievement of targets	Complete	Mostly transparent	Issue 1 in table 4 Issue 1 in table 7 Issue 5 in table 11
Provision of support to developing country Parties	Complete	Mostly transparent	Issue 1 in table 14

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.

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

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

1. Technical assessment of the reported information

7. Total GHG emissions[2] excluding emissions and removals from LULUCF decreased by 19.7 per cent between 1990 and 2016, whereas total GHG emissions including net emissions or removals from LULUCF decreased by 19.2 per cent over the same period. Table 2 illustrates the emission trends by sector and by gas for Belgium.

Table 2
Greenhouse gas emissions by sector and by gas for Belgium 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	103 738.34	106 040.81	98 523.94	86 183.01	85 869.04	–17.2	–0.4	70.7	72.9
A1. Energy industries	30 059.40	28 670.55	26 547.01	21 284.01	19 981.75	–33.5	–6.1	20.5	17.0
A2. Manufacturing industries and construction	23 241.65	21 538.38	15 730.32	13 570.29	13 318.05	–42.7	–1.9	15.8	11.3
A3. Transport	20 891.69	24 881.94	26 433.12	26 691.85	26 390.07	26.3	–1.1	14.2	22.4
A4. and A5. Other	28 308.23	30 093.95	29 052.19	23 968.81	25 535.74	–9.8	6.5	19.3	21.7
B. Fugitive emissions from fuels	1 237.37	855.98	761.30	668.05	643.43	–48.0	–3.7	0.8	0.5
C. CO_2 transport and storage	NO	NO	NO	NO	NO	–	–	–	–
2. IPPU	26 292.80	28 420.01	21 456.66	19 714.23	20 466.60	–22.2	3.8	17.9	17.4
3. Agriculture	12 287.81	11 372.49	10 229.37	10 088.96	9 897.06	–19.5	–1.9	8.4	8.4
4. LULUCF	–2 433.69	–1 889.89	–1 536.50	–1 182.24	–1 149.54	–52.8	–2.8	–	–
5. Waste	4 335.07	3 950.80	2 502.39	1 598.23	1 494.41	–65.5	–6.5	3.0	1.3
6. Other	NO	NO	NO	NO	NO	–	–	–	–
Indirect CO_2	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	–	–	–	–
Gas[a]									
CO_2	120 484.40	126 794.79	113 582.03	100 229.49	100 243.71	–16.8	0.0	82.2	85.1
CH_4	12 197.20	11 008.01	8 789.10	8 106.56	8 043.92	–34.1	–0.8	8.3	6.8
N_2O	10 159.33	10 259.75	7 586.46	6 022.14	5 746.39	–43.4	–4.6	6.9	4.9
HFCs	NA, NO	1 131.39	2 544.80	2 834.10	2 939.17	–	3.7	–	2.5
PFCs	2 191.05	446.11	106.61	299.93	658.55	–69.9	119.6	1.5	0.6
SF_6	1 622.04	144.06	102.03	91.36	94.67	–94.2	3.6	1.1	0.1
NF_3	NA, NO	NA, NO	1.32	0.85	0.71	–	–15.9	–	0.0
Total GHG emissions without LULUCF	**146 654.02**	**149 784.10**	**132 712.35**	**117 584.43**	**117 727.11**	**–19.7**	**0.1**	**100.0**	**100.0**
Total GHG emissions with LULUCF	**144 220.33**	**147 894.21**	**131 175.85**	**116 402.19**	**116 577.58**	**–19.2**	**0.2**	**–**	–

Source: GHG emission data: Belgium's 2018 annual submission, version 2.
[a] Emissions by gas without LULUCF and without indirect CO_2.

[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 on the basis of the 2018 annual submission, version 2.

8. The decrease in total emissions was driven mainly by a shift from coal to RES and natural gas in the energy sector and changes in activity level and technology improvements in the manufacturing sector. However, the decrease was countered by increasing road transport emissions. CH_4 emissions in the waste sector decreased significantly. The ERT noted that the BR3 does not provide a figure including graphs for sector totals and total emissions from 1990 to the most recent year for which data are available (2016), which would improve the understanding of trends.

9. In brief, Belgium's national inventory arrangements were reported as follows. The Belgian Interregional Environment Agency, established in accordance with the cooperation agreement of 18 May 1994 (modified by the decision of 21 May 1995) on atmospheric emissions monitoring and data structuring, is the designated single entity for the national inventory. It cooperates with the regional agencies responsible for reporting on the inventories of each region in accordance with IPCC guidelines. Under the auspices of the Coordination Committee for International Environmental Policy, a thematic working group on emission inventories ensures consistency across the regional inventories and consistency of the reference approach from the federal inventory. The final national inventory is approved by the National Climate Commission (established in accordance with the cooperation agreement of 14 November 2002 between the three regional governments and the Federal Government). There have been no major changes in the arrangements since the BR2.

2. Assessment of adherence to the reporting guidelines

10. The ERT assessed the information reported in the BR3 of Belgium 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.

B. Quantified economy-wide emission reduction target and related assumptions, conditions and methodologies

1. Technical assessment of the reported information

11. For Belgium the Convention entered into force on 15 April 1996. Under the Convention Belgium 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.

12. 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 GWP 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.

13. 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 stationary emissions sources in the energy and industry sectors, as well as a portion of the emissions from the aviation sector. 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.

14. Under the ESD, Belgium has a target of reducing its total emissions to 15 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.

Belgium's AEAs change following a linear path from 78,379,825 kt CO_2 eq in 2013 to 68,247,607 kt CO_2 eq in 2020.[3] In October 2016, a legally binding cooperation agreement was adopted between the Federal Government and the governments of the three regions that includes an individual emission reduction target for each region and provisions regarding monitoring, reporting and compliance.

15. In 2014, the European Council agreed on the 2030 climate and energy policy framework for the EU and endorsed new EU targets on GHG emissions, renewable energy and energy efficiency for 2030. These include a target of at least a 40 per cent reduction in GHG emissions from the 1990 level. This target is divided between an emission reduction target of 43 per cent (compared with 2005) for the EU ETS sector and an emission reduction target of 30 per cent (compared with 2005) for the non-ETS sector. For Belgium, an emission reduction target of 35 per cent (compared with 2005) for the non-ETS sector has been set.

2. Assessment of adherence to the reporting guidelines

16. The ERT assessed the information reported in the BR3 of Belgium 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.

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

17. Belgium provided information on its package of PaMs implemented, adopted and planned, by sector and by gas, in order to fulfil its commitments under the Convention and its Kyoto Protocol. The Party 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.

18. Belgium provided information on a set of PaMs similar to those previously reported. It also provided information on changes made since the previous submission, in particular with regard to newly introduced PaMs and those no longer being implemented. During the review, the Party provided information on PaMs implemented at the federal and regional level since the submission of its BR3. These mainly relate to renewable energy, energy efficiency, mobility, F-gases, N_2O from chemical production and green bonds.

19. Belgium reported on its self-assessment of compliance with emission reduction targets and national rules for taking action against non-compliance. Belgium's commitments for 2020 under the ESD are subject to burden-sharing among the three regions and the Federal Government. The legal basis for this is the 2016 cooperation agreement, which also requires the three regions and the Federal Government to evaluate annually the progress and implementation of their PaMs in a harmonized way, including by estimating their impact in terms of GHG emission reductions. The latest reports on the implementation of PaMs are from 2016 for the Walloon Region and from 2017 for the Federal Government and the Flemish Region. The Brussels-Capital Region plans to complete the evaluation of its Air, Climate, Energy Plan four years into its implementation (i.e. in 2020). There are other specific arrangements that apply to the whole country, including a mechanism for increasing awareness of climate responsibility within the building sector in all regions and a substitution right to ensure compliance with international obligations.

20. The key overarching cross-sectoral policy in the EU is the 2020 climate and energy package, adopted in 2009, which includes the revised EU ETS and the ESD. The package is supplemented by renewable energy and energy efficiency legislation and legislative

[3] According to the EU transaction log, available at http://ec.europa.eu/environment/ets/esdAllocations.do?languageCode=en.

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.

21. 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 some 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).

22. 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.

23. Belgium introduced national-level climate policies to achieve its climate and energy targets. The key policies reported are (a) in the area of renewable energy, including offshore wind energy, various support schemes for wind, solar and biomass energy production, and biofuel incorporation in transport fuels; (b) in the area of buildings, various support schemes for energy savings in existing buildings and implementation of the EU directive on energy performance of buildings for new construction; (c) in the area of transport, a distance-based road charging system for heavy goods vehicles, investments in public transport and cycling infrastructure, and free public transport for commuters in public sector jobs; and (d) in the area of agriculture and manure management policies. The mitigation effect of energy efficiency standards for electrical appliances is the most significant. Other policies that have delivered significant emission reductions are included in table 3.

24. During the review, Belgium highlighted the domestic mitigation actions that are under development or being investigated. One such important measure under investigation is carbon pricing for non-ETS sectors. Related studies have been prepared in consultation with experts and national stakeholders in an open process. The Party indicated that while clear implementation modalities have been identified and could be implemented on a short-term basis, further studies (related to jurisdictional issues and energy poverty) on this issue are ongoing. The ERT notes that these developments could, once implemented, serve as an example to other Parties. In any case, the scope for additional energy taxes is considerable given that that the share of energy taxes of the GDP is very low in Belgium compared with other EU countries.[4]

25. Belgium also indicated during the review that, by means of its NECP, it aims to make the fiscal system more climate-friendly, including by progressively reducing indirect support for fossil fuels. In its BR3 the Party reported that it has abolished subsidies for the use of coal, which it expects will also have a positive impact on health in the long term. Nevertheless, various international bodies have conducted studies in which they identified areas where progress could be made to decrease fossil fuel subsidies in Belgium. According to these studies, the scope for reducing fossil fuel subsidies is between EUR 2 billion and EUR 4 billion. The most recent national study lists the following largest subsidies in this context: EUR 1.1 billion for fuel tax reduction for residential users (heating oil); EUR 0.6 billion for fuel tax reduction for certain professional users (heating oil); EUR 0.2 billion for favourable tax treatment of fuel used in company cars; and EUR 0.2 billion for fuel tax exemption in aviation (kerosene) (Climact, 2019).

[4] See https://ec.europa.eu/eurostat/en/web/products-datasets/-/T2020_RT320.

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

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	NE	NE
	Energy conservation	NE	NE
	Awareness-raising activities on climate change	NE	NE
Energy	Action plan for RES and CHP	2 464.00	2 724.00
Transport	Promoting clean vehicles	11.57	11.57
	Promoting multi-modal freight transport	117.26	164.21
	Improving and promoting public transport	495.15	665.01
	Promoting use of biofuels	1 945.00	2 717.00
Renewable energy	Support for electricity production from RES	5 311.3	6 664.24
	Financial support for RES and taxation of fossil fuels	1 319.00	1 319.00
Energy efficiency	Energy efficiency improvement in existing buildings	3 587.00	2 871.00
	Energy efficiency in electrical appliances	6 512.00	11 282.00
IPPU	Catalytic reduction of N_2O emissions from nitric acid plants	3 362.21	3 362.21
	Energy efficiency in industry	2 627.03	2 627.03
	Reduction in emissions from F-gases (HFCs and PFCs)	1 647.00	3 334.00
Agriculture	Reduction of GHG emissions from fertilizer use and manure management policy	NE	NE
LULUCF	Limiting deforestation and promotion of reforestation	NE	NE
Waste	Ban on landfilling of organic waste	NE	NE
	Optimization of incineration plants	NE	NE
	Reduction of waste generation	NE	NE

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.

26. The National Climate Commission is responsible for reporting annually on the evaluation of the PaMs contained in the National Climate Plan. A bottom-up approach is used for assessing the mitigation impacts. The estimated sum of GHG emission reductions from PaMs to be adopted and implemented by 2020 is 32.16 Mt CO_2 eq (CTF table 3). Belgium also reported its sum of estimated GHG emission reductions as 36.70 Mt CO_2 eq (annex II, table B). The ERT noted a discrepancy in the estimated GHG emission reduction. During the review week, the Party revised the GHG emission reduction estimate to 31.76 Mt CO_2 eq, citing misallocation of a PaM that belonged to the residential sector and calculation errors due to the double counting effects of some PaMs, mainly of energy efficiency and cross-cutting measures. The ERT noted that transparency would be improved if these corrections to the aggregate effects of Belgium's mitigation actions are applied in its next submission. During the review, the Party provided planned, adopted and implemented measures that are additional to those included in the draft NECP 2030. The Party was not able to provide during the review week its latest report on the assessment, monitoring and evaluation of the impact

of its mitigation actions. The Party indicated that this annual report of the National Climate Commission had not taken place as expected.

(b) Policies and measures in the energy sector

27. **Energy supply.** Belgium has limited energy resources and produces only about 20 per cent of its primary energy consumption. Renewables and waste account for 26.5 per cent of the domestic primary energy supply, while nuclear power plants account for 63.7 per cent. Between 1990 and 2014, emissions from energy industries decreased by 30 per cent, primarily owing to an increase in the share of renewables, an increase in CHP installations, a shift from solid fuels to natural gas and technological improvements. The main mitigation actions in the energy production transformation sector are an increase in the renewable energy supply, mostly through offshore wind energy, and an increase in energy efficiency on the supply side. Belgium is phasing out energy production from nuclear plants by 2025 and promoting CHP installations.

28. **Renewable energy sources.** The main RES in Belgium are offshore wind power, for which development is ongoing, and energy from waste. As a member State of the EU, Belgium is striving to meet its obligation of increasing the share of renewables to 13 per cent of gross final energy consumption by 2020 under the EU 2020 climate and energy package, and to 27 per cent by 2030 under the EC 2030 climate and energy policy framework. In 2017, renewables accounted for 9.1 per cent of gross final energy consumption in Belgium.[5] The key RES PaM is EP-A05: Action plan for RES and CHP, which estimates a reduction in GHG emissions of 2,464.00 kt CO_2 eq by 2020.

29. **Energy efficiency.** The national energy efficiency target is an 18 per cent reduction of primary energy consumption by 2020, pursuant to the EU energy efficiency directive (2012/27/EU). The main PaMs in energy efficiency are designed, developed and implemented at both the federal and the regional level. The PaMs on energy efficiency, which are expected to yield significant GHG emission reductions by 2020, primarily cover the areas of production of electricity (4,526.01 kt CO_2 eq), buildings (1,665.41 kt CO_2 eq), industry (3,267.22 kt CO_2 eq), electrical appliances (6,572.00 kt CO_2 eq) and transport (178.08 kt CO_2 eq).

30. **Residential and commercial sectors.** The main objective of the PaMs in the residential and commercial sectors is compliance with the EU directives on energy performance in new and existing buildings (directives 2002/91/EC and 2010/31/EU). The Brussels-Capital Region, for example, has instituted an obligation to conduct energy audits of buildings of more than 3,500 m^2 to help meet the building efficiency requirements. The PaMs in the residential and commercial sectors are implemented together with PaMs that promote use of renewable energy.

31. **Transport sector.** Emissions in the transport sector have been increasing, mostly because of road transport emissions. Since 2004, Belgium has been implementing various PaMs aimed at reducing GHG emissions from the road transport sector. The most recent of these is the taxation of road transport, introduced in 2016, which is being implemented on a phased basis. The measure aims to establish effective pricing of vehicle kilometres by road; differentiate kilometre taxes for freight vehicles; and develop pricing mechanisms for passenger cars, following an evaluation trial project. During the review, Belgium informed the ERT of measures in the transport sector that have been implemented at the federal level since the submission of its BR3. They include a provision on mobility allowances, a mobility budget, incentives for e-bikes, modification of fiscal regimes for company cars and a new excise duty regime for petrol and diesel. Other implemented PaMs pertain to promoting biofuels; improving public transport efficiency; and promoting environmentally friendly vehicles, eco-driving training and intermodality. The ERT notes that additional measures may be required to curb the increase in GHG emissions from the road transport sector. Such measures have been planned at both the federal and the regional level and are included in the draft NECP 2030.

[5] See https://ec.europa.eu/eurostat/web/energy/data/shares.

32. The BR3 includes information on how Belgium promotes and implements the decisions of the International Civil Aviation Organization and the International Maritime Organization on limiting emissions from aviation and marine bunker fuels. For example, Belgium indicated in its BR3 that it will participate in the Carbon Offsetting and Reduction Scheme for International Aviation of the International Civil Aviation Organization in 2021.

33. **Industrial sector.** The reduction of emissions in the industrial sector is carried out via the EU ETS. The regional governments also have specific agreements, such as benchmark and voluntary agreements that aim to reduce emissions from the industrial sector in the Flemish Region.

(c) Policies and measures in other sectors

34. **Industrial processes.** The main PaMs in this sector are voluntary agreements that seek to reduce N_2O emissions from nitric acid and other plants. In consultation with industry, the Flemish Government has also put a cap on N_2O emissions from the production of caprolactam, which will take effect in 2020. Emissions from nitric acid plants have declined owing to the closure of two of the plants and implementation of the aforementioned PaMs. During the review, Belgium indicated that the first regulation on F-gases was replaced by regulation 517/2014 in 2014, which strengthened the existing measures and introduced new provisions on F-gas consumption and production. This regulation came into force in 2015 and was not reported in the BR3.

35. **Agriculture.** Enteric fermentation, manure management and N_2O emissions from agricultural soils are the main sources of non-fuel related GHG emissions from agriculture. The mitigation actions implemented include the reduction of GHG emissions from fertilizer use and the Manure Action Plan of the Flemish Region, which seeks to reduce ammonia and N_2O emissions from the application of manure. However, the ERT noted that neither the aggregate nor the individual impact of these PaMs was evaluated in the BR3.

36. **LULUCF.** The LULUCF sector is a net sink in Belgium in the range of –2,500 kt CO_2 eq. However, there are direct N_2O emissions from nitrogen mineralization and immobilization. These emissions are indirectly offset by increasing the sink capacity through limiting deforestation and promoting reforestation measures. However, this impact of the measure is not estimated in the BR3.

37. **Waste management.** Belgium is subject to EC directives on managing emissions from the waste sector, such as directive 1999/31/EC. A number of measures have been put in place since 2004, resulting in a reduction in emissions from the waste sector. These include PaMs to ban landfilling of organic waste, optimize incineration plants and reduce waste generation. During the review, Belgium also informed the ERT of waste PaMs that have been strengthened or implemented since submission of the BR3, as well as PaMs that are planned in NECP 2030, including measures to promote a circular economy and increase recycling rates, for example through the Walloon Waste and Resources Plan. Although the Party informed the ERT that the PaMs in the waste sector are directly linked to the reduction in GHG emissions from the sector, it did not estimate the impact of either individual measures or the sector cluster.

Response measures

38. Belgium did not report on the assessment of the economic and social consequences of response measures.

(d) Assessment of adherence to the reporting guidelines

39. The ERT assessed the information reported in the BR3 of Belgium and identified issues relating to completeness, transparency and adherence 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 Belgium

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in CTF table 3 Issue type: transparency Assessment: recommendation	The Party did not report on the estimated impacts of a number of PaMs and did not provide a footnote or other explanation with the reasons for the blank cells. In addition, for some PaMs (e.g. energy performance of buildings and environmentally friendly energy production) the year implementation started is reported as 0, also with no explanation. During the review, Belgium explained that some of the emissions (e.g. waste sector measures (incineration)) are included under the energy sector (1.A.1) and that PaMs on agriculture have an indirect link to the reduction in GHG emissions, while PaMs in the waste sector have a direct link. The Party also reiterated the general reasons set out in the BR3 as to why the effects of measures could not always be estimated, and noted that the reporting software did not allow the input of two or more years for a cluster of PaMs whose components had different start years. The ERT recommends that Belgium improve the transparency of reporting by providing in its next BR in CTF table 3 the impact of all the reported PaMs, or clearly explaining why this may not be possible due to its national circumstances and by providing explanations for all blank cells and zero values as appropriate.
2	Reporting requirement specified in paragraph 8 Issue type: completeness Assessment: encouragement	The Party did not report information on the assessment of the economic and social consequences of response measures in its BR3. During the review, Belgium provided information on the socioeconomic costs of some federal PaMs, and acknowledged the lack of information with respect to other PaMs. The Party noted that since the publication of its NC7 and BR3, the focus of work on PaMs has been on prospective studies to develop NECP 2030. The ERT encourages the Party to provide, to the extent possible, an assessment of the economic and social consequences of its response measures.

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

40. For 2014 Belgium reported in CTF table 4 annual total GHG emissions excluding LULUCF of 114,078.73 kt CO_2 eq, which is 22.0 per cent below the 1990 base-year level. In 2014 emissions from non-ETS sectors relating to the target under the ESD amounted to 70,213.99 kt CO_2 eq.

41. For 2015 Belgium reported in CTF table 4 annual total GHG emissions excluding LULUCF of 117,443.26 kt CO_2 eq, which is 19.7 per cent below the 1990 base-year level. In 2015 emissions from non-ETS sectors relating to the target under the ESD amounted to 72,700 kt CO_2 eq.

42. On its use of units from LULUCF activities, Belgium reported in CTF table 4 that in 2014 and 2015 it used units equivalent to 1,929.69 kt CO_2 eq and 1,905.88 kt CO_2 eq, respectively. However, during the review the Party clarified that the LULUCF reporting in CTF table 4 refers to net removals as reported in the GHG inventory. In fact, in accordance with the assumptions related to the EU target, Belgium does not use any LULUCF units for reaching the 2020 target.

43. During the review the Party explained that it does not intend to use units from market-based mechanisms with respect to the 2020 joint EU target, although some units have been transferred from the first commitment period, in case the need arises. Nevertheless, the Party reported in CTF tables 4 and 4(b) that it used units from market-based mechanisms in 2015 in the amount of 385,329.05 kt CO_2 eq towards the achievement of its target. In response to

a question raised by the ERT Belgium clarified that the market-based mechanisms reported in CTF table 4 refer to units associated with the first commitment period under the Kyoto Protocol. Table 5 illustrates Belgium's total GHG emissions, its contribution of LULUCF and its use of units from market-based mechanisms to achieve the 2020 joint EU target.

Table 5
Summary of information on the use of units from market-based mechanisms and land use, land-use change and forestry by Belgium 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)*[b]
1990	146 294.18	NA	NA	NA
2010	132 437.18	NA	NA	NA
2011	121 803.37	NA	NA	NA
2012	119 000.74	NA	NA	NA
2013	119 380.69	NA	NA	NA
2014	114 078.73	NA	NA	NA
2015	117 443.26	NA	NA	NA

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

[a] Belgium, in CTF table 4, reported the contribution of the LULUCF sector. The ERT did not include the values in this table as the Party is an EU member State, bound by the EU-wide unconditional commitment to reduce GHG emissions by 20 per cent below the 1990 level by 2020, which does not include emissions/removals from LULUCF.

[b] Belgium, in CTF table 4, reported units of market-based mechanisms related to targets other than the economy-wide emission reduction target. The ERT did not include those values in this table, because Belgium indicated it does not plan to use market-based mechanisms to fulfil its obligation under the ESD related to the EU's economy-wide emission reduction target.

44. In assessing the progress towards the achievement of the 2020 target, the ERT noted that Belgium's emission reduction target for non-ETS sectors is 15 per cent below the 2005 base-year level (see para. 14 above). As discussed above, in 2015, Belgium's emissions from non-ETS sectors were 7.3 per cent (5,700 kt CO_2 eq) below the base-year level. According to the latest EEA report (EEA, 2018), Belgium's emissions were 7.7 per cent and 9.5 per cent below the base-year level in 2016 and 2017 (using proxy data), respectively. In the WEM scenario (see para. 61 below), Belgium projects non-ETS emissions to be 9.4 per cent below the base-year level in 2020. These results indicate that Belgium will not meet its 15 per cent emission reduction target for 2020.

45. The ERT noted that owing to emission surpluses that were generated at the beginning of the 2013–2020 period when emissions were below the AEAs, Belgium's projected cumulative emissions for 2013–2020, based on the information in the BR3, are lower than the cumulative AEAs and thus within its ESD commitment.

46. Apart from GHG emission targets, the Party also has 2020 targets related to energy consumption and renewable energy. Under EU legislation, Belgium set an indicative target of 43.7 Mtoe of primary energy consumption by 2020. In 2017, primary energy consumption was 49.1 Mtoe, which is significantly above the target. The ERT noted that primary energy consumption was reduced between 2008 and 2014 but has increased since then[6]. The trend reversal is mainly due to increases in transport fossil fuel consumption since 2013. Therefore, the ERT considers that a special effort is likely to be needed in order to reduce fossil fuel consumption in transport.

47. Belgium has a target of a 13 per cent share of gross final energy consumption from renewable sources by 2020, in line with EU legislation. Although the share of renewable energy has increased significantly over the last decade, reaching 9.1 per cent in 2017, this is still considerably below the 13 per cent target. The ERT noted that the share of RES in electricity production increased considerably, by 13 per cent, between 2008 and 2017 (mainly

[6] See https://ec.europa.eu/eurostat/web/energy/data/energy-balances.

owing to increased wind power production), whereas the share of RES used for heating and cooling increased by only 3 per cent between 2008 and 2017. In fact, it appears that growth rates for RES used in heating and cooling have been declining in recent years.[7] Therefore, the ERT considers that a special effort is likely to be needed in order to increase the share of RES used in heating and cooling.

48. The analysis above indicates that, although Belgium has made some progress to date, it continues to face challenges in implementing mitigation actions that deliver the emission reductions needed to make sufficient progress towards its targets. The ERT therefore notes that a strengthening of mitigation actions is urgently needed to achieve the 2030 targets.

49. During the review, Belgium provided, at the request of the ERT, the latest information concerning progress at the federal and regional level (see table 6). The latest numbers show that in 2016 non-ETS emissions for all of Belgium fell exactly on the trajectory towards the 2020 ESD target. The Flemish Region was approximately 3 per cent above its trajectory in 2016, whereas the Walloon Region and the Brussels-Capital Region were approximately 3 per cent and 8 per cent below their trajectories, respectively. This indicates that more efforts to reduce GHG emissions are needed in the Flemish Region in particular.

Table 6
Deviation from trajectory towards 2020 ESD target for Belgium and its subnational allocations of burden-sharing

	2013	*2014*	*2015*	*2016*
Flemish Region	–4%	–8%	–2%	3%
Brussels-Capital Region	–7%	–16%	–12%	–8%
Walloon Region	–7%	–9%	–5%	–3%
Belgium	–5%	–9%	–3%	0%

(b) Assessment of adherence to the reporting guidelines

50. The ERT assessed the information reported in the BR3 of Belgium and identified an issue relating to transparency and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 7.

Table 7
Findings on estimates of emission reductions and removals and the use of units from the market-based mechanisms and land use, land-use change and forestry from the review of the third biennial report of Belgium

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in CTF table 4 Issue type: transparency Assessment: recommendation	In CTF table 4 Belgium reported numerical values for the contribution of the LULUCF sector, although the shared EU target does not include the contribution from LULUCF. In the same table the Party also reported numerical values on the contribution from market-based mechanisms even though it does not intend to use market-based mechanisms for achieving the 2020 target, as reported in CTF table 2(e). During the review, Belgium confirmed that the EU pledge under the Convention does not include emissions or removals from LULUCF and explained that accounting for specific LULUCF activities takes place only under the Kyoto Protocol. Belgium also explained that the use of market-based mechanisms reported in CTF table 4 are related to the first commitment period under the Kyoto Protocol. In order to increase reporting transparency, the ERT reiterates the recommendation from the previous ERT that, in its next BR submission, Belgium report in CTF table 4 the appropriate information with regard to the contribution of the LULUCF sector and market-based mechanisms. The ERT notes that, for example, the notation key "NA" could be used when a Party's target does not include contributions for LULUCF and

[7] See https://ec.europa.eu/eurostat/web/energy/data/shares.

No.	Reporting requirement, issue type and assessment	Description of the finding with recommendation or encouragement
		when the Party does not intend to use market-based mechanisms in its fulfilment of this target for all relevant years.

Note: Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs or CTF table number from "Common tabular format for UNFCCC biennial reporting guidelines for developed country Parties". 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. Projections overview, methodology and results

(a) Technical assessment of the reported information

51. Belgium reported updated projections for 2020 and 2030 relative to actual inventory data for 2015 under the WEM scenario. The WEM scenario reported by Belgium includes implemented and adopted PaMs until 2035.

52. In its BR3, Belgium did not provide WAM or WOM scenarios. Belgium explained in its BR3 that, as a result of national circumstances, new policy development between 2016 and 2018 remained at an early stage and estimating the effects of new PaMs had not been possible. A WAM scenario therefore could not be produced in time for the submission of the BR3. Belgium included a WAM projection scenario in its BR1. During the review, Belgium provided a WAM scenario that it had submitted to the EU in March 2019, developed for the draft NECP 2030, and confirmed its intention to include a WAM scenario in its next BR.

53. The WEM projection is 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 and SF_6 (treating PFCs and HFCs collectively in each case) for 1990–2030, as well as NF_3 for 2010–2030. The projections are also provided in an aggregated format for each sector as well as for a Party total using GWP values from the AR4.

54. Belgium did not report emission projections for indirect GHGs such as carbon monoxide, nitrogen oxides, non-methane volatile organic compounds or sulfur oxides.

55. Emission projections related to fuel sold to ships engaged in international transport were reported separately and not included in totals. Emission projections related to fuel sold to aircraft engaged in international transport were reported separately in some tables (e.g. CTF tables) but not reported in other tables in the NC. Belgium reported on factors and activities affecting emissions for each sector.

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

56. The methodology used for the preparation of the projections is identical to that used for the preparation of the emission projections for the BR2. Belgium reported supporting information further explaining the methodologies and the changes to assumptions made since the NC6 and BR2.

57. To prepare its projections, Belgium relied on the following key underlying assumptions: population, household size, degree days, electricity imports, passenger and freight tonne-kilometres, and certain livestock head counts. These variables and assumptions were reported in CTF table 5, with a supplementary qualitative discussion of the two assumptions considered the most important in the NC. The assumptions were updated on the basis of the most recent economic and climatic developments known at the time of the preparation of the projections. With regard to degree days, the assumed number was reduced by 12, from 1819 to 1807. For electricity imports, the impact of the changes in the planned phase-out of nuclear power stations meant that higher transboundary imports were assumed.

58. Belgium provided information in CTF table 5 on assumptions and key variables, and in the BR3 on methodologies, models and approaches used in the preparation of the projection scenarios. To explain the changes, Belgium provided supporting documentation. It also provided information on sensitivity analyses for two underlying assumptions.

59. Sensitivity analyses were conducted for two important assumptions: degree days and electricity imports. For degree days, the sensitivity analysis showed that warm winters (as in 2014) would lead to lower emissions owing to a lower energy demand for heating. The reduced energy demand in a warm winter would equal an additional emission reduction in 2020 of 2.6 per cent compared with the 2005 base-year emissions. A cold winter (as in 2013) would mean an increase in projected emissions in 2020 of 3.1 per cent compared with the WEM scenario. For transboundary electricity imports, lower imports would lead to higher demand for in-country natural gas power generation. The maximum estimated sensitivity of projected emissions related to a change in electricity imports in 2030 (25 TWh less imported) was equal to a 9.4 per cent increase in WEM emissions in 2030 or 10,728 kt CO_2 eq.

(c) Results of projections

60. 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 8 and the figure below.

Table 8
Summary of greenhouse gas emission projections for Belgium

	GHG emissions (kt CO_2 eq per year)	*Changes in relation to base-year[a] level (%)*	*Changes in relation to 1990 level (%)*
Kyoto Protocol base year[b]	147 811.09	NA	NA
Quantified emission limitation or reduction commitment under the Kyoto Protocol (2013–2020)[c]	NA	NA	NA
Quantified economy-wide emission reduction target under the Convention[d]	NA	NA	NA
Inventory data 1990[e]	146 294.18		
Inventory data 2015[e]	117 443.26	–20.5	–10.7
WEM projections for 2020[f]	114 677.00	–22.4	–21.6
WEM projections for 2030[f]	114 134.48	–22.8	–22.0

[a] "Base year" in this column refers to the base year used for the target under the Kyoto Protocol, while for the target under the Convention the base year for Belgium is 1990, and changes in relation to this year are shown in the last column.

[b] The Kyoto Protocol base-year level of emissions is provided in the initial review report, contained in document FCCC/IRR/2016/BEL.

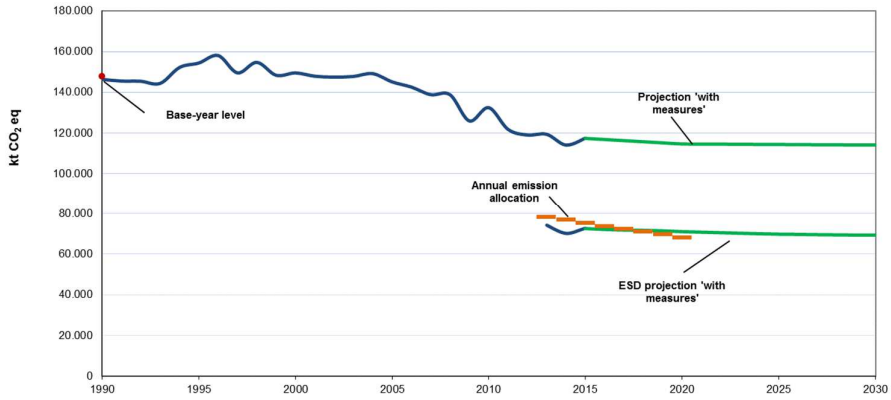
[c] The Kyoto Protocol target for the second commitment period (2013–2020) is a joint target of the EU and its 28 member States and Iceland. The target is to reduce emissions by 20 per cent compared with the base-year (1990) level by 2020. The target for non-ETS sectors is 15 per cent below 2005 levels for Belgium under the ESD.

[d] 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.

[e] From Belgium's BR3 CTF table 6.

[f] From Belgium's BR3.

Greenhouse gas emission projections reported by Belgium



Sources: (1) data for 1990–2016: Belgium's 2018 annual inventory submission, version 1.0; total GHG emissions excluding LULUCF; (2) data for 2015–2030: Belgium's NC7 and BR3; historical ESD sector inventory data for 2014–2016 were provided by the Party during the review.

61. Belgium's total GHG emissions excluding LULUCF in 2020 and 2030 are projected to be 114,677.00 and 114,134.48 kt CO_2 eq, respectively, under the WEM scenario, which represents a decrease of 21.6 and 22.0 per cent, respectively, below the 1990 level. The 2020 projections suggest that Belgium will continue contributing to the achievement of the EU target under the Convention (see para. 11 above).

62. Belgium's target for non-ETS sectors is to reduce its total emissions by 15 per cent below the 2005 level by 2020 (see para. 14 above). Belgium's AEAs, which correspond to its national emission target for non-ETS sectors, change linearly from 78,379.83 kt CO_2 eq in 2013 to 68,247.61 kt CO_2 eq for 2020. According to the projections under the WEM scenario, emissions from non-ETS sectors are estimated to reach 71,038.99 kt CO_2 eq by 2020. The projected level of emissions under the WEM scenario in 2020 is 4.0 per cent higher than the ESD target. The ERT noted that this suggests that Belgium may face challenges in meeting its 2020 target under the WEM scenario (see para. 44 above). However, owing to emission surpluses that were generated earlier in the 2013–2020 commitment period, when emissions were below AEAs, Belgium's projected cumulative ESD emissions for the entire period 2013–2020 are lower than the cumulative AEAs and thus within its ESD commitment.

63. Belgium presented the WEM scenario by sector for 2020 and 2030, as summarized in table 9.

Table 9
Summary of greenhouse gas emission projections for Belgium 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)	103 484.06	83 797.53	85 498.76	–19.0	–17.4
Transport	20 657.45	27 197.76	29 219.53	31.7	41.4
Industry/industrial processes	26 238.07	19 903.15	18 628.74	–24.1	–29.0
Agriculture	12 248.71	9 620.09	9 057.26	–21.5	–26.1
LULUCF	–2 786.37	–3 729.75	–3 829.75	33.9	37.4
Waste	4 323.34	1 356.24	949.72	–68.6	–78.0
Total GHG emissions without LULUCF	**146 294.17**	**114 677.00**	**114 134.48**	**–21.6**	**–22.0**

Source: Belgium's BR3 CTF table 6.

64. According to the projections reported for 2020 under the WEM scenario, the most significant emission reductions are expected to occur in the energy and industrial processes sectors, amounting to projected reductions of 19,686.5 kt CO_2 eq (19.0 per cent) and 6,334.92 kt CO_2 eq (24.1 per cent) between 1990 and 2020, respectively. The pattern of projected emissions reported for 2030 under the same scenario remains the same for all sectors except the energy sector, where emissions are projected to increase slightly again owing to the phase-out of nuclear power, which will be replaced in part by imported natural gas.

65. Belgium presented the WEM scenario by gas for 2020 and 2030, as summarized in table 10.

Table 10
Summary of greenhouse gas emission projections for Belgium 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	120 165.96	98 544.79	100 308.20	–18.0	–16.5
CH_4	12 223.24	7 373.04	6 539.27	–39.7	–46.5
N_2O	10 138.82	5 902.71	5 800.75	–41.8	–42.8
HFCs	NA, NO	2 436.53	1 137.53	–	–
PFCs	2 191.05	333.12	333.12	-84.8	-84.8
SF_6	1 575.10	85.21	14.01	–94.6	-99.1
NF_3	NA, NO	1.60	1.60	–	–
Total GHG emissions without LULUCF	**146 294.17**	**114 677.00**	**114 134.48**	**–21.6**	**–22.0**

Source: Belgium's BR3 CTF table 6.

66. For 2020 the most significant reductions are projected for CO_2 and CH_4 emissions: 21,621.2 kt CO_2 eq (18.0 per cent) and 4,850,2 kt CO_2 eq (39.7 per cent) between 1990 and 2020, respectively.

67. For 2030 the most significant reductions are projected for CO_2 and CH_4 emissions: 19,857.8 kt CO_2 eq (16.5 per cent) and 5,683.97 kt CO_2 eq (46.5 per cent) between 1990 and 2030, respectively. The most notable change is the trend of increasing CO_2 emissions between 2020 and 2030. During the review, Belgium explained that this projected reversal is due to the phasing out of nuclear power.

68. The BR3 reports no major changes in the methodology or assumptions since the BR2. Several of the assumptions used in both the BR2 and the BR3 have been updated, such as the base year, demographic projection, livestock numbers and the timetable for nuclear phase-out. The updating of assumptions has not led to significant changes in the projections.

(d) Assessment of adherence to the reporting guidelines

69. The ERT assessed the information reported in the BR3 of Belgium and identified issues relating to completeness, transparency and adherence to the UNFCCC reporting guidelines on BRs. The findings are described in table 11.

Table 11
Findings on greenhouse gas emission projections reported in the third biennial report of Belgium

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement[a] specified in paragraph 28	The Party did not report a WAM or WOM projection scenario in its BR3. Belgium explained in the BR3 that, owing to national circumstances and the political situation, it had not been possible to complete the development of planned

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
	Issue type: completeness Assessment: encouragement	additional PaMs in time for inclusion in the submission. The absence of a WAM projection makes it difficult to assess whether Belgium is planning additional actions to reach its targets. During the review, Belgium provided information on a WAM scenario it developed in 2018 to submit to the EU as part of the draft NECP 2030. This WAM included several PaMs developed in 2017–2018 which are expected to have effects, in particular on the transport and residential sectors. Belgium indicated that the information in this scenario would be included in its BR4. The ERT encourages Belgium to include in its next BR a WAM and a WOM scenario. The ERT notes that Belgium could use a more recent starting date for the WOM scenario to potentially decrease complexity.
2	Reporting requirement[a] specified in paragraph 30 Issue type: transparency Assessment: encouragement	The Party reported a sensitivity analysis for individual assumptions (degree days and electricity imports) and their impacts on certain sectors, but did not report the results in the context of the WEM scenario. During the review, Belgium explained that no quantitative sensitivity analysis of the WEM projection had been presented, but that such information could be provided in future BRs. The ERT encourages Belgium to report in its next BR sensitivity analyses for any of the projections it reports. The ERT notes that the information can be provided in an illustration.
3	Reporting requirement[a] specified in paragraph 32 Issue type: transparency Assessment: encouragement	The Party reported the starting year and base year for all projections in its BR3, but it is not clear why the starting year and base year are not consistent across projections. While an introductory paragraph in the NC7, referenced in the BR3, states that 2014 is the base year for projections, 2015 or 2020 appears to be used in several tables (e.g. 5.16, 5.18 and 5.20). During the review, Belgium provided clarifying information on its use of starting and base year for individual projections, indicating that 2014 was the base year for projections, but that 2015 data presented were projections for HERMES modelling and inventory data in other cases. The ERT encourages Belgium to use the latest year for which inventory data are available in the NC as a starting point for the WEM and WAM scenarios. The ERT notes that Belgium should in any case include in its next BR a clear explanation of the relevant starting and base years selected for the projections for all tables and graphs.
4	Reporting requirement[a] specified in paragraph 35 Issue type: completeness Assessment: encouragement	The Party did not report information on indirect GHGs as part of the projections in its BR3. During the review, Belgium confirmed that no information on indirect GHGs was included in the BR3 and that the modelling did not include indirect gases. The ERT encourages Belgium to include in its next BR information on indirect GHGs.
5	Reporting requirement[a] specified in paragraph 36 Issue type: transparency Assessment: recommendation	The Party did not consistently report projections of GHG emissions related to fuel sold to aircraft engaged in international transport separately across the relevant tables in the BR, and it is not clear in the textual portions of the BR3 whether emissions from international aviation are included in the totals in individual tables. Emissions from international aviation are listed separately in CTF table 6(a). During the review, Belgium clarified that international aviation was not included in the totals. The ERT recommends that Belgium report in its BR4, to the extent possible, emission projections related to fuel sold to aircraft engaged in international transport separately, not included in the totals and consistently in all relevant tables.

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
6	Reporting requirement[a] specified in paragraph 46 Issue type: transparency Assessment: encouragement	The Party reported qualitative and quantitative discussion of the sensitivity of the projections to degree days and import of electricity. However, numerous other underlying assumptions, such as future developments in population and number of households, are included in CTF table 5. The ERT notes that there is no qualitative or quantitative discussion in the BR3 on the sensitivity of the projections to all of these other assumptions. During the review, Belgium clarified that net import of electricity and degree days are considered the most important underlying assumptions and that therefore these where chosen for the qualitative explanation of sensitivity in section 5.1.8 of its NC7, referenced in its BR3. The ERT encourages Belgium to provide in future BRs a qualitative, and where possible a quantitative, discussion on the sensitivity of projections to the underlying assumptions.
7	Reporting requirement[a] specified in paragraph 47 Issue type: transparency Assessment: encouragement	The Party reported general projection assumptions concerning emission factors, GWP, climate assumptions (degree days), demographic evolution and CO_2 prices. The Party did not report on variables such as GDP, tax levels and international fuel prices. Some of the reported qualitative information is presented in a CTF table, similar to table 2 of the UNFCCC reporting guidelines on NCs. During the review, Belgium clarified that GDP is only indirectly relevant for the modelling of projections and that the key underlying assumptions with direct impact are degree days and import of electricity. The ERT encourages Belgium to report in its next BR information on key underlying assumptions and variables, using table 2 and while maintaining consistency between the textual and tabular information. The ERT notes that it would enhance reporting transparency if Belgium were to clearly explain the significance of the various assumptions and variables.

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

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

71. Belgium provided details on what "new and additional" support it has provided and clarified how this support is "new and additional" by including the description of "new and additional climate finance" in the documentation box of CTF table 7. During the review, Belgium explained that its definition of "new and additional" should be considered in the context of the absence of an internationally agreed definition. In its BR3, Belgium described "new and additional" support as that in any of the following categories: contributions in line with Article 4, paragraph 3, of the Convention; contributions which would not have existed without the financial commitments resulting from the Copenhagen Accord; funding that is in addition to the annual budget for bilateral development cooperation; funding pertaining only to the climate-specific or climate-relevant part of a project and programme; funding for climate-related projects in developing countries additional to that in the previous reporting period; and contributions coming from the proceeds of the auctioning of GHG emission allowances.

72. Belgium reported the financial support it has provided to non-Annex I Parties, distinguishing between support for mitigation and adaptation activities and recognizing the

capacity-building elements of such support. It explained how it tracks finance for adaptation and mitigation using the Rio markers.

73. The BR3 includes information on the national approach to tracking the provision of support, indicators, delivery mechanisms used and allocation channels tracked. Belgium's support is administered through the three regional governments as well as the Federal Government. Belgium included information on how it has refined its approach to tracking climate support and methodologies. The Belgian Directorate General for Development Cooperation and Humanitarian Aid considers all Rio markers (climate, desertification and biodiversity) when determining the amount of a development project budget that is considered to be climate finance. For projects that have one or more markers, the coefficients are determined on the basis of their subsector code. Double counting is avoided, and thus no project can have coefficients that exceed 100 per cent.

74. Belgium described the methodology and underlying assumptions used for collecting and reporting information on financial support, including underlying assumptions and guidelines. The methodology used for preparing information on international climate support is based on the Rio markers. Belgium further described how it reports based on status (committed or disbursed), funding source, financial instrument, type of support, sector and exchange rates.

(b) Assessment of adherence to the reporting guidelines

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

2. Financial resources

(a) Technical assessment of the reported information

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

77. Belgium 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. 71 above).

78. Belgium described how its resources address the adaptation and mitigation needs of non-Annex I Parties. It also described how those resources assist non-Annex I Parties to mitigate and adapt to the adverse effects of climate change, facilitate economic and social response measures, and contribute to technology development and transfer and capacity-building related to mitigation and adaptation. Belgium reported information on the assistance that it has provided to developing country Parties that are particularly vulnerable to the adverse effects of climate change to help them to meet the costs of adaptation to those adverse effects. Belgium confirmed that this assistance includes a financial contribution to the Adaptation Fund.

79. With regard to the most recent financial contributions aimed at enhancing the implementation of the Convention by developing countries, Belgium reported that its climate finance has been allocated on the basis of programmes primarily in the agriculture and livestock, energy, and water and sanitation sectors. Examples of these projects include an initiative in Algeria to support the implementation of integrated waste management by strengthening waste prevention, reuse and recycling, and a project in Peru to assist local governments in maintaining traditional water management practices, restoring ecosystems and protecting biodiversity. The Belgian Investment Company for Development Cooperation plays a key role in deploying funds, as do the regional governments. Table 12 includes some of the information reported by Belgium on its provision of financial support. Its total financial support declined by 30.5 per cent over the two-year reporting period since the BR2 (based on revised figures referenced in the BR3), with a total of USD 235.6 million reported in BR2 and USD 163.8 million in BR3.

Table 12
Summary of information on provision of financial support by Belgium in 2015–2016
(Millions of United States dollars)

	Year of disbursement	
Allocation channel of public financial support	*2015*	*2016*
Official development assistance	2 052.6	2 182.37
Climate-specific contributions through multilateral channels, including:	8.01	59.31
Global Environment Facility	–	–
LDCF	–	16.59
SCCF	–	–
Adaptation Fund	1.94	10.79
Green Climate Fund	5.94	28.49
Trust Fund for Supplementary Activities	0.10	0 .07
United Nations bodies	–	0.004
Other	0.04	3.39
Climate-specific contributions through bilateral, regional and other channels	44.18	52.31

Sources: (1) Query Wizard for International Development Statistics, available at http://stats.oecd.org/qwids/; (2) BR3 CTF tables; (3) updated BR2 finance tables, available at https://www.cnc-nkc.be/en/wg-national-communication-and-biennial-report.

80. Belgium reported on its climate-specific public financial support, totalling USD 52.2 million in 2015 and USD 111.6 million in 2016. With regard to the future financial pledges aimed at enhancing the implementation of the Convention by developing countries, in 2014 Belgium pledged to contribute EUR 50 million per year from 2016 to 2020. The Party reported that in 2016 it had developed a burden-sharing agreement on the division of this obligation between the federal and regional governments. Belgium provided information showing its public support for developing country Parties, totalling 334.1 million over the period 2013-2016, to contribute to the achievement of the long-term transformation of developing countries into low-carbon and climate-resilient economies. This support was provided mainly through grants and some concessional loans and was directed to: adaptation and cross-cutting activities; bilateral and multilateral support (in the form of grants); support for Africa and the least developed countries; climate-specific multilateral funds (the Green Climate Fund, the Adaptation Fund, LDCF, etc.); and specialized United Nations agencies. The ERT noted that Belgium reported in CTF table 7(b) the bilateral support allocated to non-Annex I Parties in 2015 and 2016, which amounted to USD 44.2 million and USD 52.3 million, respectively. 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 13.

Table 13
Summary of information on channels of financial support used in 2015–2016 by Belgium
(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	12.141	10.476	–1.665	–13.7	23.3	9.4
Adaptation	28.062	58.749	30.687	109.4	53.8	52.6
Cross-cutting	11.985	42.406	30.421	253.8	23.0	38.0
Other	0	0	–	–	–	–
Total	**52.189**	**111.632**	**59.443**	**113.9**	**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	0 .036	0.035	– 0.001	–5.3	0.5	0.1
Adaptation	1.940	28.485	26.544	1 368.2	24.2	48.0
Cross-cutting	6.034	30.799	24.765	410.4	75.3	51.9
Other	–	–	–	–	–	–
Total	**8.011**	**59.318**	**51.307**	**640.5**	**100.0**	**100.0**
Bilateral channels						
Mitigation	12.105	10.442	–1.663	–13.7	27.4	20.0
Adaptation	26.122	30.2645	4.143	15.9	59.1	57.9
Cross-cutting	5.951	11.607	5.656	95.0	13.5	22.2
Other	0	0	–	–	–	–
Total	**44.178**	**52.314**	**8.136**	**18.4**	**100.0**	**100.0**
Multilateral compared with bilateral channels						
Multilateral	8.011	59.318	51.307	640.5	15.3	53.1
Bilateral	44.178	52.314	8.136	18.4	84.7	46.9
Total	**52.189**	**111.632**	**59.443**	**113.9**	**100.0**	**100.0**

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

81. The BR3 includes detailed information on the financial support provided though multilateral, bilateral and regional channels in 2015 and 2016. More specifically, Belgium contributed through multilateral channels, as reported in the BR3 and in CTF table 7(a), USD 15.3 and 53.1 million for 2015 and 2016, respectively. The contributions were made to specialized multilateral climate change funds, such as the Clean Technology Fund, the LDCF and the SCCF.

82. The BR3 and CTF table 7(b) also include detailed information on the total financial support provided though bilateral, regional and other channels in the amounts of USD 44.1 million and USD 52.3 million in 2015 and 2016, respectively.

83. 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 23.3, 53.8 and 23.0 per cent, respectively. In addition, 15.3 per cent of the total public financial support was allocated through multilateral channels and 84.7 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 9.4, 52.6 and 38.0 per cent, respectively. Furthermore, 53.1 per cent of the total public financial support was allocated through multilateral channels and 46.9 per cent through bilateral, regional and other channels.

84. The ERT noted that in 2015 a majority of financial contributions made through multilateral channels were allocated to agriculture and livestock projects. Some funds were allocated for activities that are cross-cutting across mitigation and adaptation, as reported in CTF table 7(a). The ERT also noted that sector-specific information was reported as multisectoral or not applicable in CTF table 7(a). It noted that in 2015 and 2016 financial contributions made through multilateral channels were allocated to a variety of sectors. The largest share was directed to adaptation-focused funds, such as the LDCF, the SCCF, the Adaptation Fund, the Green Climate Fund and the UNFCCC Trust Fund for Supplementary Activities.

85. 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 grants and concessional

loans. The ERT noted that the grants and concessional loans accounted for most of the total public financial support provided in 2015 and 2016.

86. In the BR3 Belgium clarified that private finance is mainly mobilized for adaptation and mitigation. It reported on how it uses public funds to promote private sector financial support for developing countries, which it sees as pivotal to effectively increasing mitigation and adaptation efforts in those countries. Through different actors and channels, its various instruments combine public financing with commercial financing. Examples of actors involved in the mobilization of private finance include FINEXPO, a Belgian federal committee on financial support for exportation, with an important role in mobilizing private climate finance in developing countries and BIO-invest, a government-owned company which made both direct and indirect investments in renewable energy funds.

87. Belgium reported on the difficulty of collecting information and reporting on private financial flows leveraged by bilateral climate finance for mitigation and adaptation activities in non-Annex I Parties, owing to the complexity of collecting information on initiatives undertaken by the private sector. Belgium explained that it had adopted a conservative approach to reporting mobilized private finance; it provided a general and qualitative overview of the efforts of most of the main actors working on the mobilization of private climate finance flows in developing countries and, where possible, quantitative estimates of some of their actions, based on the best available data. This approach was chosen with the objective of providing as much transparency as possible while reducing double counting and over-reporting.

(b) Assessment of adherence to the reporting guidelines

88. The ERT assessed the information reported in the BR3 of Belgium and identified an issue relating to transparency and adherence to the UNFCCC reporting guidelines on BRs. The finding is described in table 14.

Table 14
Findings on financial resources from the review of the third biennial report of Belgium

No.	*Reporting requirement, issue type and assessment*	*Description of the finding with recommendation or encouragement*
1	Reporting requirement specified in CTF table 7(a)	Although Belgium filled out CTF table 7(a), it did not report sector-specific information on the financial contributions made through multilateral channels for 2016 in its BR3 or provide a relevant explanation for the missing information.
	Issue type: transparency	During the review, the Party explained that the sectoral designation “not applicable” was used for contributions that were not climate-specific and for a project that involved translation of reports related to UNFCCC negotiations.
	Assessment: recommendation	The ERT recommends that Belgium enhance the transparency of reporting by specifying its financial contributions per sector or provide explanations as to why the information cannot be provided in its next BR.

Note: Item listed under reporting requirement refers to the relevant paragraph of the UNFCCC reporting guidelines on BRs or CTF table number from “Common tabular format for UNFCCC biennial reporting guidelines for developed country Parties”. 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

89. Belgium 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. Belgium provided examples of support provided for the deployment and enhancement of the endogenous capacities and technologies of non-Annex I Parties.

90. 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. Belgium

supports technology transfer through a number of mechanisms and initiatives, such as inter-university councils, academic research programmes, the Flemish Water for Development Partnership project and projects that include objectives relating to biofuels, sustainable agriculture, renewable energy and energy efficiency.

91. The ERT noted that Belgium reported on its programmes as well as successes and failures relating to technology transfer, in particular on measures taken to promote, facilitate and finance the transfer and deployment of climate-friendly technologies. For example, a project to rehabilitate school buildings in the State of Palestine applied design practices to help school buildings stay warmer in winter and cooler in summer, thus allowing them to stay open year-round. Training local building companies in these practices was an integral part of the project. Another project, which sought to improve the energy efficiency of cookstoves in Benin, had substantial local participation and involved the transfer of more efficient technology; the project resulted in the proliferation of stoves that use 50 per cent less wood than the traditional stoves they replaced.

(b) Assessment of adherence to the reporting guidelines

92. The ERT assessed the information reported in the BR3 of Belgium 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.

4. Capacity-building

(a) Technical assessment of the reported information

93. In the BR3 and CTF table 9 Belgium supplied information on how it has provided capacity-building support for mitigation, adaptation and technology that responds to the existing and emerging needs identified by non-Annex I Parties. Belgium described individual measures and activities related to capacity-building support in textual and tabular format. An example of these measures and activities is the support provided to francophone African countries to build their capacity related to their GHG inventories, nationally appropriate mitigation actions and intended nationally determined contributions. Belgium also has a few ongoing projects and programmes in, among others, Viet Nam and countries in Latin America and the Caribbean focused on a variety of sectors including water and sanitation, energy and agriculture.

94. Belgium reported that it has supported climate-related capacity development activities relating to adaptation, mitigation, technology transfer and cross-cutting sectors. Belgium also reported that it has responded to the existing and emerging capacity-building needs of non-Annex I Parties through academic and other partnerships, such as the Academic Research Platforms for Policy Support and the Flemish Water for Development partnership project, which works with non-governmental organizations, public water companies and private firms. During the review, Belgium explained that its bilateral cooperation programmes address the existing and emerging capacity-building needs of non-Annex I Parties, because the programmes are established in consultation with partner countries and always include a strong capacity-building component.

(b) Assessment of adherence to the reporting guidelines

95. The ERT assessed the information reported in the BR3 of Belgium 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.

III. Conclusions and recommendations

96. The ERT conducted a technical review of the information reported in the BR3 and CTF tables of Belgium 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 the Party's quantified economy-wide emission reduction target; assumptions, conditions and methodologies related to the attainment of the target; progress made by Belgium in achieving its target; and the Party's provision of support to developing country Parties.

97. Belgium's total GHG emissions excluding LULUCF covered by its quantified economy-wide emission reduction target were estimated to be 19.7 per cent below its 1990 level, whereas total GHG emissions including LULUCF were 19.2 per cent below its 1990 level, in 2016. Emission decreases were driven by the closure of coke plants, fuel switching from coal to natural gas and an increase in the use of renewables. Those factors outweighed increased emissions from transport.

98. Under the Convention, Belgium 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 GWP 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.

99. Under the ESD, Belgium has a target of reducing its emissions by 15 per cent below the 2005 level by 2020. The 2015–2020 linear progression in Belgium's AEAs (its national emission target for non-ETS sectors) is 78,379,825–68,247,607 kt CO_2 eq. Under the 2030 climate and energy policy framework for the EU, Belgium has a 2030 ESD reduction target of 35 per cent below the 2005 level.

100. Belgium's main policy framework relating to energy and climate change is the National Climate Plan 2012; the new 2030 NECP is currently under review by the EU. Key legislation supporting Belgium's climate change goals includes the cooperation agreement of 14 November 2002 that established the National Climate Commission, the burden-sharing agreement for 2013–2020 and the substitution right for international obligations. The mitigation actions with the most significant mitigation impact are environmentally friendly energy production, energy efficiency and conservation in buildings, energy efficiency in industry, reducing F-gas emissions, reducing N_2O emissions in industrial processes, promoting biofuels, promoting the intermodality of transport means and promoting energy-efficient electrical appliances.

101. For 2015 Belgium reported in CTF table 4 total GHG emissions excluding LULUCF of 117,443.26 kt CO_2 eq. Belgium reported that it does not intend to use units from market-based mechanisms to achieve its target under the ESD.

102. The GHG emission projections provided by Belgium in the BR3 correspond to the WEM scenario. Under this scenario, emissions are projected to be 21.6 per cent below the 1990 level in 2020 and 22.0 per cent below the 1990 level in 2030. For non-ETS sectors, the provided scenarios are projected to be 4.0 per cent above the AEAs for 2020. On the basis of the reported information, the ERT concludes that Belgium may face challenges in achieving its 2020 target for non-ETS sectors.

103. The projections of GHG emissions under the ESD indicate that Belgium is not on track to meet its 2020 ESD target (ESD contribution equivalent to a 15 per cent reduction below the 2005 level by 2020, as part of the joint EU target of 20 per cent below its 1990 level by 2020) under the WEM scenario. However, owing to emission surpluses that were generated earlier in the 2013–2020 commitment period when emissions were below AEAs, Belgium's projected cumulative ESD emissions for the entire period 2013–2020 are lower than the cumulative AEAs and thus within its ESD commitment.

104. Belgium continued to provide climate financing to developing countries in line with its commitment to contribute EUR 50 million annually in the period 2016–2020. The Belgian Investment Company for Development Cooperation and regional governments play a key role in the deployment of funds. Belgium also contributes to global multilateral funds, such as the Clean Technology Fund, the LDCF and the SCCF. Belgium has reduced its financial

support by 16.6 per cent from the level reported in its BR2; its public financial support totalled USD 52.2 million in 2015 and USD 111.6 million in 2016. For those years, Belgium's support provided for mitigation action was lower than its support provided for adaptation. The biggest share of financial support went to projects in the agriculture sector, followed by the water and sanitation sector. Belgium's activities related to technology transfer to developing countries were mostly focused on the energy sector, including renewable electricity generation, biofuels, and end-use efficiency in buildings and cookstoves.

105. In the course of the review, the ERT formulated the following recommendations for Belgium to improve its adherence to the UNFCCC reporting guidelines on BRs in its next BR, namely to improve the transparency of its reporting by:

(a) Specifying in CTF table 3 the impacts of all reported PaMs or clearly explaining why this may not be possible due to its national circumstance, and by providing explanations for all blank cells and zero values as appropriate (see issue 1 in table 4);

(b) Reporting in CTF table 4 the appropriate information with regard to the contribution of the LULUCF sector and market-based mechanisms in accordance with its target (see issue 1 in table 7);

(c) Consistently reporting throughout all projections tables in the textual portions of its BR emission projections related to fuel sold to aircraft engaged in international transport, to the extent possible, separately and not included in the totals (see issue 5 in table 11);

(d) Specifying its financial contributions per sector in CTF table 7(a) or provide explanations as to why the information cannot be provided (see issue 1 in table 14).

Annex

Documents and information used during the review

A. Reference documents

2017 GHG inventory submission of Belgium. Available at https://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/bel-2017-nir-13apr17.zip.

2018 GHG inventory submission of Belgium. Available at https://unfccc.int/sites/default/files/resource/bel-2018-nir-28sep18.zip.

Additional information submitted by Belgium with its 2018 GHG inventory. Available at https://unfccc.int/sites/default/files/resource/bel-2018-nir-addinfo-28sep18.zip.

BR3 of Belgium. Available at http://unfccc.int/files/national_reports/annex_i_natcom_/application/pdf/7319685_belgium-nc7-br3-1-nc7_en_lr.pdf.

BR3 CTF tables of Belgium. Available at http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/vnd.openxmlformats-officedocument.spreadsheetml.sheet/7319685_belgium-nc7-br3-1-bel_2018_v1.0.xlsx.

Climact. 2019. *Fossil Fuel Subsidies: Hidden Impediments on Belgian Climate Objectives*. World Wide Fund for Nature Belgium. Available at https://wwf.be/assets/IMAGES-2/CAMPAGNES/ELECTIONS2019/FF-report/WWF-fossil-fuels-final-report.pdf.

"Common tabular format for UNFCCC biennial reporting guidelines for developed country Parties". Decision 19/CP.18. Available at https://unfccc.int/sites/default/files/resource/docs/2012/cop18/eng/08a03.pdf.

EEA. 2018. *Trends and Projections in Europe 2018: Tracking Progress towards Europe's Climate and Energy Targets*. Available at https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2018-climate-and-energy.

"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 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 Belgium. Available at http://unfccc.int/files/national_reports/annex_i_natcom_/application/pdf/7319685_belgium-nc7-br3-1-nc7_en_lr.pdf.

Report on the individual review of the annual submission of Belgium submitted in 2016. FCCC/ARR/2016/BEL. Available at https://unfccc.int/resource/docs/2017/arr/bel.pdf.

Report on the review of the report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol of Belgium. FCCC/IRR/2016/BEL. Available at https://unfccc.int/resource/docs/2017/irr/bel.pdf.

Report of the technical review of the BR2 of Belgium. FCCC/TRR.2/BEL. Available at https://unfccc.int/sites/default/files/resource/docs/2016/trr/bel.pdf.

Report on the technical review of the NC6 of Belgium. FCCC/IDR.6/BEL. Available at https://unfccc.int/sites/default/files/resource/docs/2015/idr/bel06.pdf.

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

B. Additional information provided by the Party

Responses to questions during the review were received from Ms. Claire Collin (Federal Public Service Health, Food Chain Safety and Environment), including additional material. The following documents[1] were provided by Belgium:

2015. *Promoting private sector actions in the fight against climate change in Belgium and abroad.* Trinomics B.V. Available at https://www.climat.be/files/4314/5873/7318/private_climate_finance_report.pdf.

[1] Reproduced as received from the Party.